BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of	)	
	)	
MAUI ELECTRIC COMPANY, LIMITED	)	Docket No. 2006-0387
	)	
For Approval of Rate Increases and Revised Rate Schedule and Rules	)	
	)	

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MECO
2007 TEST YEAR

WORKPAPERS IN SUPPORT OF DIRECT TESTIMONIES

Book 2 of 5

February 23, 2007

ECONOMIC OUTLOOK FOR MAUI COUNTY

prepared for

MAUI ELECTRIC COMPANY, LTD.

by

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May 10, 2006

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Preface

This report, prepared for Maui Electric Company, Ltd. (MECO), presents the annual long-term trend economic forecast for Maui County. It is based on a detailed econometric model of the State of Hawai'i and each of its four individual counties, estimated and maintained by the University of Hawai'i Economic Research Organization (UHERO).

In the process of preparing the forecast, we have benefitted from the insights of George Willoughby, Director of Forecasts and Research at HECO, members of his staff, and other individuals—representatives from tourism, local government, and other sectors—surveyed inside and outside the HECO and MECO organizations. The resulting forecast combines the formal economic structure of a detailed econometric model with on-the-ground observations about conditions in key sectors. We believe the result is superior to an approach that considers only one of these two inputs separately.

Recent trends and the outlook for the State economy as a whole are presented in this report prior to addressing specifics for the Maui economy. Economic conditions and UHERO forecasts for key external economies—principally the U.S. and Japan—are discussed following the Maui forecast. Separate reports prepared by UHERO summarize conditions and present the outlook for the O'ahu and Hawai'i County economies.

Time series referred to in the text that are not depicted in text charts can be found in the Data Tables section of this report.

UHERO and MECO acknowledge standard sources of the local economic data: the Research and Economic Analysis Division (READ) of the State of Hawai'i's Department of Business, Economic Development, and Tourism (DBEDT); labor market data from the Research and Statistics Office of State of Hawai'i's Department of Labor and Industrial Relations (DLIR); and selected data from Prudential-Locations Real Estate.

Thanks to Somchai Amornthum and Porntawee Nantamanasikarn for excellent research assistance.

Mission Statement

The mission of the University of Hawai'i Economic Research Organization is to inform public- and private-sector decision-making through quantitative and analytical research, with a particular focus on the economies of Hawai'i and the Asia-Pacific region. UHERO provides a forum for interaction between scholars, policy makers and business leaders and facilitates the collaborative efforts of UH economists, students, and scholars. For more information, see the UHERO web site at http://www.uhero.hawaii.edu

EXECUTIVE SUMMARY

The outlook for Maui County is for moderately strong growth in the near term, with tourism, construction, and non-tourism services all contributing. With the labor market very tight and the construction cycle maturing, job growth will continue the slowing trend already evident, and slower income growth will follow. Over the long term, the aging of U.S. and Japanese populations, along with local development constraints, will bring lower average growth rates for tourism on Maui, and for the overall local economy. The composition of the county economy will continue the gradual evolution toward non-tourism service areas, although tourism will remain preeminent.

- UHERO expects continued moderate expansion of the U.S. economy, and Japan's near term prospects are now quite good. Notwithstanding recent concerns related to high energy prices, global economic conditions are expected to be broadly supportive of continued healthy growth for the Hawai'i economy. After expanding by 3.5% last year, we expect the U.S. economy to growth by 3% this year, and 3.3–3.4% in 2007–2008. Japan finished last year strongly, and we expect solid real GDP growth of 2.7% this year. Japanese growth will back down to just under 2% in 2007–08.

- There are external and policy risks for the U.S. and Japanese economies. In the U.S., high energy costs and interest rates will act as constraints, and there is some risk that consumer spending could weaken now that home equity appreciation is ending. In Japan, both fiscal and monetary policy may soon become more restrictive.

- The visitor picture continues to look very positive. Additional growth in visitor arrivals will be slower than in recent years. Last year, Japanese arrivals continued a string of double-digit declines that began in 2000, but the increasingly dominant U.S. domestic market made up for this. Growth of U.S. visitors to Maui is expected to average 1.6% through the end of the decade. On the Japanese side, we expect an end to the decline by 2007, followed by very modest growth in the 1–2% range. Overall arrivals are expected to grow at an average rate of 1.8% over the next five years.

- Over the longer term, overall growth in the industry will be moderate, with relatively slower growth in the number of visitors accompanied by continued growth in daily visitor spending. To some extent, infrastructure bottlenecks and anti-growth sentiment will act as a brake on more rapid growth. On the demand side, slowing population growth in the U.S.—and outright population decline in Japan—will also restrain visitor growth. Average growth in U.S. arrivals will converge to the 0.3–0.4% range by 2011 and remain on this track thereafter.

- On the Japanese side, we expect some recovery but no return to the quarter-million-plus Japanese visitors that Maui saw in 2000. In part this reflects the generally weaker outlook for Japanese travel, but it also reflects our belief that the decade-long decline in Maui's Japanese market share will not be substantially reversed. After the end of the current decline, we expect Japanese visitor growth to recover to 1.7% per year in the last decade of the forecast, eventually bringing the Japanese visitor count to 144,000 by 2026.

- the non-U.S., non-Japanese portion of the visitor market is expected to see the greatest growth over the next two decades. This category is expected to grow at an annual rate of 3.2% over the forecast period, adding more than 272,000 visitors. By 2026, visitors from markets other than the U.S. and Japan will grow to 19% of total visitors, up from 12% today.

- Annual hotel occupancy on Maui reached the 80% level last year. With continued visitor growth, we expect it to peak above 81% this year, before softening marginally as some new accommodations come on line. However, room growth will just barely keep pace with our relatively modest projection of visitor growth. Therefore, occupancy rates will remain in the 78–80% range for the foreseeable future.

- The Maui labor market is expected to remain healthy for the remainder of the decade. With the labor market now very tight, and high housing costs imposing limits on in-migration, we expect a continuation of the slowing trend that has been evident in recent years. After 2.4% growth this year, we expect less than 2% growth in 2007 and 2008. Growth will decelerate further after 2010 and will averaging just over 1% in the final decade of the forecast. General slowing of job growth is consistent with anticipated slowing of labor force growth as Maui and national population growth decelerates and the population ages.

- Construction will continue to lead all sectors this year, but the growth rate will be well off last year's 18% surge. After about 4-1/2% growth in construction jobs this year, we expect further slowing to 1% by 2009. Still, we do not see any evidence of a retreat from the high levels of jobs that have been built up over the past decade. Wholesale and retail trade will grow an additional 3% this year, and services will continue to grow at or above the average rate for all sectors.

- Recent strong income performance, as well as upward data revisions by the U.S. Bureau of Economic Analysis, lead us to raise our near-term projection for Maui real personal income growth. We now expect about 3% real income growth for the remainder of the decade, decelerating to 2% by 2015 and 1.7% for the final decade of the forecast period. Maui's population is expected to grow at an average rate of 1.6% for the remainder of the decade, slowing to 1.0% for the final decade of the forecast period. Maui's real personal income *per capita* is expected to grow an average 0.8% over the 21-year period.

- Over the longer run, Maui jobs will be increasingly created in non-tourism service sectors. Agriculture will continue its gradual decline, and the tourism-related wholesale and retail trade sector will decline in relative importance as well. The aggregate services sector will expand from its current 53% of the Maui economy to 58% in 2026, with above-average growth in health care and the "other services" category. Nevertheless, these changes are slow, and tourism will remain a key engine of the Maui economy.

- While this forecast is considered the most likely trend path for Maui's economy, we have also evaluated high and low alternative scenarios. In the optimistic scenario, we assume both faster growth for the U.S. and Japanese economies in the near term as well as stronger employment and productivity growth in the long run. We also assume higher birth rates and in-migration for the County. This creates annual population growth rates that average 0.6% per year higher than the baseline path, and job growth that is 0.9% higher. Maui real personal income grows at an average rate of 3.4% over the twenty-one year period, compared with 2.1% in the baseline.

- For the pessimistic alternative scenario, we begin with weaker near-term forecasts for the U.S. and Japanese economies, reflecting the potential for more restrictive monetary policy in the U.S. and fiscal and monetary policy restraint in Japan. In addition, long-run employment and productivity growth are slower than the baseline trend, and local tourism and demographics are less favorable to growth. In this case, Maui's average population growth rate is only 0.8% over the forecast horizon, compared with 1.3% in the baseline. Real income expands at a 1.7% annual rate.

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I. THE HAWAI'I STATE ECONOMY

Recent Economic Performance

In 2005, Hawai'i extended to nine years an expansionary period that began in mid-1996. This exceeds by one quarter the long expansion of the 1980s, which ultimately ended with the collapse of the Japanese bubble and the 1991 U.S. recession. But this time around, there are no dark clouds on the horizon. The outlook for the next several years remains bright, with some moderation from the robust growth of the past two years.[1]

Very robust real personal income growth for the first half of 2005, on the heels of upward revisions to prior year income, caused upward revisions to the outlook as the year progressed. UHERO now estimates that Hawai'i's economy grew by 3.7% last year, as measured by inflation-adjusted personal income. Practically all major sectors of the economy continued to be strong.

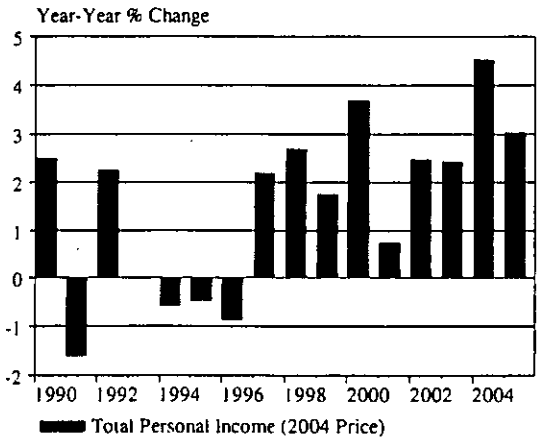

Figure 1: Hawai'i Real Personal Income, 1990-2005

The main underlying sources of this growth remained the same as in the last several years. Tourism showed continued strength. A record in visitor arrivals for the year of almost 7.4 million easily broke the 7.0 million barrier the state had long flirted with (and almost cracked in 2000).

The housing market also exhibited continued strength—in prices if not in sales. Median home price gains well exceeded growth of the preceding year. (For example, O'ahu single family median home prices rose over 27%, after a 22% gain in 2004.) These spectacular gains raised some concerns about when the run-up would cease, both because of the adverse impact on affordability and the risk of a possible downward price adjustment.

Construction activity remained extremely strong, stoked by previous permit authorizations and continuing low long-term interest rates. The construction job count swelled by 10.5%, its biggest gain since the current cycle began in 2000. The building sector seemed constrained only by growing labor shortages in the skilled building trades.

Job creation was also very strong in transportation and utilities, which grew 8.2% in 2005. Other sectors showed lower, but still very solid, job creation. Total trade jobs grew 3.3%; finance, insurance and real estate saw almost 2.0% growth; total services grew just over 3.0%. In Hawai'i's important services sector, the major categories of food and accommodations, health care and social assistance, and other services all showed yearly gains near 3%.

The only major sector that lost jobs in 2005 was government. Though that extended across the board to Federal, State, and Local levels, the losses were all very minor—under 1.0% in each case. Manufacturing also saw some job losses last year, but again these losses were small, as is the sector itself as a proportion of Hawai'i's economy. Overall non-farm job growth was 2.8% last year, the most rapid rate of aggregate job growth since 2000.

Labor markets are now tight on each of the islands, posing a challenge for continued expansion. Employers, large and small, have all reported the inability to find and hire qualified people. The problem extends to all levels, from entry-level to higher-paying positions. In certain pockets on the Neighbor Islands, especially where tourism and other service jobs are important and construction remains

[1] Historical numbers cited in the text and figures may differ from the Appendix tables because of data revisions since the time the forecasts were computed.

hot, the community unemployment rates are estimated by local observers to be well below what economists would normally consider minimum sustainable levels.

The state's overall unemployment rate reflects the tight labor market conditions. Throughout 2005, Hawai'i's monthly jobless rate was often the lowest in the nation. The annual average of 2.8% was well below the national rate of just over 5.0%. And even though the national rate began to fall in the early part of 2006, it still remains a good two percentage points higher than what we are experiencing in Hawai'i.

Looking beneath these overall numbers for the Hawai'i economy in 2005, notable developments in key sectors include the following:

Tourism

A slowdown for tourism in the second quarter of the year was followed by a rebound. This was shared by all islands. For the year as a whole, growth held up better in the U.S. Mainland market than on the international side. Domestic arrivals rose 7.0%, only a slight deceleration from 2004's 7.3%.

On the Japanese side, however, visitor growth was only 2.7%. This followed a surge in the Japan market in 2004 of 10.6%, which largely offset the contraction seen in 2003 when the Iraq war and SARS were big concerns. Over the past decade, the Japanese traveler to Hawai'i has proven to be rather fickle. The Japanese visitor count showed consecutive declines from 1998 through 2003, capped by a drop of almost 16.0% in 2001 following 9/11. In 2005, Japanese arrivals still stood at about 1.5 million statewide, compared with 2.2 million in 1997. Of course, even at 1.5 million, the Japanese market remains far and away Hawai'i's most important international visitor market.

Foreign exchange rates have an important impact on Hawai'i international tourism, especially the critical yen/dollar rate. Exchange rate effects can sometimes be hard to discern, given all the other things

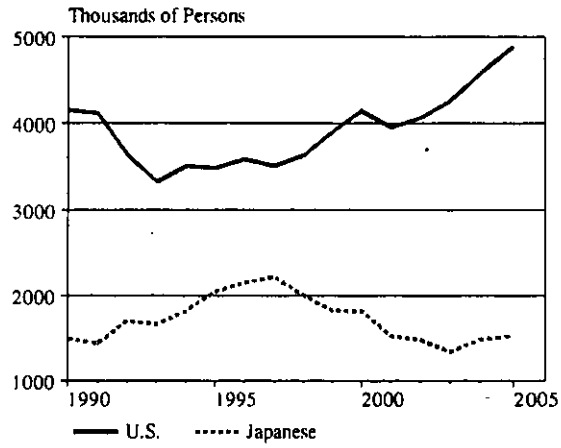

Figure 2: U.S. and Japanese Visitor Arrivals to State, 1990–2005

that affect international tourism. Over the course of 2005, there was some weakening of the yen, from about 105 yen/dollar to around 119 yen/dollar. However, if one compares the average rate for 2004 with the average for 2005, there was only a very small decline from 108 to 110.

Swings in the yen/dollar rate over the past decade have been relatively modest, but there is the potential for greater change over the next decade. As we will touch on in the External Economies section, the large U.S. Current Account and Federal Budget deficits, which show no signs of abating, pose a risk of sharper dollar depreciation in coming years.

Other developments in tourism for 2005 included continued strength in time-share and a more recent interest in *condotels*, the sale of hotel properties to buyers of individual rooms. In addition, cruise ships continue to grow in importance. In 2006, a third 2,000-passenger, 1,000-crew vessel will be added to the inter-island circuit. Growth rates in the Hawai'i cruise industry have been rapid. As recently as 2000, there were well under 100,000 cruise passengers debarking at island ports. In 2005, that number had grown to 300,000, and it has the potential to exceed 400,000 in 2006 and 2007. All of this growth has come with virtually no upgrades to harbor infrastructure, a situation that will be exacerbated if the harbor needs of a proposed inter-island Super Ferry are also added to the picture.

For hotels, the growing visitors have driven statewide occupancy rates into the 80% range. Occupancy is expected to remain at a high level for the next several years. There are few new hotels being discussed, a number of hotels are undergoing conversion to time-shares, rentals, or *condotels*, and there are a number of properties out for renovations. The higher hotel occupancies have been reflected in higher average daily room rates, which rose 9.0% statewide in 2005.

Construction, Housing and Prices

Moving on to construction, another important driver of Hawai'i growth in recent years, 2005 saw continued very robust activity. The dollar value of construction completed, taken from tax base figures, surged above the previous record set in 2004 , exceeding $5.0 billion for the first time. The value of completed construction has been above the peak of Hawai'i's last building boom, reached in 1991, for the past three years.

Building permit growth insures continued strong construction activity in the near term. The total value of private permits issued in 2005 approached the highest on record at $3.5 billion, up 28% from 2004 level. Again, permitting values have been running higher than figures for the late-1980s boom for three straight years. About two-thirds of Hawai'i private permits issued in 2005 were for residential construction.

As 2005 progressed, the local economic topic that increasingly garnered the most attention was the housing market, particularly the accelerating run-up in prices. The price increases were viewed with mixed emotions. Homeowners and realtors selling homes naturally were making money, and even those who were not actually selling continued to enjoy a positive wealth effect that no doubt boosted their spending on other things.

At the same time, the rapid appreciation increased nervousness that the local housing market was reaching unsustainable price levels. Over the year, more and more national analysts began to warn of overvaluation in a number of Mainland markets, contributing to local concerns.

In Hawai'i, the experience of the 1990s remains fresh in many people's minds. After an approximate doubling of home prices between mid-1980s and the early 1990s, Hawai'i saw a downward correction approaching nearly 20% over a period of several years. While real estate prices do not often see the sharp adjustments of financial markets, sometimes downward adjustments do occur, and those who bought at the top of Hawaii's last home price boom did get punished, at least for a while.

Speculative excesses—buying only with the intention of flipping the property in the near future and not for use or income—have not been as egregious in this boom as they were in the previous one, when Japanese speculation here played an important role. Still, we did begin to hear anecdotal evidence of at least some speculative elements emerging over the past year.

Beyond the impact for individual homeowners, rising shelter costs bring with them a longer-term drag effect for the Hawai'i economy. In a service economy that often has trouble creating higher income jobs, steep real estate prices retard in-migration. It makes recruiting from outside the state all the harder, and it erodes the ability of first-time local buyers to enter the market. These adverse effects were seen during the last boom.

As 2005 came to a close and 2006 began, there were some distinct signs of cooling in the Hawai'i housing market. Statewide, single family home and condominium resales dropped by 14.1% and 4.7% in the fourth quarter of 2005, respectively. Gradually rising long-term interest rates may have played a role. While long-term rates have lagged well behind the short-term rate increases engineered by the Federal Reserve since June of 2004, there was still a roughly one-percent increase in 30-year conventional mortgage rates between in 2005, from the middle to high 5.0% range in early summer to the low 6.0% range at year-end. This swing alone may have been responsible for some slowdown in the housing market here and nationally.

Beyond housing, overall inflation fears continued to emerge in Hawai'i in 2005. Hawai'i inflation has begun to outstrip overall U.S. inflation, as it usually does when the economy here heats up. Honolulu gets two readings for Consumer Price Inflation (CPI) rates each year. Because that is the only overall inflation number the Bureau of Labor Statistics produces for the state, it is often used as a proxy for statewide inflation, though Neighbor Island inflation rates may differ substantially.

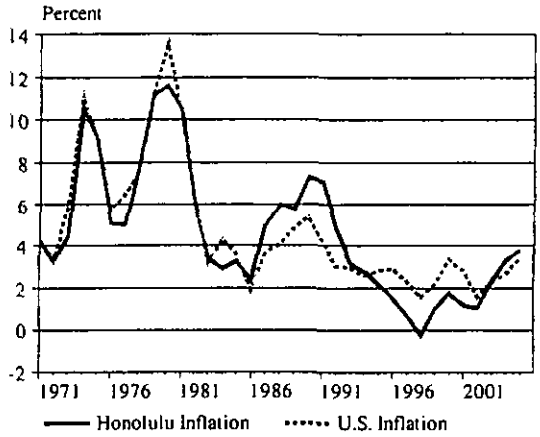

Figure 3: Honolulu vs U.S. Consumer Price Inflation, 1971–2005

The consumer price index rose 3.8% in 2005, compared to 3.3% in 2004. The increase was mainly traceable to the housing component, which rose 5.6%, and transportation—mostly from fuels—which rose 5.1%. The core inflation rate (all items less food and energy) stayed at 3.0%, the same as in 2004.

Agriculture

Hawai'i agriculture is increasingly specialized in diversified crops, with a dwindling presence of traditional plantation agriculture. Pineapple growers continue to retrench, and the big story of 2005 was the planned closure of Del Monte's operations on O'ahu by 2008. The major Maui grower is also downsizing its canning operation while concentrating more on fresh fruit sales to a smaller number of select customers.

Sugar production in 2005 still felt the lingering effects of drought in previous years. Hawai'i's two remaining sugar plantations, on Maui and Kaua'i, continue to concentrate on niche products. Both have been working with Mainland and local firms in the area of ethanol conversion for use as a fossil fuel supplement. However, progress along those lines has not been as rapid as hoped. Ethanol production from both waste products and molasses is being investigated.

Kona coffee had an excellent year in 2005. Also, cattle prices were buoyed by a cut-off in beef imports from Canada and speculation about a possible lifting of a ban on exports to Japan.

Nursery products also fared well. Landscape plants are much in demand with the strong construction industry, especially for high-end homes. On the downside, the discovery locally of a new scale insect could impact macadamia nut yields.

Health Care and High Tech

Hawai'i's health care industry continues to grow more rapidly than the average sector, largely reflecting the national trend toward higher consumption of health care services. The industry anticipates continued expansion as demographic trends and the overall aging of the local population further increase health care demand. On under-served islands, such as Maui, there is ongoing talk about possible new hospitals or expansion of existing facilities.

Measuring the size and growth of the high tech sector can be a challenge, given the broad range of activities that may be included. *The Honolulu Advertiser* recently estimated that there are fewer than 15,000 high tech jobs in the state, or about 2.5% of the total. At the same time, the sector has been growing more rapidly than the national average, 10% between 2001 and 2004. These jobs are spread across a range of activities, with the largest number in computer systems design, architectural and engineering services, and scientific research and development services.

Hawai'i's tech sector still depends importantly on the defense presence for many of its success sto-

ries. Examples on the Neighbor Islands include the Pacific Missile Range Facility's sub-contractors on Kaua'i and tenants at the Maui Research and Technology Park. For the highly tourism-oriented Neighbor Island economies, these high tech jobs are a much needed diversification of the job base.

Military

As far as the military sector itself is concerned, optimism continued to prevail in 2005. High points still include the Army Stryker Brigade presence and the Air Force C-17 cargo planes to carry it to remote locations in Hawai'i's half of the globe. (The planes began arriving in early 2006.)

The Defense Department strategy for retrenchment from bases in foreign locations also promises to augment the defense presence in Hawai'i going forward. And of course the military housing construction and renovation projects now underway are contributing significantly to the construction industry on O'ahu.

Hawai'i's congressional delegation continues to push for a Navy aircraft carrier home-ported in Hawai'i. Prospects in that area have dimmed somewhat recently, considering the greater possibility that Japan will finally allow a nuclear powered carrier to be based there.

The conflicts in Iraq and Afghanistan continue to cause some disruption to local communities. The rotation of deployments in locally based units translates to on-again, off-again economic impacts in the various neighborhoods around military bases.

County Differences

Economic activity was strong across the state in 2005, and everywhere it was the same sectors that were the main drivers of growth. Tourism was robust, and construction was strong in nearly all locations. There were, however, a few differences across Hawai'i's four counties that are worth noting.

Some variations appear in overall job growth. O'ahu non-farm payroll job growth accelerated from 2.2% in 2004 to 2.8% in 2005. That gain was offset some by declines in job growth for all three of the Neighbor Isle counties. Maui County slowed from 3.8% in 2004 to 2.5% in 2005. Kaua'i's job growth fell from 3.9% in 2004 to 2.3%. Hawai'i County had a less dramatic drop from 3.8% in 2004 to 3.3%.

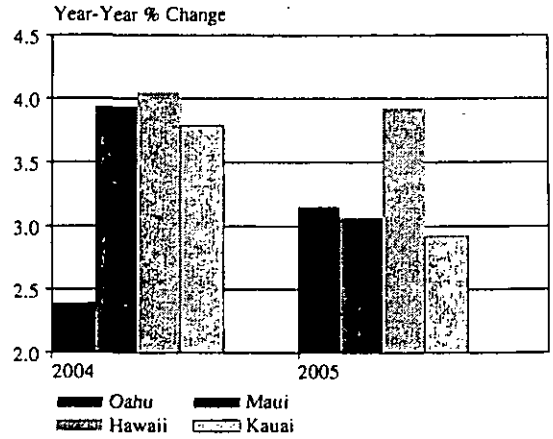

Figure 4: Non-farm Jobs by County, 2004–2005

It would be wrong to conclude from this that Neighbor Island economies were weakening significantly in 2005. Indeed, there is plenty of evidence of strong demand for workers, but qualified people to fill new jobs were scarce. This was clear from interviews with Neighbor Island employers, who complained that they could not find qualified people to fill job vacancies. This extended across sectors and to all levels, from entry levels to more senior positions, and for skilled and unskilled jobs alike.

Further evidence of labor market constraints can be seen in unemployment rates. All county-level unemployment rates fell in 2005 from the previous year, and Neighbor Island rates narrowed or closed the gap with O'ahu. The O'ahu rate fell from 3.2% in 2004 to 2.7% in 2005. Kaua'i's rate fell from 3.3% in 2004 to 2.7% in 2005, matching O'ahu. Maui actually had a lower rate than O'ahu in 2005, 2.6%, after a 3.1% rate a year earlier. Only the Big Island had a higher unemployment rate than O'ahu in 2005, at 3.3%, but this also marked a sharp

decline from 3.8% in 2004. Anecdotally, in locations where economic activity was the hottest, such as resort and urban areas, the unemployment rate was judged by local observers to be well below the county-wide measure.

In tourism, it was the Big Island that saw the biggest growth in visitor arrivals in 2005, with a 16.1% increase. That compared to O'ahu's 6.4%, and 4.8% and 6.8% for Maui and Kaua'i, respectively. O'ahu had seen a particularly strong 2004, with the return of Japanese visitors as well as Mainland strength, but that pace could not be sustained. Both Maui and Kaua'i have been closer to capacity than the Big Island visitor industry for some time. Still, across the board, these were all good gains; the Kohala Coast just had more room left to fill in 2005.

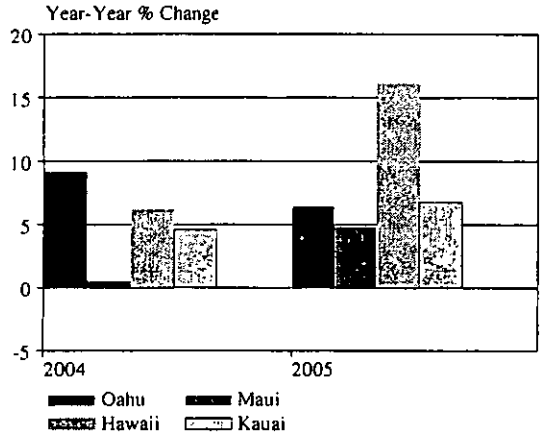

Figure 5: Visitor Arrivals by County, 2004-2005

Hawai'i County's gain in arrivals came from both the domestic and Japanese sides, with increases of 16.2% and 14.0% respectively. O'ahu's growth was also balanced somewhat between domestic and Japanese gains. But Maui and Kaua'i growth was very one-sided, with almost all gains in the domestic market and substantial shrinkage on the Japanese side.

Construction continued to act as a strong engine of expansion in all counties. Construction jobs grew 9.9% on O'ahu, 7.7% on the Big Island, 9.4% on Kaua'i, and a huge 18.1% in Maui County. These gains are remarkable considering the already acute labor shortage apparent in this sector.

There were some county differences in housing market developments in 2005. Negative reactions by the public to home price acceleration were more pronounced on the Neighbor Islands than on O'ahu. Concern was particularly acute on Maui and Kaua'i, where median price levels were highest and continued to rise. The greater weight of luxury homes in sales of these counties made the median price figures look all the worse. For Hawai'i County, there continue to be areas, such as Hilo and Puna, where median prices are substantially lower than the statewide average, although the rate of price increase approached and sometimes exceeded that of resort areas on the Western side.

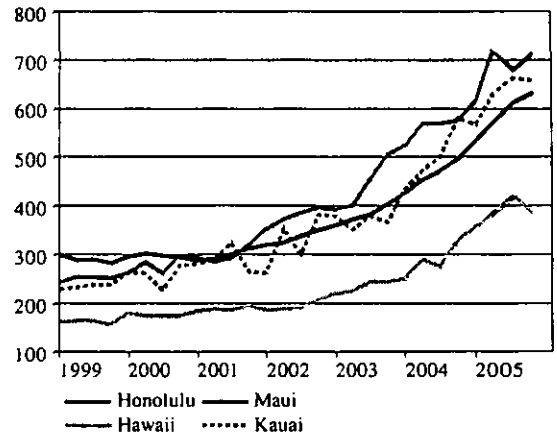

Figure 6: Single-Family Median Resale Prices

Home affordability is also a particular problem for Maui and Kaua'i because these counties are less diversified away from tourism than O'ahu, or even the Big Island. Thus, even fewer higher income jobs exist in their basically low wage, service economies. Both counties are now concentrating efforts on the creation of more affordable housing, but this is not likely to solve the problem completely.

Private building permits data shows authorizations still running at a high level in 2005. For the state as a whole, permit values grew by 28%, up from 16% in 2004. O'ahu slowed to just 3% last year. The Big Island was up 22%. Kaua'i and Maui

showed an impressive 121% and 85% increase, respectively.

Emerging Developments

Once again, the Hawai'i economy has entered the new year with strong prospects. And the driving forces behind that growth—healthy tourism, continued construction activity, military growth, and strong business confidence—are the same forces that have underpinned the economy for the past several years.

Having now surpassed the length of the 1980s expansion, Hawai'i's economy enters new territory. The expansion is reaching its mature stages. Especially in an isolated economic environment like Hawai'i, we will eventually bump against supply side constraints. We have already begun to see these constraints in the labor supply. In-migration will be only a partial safety valve, since higher living costs, exacerbated by the recent surge in home prices, discourage mainland workers from moving to Hawai'i. Home price increase will continue to filter through to rents, and local wages and salaries will be hard pressed to keep up. All in all, there is likely to be some slowdown in the rates of growth for major variables as 2006 unfolds.

After a year of accelerating home prices in 2005, the residential real estate market will continue to be closely watched in 2006. Nationally, the housing boom was an attention grabber in 2005, and an increasing number of analysts have been predicted its end. Hawai'i is not so unique that it can escape developments in the national residential market, despite its desirability as a second home choice for the world's affluent. The recent slowdown in sales will eventually begin to cool prices as well.

A cooling of the housing boom would not be unwelcome. The longer and stronger the boom is, the greater the likelihood the landing will not be a soft one, but instead might involve significant price adjustment. Luckily real estate markets are not prone to the sharp downward corrections seen in financial markets, but absolute price drops do sometimes occur.

The affordability issue will not go away in the near term. High home prices have become an important social issue, especially on the Neighbor Islands. The inability of potential new entrants to the housing market to qualify for a mortgage—even at low interest rates and aided by today's exotic mortgage products—does influence decision to relocate to Hawai'i, as well as decision by local residents on whether to remain in Hawai'i or seek opportunities elsewhere. In both cases, it becomes harder for local business to recruit the qualified people necessary for the continued growth and diversification of the local economy.

II. CURRENT MAUI CONDITIONS

The Maui economy showed strong growth on all fronts in 2005. Non-farm job growth slowed to 2.5% from its 2004 pace of 3.8%. After building since 2002, new hiring has bumped up against labor supply constraints, as we have anticipated for the last several years. The underlying economy remains very strong.

Maui job growth in 2005 was lower than Hawai'i County's 3.3%, and just slightly higher than the 2.3% seen on Kaua'i, another Neighbor Island economy that has had similar labor shortage problems to Maui. It was also lower than O'ahu's 2.9%.

In conversations over the past year with Maui employers—both large and small—the inability to find qualified workers was mentioned more frequently than any other subject. Firms were creating new jobs, but qualified workers could not be found to fill them.

Maui County's unemployment rate has been falling steadily since 2001, and in 2005 it reached 2.6%. This was lower than the statewide jobless rate of 2.8% and the O'ahu rate of 2.7%—an unusual situation in Hawai'i, where Neighbor Island unemployment rates have tended to run higher than those on O'ahu.

Briefly reviewing conditions across the Maui economy (we will turn to a more detailed sectoral discussion below), we see that again it was construction leading Maui job growth last year. Even in a tight labor market, Maui was able to add 18% to its construction payrolls, the strongest growth rate since 2000. Presumably there was substantial in-migration of workers involved.

Other major sectors saw lagging job growth in 2005, even while overall economic activity remained healthy. Accommodation and food service jobs grew only 1.5%. Health care turned in a more respectable 4.9% growth, and other services were up 3.4%.

Total trade jobs grew 2.0%, and transportation and utilities were 1.7% higher than in 2004. Finance, insurance, and real estate jobs grew a meager 0.7%. Both agriculture and manufacturing jobs actually shrank, by 5.6% and 7.1% respectively. (Both of these categories were impacted by further retrenchment in pineapple cultivation and canning.) In the public sector, Federal jobs also shrank by 1.1%, while State and Local government saw a very small 0.5% growth rate.

Maui's biggest concern in 2005 was directly related to its strong economy. The local real estate market remained extremely hot almost the entire year, and as Maui median home prices continued to surpass other islands—no doubt inflated by the relatively big offshore luxury home component—cries of pain about home affordability in the local low wage, service economy became more and more common. Maui median single family home prices were $679,000 island-wide for the year as a whole, up from an already high $550,000 in 2004—a 23.5% increase. Condo prices rose a comparable 25.8%, from $310,000 in 2004 to $390,000 in 2005.

We turn now to key developments in specific sectors of the Maui economy. These remarks reflect in part anecdotal evidence gathered over the course of the past year from industry representatives and government leaders on Maui. These include comments received at a forecast meeting hosted by Maui Electric Company April 20, 2005.

Tourism

Hawai'i's visitor industry was strong statewide in 2005, and that has continued into the current year. Maui shared in this. Its total visitor arrivals growth last year was 4.8%, the best performance by this measure since the 6.8% growth seen in 1992. Visitor days were up 2.6%.

Even so, Maui County arrivals numbers lagged behind the other three counties. It was the Big Island's turn to lead, with 16.1% growth. O'ahu and Kaua'i came in at 6.4% and 6.8%, respectively. This configuration largely reflects the high hotel occu-

pancy rates now seen on all islands. The Kohala Coast of the Big Island, with its lower occupancies, had more room for growth last year.

All of Maui's visitor strength was on the U.S. domestic side, where arrivals grew 5.0% in 2005. Maui's mainstay U.S. West market was marginally the strongest, with 5.2% growth for the year. But the increasingly important U.S. East market also turned in a good performance, with 4.7% growth. Japanese arrivals saw a 12.1% decline, a continuation of the double digit drops Maui has experienced since 2000, and the eighth decline in the last nine years.

Hotel occupancy rose to 79.6%, the highest since 80.3% in 2000, and the average daily room rate was 9.6% higher, its biggest growth since 9.8% in 1996. International length of stay continued to rise, while domestic length of stay fell for the second year in a row.

The Maui tourism sector was strong on all fronts in 2005—hotels, time share, rentals, activities, restaurants, retail, and other components. Observers in the industry continue to report optimism about the outlook both for 2006 and 2007.

The rising hotel occupancy rate has supported substantial gains in the average daily room rate. Looking ahead, however, limits to hotel room inventory may become a growing concern for Maui. Industry trends have favored time share and condo development, but a healthy room mix is important. For example, Maui's important group business depends on having access to a sufficient number of hotel rooms. There are only two prospective hotels under discussion at present, and neither is imminent. For the near term, the hotel room inventory problem is likely to be aggravated by more hotels going out for renovation.

In this environment with real constraints on the potential number of visitors, the Maui Visitors Bureau continues to target higher spending ones.

Hotels and other tourism-related activities repeated the mantra heard throughout the county last year—the frustration at not being able to find qualified workers to fill vacancies. There is no respite in sight from this problem, and it poses a particular challenge for Maui's upscale market segments, where visitors may be willing to pay higher prices, but not for sub-par service.

An aspect of rapid change for Maui tourism is the growing cruise ship industry. Statewide, harbors are woefully unprepared to accommodate the growing number of bigger cruise vessels, as well as the impending Superferry. In that regard, Kahului Harbor on Maui probably has the most problems of any harbor in the state. The harbor is totally hemmed in by land owned by others, so that expansion is impossible without purchase from private interests or the conversion of state land. On Maui, agricultural operations like sugar need a window of 48 hours at the dock for loading, which further exacerbates problems.

In other infrastructure concerns related to tourism, the Kahului Airport is a continued focus of potential upgrades by the State Department of Transportation. While this is a vote of confidence in Maui's tourism future, it threatens further disruption short term.

Residential Construction

Residential construction on Maui has continued to be one of the economy's hottest sectors, as building activity tries to catch up with demand. Maui builders remain extremely busy, often not even bidding on a project that has a start date nearer than a couple of years out. Some developers with potential projects have complained that no contractors are bidding on the work. Contractors surveyed indicate no slowdown in the industry until at least 2007. And even though job growth in Maui construction has been phenomenal, finding qualified workers in the skilled building trades is a major challenge.

Data gathered from the April 20, 2005 meeting convened by MECO indicate that there were about 59,500 housing units in Maui County at the time. Over the past four years, 3000 units had been added,

an estimated 912 in the last 10 months. Going into 2005, there were 1,177 residential building permits for 1,521 new single- and multi-family housing units. There were 600 new residences under construction, with about 3,000 units in various stages of planning over a five-year horizon.

Areas on Maui seeing the greatest concentration of construction activity include Central Maui (Wailuku, Kahului, and Waikapū), South Maui (Kīhei and Wailea) and West Maui (Lahaina, Kā'anapali, and Kapalua). Because demand remains so high, there are no unsold vacant houses like those seen during the soft housing market of the mid-1990s. New developments are deluged by qualified home buyers, so that there is a backlog of new orders.

New homes bring benefits for energy utilities, like MECO, because they are much more energy-efficient than the existing housing stock. However, the greater popularity of air conditioning—even a growing tendency to consider it a "necessity"—may offset these gains. In addition, most of the new Maui residential development is located in the island's hotter areas.

Residential Real Estate

As for the state as a whole, residential real estate was a focus of activity on Maui in 2005. Even as new construction enhanced the supply side of the equation, prices continued to soar.

On the single-family side of the market, island-wide sales were up 7% for the year, median prices rose 23% to a yearly average of $679,000, and total dollar volume was up 36%. For condos, sales were 3% higher in 2005, median prices were up 26%, and total dollar volume grew 29%. In land sales, the number of transactions were actually down 10% for the year, while the median sales price was up 29% and total dollar volume was 20% higher. Median prices have generally stayed high through the first part of 2006, but the number of sales has been declining, again reflecting statewide trends.

Naturally, most of the sales were concentrated in the areas with the most new construction. For this and other reasons, Maui real estate numbers require careful interpretation. In addition to including prices for new product, sales figures are also driven by when the new product is brought to market and also the nature of that development, luxury or more moderately-priced homes. Obviously this also affects median prices, and the Maui market is small enough that just a few higher-priced homes in a particular area can cause a surge in both average and median prices. The land price figures can be especially misleading, because one does not know the size of the parcel or its location.

In spite of all these difficulties in interpretation, there is absolutely no denying that home affordability on Maui is becoming a very serious concern. This problem is more serious on Maui than anywhere else in the state, with the possible exception of Kaua'i. Home prices are higher on Maui, and there are fewer higher-paying jobs that can support a large mortgage. New residents and entry-level buyers, without equity in an existing home, suffer the most.

A strong real estate market on Maui usually coincides with robust economic times generally, and there are both cause and effect influences in that regard. But as we have emphasized elsewhere in this report, soaring home prices do have a darker side. Over the longer term, the erosion in affordability chokes off the ability of the economy to expand, attract quality employees from the outside, and to keep the ones that it now has. Therefore, high home prices will continue to be a concern in 2006 and beyond.

Commercial Development

Commercial development on Maui continues to be driven in large part by the demand for light industrial space, a cycle that began in the late 1990s. This trend has been supported by accelerating real estate prices, and by the conversion of land parcels from agricultural to urban use.

Industry projections indicate that over the next seventeen years, 2.6 million square feet of finished light industrial space—equivalent to 270 acres—will be added, much of it in the Kahului Dairy Road corridor near the airport and harbor, but also in various other places across the island.

Absorption of new product that has already been offered has been quite rapid—for example, the sellout of the Lahaina Business Park and the Kīhei Business Park. The main purchasers have been owner/users intent on conducting some sort of sole use business—such as showrooms, retail outlets, or office warehouse space. Because of the strong short-term demand for such space, there has apparently been relatively little speculative acquisition of such properties; instead, available space is put into use immediately. Demand has been stoked by a growing population, which in turn has been facilitated by the increasing housing stock.

Ongoing or upcoming projects that are still pending zoning and entitlements, include:

- Maui Business Park Phase 2, a 179-acre longer term development by Alexander & Baldwin, which has a planned absorption horizon of 12 to 18 years.
- Maui Lani Business Park, a mixed-use commercial/residential project on about 50 acres.
- Several sites in the Wailea Resort area that can be built out over the next decade, mostly mixed use commercial (with some residential) space totaling about 50,000 square feet.
- Consolidated base yards along Waiko Road, about 20 acres of heavy industrial area.
- Kehalani, 20 acres that is anticipated to be retail.
- Thirteen acres in Wailuku, a Weinberg project that is anticipated to be retail/commercial use.
- Lahaina Business Park Phase 3, across from Cannery Mall, with potential for 12 more acres of development.
- Lahaina Gateway, 11.6 acres between the highway and a light industrial area, targeted for 2007 development.
- Kahului Shopping Center, which is being redeveloped entirely because of a fire. A mixed use project is envisioned here also, with residential as well as retail. This project has been given priority status by its owner and developer, Alexander & Baldwin. A&B plans for neighboring Maui Mall, which it also owns, to remain in retail only.
- Ka Ono Ulu Ranch in Kīhei, 80 acres zoned to accommodate commercial activity.
- Kulamalu, a Dowling project with available acreage zoned for business.

Even these potential developments may not be sufficient to cover anticipated needs.

A trend worth noting is the increased interest in the development community for projects incorporating a greater mixture of uses, from lifestyle and town planning perspectives as well as from market perspectives. This might also include rejuvenated downtown areas. These are exciting trends because they blend commercial vitality with a sense of community and place.

Retailing

Maui retailing continues to benefit from the healthy underlying economy, both directly from tourism spending and in the outlets more dependent on local spending. Larger new entrants have made Maui retail statistics look especially good in recent years, particularly the advent of discount retailers like Wal-Mart and K-Mart.

Total retail sales on Maui have been on a dramatically increasing trend in the last several years. Including all conventional retailing, auto purchases and restaurant sales, sales figures increased from $621 million in 1997 to $1.6 billion in 2004, a 158% increase.

Maui demographics are changing, and smart retailers are sensitive to this. Even aside from rising overall population and household incomes, there are other more subtle trends. One of these is the increase in transient home ownership, with the large influx of time share units. This has implications for retailing as well as other sectors.

Queen Ka'ahumanu Center (QKC), Maui's largest local mall near Kahului, has seen big changes over the past few years: new owners after its sale by Maui Land & Pine in 2003, new management, a multi-million dollar remodeling effort, and new tenants. The Center was about 75% leased to permanent tenants in 2005. Management reports that it is still something of a challenge to fill vacant space, but a 5% increase each year will mean 100% occupancy in five years.

QKC sales seem to reflect the local economy; 2005 was better than 2004, which in turn was better than 2003. Very strong double-digit increases have been seen especially in jewelry, women's apparel, and accessories. And high single-digit gains have been reported for department stores, books, and the food court. When Maui Community College builds dormitories across from QKC, management expects a further boost in sales.

The other face of Maui retailing is the purely resort side, typified by a development like the Shops at Wailea. Occupancy rates there remain at 100%; if a tenant is lost, a replacement is found very quickly. Management reports that 2005 luxury sales were not quite as strong as in the past, and the trend seems to be toward "lifestyle" items demanded by time share visitors. (Even though Wailea itself does not allow time share, new condos going into the rental pool there should balance this out.) In the near term, it is possible that hotel renovations could negatively impact sales.

Because of the dependence of Maui retail sales on part-time residents, the outlook for the retail sector can be difficult to gauge. Certainly, strength in the local economy bodes well. Declining home affordability is a risk, since a greater share of the average household budget is now tied up in servicing a mortgage. Industry observers expect a continued trend toward more niche outlets and more mid-priced sit-down restaurants in coming years.

Banking and Finance

Banking on Maui follows statewide trends. The industry remains buoyant, still benefiting from interest rates that remain low by historical standards. Though mortgage re-financing activity has subsided, the economy abounds with liquidity to support growth in deposits on the liability side of the balance sheet and loan demand to boost the asset side. Give a traditional banker those two things, and he is happy.

One thing bankers watch nowadays, however, is the narrowing spread between long- and short-term interest rates. The yield curve flattening over the past year means weaker profit growth, and this cannot be made up with volume if loan demand slows. Nevertheless, this is a sector that does not seem overly threatened at the current juncture. As long as the Maui economy remains robust, so will its financial sector.

High Tech

High tech on Maui continues to benefit from Maui Economic Development Board (MEDB) efforts and the Maui High Performance Computing Center (MHPCC) in Kīhei. MEDB estimates that the high tech contribution to the Maui economy is $145 million annually. That is in the range of other large Maui operators, just below the contribution from Wailea hotels and ML&P, and actually above HC&S. MEDB estimates that Maui tech jobs have grown from 700 five years ago to 1,200 today.

High tech continues to be a desirable target for diversification because it creates higher-income positions, much valued in Maui's predominately low-wage service economy. Technology and medicine are among the few local occupations that break out of this mold. According to MEDB, the average annual wage at the Kīhei tech park is $70,000, considerably higher than the average earnings of Maui

residents.

Most of the technology companies on Maui are defense contractors. But seeded growth often occurs through spin-off activities. MEDB representatives give Akimeka, Oceanit, and MOSAIC as local examples. Monsanto's largest research and development operation is on Maui, as well as microchip and telescope component manufacturing. Companies in the industry expect 5% to 20% growth over the next few years. Several are expanding out from the tech park to Kahului and Kula.

Boeing represents one particular Maui high tech success story. Boeing, a major contractor at MHPCC, now occupies four sites on Maui, and it has doubled its total employment over the last five years from 120 to 420, 200 of these supporting the Maui Space Surveillance Site (MSSS).

In addition to its lead contractor role on the MSSS Air Force facility atop Haleakalā, Boeing is also active on Maui with its Laser and Electro Optical Systems (LEOS) services unit and science-related work in areas such as satellite detection and identification, atmospheric compensation imaging, astronomy and orbital mechanics, sensor development, laser propagation, modeling and simulation, and software development. Boeing has been attempting to grow its business on all of Hawai'i's major islands, specifically addressing military interests. The jobs that it creates range from blue collar to the Ph.D. level.

As we have emphasized so often in previous reports, a critical component of local high tech growth is an appropriately-trained resident workforce, and this becomes particularly important in these times of general worker scarcity. A recent MEDB study documented a lack of "sticking tendencies" among high tech workers recruited from the Mainland; average stay was estimated at only 2.5 years. This represents a substantial cost for high tech firms, especially considering recruiting and relocation costs that often must be funded, all on top of basic cost of living concerns.

Therefore, MEDB has identified workforce development on Maui as a top priority, growing the local workforce from school age to mature adults. Included in this is a "Kama'āina Come Home" program. Boeing has initiated joint efforts with UH and Maui Community College to help develop the workforce. There are signs of success for these efforts. Five years ago, only an estimated 5% of the high tech workforce were homegrown workers; now the estimate is more than 30%.

Agriculture

To a greater extent than other Hawai'i islands, Maui agriculture continues to be dominated by the remnants of plantation agriculture. This includes both sugar and pineapple, although neither of these traditional plantation crops is in an expansion mode nowadays.

The remaining sugar operation is Hawaiian Commercial & Sugar (HC&S), a plantation that has survived because of its economies of scale, central location, and reinvestment by owner Alexander & Baldwin. Commodity sugar is still produced, but the trend is toward niche or specialty sugar products that have higher profit margins. On the commodity side, HC&S sugar production was down some in 2005, as it is expected to be in 2006, as a result of previous drought conditions.

The plantation also produces molasses, which is now used primarily as cattle feed on the U.S. Mainland. Higher shipping costs to the West Coast have made this business less lucrative than in the past.

HC&S has actively pursued ethanol production in the last several years, anticipating its requirement as a fuel supplement. Two different methods have been investigated: ethanol production from molasses and also from biomass waste products. Joint venture partners in this effort are Clear Fuels Technology and Maui Ethanol LLC. Progress has been slower than originally predicted, but efforts continue.

HC&S management notes several major challenges that it faces in coming years:

- Commodity sugar, its core business, is not as

profitable as it once was. NAFTA and CAFTA pose the threat of cheaper Mexican and Central American sugar imports into the U.S. So HC&S has been investigating alternative uses for the cane plant.

- Like many other firms, they have been impacted by higher oil prices. But roughly 80% of HC&S power comes from burning the waste product, bagasse. Because of higher oil prices, the plantation finds it more profitable than in the past to sell power to MECO.
- HC&S also faces environmental challenges, from possible prohibition of cane burning to concerns over water pollution. While the company is sensitive to these challenges, they emphasize that no other crop in Hawai'i stands up so well to salt air and wind, and still yields the same per acre. It is not clear that there are viable alternative uses for existing cane land, and previous sugar closures have tended to result in a significant amount of prime agricultural land lying fallow.
- Management has also had to contend recently with fires set by vandals. This sets the entire harvesting process back, and it is a hurdle they do not need with other looming issues.
- Once again, recruiting qualified people has been an ongoing problem.

Maui's other major agricultural concern is Maui Land & Pine (ML&P). The firm has been getting out of canned pineapple, downsizing its factory, and concentrating on fresh fruit. Even beyond that, they have reduced pineapple plantings and are emphasizing the specialty, not the commodity, market. Land freed up by this process may be leased to entrepreneurial farmers, mostly recruited from out-of-state, with the appropriate skills to grow a wide range of crops. Remaining land might be used to produce protein.

ML&P management observe that it is the resort residential market that drives the Maui economy, and the company is involved in planning, building, and marketing its resort residential properties in Kapalua. The County recently approved 690 luxury homes and other attractions at the Kapalua Mauka property in the next 10 to 15 years. This should further enhance the 23,000 acre master planned Kapalua Resort.

Also on the development slate for ML&P is Pulelehua, a planned holistic community in West Maui. The development, which will include schools, parks, and infrastructure, is intended to serve as affordable and moderately-priced housing for people working in West Maui. About half of the total planned 895 homes are targeted for low- and moderate-income Maui residents. This ecologically-sensitive plan, using land around the Kapalua Airport, is intended to fulfill the company's perceived mission as a responsible steward of the land. The project is still subject to County approval.

Health Care

Like much of the rest of the country, Maui is experiencing significant growth in its older population, and more aging is anticipated in the years to come. For Maui, this is exacerbated by a continued out-migration of the 25-64 age group, and inflows of retirees from the mainland. As a result, Maui may have to provide for its aging population with a dwindling workforce. Ironically, further out—when the post World War II baby boom eventually dies off—excess capacity may become the problem. In any event, for the next several decades, there will be increased demands on the health care infrastructure on Maui.

One of the biggest developments in Maui health care in the last few years has been the $42 million expansion of the Maui Memorial Medical Center (MMMC), the island's only acute care hospital. That facility, like others on Maui and elsewhere, faces immediate challenges. Among these:

- There is a statewide crisis in health care that includes insufficient reimbursement by health care providers. Uninsured patients also demand attention.

- There are not enough primary care doctors on Maui. Hospital management reports that Maui has a lower number of doctors per capita than any other county in the state. As in other professions, attracting new doctors to the local increasingly high-cost environment is often challenging.
- Long term care beds are currently in short supply.
- Cancer and diabetes are reportedly particular problems among the Maui population.

In three to five years, MMMC hopes to have a cardiology unit on island that will alleviate the need to travel to O'ahu for such care. MMMC might also begin to see more patients from the other Neighbor Islands coming for cardiac treatment.

Modern health care facilities are tremendous power consumers, both for medical equipment and air conditioning, so there will be a growing demand for electricity from the Health Care sector in coming years.

The Arts

One sometimes overlooked sector of the Maui economy that provides diversification and sustains vitality, while at the same time fostering a desirable lifestyle, is the arts. The Maui Arts and Cultural Center (MACC) plays a leadership role in the arts on Maui that is not found on any of the other Neighbor Islands.

MACC helps the Maui economy in several ways:

- It stimulates spending, both locally and from visitors, when major entertainers come to town. In addition to millions of dollars in ticket sales, one might add the sums spent on dinner, transportation, parking, and incidentals.
- It spends money on Maui itself. Campaign funds raised to improve MACC and the arts generally are spent on local construction, architects, contractors, and labor.
- It brings new money to Maui, attracting corporate and incentive groups as well as the entertainers themselves, all of whom spend money on hotels, cars, restaurants, and other goods and services.
- It generates business on Maui. Local food vendors, restaurants, and caterers serve thousands of entertainers and crews each year when they come for concerts and other events.

Lāna'i Developments

Unique among the four Hawai'i counties, Maui County is composed of more than one island. Economic activity on Maui Island dwarfs that on Lāna'i and Moloka'i, but it is nevertheless interesting and useful to review developments on these two islands.

The Lāna'i economy is dominated by the developments of Castle & Cooke Resorts, LLC. These still center on the Mānele Bay Hotel area on the south shore and Kō'ele Lodge in the highlands, along with golf courses and luxury real estate development surrounding these resorts. So far, Castle & Cooke has not realized the lofty growth projections they had once envisioned. Observers report that Mānele Bay is doing better than the Kō'ele Lodge area.

From the beginning, the idea—common to many resorts—was that the hotels would attract visitors who would become interested in buying local real estate. With hotel profit margins small, it is often the latter that makes many such projects break even.

Recent conversion to Four Seasons hotel management has meant more work hours for employees because the ratio of staff to visitors has had to increase. But hotel occupancies on Lāna'i remain much lower than those on the more populated islands. Observers report that one saving grace is the wedding business. A fitness center and spa have been added to Kō'ele Lodge.

Naturally, one of the Lāna'i economy's biggest

problems is that the labor pool is very small in all sectors. And there is a glaring difference in the luxury homes that average 2,200+ square feet and the average 1,200-square-foot plantation home. So the problems that other Hawai'i islands have been facing in the area of home affordability are only magnified on Lāna'i. The inventory of affordable homes is very low, which feeds back to the labor supply problem. This home shortage has been further aggravated recently by construction workers coming into Lāna'i City to work on Four Seasons renovations.

Recently, the Lāna'i unemployment rate has been the lowest in the state, another big change from previous times. That is somewhat deceiving, however, because many of the jobs on Lāna'i are only part time, requiring two or three jobs to make ends meet. And of course this has adverse implications for the social structure.

Local sentiments on Lāna'i often include a perception that, since there is only one major employer, the 1,100 company employees do not have much input on big issues. In addition, there appears to be a desire on the part of Lāna'i residents to establish greater home rule.

Other island projects include school expansion and hoped-for improvements in the small boat harbor near Mānele Bay. If Federal matching funds are forthcoming, the harbor breakwater may be refurbished.

Moloka'i Developments

The Moloka'i economy is similar to Lāna'i's with its very small size, although it is not dominated to the same extent by a single employer. Unemployment rates remain higher here than elsewhere in the county, even if they have shared the same downward trend.

Moloka'i has seen a number of new businesses—gourmet salts, tour outfitters, and a new restaurant and bar. At the same time, Moloka'i has more residents below the poverty line than elsewhere in the state, so local purchasing power is meager. Another distinguishing feature of the Moloka'i economy is that it remains more of an agricultural island, although it is not dominated by very large growers. Agricultural land accounts for 67% of the island's land classifications.

Among other recent developments:

- The Moloka'i Small Business Summit resulted in classes for local entrepreneurs on how to write grants for starting a business.
- The Moloka'i Language Institute was formed to provide English fluency for some Moloka'i residents, often spouses of in-migrating workers from the Philippines and Thailand who wish to attend Maui Community College.
- The Moloka'i Kūha'o Business Center and the Moloka'i Hō'ikaika Youth Opportunity Program also support workforce development. These incubator centers help local entrepreneurs because there is so little job creation by other employers on the island.
- Lanikeha Commercial Kitchen can be rented by entrepreneurs interested in developing their own food products to take to market.
- The Moloka'i General Hospital is targeting the growth of sustainable programs that are not grant-dependent and that have a high patient value. The hospital has opened a new wing, and it has just started to provide chemotherapy. This helps because some local residents in the past have chosen not to take chemotherapy because it entailed frequent commutes to Maui.

Overall, the Maui County economy began 2006 in very good economic shape. Construction and tourism continue to be favorable, and gradual diversification continues. Like elsewhere in the state, labor market constraints are among the leading concerns for further growth.

III. MAUI ECONOMIC FORECAST

Our forecasting exercise describes a likely path for the state and Maui County economies in the coming years. As always, the primary emphasis is on long-run projection: we would like to identify forces that will drive the path of the local economy over the next two decades. However, we also consider short-run business cycle prospects.

Visitor Industry

The visitor picture continues to look very positive. While additional growth in visitor arrivals will be slower than in recent years, tight conditions will support further gains in hotel room rates and overall visitor industry revenues.

The mainland tourism market has held up well in the face of the energy price shock, and prospects look good for continued strength in this market. After 7% growth in 2005, we expect growth of 3.9% for statewide U.S. visitor arrivals this year, slowing to 1.3–1.5% for the following two years.

Performance of the Japanese market has been poor. While economic conditions in Japan have firmed, we have not seen that show up in visitor arrivals. The yen's weakness also limits potential gains. Statewide Japanese arrivals will expand by 2.4% this year and about 1% for the following two years. Given the poor performance in this market over the past several years, we no longer expect a significant near-term recovery above the levels we have seen in the post-9/11 period.

Average occupancy rates are now at levels not seen since the mid-1980s. This has had tangible effects on the industry, most noticeably in the apparent diversion of some tourists to the Big Island where rooms have been relatively plentiful. High occupancy rates have also been cited by Japanese travel planners as one reason for low arrivals numbers; they are simply unable to get large blocks of rooms for tour groups. Occupancy rate will remain high for the foreseeable future, imposing some limit on tourism growth.

Given Japanese weakness and capacity limitations, we expect more moderate visitor growth this year than in 2005. Early evidence bears this out. Through mid-March, airline passenger counts for the domestic market were running about 4% above last year's levels, but they were down about 9% for the Japanese market. The total passenger count was up 1.4%.

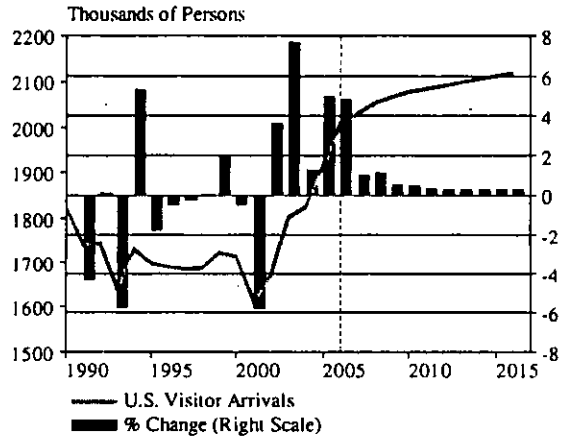

Figure 7: U.S. Visitor Arrivals to Maui County

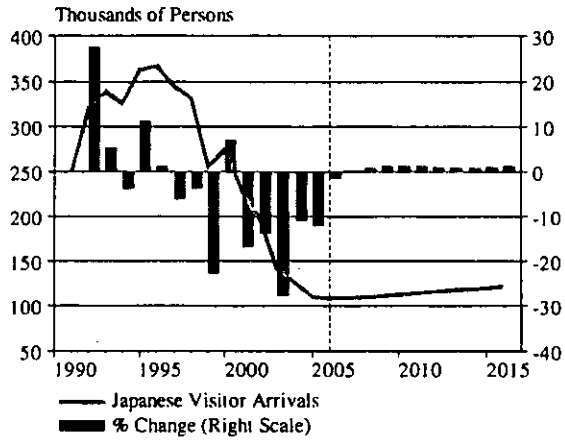

Figure 8: Japanese Visitor Arrivals to Maui County

After expanding 6.8% last year, the statewide visitor count will grow 3.4% this year, decelerating to 1.5–1.6% in 2007–08. Still, at this rate visitor arrivals will approach 7.6 million this year and nearly 7.9 million in 2008.

On Maui, overall visitor arrivals will expand 4-1/2% this year and 1.3% in 2007. Maui's U.S. visitor market has exceeded 1990 levels for the past two

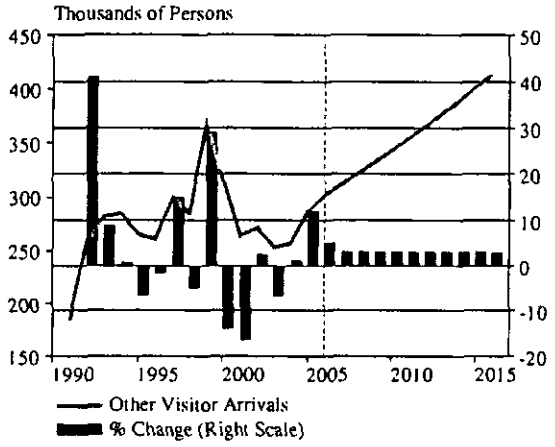

Figure 9: Non-U.S., Non-Japan Arrivals to Maui County

years, and further growth at a more moderate pace is expected. Through the end of the decade, we expect the annual growth rate of U.S. visitors to Maui to average 1.6%.

The Japanese market on Maui has all but disappeared. From more than 360,000 arrivals in 1995–96, Japanese arrivals have fallen steadily to just over 110,000 visitors in 2005. In part, this likely reflects the crowding out effect of buoyant mainland visitors. Regardless of the cause, it is no longer reasonable to project a significant recovery of this market. We expect only an end to the decline by 2007, followed by very modest growth in the 1–2% range thereafter. Growth will average just 0.5% for this market through the end of the decade.

The average length of stay was relatively stable last year, so that the daily census tracked visitor arrivals fairly closely, expanding by just under 3%. With some modest decline in the length of stay this year, we expect about 2% growth in the Maui visitor census in 2006 and just under 1% in 2007.

Over the longer term, the Maui tourism industry is expected to continue an emphasis on higher-value-added customers. Overall growth in the industry will be moderate, with relatively slower growth in the number of visitors accompanied by continued growth in daily visitor spending. To some extent, infrastructure bottlenecks and anti-growth sentiment will act as a brake on rapid growth. On the demand side, slowing population growth in the U.S.—and outright population decline in Japan—will also restrain visitor growth. Average growth in U.S. arrivals will converge to the 0.3–0.4% range by 2011 and remain on this track thereafter.

On the Japanese side, we expect some recovery but no return to the quarter-million-plus Japanese visitors that Maui saw in 2000. In part this reflects the generally weaker outlook for Japanese travel to Hawai'i as that country's population begins to decline and alternative destinations rise in popularity. But it also reflects our belief that the decade-long decline in Maui's Japanese market share will not be substantially reversed. After the end of the current decline, we expect Japanese visitor growth to recover to 1.7% per year in the last decade of the forecast, eventually bringing the Japanese visitor count to 144,000 by 2026.

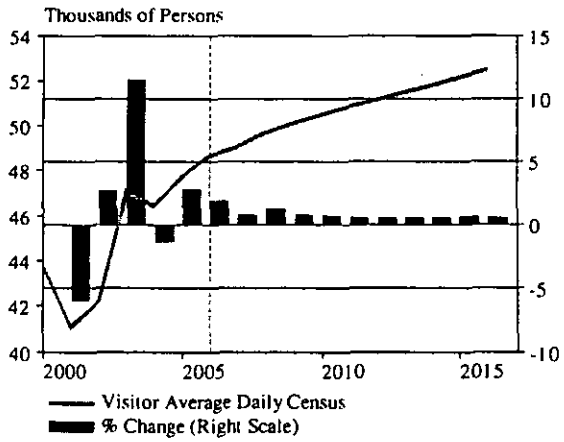

Figure 10: Maui County Average Daily Census

As elsewhere in the state, the non-U.S., non-Japanese portion of the visitor market is expected to see the greatest growth over the next two decades. This category is expected to grow at an annual rate of 3.2% over the forecast period, adding more than 272,000 visitors. By 2026, visitors from markets other than the U.S. and Japan will grow to 19% of total visitors, up from 12% today. Many of these visitors are expected to come from dynamic Asian economies, including Korea and mainland China. (Canada is the other significant area.) Because of

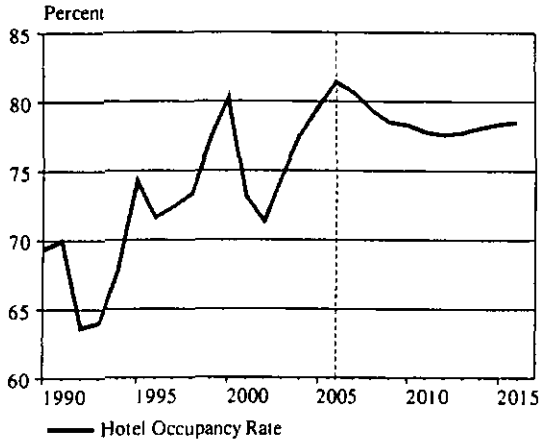

Figure 11: Maui County Hotel Occupancy Rate

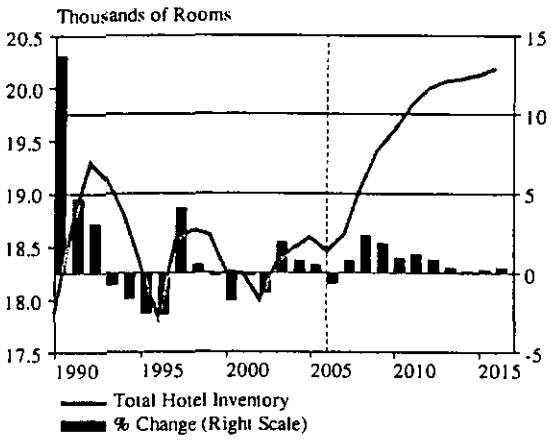

Figure 12: Maui County Visitor Accommodations

the uncertainty regarding future changes in visa and security requirements the outlook for this category has greater uncertainty associated with it than the forecasts for U.S. and Japanese visitors.

Annual hotel occupancy on Maui reached the 80% level last year. With continued visitor growth, we expect it to peak above 81% this year, before softening marginally as some new accommodations come on line. But occupancy rates will remain in the 78–80% range for the foreseeable future. Given the political climate and land constraints on Maui, we expect only 1,000 additional rooms will be added to the room stock by 2010, and another 1,000 by 2021. This will just barely keep pace with our relatively modest projection of visitor growth.

Population and Jobs

The Maui labor market is expected to remain healthy for the remainder of the decade. With the labor market now very tight, and high housing costs imposing limits on in-migration, we expect a continuation of the slowing trend that has been evident in recent years. After 2.4% growth this year, we expect less than 2% growth in 2007 and 2008. This more moderate job growth is in line with the sustainable path of employment growth of the local economy.

Construction will continue to lead all sectors this year, but the growth rate will be well off last year's 18% surge. After about 4-1/2% growth in construction jobs this year, we expect further slowing to 2.5% growth in 2007 and 1% by 2009. Still, we do not see any evidence of a retreat from the high levels of jobs that have been built up over the past decade. Wholesale and retail trade will grow an additional 3% this year, continuing to benefit from the buoyant construction sector. Services will continue to grow at or above the average rate for all sectors. Health care and social assistance and the accommodation and food services sector will expand their work forces by 2.4% this year. Jobs in the "other services" category, which includes business, administrative, and professional services, have seen big gains in recent years, and we expect that to continue, with 3.7% growth in 2006. Both Federal and state and local jobs will rise only modestly.

For the remainder of the decade, we expect aggregate non-farm job growth of 1.9%. Growth will decelerate thereafter, averaging just over 1% in the final decade of the forecast. General slowing of job growth is consistent with anticipated slowing of labor force growth as Maui and national population growth decelerates and the population ages.

Over the longer run, Maui jobs will be increasingly created in non-tourism service sectors. Agriculture will continue the gradual decline we have seen in recent decades, falling from 2.3% of Maui

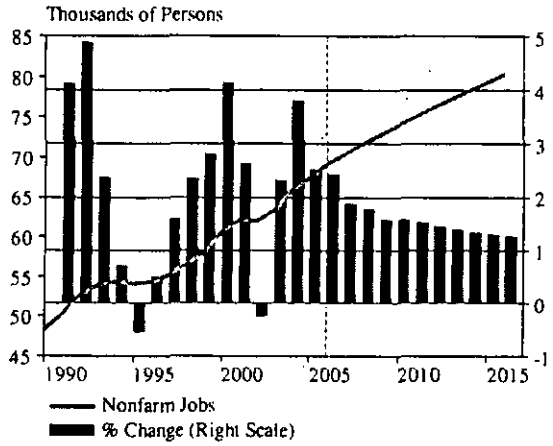

Figure 13: Maui County Non-Farm Jobs

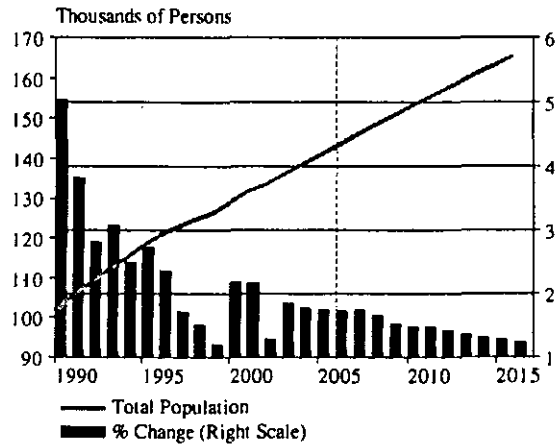

Figure 14: Maui County Population

jobs in 2005 to 1.5% in 2026. Wholesale and retail trade, which have a heavy tourism component, will decline in relative importance as well. After its current strength ebbs, construction will maintain about a 5% share in the Maui job base.

The aggregate services sector will expand from its current 53% of the Maui economy to 58% in 2026, with above-average growth in health care and the "other services" category. These long-term changes reflect not only Maui's evolution but also the changing composition of the American economy overall: Americans are steadily increasingly their expenditure on services, while spending relatively smaller shares of their income on goods.

While relative growth will favor non-tourism sectors, tourism will remain the primary export industry of Maui County and its dominant employer. Accommodation and food service jobs will still be more than one-quarter of the job base in 2026.

The population growth rate on Maui and the other Neighbor Islands is projected to exceed that of O'ahu, as these smaller economies expand and grow faster than the state's current population center. Maui's population is expected to grow at an average rate of 1.6% for the remainder of the decade, slowing to 1.0% for the final decade of the forecast period. This compares with a average growth rates of 0.8% and 0.6% for these periods on O'ahu.

Income

Income growth represents the best overall indicator of Maui economic performance, and arguably also the one most closely tied to household wellbeing. Over long time periods, income trends follow job and population growth trends, and they also reflect growth in labor productivity. Recent strong income performance, and data revisions by the U.S. Bureau of Economic Analysis, lead us to raise our near-term projection for Maui real personal income growth. We now expect about 3% real income growth for the remainder of the decade, decelerating to 2% by 2015 and 1.7% for the final decade of the forecast period. Maui's real personal income *per capita* is expected to grow an average 0.8% per year over the 21-year period.

In summary, the outlook for Maui County is for moderately strong growth in the near term, with tourism, construction, and non-tourism services all showing gains. With the labor market very tight and the construction cycle maturing, gradual slowing will begin to occur over the next several years. Over the long haul, the slowing of U.S. and Japanese populations, along with local development constraints, will bring slower average growth rates for tourism in Hawai'i, and for the overall local economy. The standard of living of Maui's people, as measured by per-person income, will continue to expand at a steady, but unspectacular, rate. The composition of

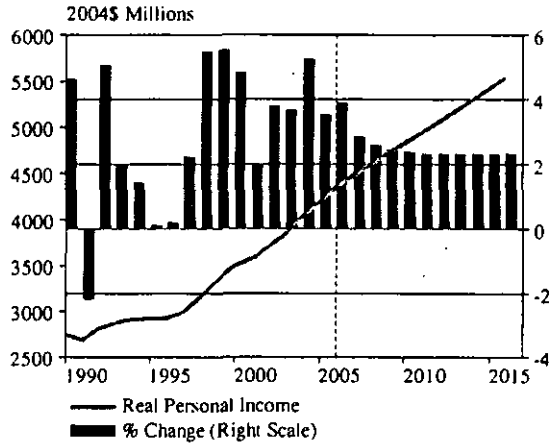

Figure 15: Maui County Real Personal Income

the county economy will continue the gradual evolution toward non-tourism service areas, although tourism will remain King.

IV. EXTERNAL ENVIRONMENT & FORECASTS

The State and County forecasts rely in part on forecasts of external conditions in the U.S. and the Japanese economies. UHERO produces long-term trend forecasts for the U.S. and Japanese economies that extend through 2026. The baseline forecast represents the average of possible paths the economy could follow in the absence of major geopolitical or economic disruptions. It assumes continued moderate expansion of the U.S. economy in the short-run. In the long-run, output follows potential output as determined by expected growth in employment and productivity. The Japanese economy has shown improvement recently, and it is now expected to grow at or slightly above potential in the short-run, before converging to potential growth over the next few years.

Major geopolitical and economic disruptions might lead to deviations from the baseline path. Large and persistent oil price shocks, unusual swings in macroeconomic policies and excessively rapid increases in private demand are examples of economic disruptions. Continued instability in Iraq, a crisis with North Korea or in the Taiwan Strait, a new terrorist attack on U.S. soil or an outbreak of Avian Flu are examples of such disruptions. Other than modifying the short-term outlook somewhat, we would not expect significant changes to the long-run forecast in response to disruptions of this kind.

UHERO also produces an optimistic and a pessimistic scenario. These scenarios are used to drive high and low forecasts for the State and Counties. See the discussion in section V.

Short-Run Projections

UHERO expects continued moderate expansion of the U.S. economy, and Japan's near term prospects are now quite good. Notwithstanding recent concerns related to high energy prices, global economic conditions are expected to be broadly supportive of continued robust growth for the Hawai'i economy.

UHERO also prepares an annual Global Outlook report, the most recent released December 8, 2005. Please contact us for more information.

U.S. Economic Prospects

The U.S. economy faced an array of challenges during 2005, including higher-than-expected oil prices, an intractable war, and the most damaging hurricanes to strike the Gulf Coast in at least three decades. Despite all these, the most common summary statistic for aggregate economic activity held up surprisingly well, with 3.5% Real Gross Domestic Product (GDP) growth for the year as a whole. Employment grew at a healthy 1.8%, bringing the unemployment rate down to 5.1%.[2]

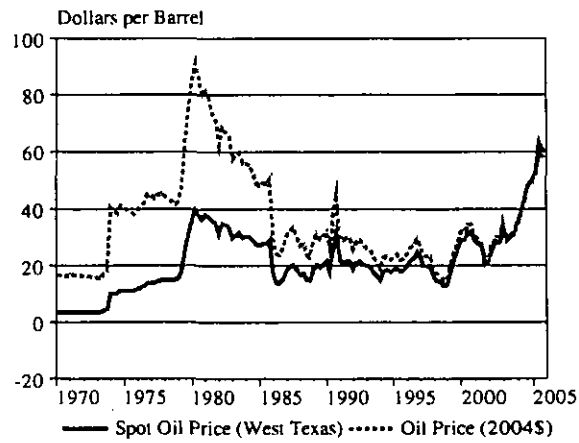

Figure 16: Crude Oil Prices

There was a marked deceleration of growth at the end of the year. GDP slowed from 4.1% in the third quarter to 1.6% in the fourth quarter. Weakness was rather broad-based. Business fixed investment managed only a 4.4% gain, and residential investment 2.6%. Because of a sharp drop in consumer durables spending following the end of auto sales incentives in the third quarter, consumption expanded at a meager 1.2% rate. Net exports continued to be a drag, and a large negative inventory swing also held down output growth.

[2]Historical and forecast data described in this section may differ slightly from the Appendix tables because of data released or revised after the time the forecasts were computed.

Near-term prospects look fairly good for a rebound of consumer spending. Indices of U.S. consumer sentiment, which took a big hit after the hurricanes, have recovered since then. The Conference Board's Consumer Confidence index hit a 3-1/2 year high in January, although the competing University of Michigan survey fell back somewhat in February. There continue to be more troubling signs for the medium term. Consumer spending has been far stronger than income growth over the past year, so that savings rates have turned negative. With household debt levels already high, this presents a concern for the medium term ability of consumption to sustain growth.

In the housing market, as mortgage interest rates have crept up above 6%, resales have softened, and they have fallen for three consecutive months. Clearly the housing market is turning, although there is no evidence of a sharp falloff. An end to home price appreciation, even absent substantial price declines, could pose a significant challenge to the U.S. economy going forward. Housing price gains in recent years have been a key support for consumer spending. (See the box, "Risks: Home Prices and Consumption.")

Investment spending has continued to be rather robust. For the year as a whole, nonresidential fixed investment averaged 8.1%, following 9.7% growth in 2004. Equipment and software spending has been particularly strong. Given strong profits, healthy balance sheets and still relatively low interest rates, investment should be a bright spot for the next few years.

The national labor market made big strides last year, and began this year with more signs of strength. The unemployment rate fell to 4.8% in February, its lowest mark since mid-2001. The four-week average of initial jobless claims has plunged to a nearly 6-year low of 277,000 after the temporary lift from the Hurricane effects.

There is no doubt that energy prices acted as a drag on the economy in 2005. The burden of higher gas costs and the temporary falloff in confidence that followed Hurricane Katrina may explain a good part of the fourth quarter weakness.

Risks: Home Prices and Consumption. Home equity borrowing has fueled consumer spending over the past several years. Rising home prices have allowed homeowners to pull substantial amounts of purchasing power out of their home, $60 billion in the third quarter of 2005 alone. What happens now that home price appreciation is ending?

It could get ugly. Home equity represents as much as two-thirds of the wealth of the median household. And household spending responds strongly to changes in housing wealth. While the estimates vary widely, a 10% increase in home prices may raise spending by 0.6–1.3%. These effects are at least twice as large as responses to changes in stock market wealth. That means that as much as half of consumer spending last year could be explained by the 13% rise in the national median home price.

So even an end to home price appreciation could trim consumption spending considerably. Already, the volume of home equity lending has fallen sharply over the past two years. Since consumption is two-thirds of the U.S. economy, this could lead to sharp slowing in output growth. If large home price declines occur, this could tip the economy into recession. Because new "subprime" loans allow borrowers to shoulder higher levels of mortgage debt, there is also the risk that delinquencies and bankruptcies could skyrocket.

But while appreciation has slowed, and modest price declines have occurred in some markets, there is no indication that substantial price declines are in the offing. What happens will likely depend on how the Federal Reserve acts over the next year or so. If the Fed decides to raise interest rates more dramatically than we have seen so far, and borrowing costs rise significantly, then a sharper housing market correction could ensue, with detrimental effects on consumer spending and the economy.

At this point, the largest risks are price-related. We have already seen some feed through to consumer prices. The overall consumer price index

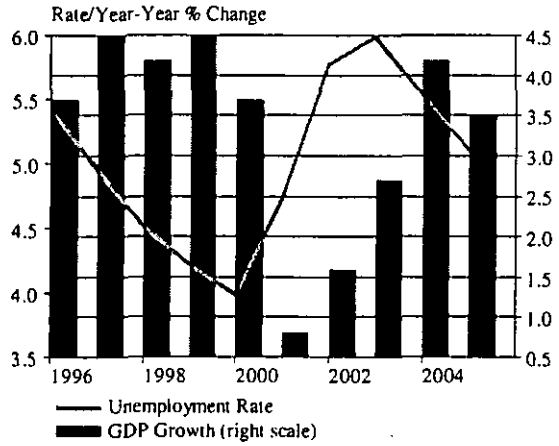

Figure 17: U.S. Real GDP Growth and Unemployment Rate

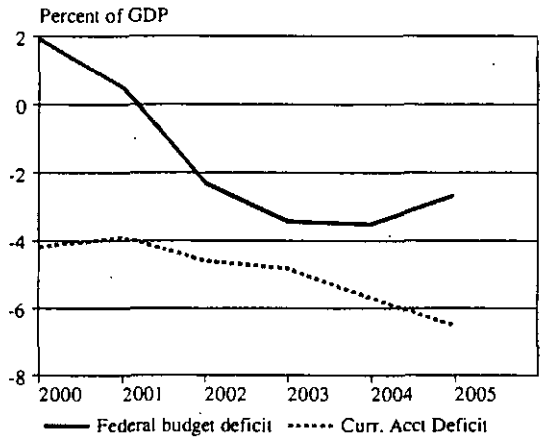

Figure 18: U.S. Fiscal and Current Account Deficits

(CPI) surged above 4% in September and October. And since capacity utilization is now near 80%, we may see more pricing power for manufacturers as well. Still, we believe that last year's 3.4% rate of inflation was the peak, and we will see inflation slow toward 2.6% by 2007.

Throughout this expansion, U.S. growth has been supported by sharply expansionary fiscal policy, beginning with the Bush tax cuts and later with increased security spending and the costly war in Iraq. The new budget Bush sent to Congress in February promises more of the same. While such stimulus was welcome in 2001–2002, the potential costs of continued fiscal profligacy appear now to far outweigh the benefits. Robust inflows of foreign capital have kept interest rates low for now, but they have resulted in a widening U.S. Current Account deficit. It is unlikely that capital inflows on this scale will continue much longer. Sooner or later, higher interest rates, a weaker currency, and a return to higher taxes are likely.

The Federal Reserve continued its gradual march toward higher short-term rates during 2005. Since the summer of 2004, the Fed has raised the Federal Funds rate by 350 basis points to 4.5% at present. At Alan Greenspan's last meeting on January 31, the Open Market Committee gave its clearest signal yet that rate increases may end soon. However, in testimony to Congress, new Chairman Ben Bernanke appeared to signal that more rate increase are likely, although he backed off from his earlier support for explicit inflation targets for monetary policy, which could lead to a tighter stance over the business cycle.

Overall, the near-term outlook for the U.S. economy remains positive, but with growth a bit lower than we have seen over the past two years. High energy costs and interest rates will act as a constraint, and, as we have seen, there is some risk that consumer spending could weaken considerably now that home equity appreciation has ended. After expanding by 3.5% last year, we expect the U.S. economy to growth by 3% this year, and 3.3–3.4% in 2007–2008.

California Performance and Prospects

California is now performing well. After the deep 2001 downturn related to the tech sector slump, real income rebounded strongly in 2004 to 3.9%, and the first three quarters of 2005 saw a solid 3.3% gain. Job counts grew at a strong 1.6% pace, building on 1% growth in 2004. The state economy added about 231,000 jobs in 2005. The California unemployment rate is on a downward trend, falling from the 6.0%-6.9% range in 2003–2004 to 4.8% in January 2006, not far off the national average.

Construction and related industries have led job

growth in recent years. Construction alone accounted for 35% the of total gain in 2004 and 25% in 2005. Other sectors leading growth are trade, transportation, and utilities; professional and business services; private educational and health services; and leisure and hospitality. Jobs in manufacturing and information remained flat.

California's fiscal condition has also improved considerably. Under the Governor's 2006–07 budget proposal, the operating budget deficit will be approximately $6.4 billion, a significant improvement from $14 billion in 2004–05 and a mammoth $35 billion shortfall in fiscal 2004.

Prospects for the California economy are for continued moderate growth, but at a bit slower rate than in 2005. The State Department of Finance expects about 1.3% growth in non-farm payroll jobs for the next three years, and sees real personal income gradually strengthening from 2.1% in 2006 to 2.9% by 2008. High tech areas will continue to be relatively weak for the next couple of years.

Japan's Economic Prospects

After a slow third quarter, the Japanese economy finished the year with a flourish. According to the first preliminary estimate, real GDP expanded at a 5.4% annual rate in the fourth quarter. For the year as a whole, Japan posted a 2.7% gain, its biggest annual increase since 2000.

Business confidence has improved after deterioration in late 2004. The *Tankan* index of business confidence has been favorable since mid-2003 for large firms and since early 2004 for both large and smaller firms. (The index for small firms turned slightly negative in the second half of 2005.) Profit rates and firms' own evaluations of supply-demand conditions are the best they have been since the early 1990s. Lending attitudes also continue to improve, to their highest levels since 1996–97.

Consumer spending has rebounded from a weak showing mid-year. In the fourth quarter, real consumption expanded at a 3.6% annual rate. Non-

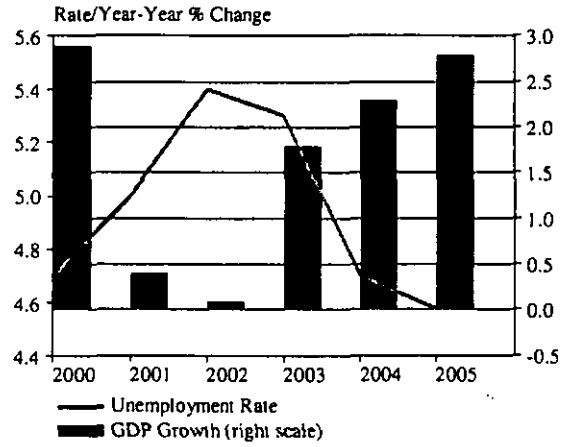

Figure 19: Japan Real GDP Growth and Unemployment Rate

residential fixed investment has slowed a bit since the first part of the year but remains an important contributor to growth.

The most notable change in the fourth quarter was a sharp positive shift in net exports. Exports have shown great strength in recent quarters, expanding at a 10–12% annual rate. But for most of the year, imports have grown faster, in part because of the high oil import bill. In the fourth quarter, real imports fell, contributing to the strong net export growth, possibly reflecting the changes in competitiveness that have come with the weaker yen.

One legacy of Japan's long period of slow growth has been the onset of price deflation. The weaker yen should help to stabilize prices which have continued to decline this year, albeit at slower rates than in the past. While higher oil prices help to reduce headline inflation, there is not yet any clear evidence that the deflation problem is completely solved. Still, we expect the price situation to continue to improve, with small positive consumer price inflation for 2006 and a bit more in 2007–08.

Last year's impressive finish sets up a strong year for the economy in 2006. We expect real GDP growth of 2.7% this year. If that happens, this will mark the longest economic expansion for the Japanese economy in the post-war period, measured according to the chain-weighted prices now in use.

We do expect the pace of growth to slow as the year progresses, and annual GDP growth will back down to just under 2% in 2007–08.

Japan's labor market will continue the steady improvement we have seen in recent years, and the unemployment rate will fall to 4.1% by 2008. Labor market gains have been the driver behind improvement in consumer spending this year, and so this augers well for continued consumption strength.

On the structural front, there has been progress reducing Japan's huge stock of non-performing loans, partly as a result of government policy but more importantly because of rising stock prices that have improved credit worthiness. The government budget deficit continues to be among the highest of developed countries. The deficit has been running at a rate of 7–8% of GDP now for seven years, and Japan has accumulated debt of more than 150% of GDP (more than double the upper limit set by the Euro Zone countries).

The policy environment represents the biggest risk for Japan over the next few years. As we noted last year, the government has been preparing the public for tax increases that may begin in 2007. This raises the risk that tax increases could derail the expansion as they did in 1997. At the same time, the Bank of Japan has been hinting that an end to its zero-interest-rate policy may be in the works. Higher rates would also serve to slow the economy, and so must be taken with great caution.

Long-Run Projections

Forecast for the U.S. Economy

Growth in real GDP in the longer term reflects the net impact of demographic factors, changes in labor force participation and productivity growth.

The current UHERO forecast for overall U.S. economic growth is shown below. After the present period of cyclical strength, which will generate above-average growth for several years, real GDP is expected to grow in the 2-3% range over the forecast horizon, with slowing growth as time goes on, principally because of demographics.

Population. Population projections are consistent with the United Nations Population Division's "medium" projection.[3] This projection is based on assumptions about fertility, mortality and immigration. Fertility rates in the United States will fall slightly from the current level of 2.04 per woman upon completion of child bearing to 1.86 in 2020-2025. Mortality rates continue to improve with life expectancy for men and women rising steadily from 75.2 and 80.6 years currently to 76.9 and 82.3 years respectively in 2020-2025. Net immigration is estimated to fall slightly from 1,150,000 persons annually to 1,100,000 in 2020-2025. The U.S. population is projected to grow 0.8% a year through 2025, down from the 1.1% pace of the last 25 years.

Labor Force. Labor force projections are taken from the Bureau of Labor Statistics (BLS).[4] The labor force is projected to grow 0.7% per year through 2025, down from the 1.3% pace of the last 25 years. The driving forces behind this slowdown are the reduction in population growth and dynamics in the labor force participation rate. The labor force participation rate will reach its peak in 2007 at 66.4%, up from 66.2% in 2003, but will then steadily drop to 63.4% in 2025. Slowing growth of the labor force participation rate of women and continuing aging of the overall population account for the long-term reduction in the labor force participation rate.

Employment. UHERO projects that employment growth will also decelerate from the 1.4% rate of growth in the past 25 years to 0.7% in the next 20 years. The deceleration is due to the reduction of the labor force and trends in the unemployment rate. We project that the unemployment rate will move to its natural rate of unemployment of 4.5% over the next five years as the U.S. economy continues its cyclical recovery. We assume that average hours per week remains constant over the projection period.

[3] United Nations Population Division, http://www.un.org/esa/population/unpop.htm.

[4] U.S. Bureau of Labor Statistics, www.bls.gov.

Productivity. Changes in productivity are among the most difficult long-term factors to forecast. In particular, there is considerable uncertainty whether recent improvements in productivity will persist over the course of the next two decades. We have adopted modestly optimistic assumptions. Jorgenson, Ho and Stiroh's (2002) labor productivity projections are used to make our long-term projections for the United States.[5] The authors project that labor productivity will increase by 2.21% in the next decade. We assume comparable growth for the following decade. This is lower than the labor productivity of 2.7% per year during the 1996-2000 period, but faster than the 1.6% average gain of the post-1973 period. As the labor productivity numbers are for the non-farm business sector, excluding government, housing and farm sectors, we adjust the labor productivity to incorporate these sectors. This implies that GDP productivity grows by 2.01% between 2006 and 2026. Given the difficulty of projecting long-run productivity and the importance of productivity growth in determining long-term economic growth, the impact of high and low productivity growth scenarios is discussed below.

Real GDP. Consistent with the projected lower employment growth and constant productivity growth, real trend GDP growth in the United States is expected to slow over the next two decades. Real GDP on average grew by 3.1% in the last 25 years. In the next 20 years, it is projected to grow at a 2.7% annual rate. Real GDP per person, a more appropriate indicator of living standards, is also expected to grow more slowly, but is not expected to decline to the same extent as the growth rate of real GDP. Real GDP per person grew by 2.0% in the last 25 years, and is projected to grow by 1.9% in the next two decades.

Monetary Policy. In the UHERO long-term trend forecast, monetary policy assumptions are more important in determining the inflation rate than the level of output. We assume that the Federal Reserve is able to target CPI inflation at 2.5%. This is roughly consistent with recent Philadelphia Federal Reserve forecasts of 10-year inflation expectations (2.4%).

Forecast for the Japanese Economy

As mentioned above, Japan's weak performance over the past decade is in part a reflection of structural problems that have held back growth. Japan has finally begun to make strides in dealing with some of these problems, in particular reducing the outstanding stock of bad debt. Genuine structural change such as opening Japan's markets to outside competition, decreasing the size and complexity of the bureaucracy, and truly liberalizing the financial sector will require more time. As this progress continues, we expect the economy to gradually return to its natural rate of unemployment of 4%.

The deflation era appears to be coming to an end, and we expect Japan to move toward inflation of about 2%.

Because demographic factors will cause the labor force to shrink beginning in 2008, the overall rate of growth of the Japanese economy will be limited. After the current recovery, real GDP is expected to grow in the 1-1.5% range over the forecast horizon.

Population. As for the United States, total population projections come from the United Nations Population Division. The projections are based on assumptions about fertility, mortality and immigration. Fertility rates will increase from the current level of 1.33 per woman to 1.58 in 2020-2025. Mortality rates also continue to improve with life expectancy for men and women steadily rising from 79.1 and 86.4 years currently to 81.3 and 89.2 years respectively in 2020-2025. Net immigration is estimated to remain constant during the projection period at a tiny 54,000 annually. Based on these assumptions, the Japanese population is expected to reach its maximum in 2010 and then start declining. This implies that population will decline at a 0.2% annual average rate for the 2005-2025 period, down from the 0.4% growth of the last 25 years. The population will be shrinking at a 0.4% rate by the end

[5] Jorgenson, Dale, Mum Ho and Kevin Stiroh (2002), "Projecting Productivity Growth: Lessons from the U.S. Growth Resurgence,"Harvard University working paper, 2003.

of the forecast horizon.

Labor Force. Labor force projections are provided by Ogawa.[6] The labor force is expected to decline 0.6% per year through 2025, down from the 0.7% annual growth of the last 25 years. The driving forces behind this slowdown are reductions in population growth and the labor force participation rate. The labor force participation rate has been declining steadily for the past 45 years due to a decline in the proportion of young people in the labor force, an increase in the proportion of retired people and an increased wealth effect. The labor force participation rate currently stands at 61% and will gradually decline to 55% in 2025.

Employment. UHERO projects that Japanese employment growth will decelerate from 0.6% growth a year in the past 25 years to an annual reduction of 0.5% in the next 20 years. The trend in employment is driven by trends in the labor force participation rate and the unemployment rate. Necessary structural adjustment in the Japanese economy postpones a return to the natural rate of unemployment of 4% until 2011. The natural rate of unemployment is projected to remain at 4% during the projection period. We assume that average hours per worker remains constant over the projection period. The trend in Japanese hours worked is thus identical to the trend in employment.

Productivity. GDP productivity in the long-run is projected to be identical to that of the United States (2.01%). An important implication is that relative differences in the long-run GDP projections of the United States and Japan are entirely driven by demographic trends. Note that this implies a closing of the productivity growth gap that has favored Japan in the post-war period. There are a number of reasons why we can expect this. First, Japan has now caught up with Western Europe and the United States. Second, Japan has belatedly started to transition from manufacturing to services. Third, persistent structural problems retard productivity growth.

[6]Naohiro Ogawa, Nihon University Population Research Institute, by personal correspondence, December 2002.

Monetary Policy. In the UHERO long-term trend forecast, monetary policy assumptions are more important in determining the inflation rate than the level of output. We assume that after a transition period the Bank of Japan is able to achieve CPI inflation at 2.0%. In addition, declining population will create a relative demand shortfall in the country that will keep the inflation rate lower than the United States.

Fiscal Policy. Japan's fiscal situation—already alarming in the short-run—continues to look grim in the long run. Population aging and population decline is expected to crumble the Japanese tax base, and may portend a fiscal emergency as pension and health bills come due for its aging generation. If the situation does not improve, the resulting huge public debt is expected to sharply increase Japanese interest rates, continue to lower Japan's international creditworthiness, and adversely affect the welfare of future generations. Nevertheless, our view is that fiscal rebalancing can be successfully achieved over the next decade but with a reduction in the role of public demand in the Japanese economy.

Real Exchange Rate. At 110 yen/dollar, we believe Japan's nominal exchange rate was slightly below its short-run equilibrium value in 2005, but we do not expect any substantial retreat in the near term. For the longer term, we expect just enough yen appreciation (about 0.5% per year) to keep the *real* exchange rate constant. (The real exchange rate is the yen/dollar rate of exchange adjusted for differences in national inflation rates.)

This represents a departure from the trend of real appreciation that Japan has experienced since the 1970s. As the population ages, savings will decline relative to investment obviating the need to appreciate and close the current account gap. With a stable long run real exchange rate, the nominal yen/dollar rate will appreciate as a reflection of inflation differences between the two countries.

V. ALTERNATIVE SCENARIOS

Alternative scenarios were prepared for Maui and the State economy to provide a range of plausible paths for the local economy over the coming two decades. These scenarios are based in part on optimistic and pessimistic forecast alternatives for the U.S. and Japanese economies. Additional assumptions were made about key aspects of the local economy. While the high and low scenarios presented may be useful guides to forecast uncertainty, neither is considered to be as likely to occur as the baseline forecast.

The optimistic national forecasts for the United States and Japan assume a faster average rate of economic growth than in the baseline scenario. The two economies in the short-run expand more rapidly than in the baseline scenario, while long-run employment and productivity grow more quickly. This allows the United States and Japan to expand a bit beyond their potential output during the current business cycle expansion and it permits their long-run potential output paths to rise faster as well.

The pessimistic national forecasts assume weaker near-term performance for the U.S. and Japanese economies, reflecting the potential for more restrictive monetary policy in the U.S. and fiscal and monetary policy restraint in Japan. In addition, long-run employment and productivity growth are slower than the baseline trend, and local tourism and demographics are less favorable to growth.

Forecasts for the U.S. Economy

The optimistic and pessimistic projections for overall U.S. economic growth are shown below. In the optimistic scenario, the current expansionary phase is more robust that in the baseline. Output growth is near 4% this year and exceeds 4% in 2007, and it remains somewhat higher than the baseline for the remainder of the decade. In the pessimistic scenario, decisive action by the Fed this year leads to higher interest rates and growth in only the 2% range for the next several years. Beyond the short-run business cycle scenario, differences in trend performance follow from different demographic and productivity assumptions.

Population. Demographic assumptions used for the baseline scenarios are consistent with the United Nations Population Division's "medium variant" projection, while the UN "high variant" is chosen for the optimistic forecast, and the UN "low variant" is adopted for the pessimistic one. The main difference between the variants is the assumption on fertility. The high variant assumes that the U.S. population will grow more quickly and the low variant assumes that the population will grow more slowly than the medium variant because of differences in fertility rates. The net result is that annual population growth averages 1.1% per year in the optimistic scenario, and only 0.5% per year in the pessimistic one (the baseline has 0.8% growth). By the end of the forecast interval, U.S. population rises from 297 million in 2005 to 367 million under the optimistic projection and 330 million under the pessimistic one. This compares to 348 million people at the end of the forecast period under the baseline scenario.

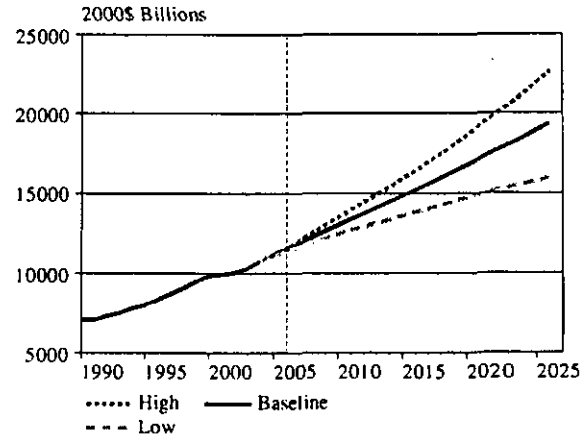

Figure 20: U.S. Real GDP

Labor Force and Employment. Varying fertility rates have a marginal impact on the labor force numbers in our projection period. Labor force is defined to be civilian noninstitutional population older than 16. Changing fertility rates beginning in 2006 therefore will only begin to influence the labor force 16 years from now in 2022.

We do assume a somewhat lower steady state rate of unemployment in the high scenario, with unemployment converging to 4% by 2011. This creates some additional employment growth for the next decade, but not in the long run. (The *level* of employment is of course permanently higher.) In the low scenario, we have unemployment remaining at or above above 5% throughout the forecast horizon.

Because of the very small differences in labor force across the baseline and alternative scenarios, the net differences in employment growth are also small. Employment will grow 0.8% per year on average in the high scenario, and 0.6% in the low scenario, compared to 0.7% in the baseline.

Productivity. We use Jorgenson, Ho and Stiroh's (2002) optimistic and pessimistic labor productivity numbers to calculate the productivity numbers for the high-low scenarios. In the optimistic scenario, it is assumed that the productivity patterns of the 1995-2000 "New Economy" period will persist during the forecast period. In that case, labor productivity is projected to be 2.93% per year (2.73% on a GDP basis). In the pessimistic scenario, it is assumed that labor productivity reverts to the "pre-New Economy" 1973-1995 averages. Labor productivity is then projected to be 1.33% (1.13% on a GDP basis).

Real GDP. In the optimistic scenario, real GDP growth averages 3.5% in the projection period, 0.8% higher than in the baseline and 0.4% higher than the actual average rate of growth since 1970. In the pessimistic scenario, real GDP growth is projected to be 1.7%, significantly lower than the historical average.

Inflation. In the optimistic scenario we assume that the Federal Reserve Board is able to maintain better control over inflationary pressure so that annual inflation averages 1.75%. This is lower than the baseline forecast of 2.5% In the pessimistic scenario, inflation control is poorer throughout the projection period and converges to 3.25%.

Forecasts for the Japanese Economy

Population. As for the U.S., the United Nations Population Division's "high", "medium" and "low" variants are used. Under the high variant, the annual population growth averages 0.09% per year in the optimistic scenario, and a reduction of 0.36% per year in the pessimistic one (baseline has 0.18% decline). By the end of the forecast interval, Japanese population rises from 128 million in 2004 to 130 million under the optimistic projection and falls to 119 million under the pessimistic one. This compares to 123 million people at the end of the forecast period under the baseline scenario.

The labor force profiles are very similar in all three scenarios, declining in each case by an average 0.5%–0.6% per year.

We assume a somewhat lower steady state rate of unemployment in the high scenario, with unemployment converging to 3.5% by 2011, compared with a 4% trend rate in the baseline. This raises the level of employment slightly and leads to slightly higher employment growth rates during the next few years. In the low scenario, we have unemployment converging to 4.5% by 2012.

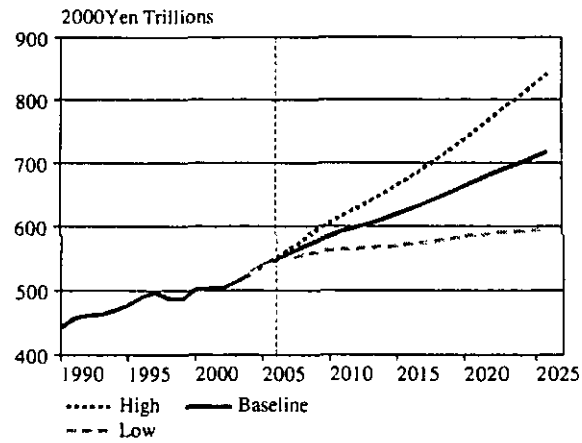

Figure 21: Japan Real GDP

Because of the very small differences in labor force across the baseline and alternative scenarios, the net differences in employment growth are negligibly small. Employment declines at approximately

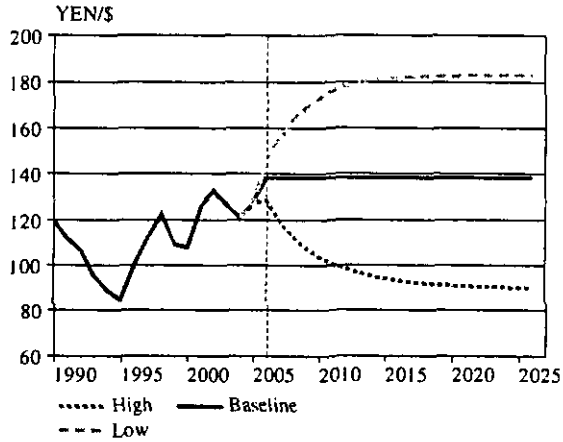

Figure 22: Yen/Dollar Real Exchange Rate

a 0.5%–0.6% rate in each case.

Productivity. We assume that GDP productivity for the Japanese economy in the various scenarios is identical to GDP productivity in the United States. This implies that differences in the long-run GDP projections about the U.S. and Japanese economy are driven entirely by demographic trends. In the optimistic scenario, labor productivity (on a GDP basis) is projected to be 2.73% . In the pessimistic scenario, labor productivity is projected to be 1.13%.

Real GDP. In the optimistic scenario, real GDP growth averages 2.2%. In the pessimistic scenario, real GDP growth averages 0.5%. In the baseline, real GDP growth was 1.4%.

Inflation. In the optimistic scenario, inflation converges to 1.25%. In the pessimistic scenario, it converges to 2.75%. In the baseline, inflation is 2.0%.

Real Exchange Rate. In the optimistic scenario, the real (inflation adjusted) exchange rate is assumed to remain flat this year and appreciate 7% next year, before continuing a path of gradual appreciation averaging 1.7% per year over the 20-year period. In the low scenario, the yen weakens 14% this year and a cumulative 30% over five years, reflecting the weaker Japanese economy. Depreciation continues at a slower rate thereafter and averages 1.8% annual depreciation over the forecast horizon. Recall that in the baseline, after limited near-term weakness, the real exchange rate maintains a constant level near the current rate. Nominal exchange rates (not shown) have a somewhat different path because they also reflect differences in inflation rates in the alternative scenarios.

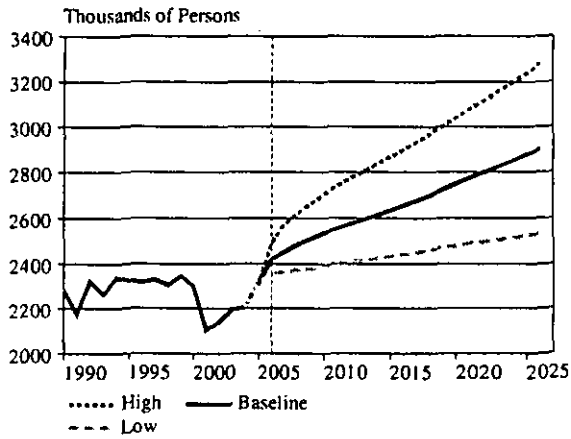

Figure 23: Maui County Visitor Arrivals

Maui

There are some additional assumptions we have made regarding developments on Maui. On the population side, more optimistic assumptions about birth rates and the environment for in-migration lead to more population growth in the high scenario, with an opposite set of assumptions in the low scenario. The resulting population forecasts are described below.

In addition, to tie down Maui's short-term growth path it is necessary to make explicit assumptions about the pace of visitor growth, particularly of recovery on the Japanese side. In part differing visitor paths will emerge in the model as a result of the different macroeconomic paths we assume. But continuing weakness in the Japanese market—at the same time that their economy is improving—confirms that economic factors are not the sole determinants. So explicit assumptions about Japanese travel recovery must be made. Of course, alternative Japanese scenarios are less important for Maui

than for O'ahu or the Big Island.

For the optimistic scenario, we assume that Japanese arrivals stabilize this year and grow by 4.3% in 2007. The market recovers to 132,700 annual Japanese visitors by 2010, and 166,800 by 2026. This is a decidedly weaker optimistic scenario than we had last year, and it reflects the failure over the past year for any clear evidence of upward potential to emerge. In the low scenario, the County sheds an additional 7.6% of its Japanese visitor base this year and about 3% in 2007–08. The number of Japanese visitor remains below 110,000 throughout the forecast period.

There is less uncertainty about the near-term prospects for U.S. visitors. We build into the optimistic scenario slightly stronger 2005 growth, and annual growth remains about 0.3 percentage points stronger in the long term. For the low scenario, U.S. arrivals still gain 2.1% this year (some of that is already "in the bag"), but U.S. arrivals remain at or below 2 million throughout the forecast period.

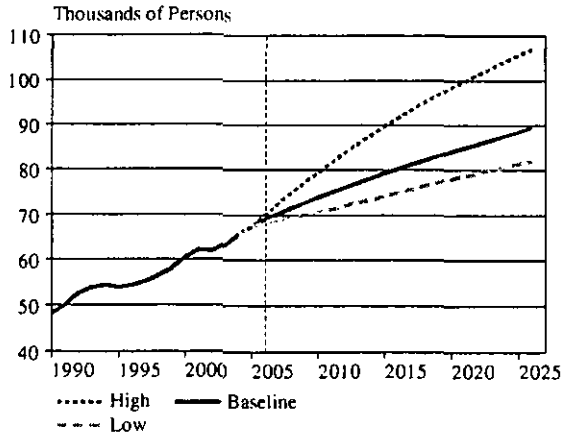

Figure 24: Maui County Non-Farm Jobs

The primary channel of transmission for external developments is visitor arrivals. Under the optimistic scenario, total visitors to Maui average 1.7% growth over the 21-year period 2006-2026, a jump from 2.3 million visitors to 3.3 million. This compares to 1.1% and 0.4% average growth rates for the baseline and pessimistic cases respectively, over the same period. Under the baseline case, we expect total Maui visitors to reach 2.9 million by the 2026.

In addition to the alternative visitor industry forecasts, we make differing assumptions about Maui demographic forces. In the optimistic scenario, a higher birth rate, lower death rate, and stronger in-migration lead to appreciably higher growth in the Maui County population. Our pessimistic scenario assumes somewhat weaker population growth than in the baseline.

Over the next 21 years, Maui's average population growth rate is about 1.9% in the optimistic scenario. This compares to an average growth rate of 1.3% in the baseline and 0.8% in the pessimistic scenario. In levels, the high scenario predicts an additional 68,000 residents by the end of the forecast cycle, while in the baseline and pessimistic scenarios, the estimates are 42,400 and 26,200, respectively.

The increased economic activity and larger population base on Maui in the high scenario leads to a faster near-term expansion of the labor market and stronger long-term job creation. In the optimistic scenario, the non-farm job count rises an additional 5,600 jobs by 2010 compared with the baseline and an additional 17,500 jobs by 2026. In the low scenario, about 3,300 fewer jobs are created by 2009 and 7,400 fewer jobs over the 21-year period compared with the baseline.

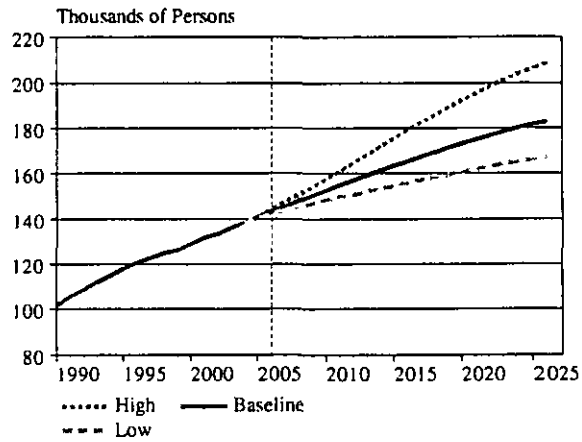

Figure 25: Maui County Population

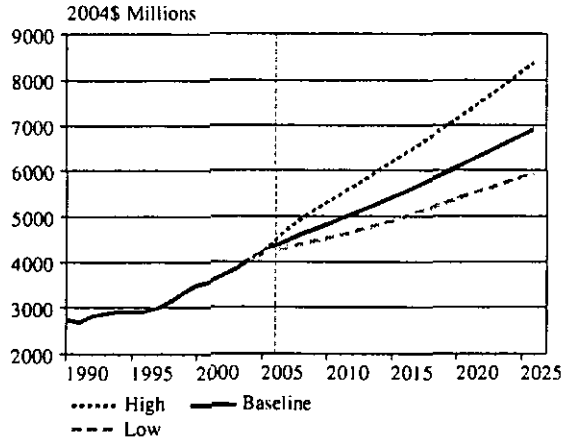

Figure 26: Maui County Real Personal Income

Differences in employment, population and the wage environment have different implications for income growth in the alternative scenarios. In the high scenario, Maui real personal income grows at an average rate of 4.8% for the 2006-2010 period, compared to 3% in the baseline and 1.5% in the low scenario. For the entire twenty-one year period, the average growth rates are 3.4%, 2.1% and 1.7% respectively.

TABLE 1: MAJOR ECONOMIC INDICATOR SUMMARY
STATE OF HAWAI'I LONG-TERM FORECAST

	2002	2003	2004	2005	2006
Non-Farm Jobs (Thou)	556.8	567.6	582.5	598.7	610.9
% Change	0.3	1.9	2.6	2.8	2.0
Employment (Thou)	584.1	588.6	595.8	617.6	635.9
% Change	-0.5	0.8	1.2	3.7	3.0
Unemployment Rate (%)	4.1	3.9	3.3	2.8	2.6
Total Population (Thou)	1,234.4	1,248.2	1,262.1	1,275.2	1,290.7
% Change	1.0	1.1	1.1	1.0	1.2
Total Personal Income (Mil$)	36,371.0	38,125.8	41,175.8	44,250.3	47,379.3
% Change	3.5	4.8	8.0	7.5	7.1
Inflation Rate, Honolulu MSA (%)	1.0	2.3	3.3	3.7	3.8
Real Personal Income (Mil 2004 $)	38,449.3	39,386.6	41,175.8	42,689.9	44,021.5
% Change	2.5	2.4	4.5	3.7	3.1
Real Per Capita Income (Thou 2004 $)	31.1	31.6	32.6	33.5	34.1
% Change	1.4	1.3	3.4	2.6	1.9
TOURISM SECTOR DETAIL					
Total Visitors (Thou)	6,389.1	6,380.4	6,912.1	7,379.6	7,634.1
Japanese Visitors (Thou)	1,483.1	1,340.0	1,482.1	1,522.4	1,558.9
U.S. Visitors (Thou)	4,069.5	4,263.2	4,573.4	4,893.0	5,083.6
% Change - Total Visitors	1.4	-0.1	8.3	6.8	3.4
% Change - Japanese Visitors	-3.0	-9.6	10.6	2.7	2.4
% Change - U.S. Visitors	2.8	4.8	7.3	7.0	3.9
Avg. Length of Stay (Days)	9.2	9.2	9.1	9.1	8.9
Hotel/Motel Occupancy Rate (%)	69.9	72.6	77.3	81.1	81.3
Total Room Stock (Thou)	70.8	70.7	72.6	70.9	71.3
% Change	-2.0	-0.1	2.6	-2.4	0.6

Note: Figures for 2005 income are UHERO estimates.

TABLE 1: MAJOR ECONOMIC INDICATOR SUMMARY
STATE OF HAWAI'I LONG-TERM FORECAST (Cont'd)

	2007	2008	2009	2010	2011
Non-Farm Jobs (Thou)	619.3	627.2	634.4	641.4	648.2
% Change	1.4	1.3	1.2	1.1	1.0
Employment (Thou)	643.4	651.5	657.8	665.1	672.4
% Change	1.2	1.3	1.0	1.1	1.1
Unemployment Rate (%)	2.5	2.7	2.9	3.0	3.1
Total Population (Thou)	1,304.8	1,318.5	1,331.4	1,344.4	1,356.8
% Change	1.1	1.1	1.0	1.0	0.9
Total Personal Income (Mil$)	50,021.2	52,702.3	55,376.4	58,100.5	60,828.3
% Change	5.6	5.4	5.1	4.9	4.7
Inflation Rate, Honolulu MSA (%)	3.1	3.1	2.9	2.8	2.7
Real Personal Income (Mil 2004 $)	45,066.4	46,075.3	47,037.5	47,999.8	48,919.7
% Change	2.4	2.2	2.1	2.0	1.9
Real Per Capita Income (Thou 2004 $)	34.5	34.9	35.3	35.7	36.1
% Change	1.3	1.2	1.1	1.1	1.0
TOURISM SECTOR DETAIL					
Total Visitors (Thou)	7,748.4	7,870.7	7,964.7	8,055.8	8,136.2
Japanese Visitors (Thou)	1,574.7	1,592.7	1,610.6	1,627.3	1,641.9
U.S. Visitors (Thou)	5,151.8	5,226.4	5,272.1	5,315.5	5,349.5
% Change - Total Visitors	1.5	1.6	1.2	1.1	1.0
% Change - Japanese Visitors	1.0	1.1	1.1	1.0	0.9
% Change - U.S. Visitors	1.3	1.4	0.9	0.8	0.6
Avg. Length of Stay (Days)	8.8	8.8	8.8	8.8	8.8
Hotel/Motel Occupancy Rate (%)	80.5	79.9	79.2	78.5	78.2
Total Room Stock (Thou)	72.5	73.9	75.3	76.4	77.1
% Change	1.7	2.0	1.8	1.6	0.9

TABLE 1: MAJOR ECONOMIC INDICATOR SUMMARY
STATE OF HAWAI'I LONG-TERM FORECAST (Cont'd)

	2012	2013	2014	2015	2016
Non-Farm Jobs (Thou)	654.7	661.1	667.4	673.7	680.0
% Change	1.0	1.0	1.0	0.9	0.9
Employment (Thou)	679.3	685.8	691.8	697.6	703.2
% Change	1.0	0.9	0.9	0.8	0.8
Unemployment Rate (%)	3.2	3.3	3.4	3.5	3.6
Total Population (Thou)	1,369.1	1,380.9	1,392.4	1,403.4	1,414.4
% Change	0.9	0.9	0.8	0.8	0.8
Total Personal Income (Mil$)	63,637.7	66,565.5	69,617.2	72,794.1	76,096.8
% Change	4.6	4.6	4.6	4.6	4.5
Inflation Rate, Honolulu MSA (%)	2.7	2.7	2.7	2.6	2.6
Real Personal Income (Mil 2004 $)	49,840.3	50,776.1	51,730.8	52,705.7	53,698.8
% Change	1.9	1.9	1.9	1.9	1.9
Real Per Capita Income (Thou 2004 $)	36.4	36.8	37.2	37.6	38.0
% Change	1.0	1.0	1.0	1.1	1.1
TOURISM SECTOR DETAIL					
Total Visitors (Thou)	8,212.6	8,287.0	8,363.5	8,443.9	8,526.0
Japanese Visitors (Thou)	1,652.7	1,659.7	1,667.6	1,678.2	1,691.3
U.S. Visitors (Thou)	5,382.6	5,416.7	5,451.1	5,486.0	5,519.3
% Change - Total Visitors	0.9	0.9	0.9	1.0	1.0
% Change - Japanese Visitors	0.7	0.4	0.5	0.6	0.8
% Change - U.S. Visitors	0.6	0.6	0.6	0.6	0.6
Avg. Length of Stay (Days)	8.7	8.7	8.7	8.7	8.6
Hotel/Motel Occupancy Rate (%)	78.2	78.3	78.5	78.7	78.8
Total Room Stock (Thou)	77.5	77.8	78.0	78.2	78.4
% Change	0.5	0.4	0.3	0.3	0.3

TABLE 1: MAJOR ECONOMIC INDICATOR SUMMARY
STATE OF HAWAI'I LONG-TERM FORECAST (Cont'd)

	2017	2018	2019	2020	2021
Non-Farm Jobs (Thou)	686.4	692.8	699.4	705.9	712.6
% Change	0.9	0.9	0.9	0.9	0.9
Employment (Thou)	708.8	714.3	719.9	725.5	731.2
% Change	0.8	0.8	0.8	0.8	0.8
Unemployment Rate (%)	3.6	3.7	3.7	3.8	3.8
Total Population (Thou)	1,425.3	1,436.1	1,446.9	1,457.5	1,468.0
% Change	0.8	0.8	0.7	0.7	0.7
Total Personal Income (Mil$)	79,537.7	83,125.9	86,874.9	90,792.1	94,858.7
% Change	4.5	4.5	4.5	4.5	4.5
Inflation Rate, Honolulu MSA (%)	2.6	2.6	2.6	2.6	2.5
Real Personal Income (Mil 2004 $)	54,714.1	55,751.7	56,812.5	57,897.0	59,002.4
% Change	1.9	1.9	1.9	1.9	1.9
Real Per Capita Income (Thou 2004 $)	38.4	38.8	39.3	39.7	40.2
% Change	1.1	1.1	1.1	1.2	1.2
TOURISM SECTOR DETAIL					
Total Visitors (Thou)	8,613.1	8,707.0	8,806.0	8,910.4	9,015.4
Japanese Visitors (Thou)	1,707.0	1,727.4	1,750.7	1,777.1	1,801.9
U.S. Visitors (Thou)	5,553.9	5,589.9	5,627.3	5,665.9	5,705.8
% Change - Total Visitors	1.0	1.1	1.1	1.2	1.2
% Change - Japanese Visitors	0.9	1.2	1.3	1.5	1.4
% Change - U.S. Visitors	0.6	0.6	0.7	0.7	0.7
Avg. Length of Stay (Days)	8.6	8.6	8.6	8.5	8.5
Hotel/Motel Occupancy Rate (%)	79.1	79.4	79.7	80.1	80.5
Total Room Stock (Thou)	78.6	78.8	79.0	79.1	79.3
% Change	0.3	0.2	0.2	0.2	0.2

TABLE 1: MAJOR ECONOMIC INDICATOR SUMMARY
STATE OF HAWAI'I LONG-TERM FORECAST (Cont'd)

	2022	2023	2024	2025	2026
Non-Farm Jobs (Thou)	719.2	725.7	732.1	738.3	744.4
% Change	0.9	0.9	0.9	0.9	0.8
Employment (Thou)	736.9	742.5	748.1	753.6	759.1
% Change	0.8	0.8	0.8	0.7	0.7
Unemployment Rate (%)	3.8	3.8	3.9	3.9	3.9
Total Population (Thou)	1,478.2	1,488.2	1,498.0	1,507.6	1,517.1
% Change	0.7	0.7	0.7	0.6	0.6
Total Personal Income (Mil$)	99,068.3	103,416.9	107,903.6	112,526.3	117,296.3
% Change	4.4	4.4	4.3	4.3	4.2
Inflation Rate, Honolulu MSA (%)	2.5	2.5	2.4	2.4	2.4
Real Personal Income (Mil 2004 $)	60,123.7	61,256.6	62,399.8	63,553.5	64,726.2
% Change	1.9	1.9	1.9	1.8	1.8
Real Per Capita Income (Thou 2004 $)	40.7	41.2	41.7	42.2	42.7
% Change	1.2	1.2	1.2	1.2	1.2
TOURISM SECTOR DETAIL					
Total Visitors (Thou)	9,115.4	9,211.3	9,305.3	9,398.8	9,493.8
Japanese Visitors (Thou)	1,820.3	1,834.3	1,845.3	1,854.4	1,863.1
U.S. Visitors (Thou)	5,746.1	5,785.9	5,825.6	5,865.7	5,906.7
% Change - Total Visitors	1.1	1.1	1.0	1.0	1.0
% Change - Japanese Visitors	1.0	0.8	0.6	0.5	0.5
% Change - U.S. Visitors	0.7	0.7	0.7	0.7	0.7
Avg. Length of Stay (Days)	8.5	8.5	8.4	8.4	8.4
Hotel/Motel Occupancy Rate (%)	80.9	81.2	81.5	81.8	82.1
Total Room Stock (Thou)	79.4	79.6	79.8	79.9	80.1
% Change	0.2	0.2	0.2	0.2	0.2

TABLE 2: MAJOR ECONOMIC INDICATOR SUMMARY
MAUI COUNTY LONG-TERM FORECAST

	2002	2003	2004	2005	2006
Non-Farm Jobs (Thou)	62.0	63.4	65.8	67.5	69.1
% Change	-0.3	2.3	3.8	2.5	2.4
Total Population (Thou)	133.4	135.9	138.3	140.8	143.2
% Change	1.3	1.9	1.8	1.7	1.7
Total Personal Income (Mil$)	3,508.5	3,723.1	4,049.3	4,345.5	4,689.1
% Change	4.9	6.1	8.8	7.3	7.9
Inflation Rate, Honolulu MSA (%)	1.0	2.3	3.3	3.7	3.8
Real Personal Income (Mil 2004 $)	3,709.0	3,846.2	4,049.3	4,192.3	4,356.8
% Change	3.8	3.7	5.3	3.5	3.9
Real Per Capita Income (Thou 2004 $)	27.8	28.3	29.3	29.8	30.4
% Change	2.5	1.8	3.4	1.8	2.2
TOURISM SECTOR DETAIL					
Total Visitors (Thou)	2,139.4	2,196.4	2,207.8	2,314.8	2,420.6
Japanese Visitors (Thou)	196.0	141.5	125.7	110.5	108.8
U.S. Visitors (Thou)	1,672.2	1,801.6	1,825.4	1,916.8	2,009.6
% Change - Total Visitors	1.7	2.7	0.5	4.8	4.6
% Change - Japanese Visitors	-13.9	-27.8	-11.1	-12.1	-1.5
% Change - U.S. Visitors	3.7	7.7	1.3	5.0	4.8
Avg. Length of Stay - Dom'c (Days)	7.6	8.1	7.9	7.7	7.6
Avg. Length of Stay - Int'l (Days)	5.3	6.3	5.9	6.0	5.9
Hotel/Motel Occupancy Rate (%)	71.3	74.6	77.6	79.6	81.4
Total Room Stock (Thou)	18.0	18.3	18.5	18.6	18.5
% Change	-1.3	2.0	0.8	0.6	-0.7

Note: Figures for 2004–2005 income are UHERO estimates.

TABLE 2: MAJOR ECONOMIC INDICATOR SUMMARY
MAUI COUNTY LONG-TERM FORECAST (Cont'd)

	2007	2008	2009	2010	2011
Non-Farm Jobs (Thou)	70.4	71.7	72.8	74.0	75.1
% Change	1.9	1.8	1.6	1.6	1.5
Total Population (Thou)	145.7	148.1	150.4	152.6	154.9
% Change	1.7	1.7	1.5	1.5	1.5
Total Personal Income (Mil$)	4,983.9	5,280.3	5,574.6	5,871.6	6,171.1
% Change	6.3	5.9	5.6	5.3	5.1
Inflation Rate, Honolulu MSA (%)	3.1	3.1	2.9	2.8	2.7
Real Personal Income (Mil 2004 $)	4,490.2	4,616.3	4,735.1	4,850.9	4,963.0
% Change	3.1	2.8	2.6	2.4	2.3
Real Per Capita Income (Thou 2004 $)	30.8	31.2	31.5	31.8	32.0
% Change	1.3	1.1	1.0	0.9	0.8
TOURISM SECTOR DETAIL					
Total Visitors (Thou)	2,452.2	2,486.8	2,510.5	2,533.8	2,553.5
Japanese Visitors (Thou)	109.1	110.2	111.6	113.2	114.8
U.S. Visitors (Thou)	2,030.7	2,054.1	2,066.1	2,077.1	2,084.3
% Change - Total Visitors	1.3	1.4	1.0	0.9	0.8
% Change - Japanese Visitors	0.3	1.0	1.3	1.5	1.4
% Change - U.S. Visitors	1.0	1.2	0.6	0.5	0.3
Avg. Length of Stay - Dom'c (Days)	7.6	7.6	7.6	7.6	7.6
Avg. Length of Stay - Int'l (Days)	5.7	5.7	5.7	5.7	5.7
Hotel/Motel Occupancy Rate (%)	80.7	79.4	78.5	78.3	77.8
Total Room Stock (Thou)	18.6	19.0	19.4	19.6	19.8
% Change	0.8	2.4	1.9	0.9	1.2

TABLE 2: MAJOR ECONOMIC INDICATOR SUMMARY
MAUI COUNTY LONG-TERM FORECAST (Cont'd)

	2012	2013	2014	2015	2016
Non-Farm Jobs (Thou)	76.2	77.3	78.3	79.4	80.4
% Change	1.5	1.4	1.3	1.3	1.3
Total Population (Thou)	157.1	159.3	161.4	163.4	165.5
% Change	1.4	1.4	1.3	1.3	1.2
Total Personal Income (Mil$)	6,478.1	6,794.9	7,121.0	7,456.1	7,800.7
% Change	5.0	4.9	4.8	4.7	4.6
Inflation Rate, Honolulu MSA (%)	2.7	2.7	2.7	2.6	2.6
Real Personal Income (Mil 2004 $)	5,073.6	5,183.2	5,291.4	5,398.5	5,504.6
% Change	2.2	2.2	2.1	2.0	2.0
Real Per Capita Income (Thou 2004 $)	32.3	32.5	32.8	33.0	33.3
% Change	0.8	0.8	0.8	0.7	0.7
TOURISM SECTOR DETAIL					
Total Visitors (Thou)	2,572.9	2,592.7	2,612.9	2,633.8	2,654.6
Japanese Visitors (Thou)	116.1	117.2	118.4	119.9	121.5
U.S. Visitors (Thou)	2,091.1	2,098.1	2,105.3	2,112.5	2,119.1
% Change - Total Visitors	0.8	0.8	0.8	0.8	0.8
% Change - Japanese Visitors	1.1	1.0	1.0	1.2	1.4
% Change - U.S. Visitors	0.3	0.3	0.3	0.3	0.3
Avg. Length of Stay - Dom'c (Days)	7.6	7.6	7.6	7.6	7.6
Avg. Length of Stay - Int'l (Days)	5.7	5.7	5.6	5.6	5.6
Hotel/Motel Occupancy Rate (%)	77.6	77.7	78.1	78.3	78.5
Total Room Stock (Thou)	20.0	20.1	20.1	20.1	20.2
% Change	0.8	0.4	0.1	0.2	0.3

TABLE 2: MAJOR ECONOMIC INDICATOR SUMMARY
MAUI COUNTY LONG-TERM FORECAST (Cont'd)

	2017	2018	2019	2020	2021
Non-Farm Jobs (Thou)	81.3	82.3	83.2	84.1	85.0
% Change	1.2	1.2	1.1	1.1	1.1
Total Population (Thou)	167.4	169.4	171.3	173.1	174.9
% Change	1.2	1.2	1.1	1.1	1.0
Total Personal Income (Mil$)	8,154.4	8,517.5	8,890.2	9,273.3	9,666.9
% Change	4.5	4.5	4.4	4.3	4.2
Inflation Rate, Honolulu MSA (%)	2.6	2.6	2.6	2.6	2.5
Real Personal Income (Mil 2004 $)	5,609.4	5,712.6	5,813.8	5,913.5	6,012.9
% Change	1.9	1.8	1.8	1.7	1.7
Real Per Capita Income (Thou 2004 $)	33.5	33.7	33.9	34.2	34.4
% Change	0.7	0.7	0.6	0.6	0.6
TOURISM SECTOR DETAIL					
Total Visitors (Thou)	2,676.4	2,699.4	2,723.5	2,748.5	2,774.3
Japanese Visitors (Thou)	123.4	125.7	128.2	131.1	133.8
U.S. Visitors (Thou)	2,126.0	2,133.5	2,141.3	2,149.6	2,158.3
% Change - Total Visitors	0.8	0.9	0.9	0.9	0.9
% Change - Japanese Visitors	1.6	1.8	2.0	2.2	2.1
% Change - U.S. Visitors	0.3	0.4	0.4	0.4	0.4
Avg. Length of Stay - Dom'c (Days)	7.6	7.6	7.6	7.6	7.6
Avg. Length of Stay - Int'l (Days)	5.6	5.6	5.6	5.6	5.6
Hotel/Motel Occupancy Rate (%)	78.7	78.8	79.1	79.3	79.6
Total Room Stock (Thou)	20.3	20.4	20.4	20.5	20.6
% Change	0.4	0.4	0.4	0.3	0.3

TABLE 2: MAJOR ECONOMIC INDICATOR SUMMARY
MAUI COUNTY LONG-TERM FORECAST (Cont'd)

	2022	2023	2024	2025	2026
Non-Farm Jobs (Thou)	85.9	86.8	87.7	88.6	89.5
% Change	1.1	1.0	1.0	1.0	1.0
Total Population (Thou)	176.6	178.3	180.0	181.6	183.1
% Change	1.0	1.0	0.9	0.9	0.9
Total Personal Income (Mil$)	10,069.4	10,479.7	10,897.0	11,320.6	11,746.4
% Change	4.2	4.1	4.0	3.9	3.8
Inflation Rate, Honolulu MSA (%)	2.5	2.5	2.4	2.4	2.4
Real Personal Income (Mil 2004 $)	6,111.0	6,207.4	6,301.7	6,393.7	6,481.9
% Change	1.6	1.6	1.5	1.5	1.4
Real Per Capita Income (Thou 2004 $)	34.6	34.8	35.0	35.2	35.4
% Change	0.6	0.6	0.6	0.6	0.5
TOURISM SECTOR DETAIL					
Total Visitors (Thou)	2,800.2	2,825.8	2,851.6	2,877.7	2,904.5
Japanese Visitors (Thou)	136.2	138.2	140.1	141.9	143.6
U.S. Visitors (Thou)	2,167.0	2,175.4	2,183.7	2,192.1	2,200.6
% Change - Total Visitors	0.9	0.9	0.9	0.9	0.9
% Change - Japanese Visitors	1.8	1.5	1.4	1.3	1.2
% Change - U.S. Visitors	0.4	0.4	0.4	0.4	0.4
Avg. Length of Stay - Dom'c (Days)	7.6	7.6	7.6	7.6	7.6
Avg. Length of Stay - Int'l (Days)	5.6	5.6	5.6	5.6	5.6
Hotel/Motel Occupancy Rate (%)	79.9	80.2	80.5	80.8	81.2
Total Room Stock (Thou)	20.6	20.7	20.8	20.8	20.9
% Change	0.3	0.3	0.3	0.3	0.3

TABLE 3: JOBS (in Thousands) BY DETAILED SECTOR
MAUI COUNTY LONG-TERM FORECAST

	2002	2003	2004	2005	2006
Total Non-Farm Jobs	62.0	63.4	65.8	67.5	69.1
% Change	-0.3	2.3	3.8	2.5	2.4
Agriculture	2.0	1.5	1.7	1.6	1.6
% Change	12.6	-27.6	14.9	-5.7	0.9
Construction and Mining	3.1	3.0	3.1	3.6	3.8
% Change	-2.5	-1.4	1.9	18.0	4.4
Manufacturing	1.6	1.6	1.5	1.4	1.4
% Change	-2.7	-3.3	-3.4	-6.7	-0.4
Total Trade	9.9	10.0	10.5	10.7	11.1
% Change	-0.5	1.3	5.0	2.1	3.0
Transportation and Utilities	3.0	3.1	3.3	3.3	3.4
% Change	1.0	3.7	4.8	1.4	1.6
Finance, Insurance and Real Estate	2.7	2.9	2.9	3.0	3.0
% Change	1.3	7.8	2.2	0.9	0.8
Services	33.3	34.1	35.9	36.8	37.8
% Change	-1.3	2.6	5.1	2.5	2.9
Health Care and Soc. Assistance	4.0	4.0	4.2	4.4	4.5
% Change	2.0	1.4	2.8	4.7	2.4
Accommodation and Food	18.1	18.4	19.3	19.6	20.0
% Change	-2.8	1.8	4.7	1.4	2.4
Others	11.2	11.7	12.4	12.8	13.3
% Change	0.1	4.3	6.4	3.4	3.7
Total Government	8.5	8.7	8.7	8.7	8.7
% Change	4.6	2.7	-0.2	0.3	0.5
Federal Government	0.6	0.8	0.8	0.7	0.8
% Change	9.9	31.9	-4.2	-1.3	0.6
State and Local Government	7.9	7.9	7.9	7.9	8.0
% Change	4.3	0.4	0.2	0.5	0.5

TABLE 3: JOBS (in Thousands) BY DETAILED SECTOR
MAUI COUNTY LONG-TERM FORECAST (Cont'd)

	2007	2008	2009	2010	2011
Total Non-Farm Jobs	70.4	71.7	72.8	74.0	75.1
% Change	1.9	1.8	1.6	1.6	1.5
Agriculture	1.6	1.6	1.6	1.6	1.5
% Change	-1.0	-0.9	-0.8	-0.8	-0.8
Construction and Mining	3.9	3.9	4.0	4.0	4.0
% Change	2.5	1.3	1.0	1.1	0.5
Manufacturing	1.4	1.4	1.4	1.3	1.3
% Change	-0.7	-1.4	-2.1	-1.7	-1.2
Total Trade	11.2	11.4	11.5	11.6	11.6
% Change	1.6	1.2	1.0	0.8	0.8
Transportation and Utilities	3.4	3.5	3.5	3.6	3.7
% Change	1.5	1.9	1.7	1.7	1.7
Finance, Insurance and Real Estate	3.0	3.0	3.1	3.1	3.1
% Change	1.1	0.6	0.7	0.7	0.4
Services	38.7	39.6	40.5	41.4	42.2
% Change	2.4	2.4	2.2	2.2	2.1
Health Care and Soc. Assistance	4.6	4.7	4.9	5.0	5.2
% Change	2.5	3.1	3.0	3.2	3.2
Accommodation and Food	20.3	20.6	20.8	20.9	21.1
% Change	1.6	1.2	0.9	0.8	0.9
Others	13.8	14.3	14.9	15.4	15.9
% Change	3.5	3.9	3.7	3.8	3.5
Total Government	8.8	8.9	9.0	9.1	9.2
% Change	0.8	1.0	0.9	0.9	1.0
Federal Government	0.8	0.8	0.8	0.8	0.8
% Change	0.6	1.2	1.4	1.5	1.6
State and Local Government	8.0	8.1	8.2	8.3	8.4
% Change	0.8	1.0	0.9	0.9	1.0

TABLE 3: JOBS (in Thousands) BY DETAILED SECTOR
MAUI COUNTY LONG-TERM FORECAST (Cont'd)

	2012	2013	2014	2015	2016
Total Non-Farm Jobs	76.2	77.3	78.3	79.4	80.4
% Change	1.5	1.4	1.3	1.3	1.3
Agriculture	1.5	1.5	1.5	1.5	1.5
% Change	-0.8	-0.8	-0.8	-0.8	-0.8
Construction and Mining	4.0	4.1	4.1	4.1	4.2
% Change	0.3	0.4	0.6	0.9	1.2
Manufacturing	1.3	1.3	1.3	1.3	1.3
% Change	-1.0	-1.0	-1.0	-1.0	-1.0
Total Trade	11.7	11.8	11.8	11.9	11.9
% Change	0.6	0.5	0.5	0.4	0.4
Transportation and Utilities	3.7	3.8	3.8	3.8	3.9
% Change	1.4	1.3	1.2	1.2	1.1
Finance, Insurance and Real Estate	3.1	3.1	3.1	3.1	3.2
% Change	0.5	0.5	0.4	0.4	0.4
Services	43.1	43.9	44.7	45.5	46.3
% Change	2.0	1.9	1.8	1.8	1.7
Health Care and Soc. Assistance	5.3	5.5	5.6	5.8	5.9
% Change	3.1	2.9	2.8	2.6	
Accommodation and Food	21.3	21.5	21.7	21.9	22.1
% Change	0.9	0.9	0.9	0.9	
Others	16.5	16.9	17.4	17.9	18.3
% Change	3.2	3.0	2.8	2.6	
Total Government	9.2	9.3	9.4	9.5	9.6
% Change	1.1	1.1	1.1	1.1	1.1
Federal Government	0.8	0.8	0.8	0.8	0.9
% Change	1.6	1.5	1.4	1.3	1.2
State and Local Government	8.4	8.5	8.6	8.7	8.8
% Change	1.0	1.0	1.0	1.0	1.0

TABLE 3: JOBS (in Thousands) BY DETAILED SECTOR
MAUI COUNTY LONG-TERM FORECAST (Cont'd)

	2017	2018	2019	2020	2021
Total Non-Farm Jobs	81.3	82.3	83.2	84.1	85.0
% Change	1.2	1.2	1.1	1.1	1.1
Agriculture	1.5	1.5	1.5	1.4	1.4
% Change	-0.8	-0.8	-0.9	-0.9	-0.9
Construction and Mining	4.2	4.3	4.3	4.4	4.4
% Change	1.3	1.3	1.3	1.3	1.2
Manufacturing	1.2	1.2	1.2	1.2	1.2
% Change	-1.0	-1.0	-1.0	-1.0	-1.0
Total Trade	12.0	12.1	12.1	12.2	12.2
% Change	0.4	0.4	0.5	0.5	0.6
Transportation and Utilities	3.9	4.0	4.0	4.1	4.1
% Change	1.1	1.1	1.1	1.1	1.1
Finance, Insurance and Real Estate	3.2	3.2	3.2	3.2	3.2
% Change	0.4	0.4	0.4	0.4	0.5
Services	47.0	47.7	48.4	49.0	49.6
% Change	1.6	1.5	1.4	1.3	1.2
Health Care and Soc. Assistance	6.1	6.2	6.3	6.5	6.6
% Change	2.4	2.2	2.1	2.0	1.9
Accommodation and Food	22.2	22.4	22.6	22.8	23.0
% Change	0.8	0.8	0.8	0.8	0.8
Others	18.7	19.1	19.4	19.7	20.0
% Change	2.2	2.0	1.8	1.6	1.5
Total Government	9.7	9.9	10.0	10.1	10.2
% Change	1.1	1.1	1.2	1.2	1.2
Federal Government	0.9	0.9	0.9	0.9	0.9
% Change	1.2	1.2	1.3	1.3	1.3
State and Local Government	8.9	9.0	9.1	9.2	9.3
% Change	1.1	1.1	1.1	1.2	1.2

TABLE 3: JOBS (in Thousands) BY DETAILED SECTOR
MAUI COUNTY LONG-TERM FORECAST (Cont'd)

	2022	2023	2024	2025	2026
Total Non-Farm Jobs	85.9	86.8	87.7	88.6	89.5
% Change	1.1	1.0	1.0	1.0	1.0
Agriculture	1.4	1.4	1.4	1.4	1.4
% Change	-0.9	-0.9	-0.9	-1.0	-1.0
Construction and Mining	4.5	4.5	4.5	4.5	4.5
% Change	1.0	0.7	0.4	0.1	-0.2
Manufacturing	1.2	1.2	1.2	1.2	1.1
% Change	-1.0	-1.0	-1.0	-0.9	-0.9
Total Trade	12.3	12.4	12.5	12.5	12.6
% Change	0.6	0.6	0.6	0.6	0.6
Transportation and Utilities	4.1	4.2	4.2	4.3	4.3
% Change	1.1	1.1	1.1	1.1	1.1
Finance, Insurance and Real Estate	3.2	3.3	3.3	3.3	3.3
% Change	0.5	0.4	0.4	0.4	0.4
Services	50.2	50.8	51.5	52.1	52.7
% Change	1.2	1.2	1.2	1.2	1.2
Health Care and Soc. Assistance	6.7	6.8	6.9	7.0	7.2
% Change	1.8	1.7	1.6	1.6	1.5
Accommodation and Food	23.2	23.4	23.6	23.8	24.0
% Change	0.8	0.8	0.8	0.8	0.8
Others	20.3	20.6	21.0	21.3	21.6
% Change	1.5	1.5	1.5	1.6	1.6
Total Government	10.3	10.5	10.6	10.7	10.8
% Change	1.2	1.2	1.2	1.2	1.2
Federal Government	0.9	0.9	1.0	1.0	1.0
% Change	1.4	1.4	1.4	1.3	1.3
State and Local Government	9.4	9.5	9.6	9.7	9.9
% Change	1.2	1.2	1.2	1.2	1.2

TABLE 4: PERSONAL INCOME BY DETAILED SECTOR
MAUI COUNTY LONG-TERM FORECAST

	2002	2003	2004	2005	2006
Real Personal Income (Mil 2004 $)	3,709.0	3,846.2	4,049.3	4,192.3	4,356.8
% Change	3.8	3.7	5.3	3.5	3.9
Labor & Proprietors' Income	–	–	3,183.8	3,315.7	3,437.9
% Change	–	–	–	4.1	3.7
Construction	–	–	238.1	288.5	307.4
% Change	–	–	–	21.2	6.5
Manufacturing	–	–	106.8	103.7	101.6
% Change	–	–	–	-3.0	-2.0
Total Trade	–	–	376.3	393.8	410.7
% Change	–	–	–	4.7	4.3
Transportation and Utilities	–	–	152.5	162.1	169.3
% Change	–	–	–	6.3	4.4
Finance, Insurance & Real Estate	–	–	186.9	194.4	202.3
% Change	–	–	–	4.0	4.1
Services	–	–	1,506.9	1,533.9	1,595.4
% Change	–	–	–	1.8	4.0
Government	–	–	451.1	462.5	468.9
% Change	–	–	–	2.5	1.4
Less Social Security Taxes (-)	–	–	334.7	343.5	352.4
Transfer Payments	–	–	566.0	588.7	610.1
Dividends, Interest and Rent	–	–	634.3	631.4	661.2
Total Population (Thou)	133.4	135.9	138.3	140.8	143.2
Real Per Capita Income (Thou 2004 $)	27.8	28.3	29.3	29.8	30.4
Inflation Rate, Honolulu MSA (%)	1.0	2.3	3.3	3.7	3.8
Nominal Personal Income (Mil. $)	3,508.5	3,723.1	4,049.3	4,345.5	4,689.1

Note: Figures for 2004–2005 income are UHERO estimates.

TABLE 4: PERSONAL INCOME BY DETAILED SECTOR
MAUI COUNTY LONG-TERM FORECAST (Cont'd)

	2007	2008	2009	2010	2011
Real Personal Income (Mil 2004 $)	4,490.2	4,616.3	4,735.1	4,850.9	4,963.0
% Change	3.1	2.8	2.6	2.4	2.3
Labor & Proprietors' Income	3,542.6	3,635.0	3,721.0	3,802.1	3,881.5
% Change	3.0	2.6	2.4	2.2	2.1
Construction	317.4	322.5	326.7	330.8	333.2
% Change	3.3	1.6	1.3	1.3	0.7
Manufacturing	99.2	100.3	102.2	101.7	99.7
% Change	-2.4	1.2	1.8	-0.5	-2.0
Total Trade	418.5	425.0	429.9	433.8	437.1
% Change	1.9	1.5	1.2	0.9	0.8
Transportation and Utilities	176.5	184.3	190.9	196.8	203.1
% Change	4.3	4.4	3.5	3.1	3.2
Finance, Insurance & Real Estate	209.2	216.2	222.3	228.0	233.4
% Change	3.4	3.4	2.8	2.6	2.4
Services	1,656.2	1,712.0	1,762.0	1,812.2	1,863.8
% Change	3.8	3.4	2.9	2.9	2.8
Government	479.3	485.4	493.7	501.7	510.7
% Change	2.2	1.3	1.7	1.6	1.8
Less Social Security Taxes (-)	361.9	371.4	380.1	388.4	396.6
Transfer Payments	630.9	653.9	676.9	699.8	722.2
Dividends, Interest and Rent	678.6	698.8	717.4	737.4	755.9
Total Population (Thou)	145.7	148.1	150.4	152.6	154.9
Real Per Capita Income (Thou 2004 $)	30.8	31.2	31.5	31.8	32.0
Inflation Rate, Honolulu MSA (%)	3.1	3.1	2.9	2.8	2.7
Nominal Personal Income (Mil. $)	4,983.9	5,280.3	5,574.6	5,871.6	6,171.1

TABLE 4: PERSONAL INCOME BY DETAILED SECTOR
MAUI COUNTY LONG-TERM FORECAST (Cont'd)

	2012	2013	2014	2015	2016
Real Personal Income (Mil 2004 $)	5,073.6	5,183.2	5,291.4	5,398.5	5,504.6
% Change	2.2	2.2	2.1	2.0	2.0
Labor & Proprietors' Income	3,958.8	4,034.5	4,108.4	4,180.9	4,253.0
% Change	2.0	1.9	1.8	1.8	1.7
Construction	335.1	337.1	339.8	343.3	347.6
% Change	0.6	0.6	0.8	1.0	1.2
Manufacturing	98.1	97.5	97.4	97.1	96.5
% Change	-1.6	-0.6	-0.2	-0.3	-0.6
Total Trade	439.9	442.3	444.2	445.8	447.0
% Change	0.6	0.5	0.4	0.4	0.3
Transportation and Utilities	208.8	214.3	219.5	224.6	229.6
% Change	2.8	2.6	2.5	2.3	2.2
Finance, Insurance & Real Estate	238.5	243.1	247.4	251.3	254.9
% Change	2.2	2.0	1.8	1.6	1.4
Services	1,915.2	1,965.1	2,013.7	2,061.6	2,110.9
% Change	2.8	2.6	2.5	2.4	2.4
Government	519.2	527.7	535.9	544.0	551.1
% Change	1.7	1.6	1.6	1.5	1.3
Less Social Security Taxes (-)	404.5	412.2	419.7	427.1	434.4
Transfer Payments	745.1	768.1	791.4	814.7	838.1
Dividends, Interest and Rent	774.2	792.8	811.4	830.0	847.9
Total Population (Thou)	157.1	159.3	161.4	163.4	165.5
Real Per Capita Income (Thou 2004 $)	32.3	32.5	32.8	33.0	33.3
Inflation Rate, Honolulu MSA (%)	2.7	2.7	2.7	2.6	2.6
Nominal Personal Income (Mil. $)	6,478.1	6,794.9	7,121.0	7,456.1	7,800.7

TABLE 4: PERSONAL INCOME BY DETAILED SECTOR
MAUI COUNTY LONG-TERM FORECAST (Cont'd)

	2017	2018	2019	2020	2021
Real Personal Income (Mil 2004 $)	5,609.4	5,712.6	5,813.8	5,913.5	6,012.9
% Change	1.9	1.8	1.8	1.7	1.7
Labor & Proprietors' Income	4,323.5	4,392.2	4,458.8	4,523.7	4,587.7
% Change	1.7	1.6	1.5	1.5	1.4
Construction	352.2	357.0	361.8	366.8	371.6
% Change	1.3	1.4	1.4	1.4	1.3
Manufacturing	95.7	94.9	94.0	93.0	92.0
% Change	-0.8	-0.9	-1.0	-1.0	-1.1
Total Trade	448.0	448.7	449.2	449.5	449.5
% Change	0.2	0.2	0.1	0.1	0.0
Transportation and Utilities	234.3	238.9	243.4	247.7	252.1
% Change	2.1	2.0	1.9	1.8	1.7
Finance, Insurance & Real Estate	258.1	260.9	263.5	265.8	268.0
% Change	1.3	1.1	1.0	0.9	0.8
Services	2,160.7	2,210.6	2,260.0	2,308.8	2,356.8
% Change	2.4	2.3	2.2	2.2	2.1
Government	557.2	562.6	567.6	572.2	577.1
% Change	1.1	1.0	0.9	0.8	0.9
Less Social Security Taxes (-)	441.6	448.5	455.2	461.7	468.1
Transfer Payments	861.5	884.8	908.0	931.2	954.4
Dividends, Interest and Rent	866.0	884.1	902.2	920.3	938.8
Total Population (Thou)	167.4	169.4	171.3	173.1	174.9
Real Per Capita Income (Thou 2004 $)	33.5	33.7	33.9	34.2	34.4
Inflation Rate, Honolulu MSA (%)	2.6	2.6	2.6	2.6	2.5
Nominal Personal Income (Mil. $)	8,154.4	8,517.5	8,890.2	9,273.3	9,666.9

TABLE 4: PERSONAL INCOME BY DETAILED SECTOR
MAUI COUNTY LONG-TERM FORECAST (Cont'd)

	2022	2023	2024	2025	2026
Real Personal Income (Mil 2004 $)	6,111.0	6,207.4	6,301.7	6,393.7	6,481.9
% Change	1.6	1.6	1.5	1.5	1.4
Labor & Proprietors' Income	4,649.8	4,709.3	4,765.9	4,819.4	4,867.4
% Change	1.4	1.3	1.2	1.1	1.0
Construction	376.0	379.7	382.4	384.2	385.1
% Change	1.2	1.0	0.7	0.5	0.2
Manufacturing	91.1	90.0	89.0	88.0	86.9
% Change	-1.1	-1.1	-1.1	-1.2	-1.2
Total Trade	449.1	448.3	447.2	445.9	444.3
% Change	-0.1	-0.2	-0.2	-0.3	-0.4
Transportation and Utilities	256.4	260.7	265.1	269.3	273.5
% Change	1.7	1.7	1.7	1.6	1.5
Finance, Insurance & Real Estate	270.2	272.3	274.4	276.4	278.3
% Change	0.8	0.8	0.8	0.7	0.7
Services	2,403.5	2,448.6	2,492.2	2,534.3	2,572.7
% Change	2.0	1.9	1.8	1.7	1.5
Government	582.0	586.8	591.3	595.7	599.2
% Change	0.8	0.8	0.8	0.7	0.6
Less Social Security Taxes (-)	474.3	480.2	485.9	491.2	495.9
Transfer Payments	978.0	1,002.0	1,026.4	1,051.2	1,077.0
Dividends, Interest and Rent	957.5	976.4	995.2	1,014.3	1,033.5
Total Population (Thou)	176.6	178.3	180.0	181.6	183.1
Real Per Capita Income (Thou 2004 $)	34.6	34.8	35.0	35.2	35.4
Inflation Rate, Honolulu MSA (%)	2.5	2.5	2.4	2.4	2.4
Nominal Personal Income (Mil. $)	10,069.4	10,479.7	10,897.0	11,320.6	11,746.4

TABLE 5: SUMMARY OF EXTERNAL DRIVERS
STATE OF HAWAI'I LONG-TERM FORECAST

	2002	2003	2004	2005	2006
U.S. FACTORS					
Total Employment (Thou)	136,482.5	137,734.3	139,247.7	141,694.6	143,856.8
% Change	-0.3	0.9	1.1	1.8	1.5
Unemployment Rate (%)	5.8	6.0	5.5	5.2	5.2
Inflation Rate (%)	1.6	2.3	2.7	3.4	3.1
Real GDP (Bil. 2000$)	10,048.9	10,320.6	10,755.7	11,140.0	11,485.4
% Change	1.6	2.7	4.2	3.6	3.1
Population (Thou)	288,217.3	291,073.0	293,951.0	296,779.4	299,609.4
% Change	1.0	1.0	1.0	1.0	1.0
JAPAN FACTORS					
Total Employment (Thou)	—	63,160.8	63,295.8	63,736.2	64,114.6
% Change	—	—	0.2	0.7	0.6
Unemployment Rate (%)	5.4	5.2	4.7	4.4	4.4
Inflation Rate (%)	-0.9	-0.2	0.0	-0.2	0.5
Real GDP (Bil. 2000Yen)	504,443.8	513,615.4	525,242.4	536,734.9	547,005.2
% Change	0.1	1.8	2.3	2.2	1.9
Population (Thou)	127,478.0	127,654.0	127,800.0	127,914.0	127,998.0
% Change	0.2	0.1	0.1	0.1	0.1
Exchange Rate (Yen/$)	125.3	115.9	108.2	110.1	116.5

TABLE 5: SUMMARY OF EXTERNAL DRIVERS
STATE OF HAWAI'I LONG-TERM FORECAST (Cont'd)

	2007	2008	2009	2010	2011
U.S. FACTORS					
Total Employment (Thou)	145,871.6	147,653.6	149,125.4	150,501.3	151,516.8
% Change	1.4	1.2	1.0	0.9	0.7
Unemployment Rate (%)	5.0	4.8	4.7	4.6	4.5
Inflation Rate (%)	2.6	2.5	2.5	2.5	2.5
Real GDP (Bil. 2000$)	11,868.7	12,272.2	12,641.3	13,012.0	13,361.3
% Change	3.3	3.4	3.0	2.9	2.7
Population (Thou)	302,418.1	305,224.8	308,015.5	310,780.4	313,517.5
% Change	0.9	0.9	0.9	0.9	0.9
JAPAN FACTORS					
Total Employment (Thou)	64,307.0	64,242.6	63,985.7	63,601.8	63,124.7
% Change	0.3	-0.1	-0.4	-0.6	-0.8
Unemployment Rate (%)	4.3	4.2	4.1	4.1	4.0
Inflation Rate (%)	1.5	1.6	1.8	1.8	2.0
Real GDP (Bil. 2000Yen)	557,334.3	567,366.3	576,500.9	584,629.5	591,995.9
% Change	1.9	1.8	1.6	1.4	1.3
Population (Thou)	128,048.0	128,066.0	128,049.0	127,998.0	127,912.0
% Change	0.0	0.0	0.0	0.0	-0.1
Exchange Rate (Yen/$)	115.1	114.1	113.3	112.5	111.9

TABLE 5: SUMMARY OF EXTERNAL DRIVERS
STATE OF HAWAI'I LONG-TERM FORECAST (Cont'd)

	2012	2013	2014	2015	2016
U.S. FACTORS					
Total Employment (Thou)	152,470.7	153,413.2	154,319.7	155,186.9	155,954.0
% Change	0.6	0.6	0.6	0.6	0.5
Unemployment Rate (%)	4.5	4.5	4.5	4.5	4.5
Inflation Rate (%)	2.5	2.5	2.5	2.5	2.5
Real GDP (Bil. 2000$)	13,714.0	14,074.4	14,440.5	14,811.9	15,182.8
% Change	2.6	2.6	2.6	2.6	2.5
Population (Thou)	316,226.6	318,907.9	321,561.4	324,186.9	326,785.6
% Change	0.9	0.8	0.8	0.8	0.8
JAPAN FACTORS					
Total Employment (Thou)	62,499.5	61,846.6	61,343.2	60,874.2	60,413.0
% Change	-1.0	-1.0	-0.8	-0.8	-0.8
Unemployment Rate (%)	4.0	4.0	4.0	4.0	4.0
Inflation Rate (%)	2.0	2.0	2.0	2.0	2.0
Real GDP (Bil. 2000Yen)	598,031.6	603,804.5	611,025.7	618,636.6	626,384.0
% Change	1.0	1.0	1.2	1.2	1.3
Population (Thou)	127,793.0	127,639.0	127,449.0	127,224.0	126,963.0
% Change	-0.1	-0.1	-0.1	-0.2	-0.2
Exchange Rate (Yen/$)	111.4	110.8	110.3	109.8	109.2

TABLE 5: SUMMARY OF EXTERNAL DRIVERS
STATE OF HAWAI'I LONG-TERM FORECAST (Cont'd)

	2017	2018	2019	2020	2021
U.S. FACTORS					
Total Employment (Thou)	156,715.7	157,470.2	158,215.5	158,949.9	159,671.9
% Change	0.5	0.5	0.5	0.5	0.5
Unemployment Rate (%)	4.5	4.5	4.5	4.5	4.5
Inflation Rate (%)	2.5	2.5	2.5	2.5	2.5
Real GDP (Bil. 2000$)	15,562.1	15,949.9	16,345.9	16,750.4	17,163.1
% Change	2.5	2.5	2.5	2.5	2.5
Population (Thou)	329,353.4	331,886.4	334,380.6	336,831.0	339,236.6
% Change	0.8	0.8	0.8	0.7	0.7
JAPAN FACTORS					
Total Employment (Thou)	59,993.5	59,663.0	59,281.3	58,946.7	58,632.5
% Change	-0.7	-0.6	-0.6	-0.6	-0.5
Unemployment Rate (%)	4.0	4.0	4.0	4.0	4.0
Inflation Rate (%)	2.0	2.0	2.0	2.0	2.0
Real GDP (Bil. 2000Yen)	634,624.4	643,884.8	652,706.8	662,142.9	671,921.7
% Change	1.3	1.5	1.4	1.4	1.5
Population (Thou)	126,670.0	126,345.0	125,994.0	125,617.0	125,218.0
% Change	-0.2	-0.3	-0.3	-0.3	-0.3
Exchange Rate (Yen/$)	108.7	108.2	107.6	107.1	106.6

TABLE 5: SUMMARY OF EXTERNAL DRIVERS
STATE OF HAWAI'I LONG-TERM FORECAST (Cont'd)

	2022	2023	2024	2025	2026
U.S. FACTORS					
Total Employment (Thou)	160,380.8	161,077.3	161,764.1	162,446.9	163,134.8
% Change	0.4	0.4	0.4	0.4	0.4
Unemployment Rate (%)	4.5	4.5	4.5	4.5	4.5
Inflation Rate (%)	2.5	2.5	2.5	2.5	2.5
Real GDP (Bil. 2000$)	17,584.3	18,014.1	18,453.0	18,901.8	19,361.8
% Change	2.5	2.4	2.4	2.4	2.4
Population (Thou)	341,597.4	343,917.4	346,200.6	348,452.0	350,670.4
% Change	0.7	0.7	0.7	0.7	0.6
JAPAN FACTORS					
Total Employment (Thou)	58,299.6	57,932.6	57,557.8	57,148.2	56,725.8
% Change	-0.6	-0.6	-0.6	-0.7	-0.7
Unemployment Rate (%)	4.0	4.0	4.0	4.0	4.0
Inflation Rate (%)	2.0	2.0	2.0	2.0	2.0
Real GDP (Bil. 2000Yen)	681,612.7	691,022.4	700,442.1	709,535.8	718,553.0
% Change	1.4	1.4	1.4	1.3	1.3
Population (Thou)	124,797.0	124,359.0	123,907.0	123,444.0	122,973.0
% Change	-0.3	-0.4	-0.4	-0.4	-0.4
Exchange Rate (Yen/$)	106.1	105.6	105.0	104.5	104.0

TABLE 6: MAJOR ECONOMIC INDICATOR SUMMARY
HIGH SCENARIO LONG-TERM FORECAST

	2002	2003	2004	2005	2006
STATE OF HAWAI'I					
Non-Farm Jobs (Thou)	556.8	567.6	582.5	598.7	616.3
% Change	0.3	1.9	2.6	2.8	2.9
Total Population (Thou)	1,234.4	1,248.2	1,262.1	1,275.2	1,298.0
% Change	1.0	1.1	1.1	1.0	1.8
Military Personnel (Thou)	43.6	44.4	44.5	44.9	48.3
Military Dependents (Thou)	49.0	56.6	57.5	58.6	62.1
Real Personal Income (Mil 2004 $)	20,178.0	20,669.3	21,605.8	22,401.0	23,579.6
% Change	2.5	2.4	4.5	3.7	5.3
Unemployment Rate (%)	4.1	3.9	3.3	2.8	2.8
Total Visitors (Thou)	6,389.1	6,380.4	6,912.1	7,379.6	7,758.1
% Change	1.4	-0.1	8.3	6.8	5.1
Japanese Visitors (Thou)	1,483.1	1,340.0	1,482.1	1,522.4	1,587.8
U.S. Visitors (Thou)	4,069.5	4,263.2	4,573.4	4,893.0	5,154.2
Total Room Stock (Thou)	70.8	70.7	72.6	70.9	71.3
% Change	-2.0	-0.1	2.6	-2.4	0.6
Hotel Occupancy Rate (%)	69.9	72.6	77.3	81.1	83.5
Avg. Daily Hotel Room Rate ($)	140.3	144.8	151.2	164.8	180.7
MAUI COUNTY					
Non-Farm Jobs (Thou)	62.0	63.4	65.8	67.5	70.0
% Change	–	–	3.8	2.5	3.7
Total Population (Thou)	133.4	135.9	138.3	140.8	144.3
% Change	1.3	1.9	1.8	1.7	2.5
Inflation Rate, Honolulu MSA (%)	1.0	2.3	3.3	3.7	3.3
Real Personal Income (Mil 2004 $)	1,946.5	2,018.5	2,125.1	2,200.1	2,343.6
% Change	–	–	5.3	3.5	6.5
Total Visitors (Thou)	2,139.4	2,196.4	2,207.8	2,314.8	2,488.6
% Change	1.7	2.7	0.5	4.8	7.5
Japanese Visitors (Thou)	196.0	141.5	125.7	110.5	110.8
U.S. Visitors (Thou)	1,672.2	1,801.6	1,825.4	1,916.8	2,068.1
Total Room Stock (Thou)	18.0	18.3	18.5	18.6	18.5
% Change	-1.3	2.0	0.8	0.6	-0.7
Hotel Occupancy Rate (%)	71.3	74.6	77.6	79.6	83.8
EXTERNAL DRIVERS					
U.S. Inflation Rate (%)	1.6	2.3	2.7	3.4	3.0
U.S. Real GDP (Bil.2000$)	10,048.9	10,320.6	10,755.7	11,140.0	11,560.9
% Change	1.6	2.7	4.2	3.6	3.8
Japan Inflation Rate (%)	-0.9	-0.2	0.0	-0.2	0.0
Japan Real GDP (Bil. 2000Yen)	504,443.8	513,615.4	525,242.4	536,734.9	550,521.1
% Change	0.1	1.8	2.3	2.2	2.6
Exchange Rate (Yen/Dollar)	125.3	115.9	108.2	110.1	107.6

Note: Figures for 2005 state income and 2004–2005 Honolulu county income are UHERO estimates.

TABLE 6: MAJOR ECONOMIC INDICATOR SUMMARY
HIGH SCENARIO LONG-TERM FORECAST (Cont'd)

	2007	2008	2009	2010	2011
STATE OF HAWAI'I					
Non-Farm Jobs (Thou)	634.0	649.8	664.6	679.1	693.1
% Change	2.9	2.5	2.3	2.2	2.1
Total Population (Thou)	1,321.1	1,343.5	1,365.8	1,389.3	1,413.1
% Change	1.8	1.7	1.7	1.7	1.7
Military Personnel (Thou)	50.3	51.9	52.9	54.2	55.0
Military Dependents (Thou)	64.1	65.6	66.7	68.0	68.8
Real Personal Income (Mil 2004 $)	24,631.2	25,445.1	26,203.1	26,955.5	27,691.5
% Change	4.5	3.3	3.0	2.9	2.7
Unemployment Rate (%)	2.9	3.2	3.6	3.9	4.3
Total Visitors (Thou)	8,057.7	8,283.4	8,489.9	8,683.2	8,849.1
% Change	3.9	2.8	2.5	2.3	1.9
Japanese Visitors (Thou)	1,666.8	1,752.0	1,834.0	1,907.0	1,966.6
U.S. Visitors (Thou)	5,309.6	5,386.7	5,448.0	5,505.6	5,549.6
Total Room Stock (Thou)	72.5	73.9	75.4	76.9	78.2
% Change	1.7	2.0	2.0	2.1	1.7
Hotel Occupancy Rate (%)	84.3	84.3	84.3	84.0	83.7
Avg. Daily Hotel Room Rate ($)	190.8	201.4	212.8	225.0	238.1
MAUI COUNTY					
Non-Farm Jobs (Thou)	72.6	75.2	77.4	79.6	81.8
% Change	3.8	3.5	2.9	2.9	2.7
Total Population (Thou)	147.8	150.8	154.0	157.5	161.1
% Change	2.4	2.1	2.1	2.3	2.3
Inflation Rate, Honolulu MSA (%)	2.6	2.7	2.6	2.6	2.4
Real Personal Income (Mil 2004 $)	2,483.0	2,594.2	2,691.9	2,785.9	2,877.4
% Change	5.9	4.5	3.8	3.5	3.3
Total Visitors (Thou)	2,569.5	2,619.5	2,663.2	2,705.0	2,740.6
% Change	3.3	1.9	1.7	1.6	1.3
Japanese Visitors (Thou)	115.5	121.2	127.1	132.7	137.5
U.S. Visitors (Thou)	2,123.5	2,147.2	2,164.6	2,180.2	2,190.4
Total Room Stock (Thou)	18.6	19.0	19.4	19.7	20.1
% Change	0.8	2.4	2.0	1.5	2.0
Hotel Occupancy Rate (%)	84.6	83.6	83.0	82.8	82.0
EXTERNAL DRIVERS					
U.S. Inflation Rate (%)	2.0	1.8	1.8	1.8	1.8
U.S. Real GDP (Bil.2000$)	12,044.4	12,530.3	13,003.8	13,482.8	13,944.7
% Change	4.2	4.0	3.8	3.7	3.4
Japan Inflation Rate (%)	0.5	1.1	1.2	1.2	1.3
Japan Real GDP (Bil. 2000Yen)	564,717.9	578,835.9	592,319.6	604,934.4	616,910.5
% Change	2.6	2.5	2.3	2.1	2.0
Exchange Rate (Yen/Dollar)	98.6	92.4	87.8	84.2	81.4

TABLE 6: MAJOR ECONOMIC INDICATOR SUMMARY
HIGH SCENARIO LONG-TERM FORECAST (Cont'd)

	2012	2013	2014	2015	2016
STATE OF HAWAI'I					
Non-Farm Jobs (Thou)	706.6	719.7	732.4	744.8	756.9
% Change	1.9	1.9	1.8	1.7	1.6
Total Population (Thou)	1,437.6	1,462.1	1,486.3	1,509.4	1,532.2
% Change	1.7	1.7	1.7	1.6	1.5
Military Personnel (Thou)	55.9	56.3	56.6	56.6	56.7
Military Dependents (Thou)	69.7	70.1	70.4	70.4	70.5
Real Personal Income (Mil 2004 $)	28,436.0	29,196.3	29,972.4	30,758.5	31,555.8
% Change	2.7	2.7	2.7	2.6	2.6
Unemployment Rate (%)	4.7	5.2	5.7	6.1	6.5
Total Visitors (Thou)	8,994.8	9,124.6	9,245.8	9,363.3	9,476.5
% Change	1.6	1.4	1.3	1.3	1.2
Japanese Visitors (Thou)	2,009.5	2,036.2	2,053.9	2,067.0	2,077.0
U.S. Visitors (Thou)	5,590.4	5,632.0	5,674.3	5,717.7	5,760.5
Total Room Stock (Thou)	79.1	79.8	80.4	81.0	81.5
% Change	1.1	0.9	0.7	0.7	0.7
Hotel Occupancy Rate (%)	83.6	83.7	83.8	83.8	83.9
Avg. Daily Hotel Room Rate ($)	251.9	266.4	281.3	296.7	312.6
MAUI COUNTY					
Non-Farm Jobs (Thou)	83.9	85.9	87.9	89.8	91.7
% Change	2.6	2.4	2.3	2.2	2.1
Total Population (Thou)	164.6	168.2	171.9	175.5	178.9
% Change	2.2	2.2	2.2	2.1	2.0
Inflation Rate, Honolulu MSA (%)	2.3	2.3	2.2	2.1	2.1
Real Personal Income (Mil 2004 $)	2,968.6	3,061.0	3,154.1	3,247.1	3,342.6
% Change	3.2	3.1	3.0	2.9	2.9
Total Visitors (Thou)	2,773.7	2,805.9	2,837.7	2,869.6	2,901.0
% Change	1.2	1.2	1.1	1.1	1.1
Japanese Visitors (Thou)	141.2	143.8	145.8	147.6	149.2
U.S. Visitors (Thou)	2,199.2	2,208.2	2,217.3	2,226.8	2,235.9
Total Room Stock (Thou)	20.4	20.6	20.6	20.7	20.9
% Change	1.4	0.7	0.3	0.5	0.7
Hotel Occupancy Rate (%)	81.6	81.7	82.2	82.5	82.6
EXTERNAL DRIVERS					
U.S. Inflation Rate (%)	1.8	1.8	1.8	1.8	1.8
U.S. Real GDP (Bil.2000$)	14,413.1	14,895.7	15,390.4	15,897.0	16,409.6
% Change	3.4	3.3	3.3	3.3	3.2
Japan Inflation Rate (%)	1.3	1.3	1.3	1.3	1.3
Japan Real GDP (Bil. 2000Yen)	627,642.0	638,219.8	650,447.8	663,232.9	676,314.2
% Change	1.7	1.7	1.9	2.0	2.0
Exchange Rate (Yen/Dollar)	79.1	77.3	75.8	74.5	73.4

TABLE 6: MAJOR ECONOMIC INDICATOR SUMMARY
HIGH SCENARIO LONG-TERM FORECAST (Cont'd)

	2017	2018	2019	2020	2021
STATE OF HAWAI'I					
Non-Farm Jobs (Thou)	768.6	780.0	791.2	802.2	813.0
% Change	1.5	1.5	1.4	1.4	1.3
Total Population (Thou)	1,554.5	1,576.5	1,598.2	1,619.4	1,640.0
% Change	1.5	1.4	1.4	1.3	1.3
Military Personnel (Thou)	56.8	57.1	57.5	58.0	58.6
Military Dependents (Thou)	70.6	70.9	71.3	71.8	72.4
Real Personal Income (Mil 2004 $)	32,364.9	33,187.6	34,024.7	34,877.2	35,756.0
% Change	2.6	2.5	2.5	2.5	2.5
Unemployment Rate (%)	6.9	7.2	7.5	7.8	8.1
Total Visitors (Thou)	9,590.8	9,709.8	9,832.7	9,959.7	10,095.4
% Change	1.2	1.2	1.3	1.3	1.4
Japanese Visitors (Thou)	2,086.0	2,097.2	2,109.8	2,124.4	2,136.6
U.S. Visitors (Thou)	5,805.9	5,854.1	5,905.2	5,958.5	6,022.0
Total Room Stock (Thou)	82.1	82.7	83.2	83.6	84.1
% Change	0.7	0.7	0.6	0.6	0.5
Hotel Occupancy Rate (%)	83.9	84.0	84.2	84.5	84.8
Avg. Daily Hotel Room Rate ($)	328.8	345.4	362.2	379.3	396.5
MAUI COUNTY					
Non-Farm Jobs (Thou)	93.4	95.2	96.8	98.4	99.8
% Change	2.0	1.8	1.7	1.6	1.5
Total Population (Thou)	182.3	185.6	188.9	192.0	195.0
% Change	1.9	1.8	1.7	1.7	1.6
Inflation Rate, Honolulu MSA (%)	2.0	2.0	2.0	2.0	1.9
Real Personal Income (Mil 2004 $)	3,440.8	3,541.2	3,643.1	3,746.1	3,852.1
% Change	2.9	2.9	2.9	2.8	2.8
Total Visitors (Thou)	2,933.2	2,966.6	3,001.1	3,036.6	3,076.2
% Change	1.1	1.1	1.2	1.2	1.3
Japanese Visitors (Thou)	150.8	152.6	154.6	156.7	158.7
U.S. Visitors (Thou)	2,245.9	2,256.9	2,268.9	2,281.6	2,298.0
Total Room Stock (Thou)	21.0	21.2	21.3	21.4	21.6
% Change	0.8	0.7	0.7	0.6	0.6
Hotel Occupancy Rate (%)	82.7	82.8	83.0	83.2	83.6
EXTERNAL DRIVERS					
U.S. Inflation Rate (%)	1.8	1.8	1.8	1.8	1.8
U.S. Real GDP (Bil.2000$)	16,937.7	17,481.7	18,041.7	18,617.9	19,244.4
% Change	3.2	3.2	3.2	3.2	3.4
Japan Inflation Rate (%)	1.3	1.3	1.3	1.3	1.3
Japan Real GDP (Bil. 2000Yen)	690,080.8	705,119.0	719,856.8	735,446.7	752,941.6
% Change	2.0	2.2	2.1	2.2	2.4
Exchange Rate (Yen/Dollar)	72.5	71.7	71.0	70.4	69.9

TABLE 6: MAJOR ECONOMIC INDICATOR SUMMARY
HIGH SCENARIO LONG-TERM FORECAST (Cont'd)

	2022	2023	2024	2025	2026
STATE OF HAWAI'I					
Non-Farm Jobs (Thou)	823.7	834.1	844.1	853.9	863.4
% Change	1.3	1.3	1.2	1.2	1.1
Total Population (Thou)	1,659.9	1,679.2	1,697.7	1,715.6	1,733.1
% Change	1.2	1.2	1.1	1.1	1.0
Military Personnel (Thou)	59.1	59.6	60.2	60.7	61.3
Military Dependents (Thou)	72.9	73.4	74.0	74.5	75.2
Real Personal Income (Mil 2004 $)	36,647.0	37,546.3	38,453.3	39,368.5	40,305.1
% Change	2.5	2.5	2.4	2.4	2.4
Unemployment Rate (%)	8.3	8.5	8.7	8.8	9.0
Total Visitors (Thou)	10,223.5	10,349.8	10,477.3	10,608.8	10,757.5
% Change	1.3	1.2	1.2	1.3	1.4
Japanese Visitors (Thou)	2,141.1	2,142.5	2,143.8	2,148.4	2,163.9
U.S. Visitors (Thou)	6,084.9	6,148.5	6,212.7	6,277.0	6,346.8
Total Room Stock (Thou)	84.5	84.9	85.2	85.5	85.9
% Change	0.5	0.5	0.4	0.4	0.4
Hotel Occupancy Rate (%)	85.1	85.5	85.8	86.2	86.8
Avg. Daily Hotel Room Rate ($)	413.4	430.0	446.3	462.3	478.1
MAUI COUNTY					
Non-Farm Jobs (Thou)	101.3	102.8	104.2	105.7	107.0
% Change	1.5	1.4	1.4	1.3	1.3
Total Population (Thou)	198.0	200.8	203.5	206.2	208.7
% Change	1.5	1.4	1.4	1.3	1.2
Inflation Rate, Honolulu MSA (%)	1.9	1.9	1.9	1.9	1.9
Real Personal Income (Mil 2004 $)	3,959.7	4,068.4	4,178.0	4,288.3	4,398.2
% Change	2.8	2.7	2.7	2.6	2.6
Total Visitors (Thou)	3,115.1	3,154.3	3,194.0	3,234.1	3,277.3
% Change	1.3	1.3	1.3	1.3	1.3
Japanese Visitors (Thou)	160.2	161.5	162.8	164.4	166.8
U.S. Visitors (Thou)	2,314.0	2,330.2	2,346.4	2,362.4	2,380.4
Total Room Stock (Thou)	21.7	21.9	22.0	22.1	22.3
% Change	0.6	0.6	0.6	0.6	0.6
Hotel Occupancy Rate (%)	83.9	84.3	84.6	85.0	85.4
EXTERNAL DRIVERS					
U.S. Inflation Rate (%)	1.8	1.8	1.8	1.8	1.8
U.S. Real GDP (Bil.2000$)	19,890.0	20,555.3	21,241.2	21,949.1	22,702.9
% Change	3.4	3.3	3.3	3.3	3.4
Japan Inflation Rate (%)	1.3	1.3	1.3	1.3	1.3
Japan Real GDP (Bil. 2000Yen)	770,592.0	788,179.2	806,030.7	823,762.8	842,317.9
% Change	2.3	2.3	2.3	2.2	2.3
Exchange Rate (Yen/Dollar)	69.3	68.9	68.4	68.0	67.7

TABLE 7: MAJOR ECONOMIC INDICATOR SUMMARY
LOW SCENARIO LONG-TERM FORECAST

	2002	2003	2004	2005	2006
STATE OF HAWAI'I					
Non-Farm Jobs (Thou)	556.8	567.6	582.5	598.7	606.1
% Change	0.3	1.9	2.6	2.8	1.2
Total Population (Thou)	1,234.4	1,248.2	1,262.1	1,275.2	1,284.3
% Change	1.0	1.1	1.1	1.0	0.7
Military Personnel (Thou)	43.6	44.4	44.5	44.9	45.8
Military Dependents (Thou)	49.0	56.6	57.5	58.4	59.4
Real Personal Income (Mil 2004 $)	20,178.0	20,669.3	21,605.8	22,393.1	22,785.9
% Change	2.5	2.4	4.5	3.6	1.8
Unemployment Rate (%)	4.1	3.9	3.3	2.8	2.2
Total Visitors (Thou)	6,389.1	6,380.4	6,912.1	7,379.6	7,400.6
% Change	1.4	-0.1	8.3	6.8	0.3
Japanese Visitors (Thou)	1,483.1	1,340.0	1,482.1	1,522.4	1,462.6
U.S. Visitors (Thou)	4,069.5	4,263.2	4,573.4	4,893.0	4,951.2
Total Room Stock (Thou)	70.8	70.7	72.6	70.9	71.3
% Change	-2.0	-0.1	2.6	-2.4	0.6
Hotel Occupancy Rate (%)	69.9	72.6	77.3	81.1	79.3
Avg. Daily Hotel Room Rate ($)	140.3	144.8	151.2	164.8	180.0
MAUI COUNTY					
Non-Farm Jobs (Thou)	62.0	63.4	65.8	67.5	68.5
% Change	–	–	3.8	2.5	1.5
Total Population (Thou)	133.4	135.9	138.3	140.8	142.5
% Change	1.3	1.9	1.8	1.7	1.3
Inflation Rate, Honolulu MSA (%)	1.0	2.3	3.3	3.7	4.4
Real Personal Income (Mil 2004 $)	1,946.5	2,018.5	2,125.1	2,196.1	2,243.5
% Change	–	–	5.3	3.3	2.2
Total Visitors (Thou)	2,139.4	2,196.4	2,207.8	2,314.8	2,360.1
% Change	1.7	2.7	0.5	4.8	2.0
Japanese Visitors (Thou)	196.0	141.5	125.7	110.5	102.1
U.S. Visitors (Thou)	1,672.2	1,801.6	1,825.4	1,916.8	1,957.3
Total Room Stock (Thou)	18.0	18.3	18.5	18.6	18.5
% Change	-1.3	2.0	0.8	0.6	-0.7
Hotel Occupancy Rate (%)	71.3	74.6	77.6	79.6	79.8
EXTERNAL DRIVERS					
U.S. Inflation Rate (%)	1.6	2.3	2.7	3.4	3.5
U.S. Real GDP (Bil.2000$)	10,048.9	10,320.6	10,755.7	11,140.0	11,398.3
% Change	1.6	2.7	4.2	3.6	2.3
Japan Inflation Rate (%)	-0.9	-0.2	0.0	-0.2	0.7
Japan Real GDP (Bil. 2000Yen)	504,443.8	513,615.4	525,242.4	536,734.9	543,324.8
% Change	0.1	1.8	2.3	2.2	1.2
Exchange Rate (Yen/Dollar)	125.3	115.9	108.2	110.1	122.2

Note: Figures for 2005 state income and 2004–2005 Honolulu county income are UHERO estimates.

TABLE 7: MAJOR ECONOMIC INDICATOR SUMMARY
LOW SCENARIO LONG-TERM FORECAST (Cont'd)

	2007	2008	2009	2010	2011
STATE OF HAWAI'I					
Non-Farm Jobs (Thou)	610.5	613.1	615.2	617.4	619.6
% Change	0.7	0.4	0.3	0.4	0.4
Total Population (Thou)	1,291.2	1,298.1	1,303.9	1,309.6	1,314.6
% Change	0.5	0.5	0.5	0.4	0.4
Military Personnel (Thou)	45.6	45.8	45.6	45.6	45.5
Military Dependents (Thou)	59.1	59.3	59.1	59.2	59.1
Real Personal Income (Mil 2004 $)	22,953.5	23,212.7	23,484.1	23,775.3	24,054.0
% Change	0.7	1.1	1.2	1.2	1.2
Unemployment Rate (%)	1.9	1.8	1.8	1.8	1.6
Total Visitors (Thou)	7,388.6	7,401.7	7,407.3	7,427.8	7,443.0
% Change	-0.2	0.2	0.1	0.3	0.2
Japanese Visitors (Thou)	1,422.1	1,384.7	1,351.2	1,323.9	1,303.1
U.S. Visitors (Thou)	4,962.1	4,997.1	5,021.3	5,054.9	5,077.4
Total Room Stock (Thou)	72.5	73.8	74.9	75.6	75.8
% Change	1.7	1.8	1.5	0.9	0.3
Hotel Occupancy Rate (%)	77.7	76.3	75.1	74.5	74.2
Avg. Daily Hotel Room Rate ($)	186.9	193.5	199.9	206.4	212.8
MAUI COUNTY					
Non-Farm Jobs (Thou)	69.1	69.5	70.1	70.7	71.3
% Change	0.9	0.6	0.8	0.9	0.9
Total Population (Thou)	144.0	145.5	147.0	148.4	149.6
% Change	1.0	1.0	1.0	0.9	0.8
Inflation Rate, Honolulu MSA (%)	3.8	3.8	3.7	3.6	3.6
Real Personal Income (Mil 2004 $)	2,266.3	2,301.1	2,335.9	2,371.0	2,406.6
% Change	1.0	1.5	1.5	1.5	1.5
Total Visitors (Thou)	2,361.5	2,372.5	2,379.8	2,391.1	2,398.3
% Change	0.1	0.5	0.3	0.5	0.3
Japanese Visitors (Thou)	98.6	95.8	93.6	92.1	91.1
U.S. Visitors (Thou)	1,955.9	1,964.0	1,967.8	1,975.3	1,978.3
Total Room Stock (Thou)	18.6	19.0	19.4	19.6	19.6
% Change	0.8	2.4	1.9	0.8	0.1
Hotel Occupancy Rate (%)	78.5	76.5	75.2	74.8	74.9
EXTERNAL DRIVERS					
U.S. Inflation Rate (%)	3.4	3.3	3.3	3.3	3.3
U.S. Real GDP (Bil.2000$)	11,676.9	11,951.6	12,205.9	12,453.9	12,674.7
% Change	2.4	2.4	2.1	2.0	1.8
Japan Inflation Rate (%)	2.0	2.1	2.4	2.5	2.8
Japan Real GDP (Bil. 2000Yen)	549,550.7	555,046.2	559,101.4	561,881.9	564,203.8
% Change	1.1	1.0	0.7	0.5	0.4
Exchange Rate (Yen/Dollar)	129.0	133.8	137.2	139.5	141.1

TABLE 7: MAJOR ECONOMIC INDICATOR SUMMARY
LOW SCENARIO LONG-TERM FORECAST (Cont'd)

	2012	2013	2014	2015	2016
STATE OF HAWAI'I					
Non-Farm Jobs (Thou)	621.8	624.1	626.6	629.3	632.2
% Change	0.4	0.4	0.4	0.4	0.5
Total Population (Thou)	1,320.0	1,325.4	1,331.1	1,337.0	1,343.0
% Change	0.4	0.4	0.4	0.4	0.5
Military Personnel (Thou)	45.5	45.4	45.3	45.2	45.1
Military Dependents (Thou)	59.0	58.9	58.8	58.7	58.6
Real Personal Income (Mil 2004 $)	24,339.0	24,632.8	24,937.6	25,255.4	25,584.8
% Change	1.2	1.2	1.2	1.3	1.3
Unemployment Rate (%)	1.5	1.5	1.5	1.5	1.5
Total Visitors (Thou)	7,463.4	7,488.6	7,519.9	7,557.1	7,596.9
% Change	0.3	0.3	0.4	0.5	0.5
Japanese Visitors (Thou)	1,287.3	1,275.7	1,270.4	1,271.4	1,277.5
U.S. Visitors (Thou)	5,100.7	5,125.5	5,150.6	5,176.1	5,199.9
Total Room Stock (Thou)	75.9	75.9	76.0	76.1	76.2
% Change	0.1	0.1	0.1	0.1	0.1
Hotel Occupancy Rate (%)	74.1	74.0	74.0	74.0	74.0
Avg. Daily Hotel Room Rate ($)	219.3	225.7	232.2	238.6	245.0
MAUI COUNTY					
Non-Farm Jobs (Thou)	72.0	72.8	73.5	74.3	75.0
% Change	1.0	1.0	1.0	1.0	1.0
Total Population (Thou)	150.8	152.1	153.4	154.7	155.9
% Change	0.8	0.9	0.8	0.8	0.8
Inflation Rate, Honolulu MSA (%)	3.7	3.7	3.8	3.8	3.8
Real Personal Income (Mil 2004 $)	2,444.6	2,486.0	2,530.1	2,576.4	2,624.2
% Change	1.6	1.7	1.8	1.8	1.9
Total Visitors (Thou)	2,406.1	2,414.4	2,423.1	2,432.1	2,440.6
% Change	0.3	0.3	0.4	0.4	0.3
Japanese Visitors (Thou)	90.4	90.1	90.2	90.8	91.8
U.S. Visitors (Thou)	1,981.6	1,985.4	1,989.2	1,993.2	1,996.5
Total Room Stock (Thou)	19.5	19.5	19.5	19.5	19.5
% Change	-0.4	-0.2	0.0	0.2	0.2
Hotel Occupancy Rate (%)	75.3	75.6	75.8	75.8	75.8
EXTERNAL DRIVERS					
U.S. Inflation Rate (%)	3.3	3.3	3.3	3.3	3.3
U.S. Real GDP (Bil.2000$)	12,897.8	13,123.2	13,349.1	13,574.9	13,795.4
% Change	1.8	1.7	1.7	1.7	1.6
Japan Inflation Rate (%)	2.8	2.8	2.8	2.8	2.8
Japan Real GDP (Bil. 2000Yen)	565,283.8	565,766.1	567,553.6	569,628.6	571,749.5
% Change	0.2	0.1	0.3	0.4	0.4
Exchange Rate (Yen/Dollar)	142.1	142.6	142.7	142.6	142.3

TABLE 7: MAJOR ECONOMIC INDICATOR SUMMARY
LOW SCENARIO LONG-TERM FORECAST (Cont'd)

	2017	2018	2019	2020	2021
STATE OF HAWAI'I					
Non-Farm Jobs (Thou)	635.2	638.4	641.7	645.1	648.6
% Change	0.5	0.5	0.5	0.5	0.5
Total Population (Thou)	1,349.2	1,355.5	1,362.0	1,368.6	1,375.3
% Change	0.5	0.5	0.5	0.5	0.5
Military Personnel (Thou)	45.1	45.2	45.4	45.6	45.9
Military Dependents (Thou)	58.6	58.7	58.9	59.2	59.4
Real Personal Income (Mil 2004 $)	25,928.4	26,287.0	26,658.8	27,043.0	27,426.5
% Change	1.3	1.4	1.4	1.4	1.4
Unemployment Rate (%)	1.6	1.6	1.6	1.6	1.6
Total Visitors (Thou)	7,641.4	7,691.3	7,744.8	7,802.4	7,853.0
% Change	0.6	0.7	0.7	0.7	0.6
Japanese Visitors (Thou)	1,288.0	1,303.8	1,323.0	1,345.7	1,367.1
U.S. Visitors (Thou)	5,224.7	5,250.5	5,277.2	5,305.2	5,325.8
Total Room Stock (Thou)	76.2	76.3	76.3	76.3	76.3
% Change	0.1	0.0	0.0	0.0	0.0
Hotel Occupancy Rate (%)	74.1	74.3	74.4	74.7	74.8
Avg. Daily Hotel Room Rate ($)	251.5	257.9	264.3	270.7	277.3
MAUI COUNTY					
Non-Farm Jobs (Thou)	75.8	76.5	77.3	78.0	78.8
% Change	1.0	1.0	1.0	1.0	0.9
Total Population (Thou)	157.1	158.3	159.5	160.6	161.7
% Change	0.8	0.8	0.7	0.7	0.7
Inflation Rate, Honolulu MSA (%)	3.8	3.7	3.6	3.7	3.6
Real Personal Income (Mil 2004 $)	2,673.3	2,723.4	2,774.4	2,826.2	2,876.3
% Change	1.9	1.9	1.9	1.9	1.8
Total Visitors (Thou)	2,449.6	2,459.0	2,468.8	2,479.2	2,487.1
% Change	0.4	0.4	0.4	0.4	0.3
Japanese Visitors (Thou)	93.1	94.9	96.9	99.3	101.5
U.S. Visitors (Thou)	2,000.0	2,004.0	2,008.1	2,012.8	2,014.5
Total Room Stock (Thou)	19.6	19.6	19.6	19.6	19.6
% Change	0.1	0.1	0.1	0.1	0.1
Hotel Occupancy Rate (%)	75.9	76.0	76.2	76.3	76.4
EXTERNAL DRIVERS					
U.S. Inflation Rate (%)	3.3	3.3	3.3	3.3	3.3
U.S. Real GDP (Bil.2000$)	14,018.7	14,244.6	14,473.0	14,703.7	14,909.9
% Change	1.6	1.6	1.6	1.6	1.4
Japan Inflation Rate (%)	2.8	2.8	2.8	2.8	2.8
Japan Real GDP (Bil. 2000Yen)	574,239.7	577,565.7	580,396.5	583,679.7	586,075.2
% Change	0.4	0.6	0.5	0.6	0.4
Exchange Rate (Yen/Dollar)	141.9	141.4	140.8	140.2	139.6

TABLE 7: MAJOR ECONOMIC INDICATOR SUMMARY
LOW SCENARIO LONG-TERM FORECAST (Cont'd)

	2022	2023	2024	2025	2026
STATE OF HAWAI'I					
Non-Farm Jobs (Thou)	652.1	655.7	659.2	662.6	666.1
% Change	0.5	0.5	0.5	0.5	0.5
Total Population (Thou)	1,382.0	1,388.8	1,395.5	1,402.3	1,409.2
% Change	0.5	0.5	0.5	0.5	0.5
Military Personnel (Thou)	46.2	46.4	46.7	47.0	47.3
Military Dependents (Thou)	59.7	60.0	60.2	60.5	60.8
Real Personal Income (Mil 2004 $)	27,815.8	28,210.0	28,608.9	29,012.9	29,418.2
% Change	1.4	1.4	1.4	1.4	1.4
Unemployment Rate (%)	1.7	1.8	1.8	1.9	2.1
Total Visitors (Thou)	7,901.5	7,947.2	7,991.1	8,033.4	8,065.9
% Change	0.6	0.6	0.6	0.5	0.4
Japanese Visitors (Thou)	1,383.6	1,395.7	1,404.1	1,407.9	1,403.6
U.S. Visitors (Thou)	5,345.5	5,362.6	5,377.5	5,391.2	5,399.0
Total Room Stock (Thou)	76.3	76.3	76.3	76.4	76.4
% Change	0.0	0.0	0.0	0.1	0.1
Hotel Occupancy Rate (%)	75.0	75.1	75.1	75.2	75.1
Avg. Daily Hotel Room Rate ($)	284.4	292.0	300.2	308.7	317.7
MAUI COUNTY					
Non-Farm Jobs (Thou)	79.4	80.1	80.8	81.4	82.1
% Change	0.9	0.8	0.8	0.8	0.8
Total Population (Thou)	162.8	163.9	164.9	166.0	167.0
% Change	0.7	0.7	0.6	0.6	0.6
Inflation Rate, Honolulu MSA (%)	3.6	3.5	3.5	3.5	3.4
Real Personal Income (Mil 2004 $)	2,926.2	2,975.9	3,025.5	3,075.1	3,123.6
% Change	1.7	1.7	1.7	1.6	1.6
Total Visitors (Thou)	2,495.6	2,504.1	2,512.9	2,522.3	2,530.2
% Change	0.3	0.3	0.4	0.4	0.3
Japanese Visitors (Thou)	103.5	105.2	106.6	107.7	108.2
U.S. Visitors (Thou)	2,015.9	2,016.2	2,015.7	2,014.7	2,011.5
Total Room Stock (Thou)	19.6	19.6	19.7	19.7	19.7
% Change	0.1	0.1	0.1	0.1	0.1
Hotel Occupancy Rate (%)	76.5	76.6	76.6	76.7	76.8
EXTERNAL DRIVERS					
U.S. Inflation Rate (%)	3.3	3.3	3.3	3.3	3.3
U.S. Real GDP (Bil.2000$)	15,117.5	15,326.4	15,537.1	15,750.0	15,949.1
% Change	1.4	1.4	1.4	1.4	1.3
Japan Inflation Rate (%)	2.8	2.8	2.8	2.8	2.8
Japan Real GDP (Bil. 2000Yen)	588,278.4	590,127.1	591,879.3	593,253.6	593,933.8
% Change	0.4	0.3	0.3	0.2	0.1
Exchange Rate (Yen/Dollar)	139.0	138.4	137.7	137.1	136.4

Maui Electric Company, Ltd. - Consolidated
2006 - 2011 Sales and Customer Forecast

	Actual 2005	Fcst 2006	Fcst 2007	Fcst 2008	Fcst 2009	Fcst 2010	Fcst 2011
MWh Sales							
R	442,007	442,165	451,427	463,425	471,374	480,199	489,054
G	375,426	377,537	384,529	392,880	399,436	406,726	415,579
H	24,807	23,698	23,614	23,757	23,698	23,698	23,698
P	403,995	410,504	413,754	423,203	433,051	453,203	458,262
F	5,877	5,878	5,933	6,002	6,042	6,094	6,149
Total	1,252,112	1,259,782	1,279,257	1,309,268	1,333,601	1,369,920	1,392,742
Avg. No. of Customers							
R	53,471	54,426	55,316	56,151	56,986	57,821	58,656
G	9,057	9,311	9,537	9,758	9,971	10,184	10,397
H	269	269	269	269	269	269	269
P	134	137	138	139	140	141	141
F	170	178	181	184	187	190	193
Total	63,101	64,321	65,441	66,501	67,553	68,605	69,656

Source: 2006-2011 Sales and Peak Forecast Adopted by Forecast Planning Committee

Maui Electric Company, Ltd. - Maui Division
2006 - 2011 Sales and Customer Forecast

	Actual 2005	Fcst 2006	Fcst 2007	Fcst 2008	Fcst 2009	Fcst 2010	Fcst 2011
MWh Sales							
R	421,130	421,130	430,167	441,914	449,653	458,241	466,856
G	355,894	357,673	364,386	372,473	378,847	385,931	394,576
H	22,272	21,159	21,075	21,217	21,159	21,159	21,159
P	383,669	389,328	391,961	400,974	410,712	430,715	435,622
F	5,287	5,287	5,340	5,408	5,448	5,502	5,557
Total	1,188,252	1,194,578	1,212,929	1,241,986	1,265,818	1,301,548	1,323,771
Avg. No. of Customers							
R	49,648	50,548	51,398	52,198	52,998	53,798	54,598
G	8,343	8,567	8,773	8,979	9,185	9,391	9,597
H	233	233	233	233	233	233	233
P	117	120	121	122	123	124	124
F	158	166	169	172	175	178	181
Total	58,499	59,634	60,694	61,704	62,714	63,724	64,733

Source: 2006-2011 Sales and Peak Forecast Adopted by Forecast Planning Committee

Maui Electric Company, Ltd. - Lanai Division
2006 - 2011 Sales and Customer Forecast

	Actual 2005	Fcst 2006	Fcst 2007	Fcst 2008	Fcst 2009	Fcst 2010	Fcst 2011
MWh Sales							
R	7,864.8	8,022.3	8,182.7	8,369.3	8,513.3	8,683.6	8,857.3
G	7,846.7	8,004.0	8,164.0	8,308.7	8,368.9	8,452.5	8,537.1
H	540.0	545.0	545.0	546.5	545.0	545.0	545.0
P	11,576.9	12,295.7	12,773.9	13,065.5	13,029.8	13,029.8	13,029.8
F	113.6	113.6	113.7	114.2	114.1	114.2	114.2
Total	27,942.0	28,980.6	29,779.4	30,404.2	30,571.1	30,825.2	31,083.4
Avg. No. of Customers							
R	1,342	1,357	1,372	1,387	1,402	1,417	1,432
G	204	214	224	229	234	239	244
H	4	4	4	4	4	4	4
P	3	3	3	3	3	3	3
F	3	3	3	3	3	3	3
Total	1,556	1,581	1,606	1,626	1,646	1,666	1,686

Source: 2006-2011 Sales and Peak Forecast Adopted by Forecast Planning Committee

Maui Electric Company, Ltd. - Molokai Division
2006 - 2011 Sales and Customer Forecast

	Actual 2005	Fcst 2006	Fcst 2007	Fcst 2008	Fcst 2009	Fcst 2010	Fcst 2011
MWh Sales							
R	13,012.2	13,012.0	13,077.0	13,142.0	13,207.7	13,273.7	13,340.1
G	11,685.2	11,860.0	11,979.0	12,099.0	12,220.0	12,342.2	12,465.6
H	1,994.5	1,994.2	1,994.2	1,994.2	1,994.2	1,994.2	1,994.2
P	8,749.1	8,879.7	9,019.4	9,163.0	9,309.6	9,458.6	9,609.9
F	476.6	477.5	478.5	479.5	480.5	478.0	478.0
Total	35,917.6	36,223.5	36,548.2	36,877.8	37,212.1	37,546.8	37,887.9
Avg. No. of Customers							
R	2,481	2,521	2,546	2,566	2,586	2,606	2,626
G	510	530	540	550	552	554	556
H	32	32	32	32	32	32	32
P	14	14	14	14	14	14	14
F	9	9	9	9	9	9	9
Total	3,046	3,106	3,141	3,171	3,193	3,215	3,237

Source: 2006-2011 Sales and Peak Forecast Adopted by Forecast Planning Committee

Ride may not be ending, but it sure is slowing

Pacific Business News (Honolulu) - May 26, 2006

The state Department of Business, Economic Development and Tourism issued a press release last week suggesting that the strong economic growth Hawaii has been experiencing in recent years will continue through the rest of 2006.

We're grateful for the buoyant economy, but inside the 147-page economic forecast are a number of trends that indicate the six-year run of economic growth, one of the best in the country, is winding down.

It recalls an economic forecast made last November by Leroy Laney, consultant to First Hawaiian Bank, who suggested that the bubble in housing prices may be over, though likely it will arrive with a slow escaping of air rather than a loud "pop."

That could be the scenario for the overall Hawaii economy.

Economists like those at DBEDT and Laney have made upbeat economic projections in 2006 because:

- Jobs are strong, expected by DBEDT to be up 2.2 percent to 622,200 this year after 3.1 percent growth last year. That comes when unemployment is running at 2.5 percent, the lowest in the United States.
- Visitor arrivals are expected to reach 7.6 million this year, up 9.2 percent from just two years ago. The pace of increase this year, though, has been trimmed by DBEDT from 3.2 percent to 2.8 percent.
- Personal income is projected to shoot up 6.8 percent and gross state product, unadjusted for inflation, is expected to rise 6 percent.

Plus, construction seems on an unstoppable growth path. Though home sales aren't moving at quite the same clip as in recent years, prices and activity are still high.

But the details where the economic devil is living are in the forecasts by DBEDT. Of the 11 categories analyzed, 10 of them show significant downward trends from 2005. Visitor arrivals, for example, are projected at half the 2005 increase rate for the next four years.

A lot of the slowing is driven by inflation as measured by the Consumer Price Index. Since 2002, Honolulu's CPI has been slowly inching upward and the 3.8 percent increase reported in December is higher than both the Mainland city average and the Western region.

A lot of that jump is traced to rising oil prices. The Feds note that last year, Honolulu gas prices were up 17.9 percent vs. 21.9 percent nationally. Oil impacts the cost of goods

brought into Hawaii, the power generated here and the cost of driving. That's not likely to end anytime soon.

Paul Brewbaker, Bank of Hawaii's economist, puts it this way: "Hawaii came through 2005 with a good head of steam but entered 2006 by finding out that more of its economic energy went up in inflation smoke."

These declining trends are not a cause for economic alarm but, rather, prudent reality.

This is the point where Hawaii needs to look ahead because we can control outcomes for many issues that need to be addressed to ensure a viable economic future, especially quality of education, work-force development and economic diversification.

The DBEDT news release last week gave credit to Gov. Linda Lingle for helping to create the great economic environment that offers "the kind of business environment that will sustain economic growth."

But with each new forecast it becomes clearer that the kind of growth we'll be seeing over the next four years will be the incremental kind.

The state's Quarterly Statistical and Economic Report is available at www.hawaii.gov/dbedt. The link is under "What's New in Hawaii."

Maui growth constrained by tight labor pool

Leroy Laney gives an economic forecast for the Valley Isle

By Dave Segal
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Saturday, September 9, 2006

Maui faces a bright outlook in most economic sectors next year, but the tight labor market will be even more of a problem for its economy than the rest of the state's.

First Hawaiian Bank economics consultant Leroy Laney, who spoke yesterday at an economic outlook forum at the Maui Beach Hotel, said the Valley Isle will continue to benefit from healthy tourism, a construction boom and active development plans by kamaaina companies.

Laney said visitor arrivals on Maui through midyear were up 9.2 percent and visitor spending rose 20 percent over the same period a year earlier.

"This was far higher than any other island in the state," Laney said. "For some years now, Maui has been closer to capacity than other islands, and it has been targeting higher-spending visitors rather than just more bodies. That strategy seems to be paying off."

However, Laney said, Maui's labor market is tighter than the state's as a whole, and the problem of finding employees has been worsening.

"Traditionally, neighbor island jobless rates are higher than Oahu's," Laney said. "But that's no longer the case. This is one of the biggest constraints on growth -- for the state, but especially for Maui."

Maui's nonseasonally adjusted unemployment rate was 3 percent in July, lower than the 3.3 percent for the state, according to the latest figures available from the state Department of Labor and Industrial Relations. The state doesn't break out seasonally adjusted numbers for the separate islands.

Construction is still booming, even though the permit and entitlement process is getting longer and harder due to an increased anti-growth sentiment on Maui, Laney said. He said the Maui Lani is the biggest development in central Maui, with 759 homes built so far out of a potential 3,700 total units. Nearby, Kehalani has the potential for another 2,000 total units.

Alexander & Baldwin Inc. remains a big player on Maui, with development plans for the Kahului Shopping Center, Maui Business Park, housing for Haliimaile and Wailea, a possible business hotel next to Costco, and a $21 million, 400-bed student housing project for Maui Community College.

Laney also said **Maui Land & Pineapple Co.** has gotten Maui Planning Commission approval for its 882-unit project in West Maui, including 450 "affordable" houses and apartments.

Despite the boom in construction, Maui developers are closely watching the trends in the housing market, Laney said. He said some builders believe that second-home demand from a retiring baby-boom generation will be stronger on Maui than the other islands.

But Laney said "there is no doubt that we have a housing shortage here, and increasing supply is the only viable way to help control now-astronomical prices that are out of reach for Maui residents."

"Still," he warned, "it would be foolish to believe that we are totally insulated here. Nobody wants to buy a home at the peak of the market. Maui builders report that, in the future, homes will need to be priced responsibly -- and more marketing will be necessary."

Laney, said that single-family sales volume dropped 27 percent through the first six months of the year compared to the first half of 2005, while median prices continued to rise but gained "a much more realistic" 6 percent.

In 2005, Maui median single-family prices jumped 23 percent, Laney said.

"If this cycle follows past ones, an actual mild decline in median prices next year would not be surprising," he said. "Slumping prices on Maui last time lasted four years. From 1993 to 1997, there was over a 16 percent decline."

On Thursday, the Realtors Association of Maui reported that single-family sales in August fell 26.4 percent from a year earlier but rose 8 percent from the previous month. Median prices increased 11.8 percent to $749,000 from $670,000 a year earlier but fell 4 percent from $780,000 in July.

Maui commercial real estate brokers are reporting the tightest industrial market in 20 years, Laney said. "They see 800,000 square feet of space coming on line in the foreseeable future, in the face of an estimated 3 million square feet demanded by users."

Infrastructure presents another looming problem, Laney said. Kahului Harbor has more troubles than any harbor in the state because of lack of space. Those problems could be magnified next year when the Hawaii Superferry is expected to arrive.

"There's not much time to do all that has to be done, and unforeseen problems keep coming up," he said of the harbor.

UHERO Hawai'i Quarterly Forecast Update

Inflation Shock Means Sharply Lower "Real" Growth

by

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EXECUTIVE SUMMARY

Key Changes in This Forecast.

Our inflation forecast has been raised to 5.2% from our 3.8% forecast made in May, based on the nearly 6% inflation experienced in the first half of the year. Inflation will exceed 4% in 2007.

Because of higher inflation, real income growth is now expected to manage just 1% growth this year, down from our May forecast of 3%.

The visitor arrivals forecast has been marked down to 1.5% growth this year (compared with our 2.8% forecast from May) based on poor Japanese-market performance.

Inflation in Hawai'i has reared its ugly head. For the first half of the year, Honolulu consumer price inflation topped the nation, with average prices rising nearly 6% over the previous year. Rising prices are cutting into the purchasing power of local residents and will lead to a sharp drop in measured real income growth this year. While an orderly process of economic slowing continues to be evident, the inflation impulse introduces some new risks.

- The outlook for Hawai'i's key external markets has become somewhat less favorable. We expect relative weakness in the U.S. economy into the first half of 2007. After real GDP growth of 3.3% this year, U.S. growth will be only 2.7% in 2007. We have also reduced to 2.5% our forecast for Japanese growth for this year, and about 2% for next year.

- In Hawai'i, the inflation outlook has clearly worsened. Housing cost pressures are the primary driver, but energy prices have also been important. Because of lags between home price increases and measured inflation in shelter costs, we expected inflation to remain high for some time. Overall Honolulu inflation will top 5% this year, and exceed 4% in 2007.

- Nominal incomes will not keep pace with inflation in the near term, so measured real (inflation-adjusted) income will suffer. After rising 3% last year, real personal income will manage just a 1% gain this year. This represents a full two percentage point downgrade from our May forecast. Real income will rebound to 2% in 2007. Actual purchasing power of Hawai'i residents will probably not slow to the degree these figures suggest, since many homeowners do not face the full housing cost increases estimated by government statisticians.

- The visitor industry is healthy, but slowing compared with recent years. Based on activity through July and fall scheduled air seats, we have reduced our forecast for 2006 visitor arrivals from the 2.8% forecast made in May to 1.5%. U.S. arrivals for the year will be 2.9% higher than in 2005. Japanese arrivals will be 7.4% weaker for 2006 as a whole, a stark downward revision from our flat second-quarter forecast. Overall arrivals are expected to rise 2.4% in 2007.

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- The labor market has now begun to show the expected cooling trend. Job growth has dropped below three percent, and unemployment, while still very low, has eased a bit. With tourism peaking, construction decelerating, and continuing labor market constraints, we expect a more pronounced slowing over the coming two years. After 2.5% growth this year, aggregate job gains will slow to 1.2% in 2007. The unemployment rate will average 2.8% for this year and move up above 3% in 2007.

- The housing market has now clearly turned, with a significant decline in resale activity, rising inventories and decelerating price gains. With the slowing of the housing market, the residential construction sector will also continue to slow. We continue to believe that a sharp correction is unlikely, largely because we do not expect an abrupt decline in prices. Construction job growth will decline from last year's 13.7% pace to 2.3% in 2007.

- UHERO 2006 job forecasts are largely unchanged from our May forecast update for most sectors. Trade job growth is looking to be a bit weaker, and health care job gains are anemic. The "other services" category, which includes business, administrative, and professional services, has been running a little stronger than expected earlier in the year. There are no significant changes to sector job forecasts for 2007.

- While this year's inflation surprise will take a big bite out of measured growth, the state economy remains on the same path of gradual slowing that we have been forecasting for the past year. The surge in inflation does present a new risk, since it is difficult to know how business and consumers will react to sharply rising prices.

Hawai'i Economic Indicators, Year-Over-Year %Change

	2003	2004	2005	2006	2007
Visitor Arrivals	-0.1	8.3	6.4	1.5	2.4
U.S. Visitor Arrivals	4.8	7.3	7.0	2.9	1.7
Japan Visitor Arrivals	-9.6	10.6	2.7	-7.4	2.3
Payroll Jobs	1.9	2.8	3.2	2.5	1.2
Employment	0.9	1.4	3.0	2.1	1.1
Unemployment Rate (%)	3.9	3.3	2.8	2.8	3.1
Inflation Rate, Honolulu MSA (%)	2.3	3.3	3.8	5.2	4.2
Real Personal Income	2.4	4.6	3.0	1.0	2.0

Notes: Source is UHERO. Figures for 2006–2007 are forecasts.

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Department of Business, Economic Development & Tourism Quarterly Forecast

http://www.hawaii.gov/dbedt/info/economic/data_reports/qser/outlook-economy

Outlook of the Economy

You are here: Home » Information Resources » Economic Data » Economic Data & Reports » Quarterly Statistical & Economic Report » Outlook of the Economy

3rd Quarter 2006

The latest DBEDT forecast for Hawaii's economy expects real (inflation-adjusted) personal income and real gross state product (GSP) growth in 2006 to be at 2.1 percent and 2.7 percent, respectively, which are somewhat lower than predicted in the May forecast and also lower than growth seen in the previous two years. The slower real growth is largely due to the higher expected rates of inflation. DBEDT forecasts are based on the latest trends of growth for Hawaii's economy, as well as those for the U.S and Japanese economies, the two economies influencing Hawaii the most.

The August 2006 *Blue Chip Economic Consensus Forecasts* expects the economic growth for both the U.S. and Japanese economies to remain strong in 2006, followed by somewhat moderate growth in 2007. Real GDP growth in 2006 is projected to be 3.4 percent for the U.S. and 3.0 percent for Japan. In 2007, GDP growth is expected to be 2.7 percent for the U.S. and 2.3 percent for Japan. The U.S. consumer price index (CPI) is now expected to increase 3.5 percent in 2006 and 2.7 percent in 2007.

Based on current conditions, visitor days in 2006 are expected to increase 2.8 percent, half a percentage point lower than the May forecast. Total nominal (current dollar) visitor expenditures are now forecast to increase 7.1 percent and visitor arrivals to increase 2.0 percent in 2006. Visitor days, visitor arrivals, and visitor expenditures are predicted to grow 2.9 percent, 2.8 percent, and 6.3 percent, respectively, in 2007, followed by slightly lower growth in later years.

Several other indicators also provide support for healthy growth for Hawaii for the rest of 2006 and into 2007. The most notable is the value of private building permit authorizations. Year-to-date in 2006, the statewide total value of private building permits increased 17.2 percent to nearly $1.7 billion, on top of nearly $3.5 billion worth of permit levels in 2005. The large value of permits should mean a robust construction sector for 2006 and 2007. However, with rising interest rates and a decline in demand for housing in recent months, private construction activity is expected to level off in the next few years.

Stronger than expected job growth in the first two quarters contributed to an upward revision of the forecast for total wage and salary job growth in 2006 to 2.5 percent from 2.2 percent in the previous QSER forecast. Job growth is projected to gradually moderate to 1.5 percent in 2007 and to 1.2 percent in later years. At 3.1 percent, Hawaii had the second lowest unemployment rate in the nation in June 2006, according to the U.S. Bureau of Labor Statistics. During the first two quarters of 2006, the Hawaii unemployment rate (not seasonally adjusted) averaged 2.7 percent, as compared to 2.8 percent in the first two quarters of 2005.

Given strong total wage and salary job growth of 2.9 percent in the first half and the strong prospect for continuing job growth in the rest of the year, nominal personal income is expected to rise 7.0 percent in 2006. For 2007, DBEDT projects a slightly lower 6.0 percent growth rate in nominal income. However, due to an upward revision of the forecast for the Honolulu CPI, real personal income is now expected to grow 2.1 percent in 2006, 0.8 of a percentage point lower than in the May forecast. Similarly, real personal income growth is expected to be 2.1 percent in 2007, 0.7 of a percentage point lower than in the May forecast.

Hawaii's projected inflation rate for 2006 is now revised up to 4.8 percent in 2006 from 3.8 percent in the May forecast. The upward revision reflects the recent rises in oil prices and their impacts on goods sold in Hawaii, as well as increases in housing costs, as evidenced by a huge 5.8 percent increase in Honolulu CPI during the first half of 2006. The rate of inflation is expected to be 3.8 percent in 2007, half of a percentage point higher than in the May forecast.

Actual and Forecast Key Economic Indicators for Hawaii: 2004 to 2009

Economic Indicators	2004	2005	2006	2007	2008	2009
	(Actual)		(Forecast)			
Total population (thousands)	1,262	1,275	1,289	1,303	1,317	1,330
Visitor arrivals (thousands)	6,992	7,494	7,645	7,863	8,050	8,240
Visitor days (thousands)	63,343	68,242	70,152	72,180	73,939	75,722
Visitor expenditures (million dollars)	10,862	11,904	12,750	13,559	14,319	15,090
Honolulu CPI-U (1982-84=100)	190.6	197.8	207.3	215.2	222.3	229.0
Personal income (million dollars)	41,177	44,031 [1]	47,113	49,940	52,686	55,426
Real personal income (millions of 2000$)	38,087	39,245 [1]	40,065	40,915	41,786	42,678
Total wage & salary jobs (thousands)	590.7	608.9	624.3	633.7	641.3	649.0
Gross state product (million dollars)	50,238	53,710 [1]	57,362	60,402	63,483	66,657

Economic Indicators	2004	2005	2006	2007	2008	2009
	(Actual)		(Forecast)			
Real gross state product (millions of 2000$)	44,683	46,200 [2]	47,444	48,598	49,782	50,996
Gross state product deflator (2000=100)	112.4	116.3 [2]	120.9	124.3	127.5	130.7
Annual Percentage Change						
Total population	1.1	1.0	1.1	1.1	1.1	1.0
Visitor arrivals	8.5	7.2	2.0	2.8	2.4	2.4
Visitor days	6.9	7.7	2.8	2.9	2.4	2.4
Visitor expenditures	8.0	9.6	7.1	6.3	5.6	5.4
Honolulu CPI-U	3.3	3.8	4.8	3.8	3.3	3.0
Personal income	8.0	6.9 [1]	7.0	6.0	5.5	5.2
Real personal income	4.6	3.0 [1]	2.1	2.1	2.1	2.1
Total wage & salary jobs	2.8	3.1	2.5	1.5	1.2	1.2
Gross state product	8.3	6.9 [1]	6.8	5.3	5.1	5.0
Real gross state product	5.0	3.4 [2]	2.7	2.4	2.4	2.4
Gross state product deflator	3.2	3.4 [2]	4.0	2.8	2.6	2.5

1/ Preliminary.
2/ DBEDT-adjusted U.S. Bureau of Economic Analysis advance estimate.
Source: Hawaii State Department of Business, Economic Development & Tourism, August 17, 2006.

UHERO County Economic Forecast:

Slowing Evident in County Economies

by

Carl S. Bonham Ph.D.
Byron Gangnes Ph.D.,
and Leroy Laney, Ph.D.

July 5, 2006

University of
Hawaii
Economic
Research
Organization

UHERO County Economic Forecast

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EXECUTIVE SUMMARY

Economic conditions were buoyant in each of Hawai'i's four counties in 2005, but with some evidence that tight labor markets are beginning to act as a brake. The county economies will experience moderate growth in jobs and income this year, followed by further deceleration over the next year.

- Growth was strong in all counties in 2005. Visitor arrivals growth ranged from 4.5% on Maui to a dramatic 16% on the Big Island, which benefitted from high occupancy rates elsewhere. Strong arrivals and tight capacity drove record hotel revenues. Construction and mining, and the accommodation and food service sector led employment growth in all four counties. The strongest job growth last year was on the Big Island, where jobs expanded 4.0%. More moderate growth of 3.0-3.2% was recorded on O'ahu, Maui, and Kaua'i.
- Hawai'i County will once again see the strongest visitor growth this year, with arrivals rising nearly 6%. Kaua'i will see more than 5% visitor growth, and Maui will post 4% growth. O'ahu, which has the highest occupancy rates of any county, will see only modest visitor growth of 0.7%. Each of the Neighbor Island counties will see slower visitor growth in 2007 than this year.
- We have begun to see evidence of labor market cooling on Maui and Kaua'i. We expect further slowing on all islands over the next several years. This year job growth in the 2.5% range will be seen in all counties but Kaua'i, which is expected to add about 2% to its job base. In 2007, O'ahu growth will slow to about 1%, with a bit faster 1.8–2.4% growth on the Neighbor Islands.
- Construction will continue to lead job growth this year and next on the Neighbor Islands, and for this year on O'ahu. Other healthy sectors this year will be transportation and utilities, trade, and other services. Health care will also see above-average growth on the Neighbor Islands. There will be significant declines in agriculture on all islands; the biggest drop will occur on O'ahu, as the Del Monte phase out continues. Government jobs will be about flat on O'ahu and Kaua'i, with modest gains on Maui and the Big Island.
- Honolulu County will see 2.9% growth in real (inflation-adjusted) personal income, just under the statewide average, slowing to 1.9% in 2007. The Neighbor Islands will see somewhat faster growth in real income, ranging from 3–3.8% this year and 2.9–3.2% in 2007.
- The housing market remains strong on all islands, and home price increases accelerated in 2005 on O'ahu, the Big Island, and Kaua'i. The pace of sales backed off somewhat on O'ahu and Kaua'i, but it remains at a historically high levels on all islands. Median prices have more than doubled since 2001, although rates of price appreciation have begun to slow recently.
- Labor shortages are a growing problem for many firms. For consumers, the story of the year has been high gasoline prices. However, the limited expenditure by residents on transportation fuels limits our overall exposure to energy-related inflation. Home prices and electricity costs may continue to feed through. We continue to forecast local inflation of 3.8% this year, and inflation remaining above 3% through 2007.
- The biggest risk to growth in all counties is a possible slowdown of the U.S. economy and in Hawai'i tourism. The Federal Reserve has begun to express rising concern about inflation risks, signalling that further interest rate hikes are likely. Not surprisingly, financial markets have reacted negatively to this, with stock markets recently giving up most of their year-to-date gains. Tighter monetary policy runs the risk of weakening the national economy and precipitating a rapid slowdown of the visitor industry.

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MAJOR ECONOMIC INDICATORS
YEAR-OVER-YEAR % CHANGE

	2003	2004	2005	2006	2007
		Statewide			
Visitor Arrivals	-0.1	8.3	6.4	2.8	2.0
Japan Visitor Arrivals	-9.6	10.6	2.7	0.5	1.5
U.S. Visitor Arrivals	4.8	7.3	7.0	3.1	1.8
Payroll Jobs	1.9	2.8	3.2	2.5	1.4
Real Personal Income	2.4	4.6	3.1	3.0	2.2
		Honolulu			
Visitor Arrivals	-4.3	9.1	6.0	0.7	2.8
Japan Visitor Arrivals	-10.8	11.1	3.0	-1.6	1.7
U.S. Visitor Arrivals	0.7	7.3	6.2	2.2	2.4
Payroll Jobs	1.6	2.4	3.2	2.5	1.1
Real Personal Income	2.2	4.5	2.8	2.9	1.9
		Hawai'i			
Visitor Arrivals	-2.9	6.1	15.8	5.8	2.9
Japan Visitor Arrivals	-12.4	11.0	14.0	8.2	2.6
U.S. Visitor Arrivals	0.8	6.4	16.2	4.9	2.9
Payroll Jobs	2.5	4.1	4.0	2.7	2.4
Real Personal Income	3.3	4.8	3.6	3.8	3.2
		Maui			
Visitor Arrivals	2.7	0.5	4.5	4.0	1.8
Japan Visitor Arrivals	-27.8	-11.1	-12.1	-4.1	-0.8
U.S. Visitor Arrivals	7.7	1.3	5.0	3.8	2.0
Payroll Jobs	2.3	3.9	3.1	2.3	1.8
Real Personal Income	2.7	5.1	4.2	3.4	2.9
		Kaua'i			
Visitor Arrivals	-3.0	4.6	6.6	5.3	3.3
Japan Visitor Arrivals	-45.7	6.2	-20.2	5.3	9.6
U.S. Visitor Arrivals	2.8	4.6	8.9	3.8	3.0
Payroll Jobs	3.9	3.8	3.0	1.9	2.1
Real Personal Income	3.7	4.2	3.2	3.0	3.0

Notes: Source is UHERO. Figures for 2006 – 2007 are forecasts.
Figures for 2005 county income are UHERO estimates.

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Maui News Article
http://www.mauinews.com/print_version.aspx?id=21405
Wednesday, July 12, 2006 11:54 AM

Planning panel OKs leveling Renaissance for new resort

By ILIMA LOOMIS, Staff Writer

WAILUKU – Plans to demolish the Renaissance Wailea Beach Resort and redevelop the site into a new resort condominium complex received approval Tuesday from the Maui Planning Commission.

The commission voted 6-1 to approve a special management area permit, a shoreline setback variance and Steps 1 and 2 planned-development approvals for the redevelopment of the new Wailea Beach Resort & Residences. Under the terms of the approval, construction on the project must start within three years.

Commissioner Jonathan Starr cast the lone "no" vote on the project, saying he was concerned about environmental impacts. He said he thought developers' plans for energy efficiency didn't go far enough because they didn't include solar water heaters.

"That certainly puts me very strongly against this project," he said.

Developers said they weren't using solar, but opted instead for more efficient, energy-saving technologies like insulation and using reclaimed heat from boilers.

"We're looking at more of a global system," said architect John Hill.

The project involves demolishing the existing 349-unit resort and building 193 new low-rise condominiums. The units would be sold to private owners, who could live in them or rent them out.

Other amenities on the 15.5-acre property would include a 10,000-square-foot spa, two swimming pools, a gym, event and yoga lawns, two restaurants, a meeting area and a fitness center. The resort would build 442 parking stalls, of which 377 would be underground.

Landscaping would feature Native Hawaiian and drought-resistant plants to reduce the need for irrigation, developers said.

And while the existing hotel includes a wing within the 150-foot shoreline setback area, the new resort would keep development out of the setback, they added, as well as move a sewer line away from the shore.

In a separate component of the project, the developers would add 22 parking stalls to the Ulua/Mokapu Beach Park, bringing the total to 75 stalls.

And while the project is not required to contribute to affordable housing or schools, the developers are donating $1.9 million to Habitat for Humanity and $134,727 to the Maui High School technology department.

The Renaissance was built in 1978 and was operating under the Marriott brand. Owners are in negotiations with St. Regis Hotels to operate the new property.

Civil engineer Ronald Fukumoto said the project's impacts would be reduced because it would be smaller than the existing hotel. Potable water use is expected to go down from the current 149,000 gallons per day to 139,600 gallons, and irrigation would be reduced from the current 62,000 gallons per day to 47,600 gallons per day, he said.

He also said the resort would build drainage basins to catch runoff, installing special filters to catch petroleum residue and other debris. Off-site runoff would continue to be routed through drains into the ocean.

Starr said runoff was another one of his major concerns about the project. He wanted the developer to do more to contain rainwater flowing onto the property and prevent it from polluting the ocean.

"There's no way I can support this project if it's going to allow that much drainage and runoff," he said.

But fellow Commissioner Bruce U'u said the Renaissance Wailea Beach Resort shouldn't be responsible for pollution it didn't create.

"The runoff starts way above their property," he said. "I understand the near-shore water quality has to be good, but I think we're barking up the wrong tree."

Bud Pikrone of the Wailea Community Association praised the developer for working closely with his group and neighboring properties. He said plans were changed to reflect the community's desire for low-rise and low-density units.

"We believe the plan they have come up with meets all our requirements," he said.

ILWU representative Abel Kahoohanohano Jr. said his union had worked with the company to retrain employees or hire them back when the development is complete.

"Although the transition will temporarily be difficult, it will result in a favorable improvement for the employees," he said.

But nonunion workers were concerned.

"We don't want this to happen because we're going to lose our jobs," said Laura Rosenthal, an independent contractor who runs a small day spa at the hotel. She was

disappointed the redevelopment would result in a kamaaina-style hotel being changed into "another elite property."

Fellow employee Pamela Palencia agreed.

"We love it, and we think it's a thing of beauty," she said. "We're totally opposed to blowing it up."

Ilima Loomis can be reached at iloomis@mauinews.com.

Pacific Business News (Honolulu) - July 3, 2006
http://pacific.bizjournals.com/pacific/stories/2006/07/03/story4.html

Ritz-Carlton begins Maui time share sales

Pacific Business News (Honolulu) - June 30, 2006

by Prabha Natarajan

Pacific Business News

The Ritz-Carlton Club at Kapalua Bay will begin selling fractional ownership units on Maui next week.

The club will offer one-twelfth ownership interest in 62 units at Kapalua Bay, the 23,000-acre master-planned resort community by Maui Land & Pineapple.

This will be the first fractional vacation ownership project in Hawaii, which offers buyers 21 days a year for $300,000 to $700,000 and options to stay more based on availability. The project is part of the $300 million makeover of the Kapalua Resort, which includes the tear down of the Kapalua Bay Hotel by landowner Maui Land & Pineapple in partnership with Ritz-Carlton Hotel Co. and former AOL Chairman Steve Case's Exclusive Resorts. The community is a mix of 84 luxury residential and 62 fractional ownership condominiums that will be managed by the Ritz-Carlton.

Kapalua hopes to attract the Ritz-Carlton's clientele -- who form the top tier of the country's high net-worth individuals -- to its resort so that it can have a complex with fewer units and higher yield per unit.

Ritz-Carlton, part of Marriott International, is a high-end hotel operator that for a dozen years has run The Ritz-Carlton, Kapalua. With the expanded management contract, Ritz-Carlton will run the entire resort.

"This is an opportunity for real estate investors in Hawaii who don't want to step up and buy a full home, but are interested in buying something on the islands," said Robert Phillips, senior vice president of business development at the Ritz-Carlton Club.
The 722 intervals are expected to bring affluent families with a household income of $300,000 to $500,000 and worth of at least $5 million.

Construction of the new homes is expected to start this fall and will be ready for occupation in late 2008.
pnatarajan@bizjournals.com | 955-8041

Oil prices struggle higher

Sun Sep 17, 2006 7:41 PM ET
http://today.reuters.com/news/articleinvesting.aspx?type=hotStocksNews&storyID=2006-09-17T234100Z_01_SP222319_RTRUKOC_0_US-MARKETS-OIL.xml

SINGAPORE (Reuters) - Oil prices nudged higher for a second day on Monday, struggling to end their steepest slump in more than a decade amid robust winter fuel stocks and easing geopolitical and weather risks to oil supplies.

NYMEX crude for October delivery was up 15 cents at $63.48 a barrel in Globex electronic trading by 2310 GMT, building on Friday's 11-cent gain and again attempting to halt a $9 collapse in prices over the past three weeks and a near 20 percent reversal since mid-July's record high $78.40 a barrel.

From peak to trough, oil prices have fallen by more than $16, the steepest retracement since the first Gulf war in 1990/1991, although deep $15 corrections in the autumns of 2004 and 2005 were followed by new peaks within about half a year.

Oil shed nearly $3 last week after data showed an expanding cushion of U.S. natural gas stockpiles and the highest distillate inventories in nearly seven years, indicating consumers in the world's biggest market were amply supplied ahead of winter.

A wave of profit-taking across the commodities complex has also driven prices successively lower and may push oil into the $50s before relenting as trend-following and technically minded speculative funds wield more influence than ever before.

The RJ/CRB Index of 19 commodities dropped to its lowest in 13-½ months.

"Increased dominance of 'funds' as the incremental buyer of oil futures has induced greater technical traits to the market," said Doug Leggate, analyst at Citigroup Investment Research.

"Our technical analysts believe a critical inflexion point has been breached, and downside risk may lie in the $50s."

Many analysts say a fall below $60 a barrel could galvanize OPEC, which a week ago opted to keep current output steady but left open the door to another meeting soon if prices kept falling, hinting at its first formal output curbs since 2004.

The producer group has yet to establish a formal price target, but is on alert for any indication that the slump could be prolonged by fundamental market imbalances or by a slowdown or reversal in global economic growth.

The International Monetary Fund said on Friday it had revised its forecast for this and next year's global growth slightly higher, but U.S. industrial output fell last month for the first time since January, providing fresh evidence of a cooling economy.

"We are following (U.S. economic growth) with a lot of attention, because this element is critical for petroleum demand in the next few years," Algerian Energy and Mines Minister Chakib Khelil told reporters on Sunday, but he added that he thought prices would remain above $50 a barrel in the coming years.

"Now everything depends on world economic growth... We count a lot on the wisdom of the chairman of the Federal Reserve to take good decisions on interest rates, as well as on the European Central Bank, to encourage economic growth."

The U.S. Federal Reserve meets on Wednesday.

There were few developments on the supply risk front over the weekend, with China urging Iran to be more flexible on its nuclear program after a week of European Union talks that left officials upbeat but prompted President George W. Bush to raise concerns that Tehran was simply playing for time.

Weather concerns remained on the backburner for the time being, with the fourth storm of the Atlantic hurricane season -- Helene -- churning over the open seas, but posing no immediate threat to land, U.S. forecasters said.

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		← Recorded →											Forecast	TY Forecast
	Rate	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
1	R	45,241	45,818	46,359	46,900	47,626	48,557	49,572	50,501	51,492	52,481	53,471	54,426	55,316
2	% Increase	1.8%	1.3%	1.2%	1.2%	1.5%	2.0%	2.1%	1.9%	2.0%	1.9%	1.9%	1.8%	1.6%
3	G/J	6,968	7,056	7,218	7,393	7,595	7,884	8,179	8,346	8,592	8,795	9,056	9,311	9,537
4	% Increase	1.9%	1.3%	2.3%	2.4%	2.7%	3.8%	3.7%	2.0%	2.9%	2.4%	3.0%	2.8%	2.4%
5	H	349	329	320	311	299	286	277	276	274	271	269	269	269
6	% Increase	-2.5%	-5.7%	-2.7%	-2.8%	-3.9%	-4.3%	-3.1%	-0.4%	-0.7%	-1.1%	-0.7%	0.0%	0.0%
7	P	115	119	122	123	122	124	129	132	133	136	136	137	138
8	% Increase	3.9%	3.5%	2.5%	0.8%	-0.8%	1.6%	4.0%	2.3%	0.8%	2.3%	0.0%	0.7%	0.7%
9	F	384	138	145	146	146	149	154	156	161	162	170	178	181
10	% Increase	0.3%	-64.1%	5.1%	0.7%	0.0%	2.1%	3.4%	1.3%	3.2%	0.6%	4.9%	4.7%	1.7%
11	Total	53,057	53,460	54,164	54,873	55,788	57,000	58,311	59,411	60,652	61,845	63,102	64,321	65,441
12	% Increase	1.8%	0.8%	1.3%	1.3%	1.7%	2.2%	2.3%	1.9%	2.1%	2.0%	2.0%	1.9%	1.7%

Source: MECO-WP-205, pages 2-4

MAUI ELECTRIC COMPANY, LIMITED
MAUI DIVISION

1995 - 2007
AVERAGE NUMBER OF CUSTOMERS

Line		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
		← Recorded →											Forecast	TY Forecast
	Rate	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
1	R	41,794	42,322	42,843	43,374	44,048	44,940	45,908	46,788	47,736	48,692	49,648	50,548	51,398
2	% Increase	1.9%	1.3%	1.2%	1.2%	1.6%	2.0%	2.2%	1.9%	2.0%	2.0%	2.0%	1.8%	1.7%
3	G/J	6,368	6,459	6,604	6,752	6,927	7,198	7,491	7,657	7,902	8,105	8,342	8,567	8,773
4	% Increase	1.8%	1.4%	2.2%	2.2%	2.6%	3.9%	4.1%	2.2%	3.2%	2.6%	2.9%	2.7%	2.4%
5	H	306	290	285	276	265	251	241	240	239	236	233	233	233
6	% Increase	-2.5%	-5.2%	-1.7%	-3.2%	-4.0%	-5.3%	-4.0%	-0.4%	-0.4%	-1.3%	-1.3%	0.0%	0.0%
7	P	103	104	107	108	107	109	113	116	118	117	117	120	121
8	% Increase	5.1%	1.0%	2.9%	0.9%	-0.9%	1.9%	3.7%	2.7%	1.7%	-0.8%	0.0%	2.6%	0.8%
9	F	368	124	131	132	132	137	142	144	149	150	158	166	169
10	% Increase	0.0%	-66.3%	5.6%	0.8%	0.0%	3.8%	3.6%	1.4%	3.5%	0.7%	5.3%	5.1%	1.8%
11	Total	48,939	49,299	49,970	50,642	51,479	52,635	53,895	54,945	56,144	57,300	58,498	59,634	60,694
12	% Increase	1.8%	0.7%	1.4%	1.3%	1.7%	2.2%	2.4%	1.9%	2.2%	2.1%	2.1%	1.9%	1.8%

ColumL, M: July2006 Sales Forecast

MAUI ELECTRIC COMPANY, LIMITED
LANAI DIVISION

1995 - 2007
AVERAGE NUMBER OF CUSTOMERS

Line		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
		← Recorded →											Forecast	TY Forecast
	Rate	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
1	R	1,137	1,173	1,176	1,195	1,221	1,262	1,303	1,313	1,314	1,332	1342	1357	1372
2	% Increase	2.1%	3.2%	0.3%	1.6%	2.2%	3.4%	3.2%	0.8%	0.1%	1.4%	0.8%	1.1%	1.1%
3	G/J	146	152	160	170	175	188	192	196	197	198	204	214	224
4	% Increase	8.1%	4.1%	5.3%	6.3%	2.9%	7.4%	2.1%	2.1%	0.5%	0.5%	3.0%	4.9%	4.7%
5	H	13	9	5	5	5	5	6	5	4	4	4	4	4
6	% Increase	-7.1%	-30.8%	-44.4%	0.0%	0.0%	0.0%	20.0%	-16.7%	-20.0%	0.0%	0.0%	0.0%	0.0%
7	P	3	3	3	3	3	3	3	3	3	3	3	3	3
8	% Increase	-6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
9	F	6	4	4	4	4	3	3	3	3	3	3	3	3
10	% Increase	-6.3%	-33.3%	0.0%	0.0%	0.0%	-25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
11	Total	1,305	1,341	1,348	1,377	1,408	1,461	1,507	1,520	1,521	1,540	1,556	1,581	1,606
12	% Increase	2.5%	2.8%	0.5%	2.2%	2.3%	3.8%	3.1%	0.9%	0.1%	1.2%	1.0%	1.6%	1.6%

ColumL, M: July2006 Sales Forecast

MAUI ELECTRIC COMPANY, LIMITED
MOLOKI DIVISION

1995 - 2007
AVERAGE NUMBER OF CUSTOMERS

Line		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
		← Recorded →											Forecast	TY Forecast
	Rate	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
1	R	2,310	2,323	2,340	2,331	2,357	2,355	2,361	2,400	2,442	2,457	2481	2521	2546
2	% Increase	0.1%	0.6%	0.7%	-0.4%	1.1%	-0.1%	0.3%	1.7%	1.8%	0.6%	1.0%	1.6%	1.0%
3	G/J	454	445	454	471	493	498	496	493	493	492	510	530	540
4	% Increase	1.8%	-2.0%	2.0%	3.7%	4.7%	1.0%	-0.4%	-0.6%	0.0%	-0.2%	3.7%	3.9%	1.9%
5	H	30	30	30	30	29	30	30	31	31	31	32	32	32
6	% Increase	0.0%	0.0%	0.0%	0.0%	-3.3%	3.4%	0.0%	3.3%	0.0%	0.0%	3.2%	0.0%	0.0%
7	P	9	12	12	12	12	12	13	13	12	16	16	14	14
8	% Increase	-5.3%	33.3%	0.0%	0.0%	0.0%	0.0%	8.3%	0.0%	-7.7%	33.3%	0.0%	-12.5%	0.0%
9	F	10	10	10	10	10	9	9	9	9	9	9	9	9
10	% Increase	17.6%	0.0%	0.0%	0.0%	0.0%	-10.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
11	Total	2,813	2,820	2,846	2,854	2,901	2,904	2,909	2,946	2,987	3,005	3,048	3,106	3,141
12	% Increase	0.4%	0.2%	0.9%	0.3%	1.6%	0.1%	0.2%	1.3%	1.4%	0.6%	1.4%	1.9%	1.1%

ColumL, M: July2006 Sales Forecast

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

	PRESENT RATES			PROPOSED RATES		
	BILLING UNITS	UNIT PRICE	REVENUES $1000s	BILLING UNITS	UNIT PRICE	REVENUES $1000s
	MWH	$/KWH		MWH	$/KWH	
ENERGY CHARGE:						
NON-FUEL	430167	8.8294	37,981.2			
0-350 kWh				194,918	10.3229	20,121.2
351-1200 kWh				187,226	11.1375	20,852.3
Over 1200 kWh				48,023	11.6756	5,607.0
Total	430167			430,167		46,580.5
BASE FUEL	430167	4.5937	19,760.6		4.5937	77,426.6
TOTAL ENERGY			57,741.8			124,007.1
CUSTOMER CHARGE:	BILLS	$/BILL			$/BILL	
1 Phase	616590	7.50	4,624.4		7.50	4,624.4
3 Phase	185	7.50	2.2		12.00	2.2
ADJUSTMENTS:						
FUEL OIL ADJ.	430167	13.9540	60,025.5		0.0000	0.0
TEMP RATE DECR.		0.0000	0.0		0.0000	0.0
FIRM CAP. SURCHARGE		(0.0769)	(47.8)		0.0000	0.0
MISCELLANEOUS*			(429.9)			(290.8)
INTERIM RATE INCREASE			0.0			
TOTAL REVENUES			121,916.2			128,342.9

* INCLUDES EMPLOYEE DISCOUNT, APT-HOUSE DISCOUNT, MINIMUM BILL ADJUSTMENT

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES & BILLS BY CUSTOMER GROUP

	NO. OF BILLS		MWH SALES	
	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES	PERCENT OF TOTAL
RECORDED:				
RESIDENTIAL-R				
1-Phase	603410	99.21	416,008.4	99.02
3-Phase	169	0.03	697.9	0.17
TOTAL R	603579	99.24	416,706.3	99.19
EMPLOYEES-E **	4622	0.76	3,409.4	0.81
10% APT. HOUSE	32922	5.41	15,693.2	3.74
TOTAL R AND E	608201	100.00	420,115.7	100.00

	NO. OF BILLS		MWH SALES	
	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES
FORECASTS:				
RESIDENTIAL-R 1 Phas	99.21	611,903	99.02	425,960
RESIDENTIAL-R 3 Phas	0.03	185	0.17	731
EMPLOYEES-E **	0.76	4,687	0.81	3,484
10% APT. HOUSE	5.41	33,368	3.74	16,088
TOTAL R AND E	100.00	616,776	100.00	430,167

** No 3 Phase Service Customers Recorded or Forecast

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES AND BILLS

RECORDED:	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES	PERCENT OF TOTAL
Usage Per Month:				
0 - 350 kWh	156929	25.8022	33,935.0	8.0775
350 - 1200 kWh	377646	62.0923	251,777.0	59.9304
Over 1200 kWh	73626	12.1055	134,403.7	31.9921
TOTAL R AND E	608201	100.0000	420,115.7	100.0000

FORECAST:	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES
Usage Per Month:				
0 - 350 kWh	25.8022	159,142	8.0775	34,746.7
350 - 1200 kWh	62.0923	382,970	59.9304	257,800.8
Over 1200 kWh	12.1055	74,664	31.9921	137,619.5
TOTAL R AND E	100.0000	616,776	100.0000	430,167.0

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR BILLING LOADS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES	PROPOSED RATES
MINIMUM CHRG.,$/MO.	17.00	17.00
BASE RATE,$/KWH	0.134231	0.283221
F.O.A.,$/KWH	0.13954	0.00000
CUSTOMER CHRG, $/MO	7.50	7.50
TRA, $/KWH	0.00000	0.00000
FCS ADJ., $/KWH	0.00000	0.00000
MINIMUM KWH/MONTH	34.70	33.54

	PRESENT RATES		PROPOSED RATES	
	RECORDED	FORECAST	RECORDED	FORECAST
SALES, MWH				
TOTAL R,E	420,115.7	430,167.0	420,115.7	430,167.0
LT/EQ TO MIN. KWH	54.017	43.0	51.0	43.0
% OF TOTAL	0.01		0.01	
NUMBER OF BILLS				
TOTAL R	608201	616,776	608,201	616,776
LT/EQ TO MIN. KWH	7,398	7,525	7,310	7,401
% OF TOTAL	1.22		1.20	

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENTS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES		
	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000s
IF NO PROVISION FOR MINIMUM CHRG.:			
BASE ENERGY CHARGE	43.0	13.42310	5.8
F.O.A. ADJUSTMENT	43.0	13.95400	6.0
TRA ADJUSTMENT	43.0	0.00000	0.0
FCS ADJ.	43.0	0.00000	0.0
SUBTOTAL			11.8
	BILLS	$/MONTH	
CUSTOMER CHARGE	7,525	7.50	56.4
TOTAL			68.2
	BILLS	$/MONTH	
AS BILLED WITH MINIMUM CHARGE:	7,525	17.00	127.9
MINIMUM BILL ADJ.			59.7

	PROPOSED RATES		
	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000s
IF NO PROVISION FOR MINIMUM CHRGE.:			
BASE ENERGY CHARGE	43.0	28.32210	12.2
F.O.A. ADJUSTMENT	43.0	0.00000	0.0
TRA ADJUSTMENT	43	0.00000	0.0
FCS ADJ.	43	0.00000	0.0
SUBTOTAL			12.2
	BILLS	$/MONTH	
CUSTOMER CHARGE	7,401	7.50	55.5
TOTAL			67.7
	BILLS	$/MONTH	
AS BILLED WITH MINIMUM CHARGE:	7,401	17.00	125.8
MINIMUM BILL ADJ.			58.1

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR EMPLOYEE DISCOUNT ADJUSTMENT

	RECORDED	FORECAST
MWH SALES:		
0-350 KWH	127.3	130
350-825 KWH	1,462.9	1,495
826-1200 KWH	1,184.4	1,210
>1200 KWH	634.8	649
TOTAL	3,409.4	3,484
NUMBER OF BILLS:		
0-350 KWH	490	497
350-825 KWH	2,490	2,525
826-1200 KWH	1,208	1,225
>1200 KWH	434	440
TOTAL	4,622	4,687

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR EMPLOYEE DISCOUNT ADJUSTMENT

		PRESENT RATES		PROPOSED RATES	
EMPLOYEE DISCOUNT	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000s	UNIT PRICE $/KWH	REVENUES $1000s
ENERGY CHARGE					
0 - 350 kWh	130			28.3221	36.8
350 - 825 KWH					
First 350 kWh	884.0			28.3221	250.4
Remaining kWh	611.0			29.1367	178.0
350 - 825 KWH Total	1,495.0				428.4
Total	1,625.0	13.4231	218.1		465.2
FOA	1,625.0	13.9540	226.8	0.0000	0.0
SUBTOTAL			444.9		465.2
	BILLS				
CUSTOMER CHARGE	3,022	7.50	22.7	7.50	22.7
TOTAL			467.6		487.9
-1/3% EMP. ADJ.			(155.9)		(162.6)

		PRESENT RATES		PROPOSED RATES	
EMPLOYEE DISCOUNT LIMITED to 825 KWH	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000s	UNIT PRICE $/KWH	REVENUES $1000s
ENERGY CHARGE					
825 - 1200 kWh					
First 350 kWh	429			28.3221	121.5
kWh above 350	582			29.1367	169.6
Over 825 kWh Total	1,011				291.1
Over 1200 kWh					
First 350 kWh	154			28.3221	43.6
kWh above 350	209			29.1367	60.9
Over 1200 kWh Total	363				104.5
Total	1,374	13.4231	184.4		395.6
FOA	1,374	13.9540	191.7	0.0000	0.0
SUBTOTAL			376.1		395.6
	BILLS				
CUSTOMER CHARGE	1665	7.50	12.5	7.50	12.5
TOTAL			388.6		408.1
-1/3% EMP. ADJ.			(129.5)		(136.0)
TOTAL EMPLOYEE ADJ:			(285.4)		(298.6)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR BILLING LOADS
FOR APARTMENT HOUSE COLLECTION ARRANGEMENT

	PRESENT RATES	PROPOSED RATES
MAXIMUM DISC.,$/MO.	65.00	65.00
BASE ENERGY ,$/KWH	0.134231	0.283221
F.O.A., $/KWH	0.13954	0.00000
CUST. CHG., $/BILL	7.50	7.50
TRA, $/KWH	0	0.00000
FCS ADJ., %	-0.000769	0.00000
KWH BLOCK @ MAX.DISC	210.13	203.02

	PRESENT RATES		PROPOSED RATES	
	RECORDED (MWH)	FORECAST (MWH)	RECORDED (MWH)	FORECAST (MWH)
SALES:				
0-210 (203) KWH	949.4	973	858.4	880
>210 (203) KWH	14,744	15,115	14,834.8	15,208
TOTAL	15693.2	16,088	15,693.2	16,088
NUMBER OF BILLS:				
0-210 (203) KWH	6,751	6,842	6,311	6,397
>210 (203) KWH	26,171	26,526	26,611	26,971
TOTAL	32,922	33,368	32,922	33,368

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR APARTMENT HOUSE COLLECTION ARRANGEMENT

	PRESENT RATES		
NO. W/IN MAX. DISC.	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000s
ENERGY CHARGE	973.0	13.4231	130.6
	BILLS	$/MO	
CUSTOMER CHARGE	6,842	7.50	51.3
TOTAL BASE			181.9
FCS (%)		-0.0769	(0.1)
FOA (¢/kWh)	973.0	13.9540	135.8
Total of Bills subject to 10% Discount			317.6
10% APT DISC.			(31.8)
	BILLS	$/MO	
NO. > MAX. DISC.	26,526	6.50	(172.4)
APT.-HOUSE REV.ADJ.			(204.2)

	PROPOSED RATES		
NO. W/IN MAX. DISC.	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000s
ENERGY CHARGE	880.0	28.32210	249.2
	BILLS	$/MO	
CUSTOMER CHARGE	6,397	7.50	48.0
TOTAL BASE			297.2
FCS (%)		0	0.0
FOA (¢/kWh)	880.0	0.00000	0.0
Total of Bills subject to 10% Discount			297.2
10% APT DISC.			(29.7)
	BILLS	$/MO	
NO. > MAX. DISC.	26,971	6.50	(175.3)
APT.-HOUSE REV.ADJ.			(205.0)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

		PRESENT RATES		PROPOSED RATES	
	BILLING UNITS (MWH)	UNIT PRICE $/KWH	REVENUES $1000S	UNIT PRICE $/KWH	REVENUES $1000S
ENERGY CHARGE:	96192.9	14.5656	14,011.1	29.8037	28669
	BILLS	$/BILL		$/BILL	
CUSTOMER CHARGE:					
1 PHASE	55404	21.00	1,163.5	25.00	1385.1
3 PHASE	33168	36.00	1194	40.00	1326.7
ADJUSTMENTS:					
FOA			13422.8		0.0
TRA			0		0.0
FCS			-12.6		0
MISCELLANEOUS *			34.1		3.6
INTERIM RATE INCREASE			0.0		
TOTAL REVENUES			29812.9		31384.4

* INCLUDES MINIMUM BILL ADJUSTMENT & SCHEDULE E ADJUSTMENT.

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES AND BILLS BY TYPE OF SERVICE

	RECORDED	FORECASTED
TOTAL G:		
SALES, MWH	94,378.3	96,192.9
NO. OF BILLS	86,264	88,572

	MWH SALES		NO. OF BILLS	
RECORDED:	SALES (MWH)	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL
1 PHASE	39,985.3	42.367	53961	62.553
3 PHASE	54,393.0	57.633	32303	37.447
TOTAL	94,378.3	100.00	86264	100.00

FORECAST:	PERCENT OF TOTAL	SALES (MWH)	PERCENT OF TOTAL	NUMBER OF BILLS
1 PHASE	42.367	40,754	62.553	55,404
3 PHASE	57.633	55,439	37.447	33,168
TOTAL	100.00	96,192.9	100.00	88,572

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR PRIMARY SUPPLY VOLTAGE SERVICE

	AT PRESENT RATES		AT PROPOSED RATES	
	RECORDED	FORECAST	RECORDED	FORECAST
SALES, MWH				
TOTAL G:	94378.3	96,192.9		96,192.9
PRIMARY SERVICE	0.0	0.0		0.0
PERCENT OF TOTAL	0.000			

	BILLING	PRESENT	RATES	PROPOSED	RATES
	UNITS	UNIT PRICE	REVENUES	UNIT PRICE	REVENUES
	MWH	$/KWH	$1000S	$/KWH	$1000S
ENERGY CHARGE:	0	14.5656	0	29.80370	0.0
		% ADJ.		% ADJ.	
PRIMARY SERV. ADJ.:		-2	0.0	-1.1	0.0

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR BILLING LOADS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES	PROPOSED RATES
1 PHASE		
MINIMUM CHRG., $/MO.	26.00	30.00
BASE RATE, $/KWH	0.145656	0.298037
F.O.A., $/KWH	0.13954	0.00000
CUSTOMER CHRG., $/MO	21.00	25.00
TRA, $/KWH	0.000000	0.000000
FCS ADJ., $/KWH	0.000000	0.000000
MINIMUM KWH/MONTH	17.53	16.78
3 PHASE		
MINIMUM CHRG., $/MO.	41.00	45.00
BASE RATE, $/KWH	0.145656	0.298037
F.O.A., $/KWH	0.13954	0.00000
CUSTOMER CHRG., $/MO	36.00	40.00
TRA, $/KWH	0.000000	0.000000
FCS ADJ., $/KWH	0.000000	0.000000
MINIMUM KWH/MONTH	17.53	16.78

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR BILLING LOADS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES		PROPOSED RATES	
	RECORDED	FORECAST	RECORDED	FORECAST
SALES, MWH				
TOTAL G	94378.3	96,192.9	94378.3	96,192.9
LT/EQ TO MIN. KWH				
1 PHASE	25.0	25.4	22.4	22.9
3 PHASE	2.9	3.0	2.8	2.9
TOTAL	27.9	28.4	25.254	25.8
% OF TOTAL	0.030	0.030	0.027	0.027
NUMBER OF BILLS				
TOTAL G	86264	88,572	86264	88,572
LT/EQ TO MIN. KWH				
1 PHASE	6777	6,958	6628	6,805
3 PHASE	1440	1,479	1435	1,473
TOTAL	8217	8,437	8063	8,278
% OF TOTAL	9.53	9.53	9.35	9.35

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSMENT
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES			PROPOSED RATES		
	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000S	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000S
IF NO PROVISION FOR MINIMUM CHRG.:						
BASE ENERGY CHARGE	28.4	14.5656	4.1	25.8	29.80370	7.7
F.O.A. ADJUSTMENT	28.4	13.954	4.0	25.8	0.0000	0.0
FCS ADJUSTMENT	28.4	0.000	0.0	25.8	0.0000	0.0
temp rate decr	28.4	0.000	0.0	25.8	0.0000	0.0
SUBTOTAL			8.1			7.7
	BILLS	$/MONTH		BILLS	$/MONTH	
CUSTOMER CHARGE						
1 PHASE	6,958	21.00	146.1	6,805	25.00	170.1
3 PHASE	1,479	36.00	53.2	1,473	40.00	58.9
SUBTOTAL	8,437		199.3	8,278		229.0
TOTAL			207.4			236.7
	BILLS	$/MONTH		BILLS	$/MONTH	
AS BILLED WITH MINIMUM CHARGE:						
1 PHASE	6958	26.00	180.9	6805	30.00	204.2
3 PHASE	1479	41.00	60.6	1473	45.00	66.3
			241.5			270.5
MINIMUM BILL ADJ.			34.1			33.8

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

	PRESENT RATES			PROPOSED RATES		
	BILLING UNITS (MWH)	UNIT PRICE $/KWH	REVENUES $1000S	BILLING UNITS (MWH)	UNIT PRICE $/KWH	REVENUES $1000S
ENERGY CHARGE:						
0 - 200 KWH/KW	163,741.2	12.4165	1,317.0	170,268.7	25.5003	43,419.0
201 - 400 KWH/KW	87,396.2	11.4024	9,965.3	79,655.5	24.4862	19,504.6
> 400 KWH/KW	17,055.5	8.4403	1,439.5	18,268.7	21.5241	3,932.2
TOTAL	268,192.9		31,735.7	268,192.9		66,855.8
DEMAND CHARGE:						
KW, BILLED	916366	5.75	5,269.1	946,751.0	12.00	11,361.0
CUSTOMER CHARGE:						
1 PHASE	1590	35.00	55.7	1590	50.00	79.5
3 PHASE	15114	50.00	755.7	15114	65.00	982.4
SUBTOTAL	16704		811.4	16704		1,061.9
ADJUSTMENTS:						
MISCELLANEOUS *			(181.3)			(294.1)
FUEL OIL ADJ.	268192.9	13.9540	37,423.6	0	0.0000	0.0
TEMP RATE DECR.		0.0000	0.0		0.0000	0.0
FCS NET		(0.0769)	(28.9)		0	0.0
INTERIM INCREASE			0.0			
TOTAL REVENUE			75,029.6			78,984.6

*INCLUDES PF ADJ, DP ADJ, DS ADJ, RIDER ADJ, SCHEDULE E ADJ

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY PHASE

	MWH SALES		NO. OF BILLS	
	SALES (MWH)	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL
RECORDED:				
1 PHASE	12,935.1	4.940	1536	9.516
3 PHASE	248,901.1	95.060	14605	90.484
TOTAL	261,836.2	100.00	16141	100.00

	PERCENT OF TOTAL	SALES (MWH)	PERCENT OF TOTAL	NUMBER OF BILLS
FORECAST:				
1 PHASE	4.940	13248.7	9.519	1590
3 PHASE	95.060	254,944.2	90.481	15114
TOTAL	100.00	268,192.9	100.00	16,704

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS
FOR DISTRIBUTION PRIMARY SUPPLY VOLTAGE SVC

	AT PRESENT RATES		AT PROPOSED RATES	
	RECORDED	FORECAST	RECORDED	FORECAST
SALES, MWH				
TOTAL J:	261,836.2	268,192.9		268,192.9
PRIMARY SERVICE	2,927.0	2,998.0		2,998.0
PERCENT OF TOTAL	1.118			
NUMBER OF BILLS				
TOTAL J:	16141	16,704		16704
PRIMARY SERVICE	72	74		74
PERCENT OF TOTAL	0.446			

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
FOR DISTRIBUTION PRIMARY SUPPLY VOLTAGE SERVICE

	SALES		NUMBER OF BILLS	
	MWH	% OF TOTAL	BILLS	% OF TOTAL
RECORDED:				
0 - 200 KWH/KW	979.5	33.46	37	51.39
201 - 400 KWH/KW	1,431.6	48.91	27	37.50
> 400 KWH/KW	515.9	17.63	8	11.11
TOTAL	2,927.0	100.00	72	100.00

	FORECAST AT PRESENT RATES:			
	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	33.46	1,003	51.39	38
201 - 400 KWH/KW	48.91	1,466	37.50	28
> 400 KWH/KW	17.63	529	11.11	8
TOTAL	100.00	2,998	100.00	74

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING KW
DISTRIBUTION PRIMARY SUPPLY VOLTAGE SERVICE

	RECORDED		KW FORECAST	
	KW	KWH/KW	PRESENT	PROPOSED
LOAD FACTOR BLOCKS				
0 - 200 KWH/KW	8,956.6	109.36	9,172	9,473.0
201 - 400 KWH/KW	5,483.5	261.07	5,615	5,615.0
> 400 KWH/KW	1,123.3	459.27	1,152	1,041.0
TOTAL	15,563.4	188.07	15,939	16,129.0

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

PRI VOLT (DP) - DISTRIBUTION OF SALES AND BILLS

Using Sch J Extract Data - 75% Ratchet at Present; Average Ratchet at Proposed

AT PRESENT RATES

	SALES		NUMBER OF BILLS	
RECORDED:	MWH	% OF TOTAL	BILLS	% OF TOTAL
0 - 200 KWH/KW	982.6	33.0880	37	51.9444
201 - 400 KWH/KW	1,465.2	49.3390	27	37.3611
> 400 KWH/KW	521.9	17.5731	8	10.6944
TOTAL	2,969.7	100.0001	72	99.9999

FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	33.0880	992.0	51.9444	38
201 - 400 KWH/KW	49.3390	1,479.2	37.3611	28
> 400 KWH/KW	17.5731	526.8	10.6944	8
TOTAL	100.0000	2,998.0	99.9999	74

AT PROPOSED RATES

	SALES		NUMBER OF BILLS	
RECORDED:	MWH	% OF TOTAL	BILLS	% OF TOTAL
0 - 200 KWH/KW	1,056.3	35.5697	38	53.1944
201 - 400 KWH/KW	1,450.9	48.8574	27	37.5000
> 400 KWH/KW	462.5	15.5728	7	9.3056
TOTAL	2,969.7	99.9999	72	100.0000

FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	35.5697	1,066.4	53.1944	39
201 - 400 KWH/KW	48.8574	1,464.7	37.5000	28
> 400 KWH/KW	15.5728	466.9	9.3056	7
TOTAL	100.0000	2,998.0	100.0000	74

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

PRI VOLT. (DP) - DETERMINATION OF KW

Using Sch J Extract Data - 75% Ratchet at Present; Average Ratchet at Proposed

AT PRESENT RATES

	RECORDED		FORECAST	
LOAD FACTOR BLOCKS	KW-B	KWH/KW	KW-B	MWH
0 - 200 KWH/KW	9,195.8	106.85	9,284	992.0
201 - 400 KWH/KW	5,570.5	263.03	5,624	1,479.2
> 400 KWH/KW	1,107.1	471.38	1,118	526.8
TOTAL	15,873.4	187.08	16,026	2,998.0

AT PROPOSED RATES

	RECORDED		FORECAST	
LOAD FACTOR BLOCKS	KW-B	KWH/KW	KW-B	MWH
0 - 200 KWH/KW	9,498.3	111.21	9,589	1,066.4
201 - 400 KWH/KW	5,570.9	260.44	5,624	1,464.7
> 400 KWH/KW	1,000.3	462.32	1,010	466.9
TOTAL	16,069.5	184.80	16,223	2,998.0

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
FOR DISTRIBUTION PRIMARY SUPPLY VOLTAGE SERVICE

PRESENT RATES

	LOAD FACTOR BLOCK (KWH/KW)			
	0 - 200	201 - 400	>400	TOTAL
LOAD FACTOR BLOCK				
0 - 200 KWH/KW	1,003	1,123	230	2,356
201 - 400 KWH/KW	0	343	230	573
> 400 KWH/KW	0	0	69	69
TOTAL	1,003	1,466	529	2,998
FORECAST AT PRESENT RATES:				
SALES-MWH	1,003	1,466	529	2,998
BILLS	38	28	8	74
KW, BILLED	9,172	5,615	1,152	15,939

PROPOSED RATES

	LOAD FACTOR BLOCK (KWH/KW)			
	0 - 200	201 - 400	> 400	TOTAL
LOAD FACTOR BLOCK				
0 - 200 KWH/KW	1,066	1,123	208	2,397
201 - 400 KWH/KW	0	342	208	550
> 400 KWH/KW	0	0	51	51
TOTAL	1,066	1,465	467	2,998
FORECAST AT PROPOSED RATES:				
SALES-MWH	1066.4	1464.7	466.9	2,998
BILLS	39	28	7	74
KW, BILLED	9473	5615	1041	16129

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSMENT
FOR DISTRIBUTION PRIMARY SUPPLY VOLTAGE SVC

	PRESENT RATES			PROPOSED RATES		
	BILLING UNITS MWH	UNIT PRICE $/KWH	REVENUES $1000S	BILLING UNITS MWH	UNIT PRICE $/KWH	REVENUES $1000S
ENERGY CHARGE:						
0 - 200 KWH/KW	2,356	12.4165	292.5	2,397.0	25.5003	611.2
201 - 400 KWH/KW	573	11.4024	65.3	550.0	24.4862	134.7
> 400 KWH/KW	69	8.4403	5.8	50.9	21.5241	11.0
TOTAL	2,998		363.6	2,998		756.9
DEMAND CHARGE	15939	5.75	91.6	16129	12.00	193.5
TOTAL			455.2			950.4
		% ADJ.			% ADJ.	
PRIMARY SERV. ADJ.:		-2	(9.1)		-1.1	(10.5)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS
FOR DISTRIBUTION SECONDARY SUPPLY VOLTAGE SVC

	AT PRESENT RATES		AT PROPOSED RATES	
	RECORDED	FORECAST	RECORDED	FORECAST
SALES, MWH				
TOTAL J:	261,836.2	268,192.9		268,192.9
SECONDARY SERVICE	956.3	979.0		979.0
PERCENT OF TOTAL	0.365			
NUMBER OF BILLS				
TOTAL J:	16141	16,704		16704
SECONDARY SERVICE	25	26		26
PERCENT OF TOTAL	0.155			

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
FOR DISTRIBUTION SECONDARY SUPPLY VOLTAGE SERVICE

	SALES		NUMBER OF BILLS	
	MWH	% OF TOTAL	BILLS	% OF TOTAL
RECORDED:				
0 - 200 KWH/KW	37.4	3.91	1	4.00
201 - 400 KWH/KW	866.5	90.61	22	88.00
> 400 KWH/KW	52.4	5.48	2	8.00
TOTAL	956.3	100.00	25	100.00

	FORECAST AT PRESENT RATES:			
	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	3.91	38	4.00	1
201 - 400 KWH/KW	90.61	887	88.00	23
> 400 KWH/KW	5.48	54	8.00	2
TOTAL	100.00	979	100.00	26

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING KW
DISTRIBUTION SECONDARY SUPPLY VOLTAGE SERVICE

	RECORDED		KW FORECAST	
	KW	KWH/KW	PRESENT	PROPOSED
LOAD FACTOR BLOCKS				
0 - 200 KWH/KW	148.1	252.53	150	175
201 - 400 KWH/KW	2,883.1	300.54	2,951	3,133
> 400 KWH/KW	124.8	419.87	129	86
TOTAL	3,156.0	303.01	3,230	3,394

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

PRI SERVICE (DS) - DISTRIBUTION OF SALES AND BILLS

Using Sch J Extract Data - 75% Ratchet at Present; Average Ratchet At Proposed

PRESENT RATES

	SALES		NUMBER OF BILLS	
RECORDED:	MWH	% OF TOTAL	BILLS	% OF TOTAL
0 - 200 KWH/KW	35.5	3.8510	1	3.33
201 - 400 KWH/KW	829.5	89.9831	21	88.33
> 400 KWH/KW	56.8	6.1659	2	8.34
TOTAL	921.8	100.0000	24	100.00

FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	3.8510	37.7	3.33	1
201 - 400 KWH/KW	89.9831	880.9	88.33	23
> 400 KWH/KW	6.1659	60.4	8.34	2
TOTAL	100.0000	979.0	100.0000	26

PROPOSED RATES

	SALES		NUMBER OF BILLS	
RECORDED:	MWH	% OF TOTAL	BILLS	% OF TOTAL
0 - 200 KWH/KW	38.4	4.1656	1	3.75
201 - 400 KWH/KW	845.2	91.6862	22	90.83
> 400 KWH/KW	38.2	4.1482	1	5.42
TOTAL	921.8	100.0000	24	100.00

FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	4.1656	40.8	3.75	1
201 - 400 KWH/KW	91.6862	897.6	90.83	24
> 400 KWH/KW	4.1482	40.6	5.42	1
TOTAL	100.0000	979.0	100.0000	26

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

PRI SERVICE (DS) - DETERMINATION OF KW

Using Sch J Extract Data - 75% Ratchet at Present; Average Ratchet at Proposed

AT PRESENT RATES

	RECORDED		FORECAST	
LOAD FACTOR BLOCKS	KW-B	KWH/KW	KW-B	MWH
0 - 200 KWH/KW	145.2	244.49	154	37.7
201 - 400 KWH/KW	2,698.8	307.36	2,866	880.9
> 400 KWH/KW	124.8	455.45	133	60.4
TOTAL	2,968.8	310.51	3,153	979.0

AT PROPOSED RATES

	RECORDED		FORECAST	
LOAD FACTOR BLOCKS	KW-B	KWH/KW	KW-B	MWH
0 - 200 KWH/KW	169.7	226.28	180	40.8
201 - 400 KWH/KW	2,865.6	294.95	3,043	897.6
> 400 KWH/KW	83.5	457.96	89	40.6
TOTAL	3,118.8	295.58	3,312	979.0

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
FOR DISTRIBUTION SECONDARY SUPPLY VOLTAGE SERVICE

PRESENT RATES

	LOAD FACTOR BLOCK (KWH/KW)			
	0 - 200	201 - 400	>400	TOTAL
LOAD FACTOR BLOCK				
0 - 200 KWH/KW	30	590	26	646
201 - 400 KWH/KW	8	297	26	331
> 400 KWH/KW	0	0	2	2
TOTAL	38	887	54	979
FORECAST AT PRESENT RATES:				
SALES-MWH	38	887	54	979
BILLS	1	23	2	26
KW, BILLED	150	2,951	129	3,230

PROPOSED RATES

	LOAD FACTOR BLOCK (KWH/KW)			
	0 - 200	201 - 400	> 400	TOTAL
LOAD FACTOR BLOCK				
0 - 200 KWH/KW	35	627	17	679
201 - 400 KWH/KW	6	271	17	294
> 400 KWH/KW	0	0	7	7
TOTAL	41	898	41	980
FORECAST AT PROPOSED RATES:				
SALES-MWH	40.8	897.6	40.6	979
BILLS	1	24	1	26
KW, BILLED	175	3133	86	3394

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSMENT
FOR DISTRIBUTION SECONDARY SUPPLY VOLTAGE SVC

	PRESENT RATES			PROPOSED RATES		
	BILLING UNITS MWH	UNIT PRICE $/KWH	REVENUES $1000S	BILLING UNITS MWH	UNIT PRICE $/KWH	REVENUES $1000S
ENERGY CHARGE:						
0 - 200 KWH/KW	646	12.4165	80.2	679	25.5003	173.1
201 - 400 KWH/KW	331	11.4024	37.7	294	24.4862	72.0
> 400 KWH/KW	2	8.4403	0.2	7	21.5241	1.5
TOTAL	979		118.1	980		246.6
DEMAND CHARGE	3230	5.75	18.6	3394	12.00	40.7
TOTAL			136.7			287.3
		% ADJ.			% ADJ.	
PRIMARY SERV. ADJ.:		-1	(1.4)		-0.5	(1.4)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS
FOR TOTAL CLASS

AT PRESENT RATES

	SALES		NUMBER OF BILLS	
RECORDED:	MWH	% OF TOTAL	BILLS	% OF TOTAL
0 - 200 KWH/KW	24,415.3	9.32	2776	17.20
201 - 400 KWH/KW	139,291.2	53.20	9979	61.82
> 400 KWH/KW	98,129.7	37.48	3386	20.98
TOTAL	261,836.2	100.00	16141	100.00

FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	9.32	24,995.6	17.20	2,873
201 - 200 KWH/KW	53.20	142,678.6	61.82	10,326
> 400 KWH/KW	37.48	100,518.7	20.98	3,504
TOTAL	100.00	268,192.9	100.00	16,704

AT PROPOSED RATES

sing Sch J Extact Data - 75% at Present; Average Ratchet at Proposed

At Present

	SALES		NUMBER OF BILLS	
RECORDED:	MWH	% OF TOTAL	BILLS	% OF TOTAL
0 - 200 KWH/KW	23,348.2	9.6770	2,431	16.9467
201 - 400 KWH/KW	123,474.1	51.1754	8,687	60.5577
> 400 KWH/KW	94,454.1	39.1477	3,227	22.4956
TOTAL	241,276.4	100.0001	14,345	100.0000

FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	9.6770	25,953.0	16.9467	2,831
201 - 200 KWH/KW	51.1754	137,248.8	60.5577	10,116
> 400 KWH/KW	39.1476	104,991.0	22.4956	3,758
TOTAL	100.0000	268,192.9	100.0000	16,704

At Proposed

	SALES		NUMBER OF BILLS	
RECORDED:	MWH	% OF TOTAL	BILLS	% OF TOTAL
0 - 200 KWH/KW	26,382.8	10.9347	2,661	18.5500
201 - 400 KWH/KW	132,891.6	55.0786	8,939	62.3144
> 400 KWH/KW	82,002.0	33.9867	2,745	19.1356
TOTAL	241,276.4	100.0000	14,345	100.0000

FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	10.9347	29,326.1	18.5500	3,099
201 - 200 KWH/KW	55.0786	147,716.9	62.3144	10,409
> 400 KWH/KW	33.9867	91,149.9	19.1356	3,196
TOTAL	100.0000	268,192.9	100.0000	16,704

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING KW
FOR TOTAL CLASS

	RECORDED		KW FORECAST	
LOAD FACTOR BLOCKS	KW	KWH/KW	PRESENT	PROPOSED
0 - 200 KWH/KW	217,462.0	112.27	222,638	242,038
201 - 400 KWH/KW	473,557.8	294.14	485,070	522,510
> 400 KWH/KW	203,699.2	481.74	208,658	182,203
TOTAL	894,719.0	292.65	916,366	946,751

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

TOTAL CLASS DETERMINATION OF KW

Using Sch J Extact Data - 75% at Present; Average Ratchet at Proposed

AT PRESENT RATES

	RECORDED		FORECAST	
LOAD FACTOR BLOCKS	KW	KWH/KW	KW	MWH
0 - 200 KWH/KW	203,059.9	114.98	225,718	25,953.0
201 - 400 KWH/KW	419,163.0	294.57	465,929	137,248.8
> 400 KWH/KW	194,163.8	486.47	215,822	104,991.0
TOTAL	816,386.7	295.54	907,469	268,192.8

AT PROPOSED RATES

	RECORDED		FORECAST	
LOAD FACTOR BLOCKS	KW	KWH/KW	KW	MWH
0 - 200 KWH/KW	220,756.8	119.51	245,386	29,326.1
201 - 400 KWH/KW	451,527.4	294.32	501,892	147,716.9
> 400 KWH/KW	169,545.3	483.66	188,459	91,149.9
TOTAL	841,829.5	286.61	935,737	268,192.9

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
FOR TOTAL CLASS

PRESENT RATES

	LOAD FACTOR BLOCK (KWH/KW)			
LOAD FACTOR BLOCK	0 - 200	201 - 400	> 400	TOTAL
0 - 200 KWH/KW	24,995.6	97,014.0	41,731.6	163,741.2
201 - 400 KWH/KW	0.0	45,664.6	41,731.6	87,396.2
> 400 KWH/KW	0.0	0.0	17,055.5	17,055.5
TOTAL	24,995.6	142,678.6	100,518.7	268,192.9
FORECAST AT PRESENT RATES:				
SALES - MWH	24,995.6	142,678.6	100,518.7	268,192.9
BILLS	2,873	10,326	3,504	16,703
KW, BILLED	222,638	485,070	208,658	916,366

PROPOSED RATES

	LOAD FACTOR BLOCK (KWH/KW)			
LOAD FACTOR BLOCK	0 - 200	201 - 400	> 400	TOTAL
0 - 200 KWH/KW	29,326.1	104,502.0	36,440.6	170,268.7
201 - 400 KWH/KW	0.0	43,214.9	36,440.6	79,655.5
> 400 KWH/KW	0.0	0.0	18,268.7	18,268.7
TOTAL	29,326.1	147,716.9	91,149.9	268,192.9
FORECAST AT PROPOSED RATES:				
SALES - MWH	29,326.1	147,716.9	91,149.9	268,192.9
BILLS	3099	10409	3196	16704
KW, BILLED	242038	522510	182203	946751

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
DOCKET NO. 2006-0387 TEST-YEAR 2007
Schedule J - General Service Demand

Determination of Billing Loads By Rate Block For kWm > 200

AT PRESENT RATES	SALES		NUMBER OF BILLS	
RECORDED:	MWH	% OF TOTAL	Bills	% OF TOTAL
0 - 200 KWH/KW	6,401.8	37.10	147	52.88
201 - 400 KWH/KW	8,908.1	51.63	113	40.65
> 400 KWH/KW	1,945.0	11.27	18	6.47
TOTAL	17,254.9	100.00	278	100.00

FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	37.10	6,917	52.88	154
201 - 200 KWH/KW	51.63	9,625	40.65	118
> 400 KWH/KW	11.27	2,101	6.47	19
TOTAL	100.00	18,643	100.00	291

AT PROPOSED RATES
Using Sch J Extract Data - 75% Ratchet at Present; Average Ratchet at Proposed

	SALES		NUMBER OF BILLS	
RECORDED:	MWH	% OF TOTAL	BILLS	% OF TOTAL
0 - 200 KWH/KW	6,590.2	42.53	143	56.77
201 - 400 KWH/KW	6,805.7	43.92	88	34.98
> 400 KWH/KW	2,099.3	13.55	21	8.25
TOTAL	15,495.2	100.00	251	100.00

FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	42.53	7,338	56.77	165
201 - 200 KWH/KW	43.92	7,578	34.98	102
> 400 KWH/KW	13.55	2,339	8.25	24
TOTAL	100.00	17,254.9	100.00	291

	RECORDED		FORECAST	
LOAD FACTOR BLOCKS	KW	KWH/KW	PRESENT	PROPOSED
0 - 200 KWH/KW	58,916.9	108.66	58,916.9	64,492
201 - 400 KWH/KW	35,357.5	251.94	35,357.5	31,872
> 400 KWH/KW	3,973.9	489.43	3,973.9	4,947
TOTAL	98248.3	175.83	98,248.3	101,311

AT PRESENT RATES	LOAD FACTOR BLOCK (KWH/KW)			
LOAD FACTOR BLOCK:	0 - 200	201 - 400	> 400	TOTAL
0 - 200 KWH/KW	6,917	7,072	795	14,784
201 - 400 KWH/KW	0	2,553	795	3,348
> 400 KWH/KW	0	0	511	511
TOTAL	6,917	9,625	2,101	18,643

AT PROPOSED RATES	LOAD FACTOR BLOCK (KWH/KW)			
LOAD FACTOR BLOCK:	0 - 200	201 - 400	> 400	TOTAL
0 - 200 KWH/KW	7,338	6,374	989	14,701
201 - 400 KWH/KW	0	1,204	989	2,193
> 400 KWH/KW	0	0	361	361
TOTAL	7,338	7,578	2,339	17,255

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
DOCKET NO. 2006-0387 TEST-YEAR 2007
Schedule J - General Service Demand

Determination of Billing Loads By Rate Block For kWm > 200

Using Sch J Extract Data - 75% Ratchet at Present; Average Ratchet at Proposed

AT PRESENT RATES	SALES		NUMBER OF BILLS	
	MWH	% OF TOTAL	BILLS	% OF TOTAL
RECORDED:				
0 - 200 KWH/KW	6,005.3	38.76	132	52.59
201 - 400 KWH/KW	7,756.7	50.06	103	40.96
> 400 KWH/KW	1,733.2	11.18	16	6.45
TOTAL	15,495.2	100.00	251	100.00
FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	38.76	7,226	52.59	153
201 - 200 KWH/KW	50.06	9,333	40.96	119
> 400 KWH/KW	11.18	2,084	6.45	19
TOTAL	100.00	18,643	100.00	291

AT PROPOSED RATES	SALES		NUMBER OF BILLS	
	MWH	% OF TOTAL	BILLS	% OF TOTAL
RECORDED:				
0 - 200 KWH/KW	6,590.2	42.53	143	56.77
201 - 400 KWH/KW	7,176.1	43.92	92	36.77
> 400 KWH/KW	1,728.9	13.55	16	6.46
TOTAL	15,495.2	100.00	251	100.00
FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	42.53	7,929	56.77	165
201 - 200 KWH/KW	43.92	8,188	36.77	107
> 400 KWH/KW	13.55	2,526	6.46	19
TOTAL	100.00	18,643	100.00	291

AT PRESENT RATES	RECORDED		FORECAST	
LOAD FACTOR BLOCKS	KW	KWH/KW	PRESENT	PROPOSED
0 - 200 KWH/KW	56,039.8	107.16	67,432	
201 - 400 KWH/KW	31,415.8	246.90	37,801	
> 400 KWH/KW	3,524.8	491.76	4,238	
TOTAL	90,980.0	170.31	109,471	

AT PROPOSED RATES	RECORDED		FORECAST	
LOAD FACTOR BLOCKS	KW	KWH/KW	PRESENT	PROPOSED
0 - 200 KWH/KW	61,349.7	107.42		73,813
201 - 400 KWH/KW	29,664.4	240.29		34,075
> 400 KWH/KW	3,611.0	478.80		5,276
TOTAL	94,625.1	163.41		113,164

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
DOCKET NO. 2006-0387 TEST-YEAR 2007
Schedule J - General Service Demand

Revenues for Power Factor Adjustment for Billing Loads By Rate Block For kWm > 200

	PRESENT RATES			PROPOSED RATES		
	BILLING UNITS	UNIT PRICE	REVENUES $000s	BILLING UNITS	UNIT PRICE	REVENUES $000s
ENERGY CHARGE:	MWH	¢/kWh		MWH	¢/kWh	
0 - 200 KWH/KW	6,401.8	12.4165	$794.9	14,701.0	25.5003	$3,748.8
201 - 400 KWH/KW	8,908.1	11.4024	$1,015.7	2,193.0	24.4862	$537.0
> 400 KWH/KW	1,945.0	8.4403	$164.2	360.9	21.5241	$77.7
TOTAL	17,254.9		$1,974.8	17,254.9		$4,363.5
DEMAND CHARGE:	kW	$/kW		kW	$/kW	
ALL BILLING KW	98,248	5.75	$564.9	101,563	12.00	$1,218.8
Total Demand and Energy			$2,539.7			$5,582.3

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTEMNT
FOR POWER FACTOR ADJUSTMENT

GWH	17.254861	FOR BILLS > 200 KW
RKVAH	11.917697	FOR BILLS > 200 KW
POWER FACTOR	82	

	PRESENT RATES	PROPOSED RATES
CALCULATED PF (%)	82	82
BASE PF (%)	85	85
DIFFERENCE	3	3
ADJ. FOR EACH 1% DIFF	0.0010	0.0010
PF ADJ. RATE	0.003	0.003
TOTAL DEMAND & ENERGY CHARGE	2539.7	5582.3
POWER FACTOR ADJ.	7.6	16.7

FOR BILLS > 200 KW
DEMAND AND ENERGY CHARGES

	BILLING UNITS (MWH)	PRESENT RATES UNIT PRICE $/KWH	PRESENT RATES REVENUES $1000S
ENERGY CHARGE			
0 - 200 KWH/KW	6,401.8	12.4165	794.9
201 - 400 KWH/KW	8,908.1	11.4024	1015.7
> 400 KWH/KW	1,945.0	8.4403	164.2
TOTAL	17,254.9		1,974.8
DEMAND CHARGE		$/KW	
ALL BILLING KW	98248.3	5.75	564.9

	BILLING UNITS (MWH)	PROPOSED RATES UNIT PRICE $/KWH	PROPOSED RATES REVENUES $1000S
ENERGY CHARGE			
0 - 200 KWH/KW	14,701.0	25.5003	3,748.8
201 - 400 KWH/KW	2,193.0	24.4862	537.0
> 400 KWH/KW	360.9	21.5241	77.7
TOTAL	17,254.9		4,363.5
DEMAND CHARGE		$/KW	
ALL BILLING KW	101563	12.00	1,218.8

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF RIDER ADJUSTMENTS

RIDER M ADJUSTMENT:	PRESENT RATES ($1000s)	PROPOSED RATES ($1000s)
M2	(2.1)	(4.5)
TOTAL	(2.1)	(4.5)

RIDER T ADJUSTMENT:	PRESENT RATES ($1000s)	PROPOSED RATES ($1000s)
T1	(0.3)	(0.3)
T2	(1.1)	(1.2)
T3	(0.4)	(0.5)
T4	(4.7)	(6.2)
T5	(4.6)	(4.8)
T6	(0.3)	(0.3)
T7	(0.4)	(0.3)
T8	(1.4)	(1.4)
T9	(27.8)	(44.1)
T10	(0.6)	(0.6)
T11	(1.1)	(1.2)
T12	(4.9)	(4.9)
T13	(1.9)	(1.9)
T14	(1.1)	(1.2)
T15	(6.3)	(6.6)
T16	(5.6)	(5.7)
T17	(3.2)	(5.3)
T18	(1.6)	(1.6)
T19	(3.4)	(3.9)
T20	1.1	1.1
T21	(0.6)	(1.2)
T22	(1.8)	(2.2)
T23	(15.0)	(21.2)
T24	(0.3)	(0.4)
T25	(65.5)	(88.3)
T26	(3.0)	(3.0)
T27	(5.3)	(12.3)
T28	(2.3)	(2.4)
T29	(1.1)	(1.1)
T30	(0.6)	(0.6)
T31	(11.2)	(19.8)
TOTAL	(176.3)	(243.4)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER M REVENUE ADJUSTMENT
AT PRESENT RATES

M2	PRESENT RATES			
	SCHEDULE J		RIDER M	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
MEASURED KW				
CURTAILABLE DMD			41.9	
BILLING KW	1005.5		974.1	
EXCESS OFF-PEAK KW				
KHW PER MONTH	105000		105000	
POWER FACTOR (%)	68		68	
VOLT. DISC. (%)	0		0	
ENERGY CHARGE:				
0 - 200 KWH/KW	105000	13,037	105000	13,037
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	105000	13,037	105000	13,037
DEMAND CHARGE:	1005.5	5782	974.1	5,601
VOLT. DISC. ADJ.		0		0
PF ADJ		320		317
EXCESS OFF-PEAK CHRG				
TOD METER CHARGE				10
FUEL OIL ADJUST	105000	14652	105000	14652
TEMP RATE DECR	105000	0	105000	0
SUBTOTAL		14972		14979
TOTAL REV. PER MONTH		33,791		33,617
TOTAL REV. PER YEAR ($1000)		405.5		403.4
RIDER M ADJ.($1000/YR)				(2.1)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER M REVENUE ADJUSTMENT
AT PROPOSED RATES

M2	PROPOSED RATES			
	SCHEDULE J		RIDER M	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
MEASURED KW				
CURTAILABLE DMD			41.9	
BILLING KW	1065.9		1,034.5	
EXCESS OFF-PEAK KW				
KHW PER MONTH	105000		105000	
POWER FACTOR (%)	68		68	
VOLT. DISC. (%)	0		0	
ENERGY CHARGE:				
0 - 200 KWH/KW	105000	26,775	105000	26,775
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	105000	26,775	105000	26,775
DEMAND CHARGE:	1065.9	12791	1034.5	12,414
VOLT. DISC. ADJ.		0		0
PF ADJ		673		666
EXCESS OFF-PEAK CHRG				
TOD METER CHARGE				10
FUEL OIL ADJUST	105000	0	105000	0
TEMP RATE DECR	105000	0	105000	0
SUBTOTAL		672.622		676.213
TOTAL REV. PER MONTH		40,239		39,865
TOTAL REV. PER YEAR ($1000)		482.9		478.4
RIDER M ADJ.($1000/YR)				(4.5)

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MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T1	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			25.1	
OFF-PEAK KW			25.1	
BILLING KW	25.1		25.1	
ON-PEAK KWH			3011	
OFF-PEAK KWH			3174	
TOTAL KWH	6185		6185	
EXCESS OFF-PEAK KW			0	
ENERGY CHARGE:				
0 - 200 KWH/KW	5020	623	5020	623
201 - 400 KWH/KW	1165	133	1165	133
> 400 KWH/KW	0	0	0	0
SUBTOTAL	6185	756	6185	756
ON-PEAK ENERGY SURCH			3011	60
OFF-PEAK ENERGY CREDIT			3174	(95)
SUBTOTAL			6185	-35
DEMAND CHARGE:				
BILLING KW	25.1	144	25.1	144
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		144		144
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	6185	863	6185	863
TEMP RATE DECR	6185	0	6185	0
SUBTOTAL		913		923
TOTAL REV. PER MONTH		1,813		1,788
TOTAL REV. PER YEAR ($1000)		21.8		21.5
RIDER T ADJ.($1000/YR)				(0.3)

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MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T1	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			25.0	
OFF-PEAK KW			25.1	
BILLING KW	25.1		25.0	
ON-PEAK KWH			3,011	
OFF-PEAK KWH			3,174	
TOTAL KWH	6185		6,185	
EXCESS OFF-PEAK KW			0.0	
ENERGY CHARGE:				
0 - 200 KWH/KW	5020	1,280	5000	1,275
201 - 400 KWH/KW	1165	285	1185	290
> 400 KWH/KW	0	0	0	0
SUBTOTAL	6185	1,565	6185	1,565
ON-PEAK ENERGY SURCH			3011	60
OFF-PEAK ENERGY CREDIT			3174	(95)
SUBTOTAL			6185	-35
DEMAND CHARGE:				
BILLING KW	25.1	301	25	300
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		301		300
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	6185	0	6185	0
TEMP RATE DECR	6185	0	6185	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		1,931		1,905
TOTAL REV. PER YEAR ($1000)		23.2		22.9
RIDER T ADJ.($1000/YR)				(0.3)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T2	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			27.4	
OFF-PEAK KW			27.4	
BILLING KW	27.4		27.4	
ON-PEAK KWH			3677	
OFF-PEAK KWH			6002	
TOTAL KWH	9679		9679	
EXCESS OFF-PEAK KW			0	
ENERGY CHARGE:				
0 - 200 KWH/KW	5480	680	5480	680
201 - 400 KWH/KW	4199	479	4199	479
> 400 KWH/KW	0	0	0	0
SUBTOTAL	9679	1,159	9679	1,159
ON-PEAK ENERGY SURCH			3677	74
OFF-PEAK ENERGY CREDIT			6002	(180)
SUBTOTAL			9679	-106
DEMAND CHARGE:				
BILLING KW	27.4	158	27.4	158
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		158		158
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	9679	1351	9679	1351
TEMP RATE DECR	9679	0	9679	0
SUBTOTAL		1401		1411
TOTAL REV. PER MONTH		2,718		2,622
TOTAL REV. PER YEAR ($1000)		32.6		31.5
RIDER T ADJ.($1000/YR)				(1.1)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T2	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			27.5	
OFF-PEAK KW			27.5	
BILLING KW	27.5		27.5	
ON-PEAK KWH			3,677	
OFF-PEAK KWH			6,002	
TOTAL KWH	9679		9,679	
EXCESS OFF-PEAK KW			0.0	
ENERGY CHARGE:				
0 - 200 KWH/KW	5500	1,403	5500	1,403
201 - 400 KWH/KW	4179	1,023	4179	1,023
> 400 KWH/KW	0	0	0	0
SUBTOTAL	9679	2,426	9679	2,426
ON-PEAK ENERGY SURCH			3677	74
OFF-PEAK ENERGY CREDIT			6002	(180)
SUBTOTAL			9679	-106
DEMAND CHARGE:				
BILLING KW	27.5	330	27.5	330
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		330		330
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	9679	0	9679	0
TEMP RATE DECR	9679	0	9679	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		2,821		2,725
TOTAL REV. PER YEAR ($1000)		33.9		32.7
RIDER T ADJ. ($1000/YR)				(1.2)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T3	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			25.0	
OFF-PEAK KW			25.0	
BILLING KW	25		25.0	
ON-PEAK KWH			3180	
OFF-PEAK KWH			3759	
TOTAL KWH	6939		6939	
EXCESS OFF-PEAK KW			0	
ENERGY CHARGE:				
0 - 200 KWH/KW	5000	621	5000	621
201 - 400 KWH/KW	1939	221	1939	221
> 400 KWH/KW	0	0	0	0
SUBTOTAL	6939	842	6939	842
ON-PEAK ENERGY SURCH			3180	64
OFF-PEAK ENERGY CREDIT			3759	(113)
SUBTOTAL			6939	-49
DEMAND CHARGE:				
BILLING KW	25	144	25	144
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		144		144
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	6939	968	6939	968
TEMP RATE DECR	6939	0	6939	0
SUBTOTAL		1018		1028
TOTAL REV. PER MONTH		2,004		1,965
TOTAL REV. PER YEAR ($1000)		24		23.6
RIDER T ADJ.($1000/YR)				(0.4)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T3	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			25.0	
OFF-PEAK KW			25.0	
BILLING KW	25		25.0	
ON-PEAK KWH			3,180	
OFF-PEAK KWH			3,759	
TOTAL KWH	6939		6,939	
EXCESS OFF-PEAK KW			0.0	
ENERGY CHARGE:				
0 - 200 KWH/KW	5000	1,275	5000	1,275
201 - 400 KWH/KW	1939	475	1939	475
> 400 KWH/KW	0	0	0	0
SUBTOTAL	6939	1,750	6939	1,750
ON-PEAK ENERGY SURCH			3180	64
OFF-PEAK ENERGY CREDIT			3759	(113)
SUBTOTAL			6939	-49
DEMAND CHARGE:				
BILLING KW	25	300	25	300
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		300		300
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	6939	0	6939	0
TEMP RATE DECR	6939	0	6939	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		2,115		2,076
TOTAL REV. PER YEAR ($1000)		25.4		24.9
RIDER T ADJ. ($1000/YR)				(0.5)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T4	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			62.3	
OFF-PEAK KW			82.0	
BILLING KW	82		62.3	
ON-PEAK KWH			2540	
OFF-PEAK KWH			10887	
TOTAL KWH	13427		13427	
EXCESS OFF-PEAK KW			19.7	
ENERGY CHARGE:				
0 - 200 KWH/KW	13427	1,667	12460	1,547
201 - 400 KWH/KW	0	0	967	110
> 400 KWH/KW	0	0	0	0
SUBTOTAL	13427	1,667	13427	1,657
ON-PEAK ENERGY SURCH			2540	51
OFF-PEAK ENERGY CREDIT			10887	(327)
SUBTOTAL			13427	-276
DEMAND CHARGE:				
BILLING KW	82	472	62.3	358
EXCESS OFF-PEAK DEMAND			19.7	0
SUBTOTAL		472		358
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	13427	1874	13427	1874
TEMP RATE DECR	13427	0	13427	0
SUBTOTAL		1924		1934
TOTAL REV. PER MONTH		4,063		3,673
TOTAL REV. PER YEAR ($1000)		48.8		44.1
RIDER T ADJ. ($1000/YR)				(4.7)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T4	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			62.6	
OFF-PEAK KW			82.9	
BILLING KW	82.9		62.6	
ON-PEAK KWH			2,540	
OFF-PEAK KWH			10,887	
TOTAL KWH	13427		13,427	
EXCESS OFF-PEAK KW			19.7	
ENERGY CHARGE:				
0 - 200 KWH/KW	13427	3,424	12520	3,193
201 - 400 KWH/KW	0	0	907	222
> 400 KWH/KW	0	0	0	0
SUBTOTAL	13427	3,424	13427	3,415
ON-PEAK ENERGY SURCH			2540	51
OFF-PEAK ENERGY CREDIT			10887	(327)
SUBTOTAL			13427	-276
DEMAND CHARGE:				
BILLING KW	82.9	995	62.6	751
EXCESS OFF-PEAK DEMAND			19.7	0
SUBTOTAL		995		751
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	13427	0	13427	0
TEMP RATE DECR	13427	0	13427	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		4,484		3,965
TOTAL REV. PER YEAR ($1000)		53.8		47.6
RIDER T ADJ.($1000/YR)				(6.2)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T5	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			106.7	
OFF-PEAK KW			106.9	
BILLING KW	106.9		106.7	
ON-PEAK KWH			11587	
OFF-PEAK KWH			20747	
TOTAL KWH	32334		32334	
EXCESS OFF-PEAK KW			0.2	
ENERGY CHARGE:				
0 - 200 KWH/KW	21380	2,655	21340	2,650
201 - 400 KWH/KW	10954	1,249	10994	1,254
> 400 KWH/KW	0	0	0	0
SUBTOTAL	32334	3,904	32334	3,904
ON-PEAK ENERGY SURCH			11587	232
OFF-PEAK ENERGY CREDIT			20747	(622)
SUBTOTAL			32334	-390
DEMAND CHARGE:				
BILLING KW	106.9	615	106.7	614
EXCESS OFF-PEAK DEMAND			0.2	0
SUBTOTAL		615		614
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	32334	4512	32334	4512
TEMP RATE DECR	32334	0	32334	0
SUBTOTAL		4562		4572
TOTAL REV. PER MONTH		9,081		8,700
TOTAL REV. PER YEAR ($1000)		109		104.4
RIDER T ADJ.($1000/YR)				(4.6)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T5	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			118.4	
OFF-PEAK KW			120.3	
BILLING KW	120.3		118.4	
ON-PEAK KWH			11,587	
OFF-PEAK KWH			20,747	
TOTAL KWH	32334		32,334	
EXCESS OFF-PEAK KW			0.2	
ENERGY CHARGE:				
0 - 200 KWH/KW	24060	6,135	23680	6,038
201 - 400 KWH/KW	8274	2,026	8654	2,119
> 400 KWH/KW	0	0	0	0
SUBTOTAL	32334	8,161	32334	8,157
ON-PEAK ENERGY SURCH			11587	232
OFF-PEAK ENERGY CREDIT			20747	(622)
SUBTOTAL			32334	-390
DEMAND CHARGE:				
BILLING KW	120.3	1444	118.4	1421
EXCESS OFF-PEAK DEMAND			0.2	0
SUBTOTAL		1444		1421
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	32334	0	32334	0
TEMP RATE DECR	32334	0	32334	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		9,670		9,263
TOTAL REV. PER YEAR ($1000)		116		111.2
RIDER T ADJ.($1000/YR)				(4.8)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T6	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			42.3	
OFF-PEAK KW			42.4	
BILLING KW	42.4		42.3	
ON-PEAK KWH			12295	
OFF-PEAK KWH			9414	
TOTAL KWH	21709		21709	
EXCESS OFF-PEAK KW			0.1	
ENERGY CHARGE:				
0 - 200 KWH/KW	8480	1,053	8460	1,050
201 - 400 KWH/KW	8480	967	8460	965
> 400 KWH/KW	4749	401	4789	404
SUBTOTAL	21709	2,421	21709	2,419
ON-PEAK ENERGY SURCH			12295	246
OFF-PEAK ENERGY CREDIT			9414	(282)
SUBTOTAL			21709	-36
DEMAND CHARGE:				
BILLING KW	42.4	244	42.3	243
EXCESS OFF-PEAK DEMAND			0.1	0
SUBTOTAL		244		243
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	21709	3029	21709	3029
TEMP RATE DECR	21709	0	21709	0
SUBTOTAL		3079		3089
TOTAL REV. PER MONTH		5,744		5,715
TOTAL REV. PER YEAR ($1000)		68.9		68.6
RIDER T ADJ.($1000/YR)				(0.3)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T6	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			44.7	
OFF-PEAK KW			44.7	
BILLING KW	44.7		44.7	
ON-PEAK KWH			12,295	
OFF-PEAK KWH			9,414	
TOTAL KWH	21709		21,709	
EXCESS OFF-PEAK KW			0.1	
ENERGY CHARGE:				
0 - 200 KWH/KW	8940	2,280	8940	2,280
201 - 400 KWH/KW	8940	2,189	8940	2,189
> 400 KWH/KW	3829	824	3829	824
SUBTOTAL	21709	5,293	21709	5,293
ON-PEAK ENERGY SURCH			12295	246
OFF-PEAK ENERGY CREDIT			9414	(282)
SUBTOTAL			21709	-36
DEMAND CHARGE:				
BILLING KW	44.7	536	44.7	536
EXCESS OFF-PEAK DEMAND			0.1	0
SUBTOTAL		536		536
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	21709	0	21709	0
TEMP RATE DECR	21709	0	21709	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		5,894		5,868
TOTAL REV. PER YEAR ($1000)		70.7		70.4
RIDER T ADJ. ($1000/YR)				(0.3)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T7	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			46.9	
OFF-PEAK KW			46.9	
BILLING KW	46.9		46.9	
ON-PEAK KWH			14,791	
OFF-PEAK KWH			11196	
TOTAL KWH	25987		25987	
EXCESS OFF-PEAK KW			0	
ENERGY CHARGE:				
0 - 200 KWH/KW	9380	1,165	9380	1,165
201 - 400 KWH/KW	9380	1,070	9380	1,070
> 400 KWH/KW	7227	610	7227	610
SUBTOTAL	25987	2,845	25987	2,845
ON-PEAK ENERGY SURCH			14791	296
OFF-PEAK ENERGY CREDIT			11196	(336)
SUBTOTAL			25987	-40
DEMAND CHARGE:				
BILLING KW	46.9	270	46.9	270
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		270		270
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	25987	3626	25987	3626
TEMP RATE DECR	25987	0	25987	0
SUBTOTAL		3676		3686
TOTAL REV. PER MONTH		6,791		6,761
TOTAL REV. PER YEAR ($1000)		81.5		81.1
RIDER T ADJ.($1000/YR)				(0.4)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T7	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			49.7	
OFF-PEAK KW			49.7	
BILLING KW	49.7		49.7	
ON-PEAK KWH			14,791	
OFF-PEAK KWH			11,196	
TOTAL KWH	25987		25,987	
EXCESS OFF-PEAK KW			0.0	
ENERGY CHARGE:				
0 - 200 KWH/KW	9940	2,535	9940	2,535
201 - 400 KWH/KW	9940	2,434	9940	2,434
> 400 KWH/KW	6107	1314	6107	1314
SUBTOTAL	25987	6,283	25987	6,283
ON-PEAK ENERGY SURCH			14791	296
OFF-PEAK ENERGY CREDIT			11196	(336)
SUBTOTAL			25987	-40
DEMAND CHARGE:				
BILLING KW	49.7	596	49.7	596
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		596		596
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	25987	0	25987	0
TEMP RATE DECR	25987	0	25987	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		6,944		6,914
TOTAL REV. PER YEAR ($1000)		83.3		83
RIDER T ADJ. ($1000/YR)				(0.3)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T8	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			36.4	
OFF-PEAK KW			36.4	
BILLING KW	36.4		36.4	
ON-PEAK KWH			6293	
OFF-PEAK KWH			8430	
TOTAL KWH	14723		14723	
EXCESS OFF-PEAK KW			0	
ENERGY CHARGE:				
0 - 200 KWH/KW	7280	904	7280	904
201 - 400 KWH/KW	7280	830	7280	830
> 400 KWH/KW	163	14	163	14
SUBTOTAL	14723	1,748	14723	1,748
ON-PEAK ENERGY SURCH			6293	126
OFF-PEAK ENERGY CREDIT			8430	(253)
SUBTOTAL			14723	-127
DEMAND CHARGE:				
BILLING KW	36.4	209	36.4	209
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		209		209
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	14723	2054	14723	2054
TEMP RATE DECR	14723	0	14723	0
SUBTOTAL		2104		2114
TOTAL REV. PER MONTH		4,061		3,944
TOTAL REV. PER YEAR ($1000)		48.7		47.3
RIDER T ADJ.($1000/YR)				(1.4)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T8	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			38.8	
OFF-PEAK KW			38.8	
BILLING KW	38.8		38.8	
ON-PEAK KWH			6,293	
OFF-PEAK KWH			8,430	
TOTAL KWH	14723		14,723	
EXCESS OFF-PEAK KW			0.0	
ENERGY CHARGE:				
0 - 200 KWH/KW	7760	1,979	7760	1,979
201 - 400 KWH/KW	6963	1,705	6963	1,705
> 400 KWH/KW	0	0	0	0
SUBTOTAL	14723	3,684	14723	3,684
ON-PEAK ENERGY SURCH			6293	126
OFF-PEAK ENERGY CREDIT			8430	(253)
SUBTOTAL			14723	-127
DEMAND CHARGE:				
BILLING KW	38.8	466	38.8	466
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		466		466
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	14723	0	14723	0
TEMP RATE DECR	14723	0	14723	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		4,215		4,098
TOTAL REV. PER YEAR ($1000)		50.6		49.2
RIDER T ADJ. ($1000/YR)				(1.4)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T9	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			126.3	
OFF-PEAK KW			229.6	
BILLING KW	229.6		126.3	
ON-PEAK KWH			9263	
OFF-PEAK KWH			49050	
TOTAL KWH	58313		58313	
EXCESS OFF-PEAK KW			103.3	
ENERGY CHARGE:				
0 - 200 KWH/KW	45920	5,702	25260	3,136
201 - 400 KWH/KW	12393	1,413	25260	2,880
> 400 KWH/KW	0	0	7793	658
SUBTOTAL	58313	7,115	58313	6,674
ON-PEAK ENERGY SURCH			9263	185
OFF-PEAK ENERGY CREDIT			49050	(1,472)
SUBTOTAL			58313	-1287
DEMAND CHARGE:				
BILLING KW	229.6	1320	126.3	726
EXCESS OFF-PEAK DEMAND			103.3	0
SUBTOTAL		1320		726
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	58313	8137	58313	8137
TEMP RATE DECR	58313	0	58313	0
SUBTOTAL		8187		8197
TOTAL REV. PER MONTH		16,622		14,310
TOTAL REV. PER YEAR ($1000)		199.5		171.7
RIDER T ADJ. ($1000/YR)				(27.8)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T9	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			100.8	
OFF-PEAK KW			233.8	
BILLING KW	233.8		100.8	
ON-PEAK KWH			9,263	
OFF-PEAK KWH			49,050	
TOTAL KWH	58313		58,313	
EXCESS OFF-PEAK KW			103.3	
ENERGY CHARGE:				
0 - 200 KWH/KW	46760	11,924	20160	5,141
201 - 400 KWH/KW	11553	2,829	20160	4,936
> 400 KWH/KW	0	0	17993	3873
SUBTOTAL	58313	14,753	58313	13,950
ON-PEAK ENERGY SURCH			9263	185
OFF-PEAK ENERGY CREDIT			49050	(1,472)
SUBTOTAL			58313	-1287
DEMAND CHARGE:				
BILLING KW	233.8	2806	100.8	1210
EXCESS OFF-PEAK DEMAND			103.3	0
SUBTOTAL		2806		1210
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	58313	0	58313	0
TEMP RATE DECR	58313	0	58313	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		17,624		13,948
TOTAL REV. PER YEAR ($1000)		211.5		167.4
RIDER T ADJ.($1000/YR)				(44.1)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T10	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			61.0	
OFF-PEAK KW			61.0	
BILLING KW	61		61.0	
ON-PEAK KWH			5900	
OFF-PEAK KWH			6050	
TOTAL KWH	11950		11950	
EXCESS OFF-PEAK KW			0	
ENERGY CHARGE:				
0 - 200 KWH/KW	11950	1,484	11950	1,484
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	11950	1,484	11950	1,484
ON-PEAK ENERGY SURCH			5900	118
OFF-PEAK ENERGY CREDIT			6050	(182)
SUBTOTAL			11950	-64
DEMAND CHARGE:				
BILLING KW	61	351	61	351
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		351		351
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	11950	1668	11950	1668
TEMP RATE DECR	11950	0	11950	0
SUBTOTAL		1718		1728
TOTAL REV. PER MONTH		3,553		3,499
TOTAL REV. PER YEAR ($1000)		42.6		42
RIDER T ADJ.($1000/YR)				(0.6)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T10	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			61.0	
OFF-PEAK KW			61.0	
BILLING KW	61		61.0	
ON-PEAK KWH			5,900	
OFF-PEAK KWH			6,050	
TOTAL KWH	11950		11,950	
EXCESS OFF-PEAK KW			0.0	
ENERGY CHARGE:				
0 - 200 KWH/KW	11950	3,047	11950	3,047
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	11950	3,047	11950	3,047
ON-PEAK ENERGY SURCH			5900	118
OFF-PEAK ENERGY CREDIT			6050	(182)
SUBTOTAL			11950	-64
DEMAND CHARGE:				
BILLING KW	61	732	61	732
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		732		732
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	11950	0	11950	0
TEMP RATE DECR	11950	0	11950	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		3,844		3,790
TOTAL REV. PER YEAR ($1000)		46.1		45.5
RIDER T ADJ. ($1000/YR)				(0.6)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T11	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			66.0	
OFF-PEAK KW			66.0	
BILLING KW	66		66.0	
ON-PEAK KWH			9,417	
OFF-PEAK KWH			9,800	
TOTAL KWH	19217		19217	
EXCESS OFF-PEAK KW			0	
ENERGY CHARGE:				
0 - 200 KWH/KW	13200	1,639	13200	1,639
201 - 400 KWH/KW	6017	686	6017	686
> 400 KWH/KW	0	0	0	0
SUBTOTAL	19217	2,325	19217	2,325
ON-PEAK ENERGY SURCH			9417	188
OFF-PEAK ENERGY CREDIT			9800	(294)
SUBTOTAL			19217	-106
DEMAND CHARGE:				
BILLING KW	66	380	66	380
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		380		380
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	19217	2682	19217	2682
TEMP RATE DECR	19217	0	19217	0
SUBTOTAL		2732		2742
TOTAL REV. PER MONTH		5,437		5,341
TOTAL REV. PER YEAR ($1000)		65.2		64.1
RIDER T ADJ. ($1000/YR)				(1.1)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T11	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			66.0	
OFF-PEAK KW			66.0	
BILLING KW	66		66.0	
ON-PEAK KWH			9,417	
OFF-PEAK KWH			9,800	
TOTAL KWH	19217		19,217	
EXCESS OFF-PEAK KW			0.0	
ENERGY CHARGE:				
0 - 200 KWH/KW	13200	3,366	13200	3,366
201 - 400 KWH/KW	6017	1,473	6017	1,473
> 400 KWH/KW	0	0	0	0
SUBTOTAL	19217	4,839	19217	4,839
ON-PEAK ENERGY SURCH			9417	188
OFF-PEAK ENERGY CREDIT			9800	(294)
SUBTOTAL			19217	-106
DEMAND CHARGE:				
BILLING KW	66	792	66	792
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		792		792
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	19217	0	19217	0
TEMP RATE DECR	19217	0	19217	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		5,696		5,600
TOTAL REV. PER YEAR ($1000)		68.4		67.2
RIDER T ADJ.($1000/YR)				(1.2)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T12	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			104.2	
OFF-PEAK KW			111.4	
BILLING KW	111.4		104.2	
ON-PEAK KWH			6333	
OFF-PEAK KWH			16283	
TOTAL KWH	22616		22616	
EXCESS OFF-PEAK KW			7.2	
ENERGY CHARGE:				
0 - 200 KWH/KW	22280	2,766	20840	2,588
201 - 400 KWH/KW	336	38	1776	203
> 400 KWH/KW	0	0	0	0
SUBTOTAL	22616	2,804	22616	2,791
ON-PEAK ENERGY SURCH			6333	127
OFF-PEAK ENERGY CREDIT			16283	(488)
SUBTOTAL			22616	-361
DEMAND CHARGE:				
BILLING KW	111.4	641	104.2	599
EXCESS OFF-PEAK DEMAND			7.2	0
SUBTOTAL		641		599
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	22616	3156	22616	3156
TEMP RATE DECR	22616	0	22616	0
SUBTOTAL		3206		3216
TOTAL REV. PER MONTH		6,651		6,245
TOTAL REV. PER YEAR ($1000)		79.8		74.9
RIDER T ADJ.($1000/YR)				(4.9)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T12	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			107.8	
OFF-PEAK KW			112.1	
BILLING KW	112.1		107.8	
ON-PEAK KWH			6,333	
OFF-PEAK KWH			16,283	
TOTAL KWH	22616		22,616	
EXCESS OFF-PEAK KW			7.2	
ENERGY CHARGE:				
0 - 200 KWH/KW	22420	5,717	21560	5,498
201 - 400 KWH/KW	196	48	1056	259
> 400 KWH/KW	0	0	0	0
SUBTOTAL	22616	5,765	22616	5,757
ON-PEAK ENERGY SURCH			6333	127
OFF-PEAK ENERGY CREDIT			16283	(488)
SUBTOTAL			22616	-361
DEMAND CHARGE:				
BILLING KW	112.1	1345	107.8	1294
EXCESS OFF-PEAK DEMAND			7.2	0
SUBTOTAL		1345		1294
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	22616	0	22616	0
TEMP RATE DECR	22616	0	22616	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		7,175		6,765
TOTAL REV. PER YEAR ($1000)		86.1		81.2
RIDER T ADJ.($1000/YR)				(4.9)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T13	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			42.0	
OFF-PEAK KW			42.0	
BILLING KW	42		42.0	
ON-PEAK KWH			3,167	
OFF-PEAK KWH			7,883	
TOTAL KWH	11050		11050	
EXCESS OFF-PEAK KW			0	
ENERGY CHARGE:				
0 - 200 KWH/KW	8400	1,043	8400	1,043
201 - 400 KWH/KW	2650	302	2650	302
> 400 KWH/KW	0	0	0	0
SUBTOTAL	11050	1,345	11050	1,345
ON-PEAK ENERGY SURCH			3167	63
OFF-PEAK ENERGY CREDIT			7883	(236)
SUBTOTAL			11050	-173
DEMAND CHARGE:				
BILLING KW	42	242	42	242
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		242		242
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	11050	1542	11050	1542
TEMP RATE DECR	11050	0	11050	0
SUBTOTAL		1592		1602
TOTAL REV. PER MONTH		3,179		3,016
TOTAL REV. PER YEAR ($1000)		38.1		36.2
RIDER T ADJ. ($1000/YR)				(1.9)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T13	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			42.0	
OFF-PEAK KW			42.0	
BILLING KW	42		42.0	
ON-PEAK KWH			3,167	
OFF-PEAK KWH			7,883	
TOTAL KWH	11050		11,050	
EXCESS OFF-PEAK KW			0.0	
ENERGY CHARGE:				
0 - 200 KWH/KW	8400	2,142	8400	2,142
201 - 400 KWH/KW	2650	649	2650	649
> 400 KWH/KW	0	0	0	0
SUBTOTAL	11050	2,791	11050	2,791
ON-PEAK ENERGY SURCH			3167	63
OFF-PEAK ENERGY CREDIT			7883	(236)
SUBTOTAL			11050	-173
DEMAND CHARGE:				
BILLING KW	42	504	42	504
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		504		504
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	11050	0	11050	0
TEMP RATE DECR	11050	0	11050	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		3,360		3,197
TOTAL REV. PER YEAR ($1000)		40.3		38.4
RIDER T ADJ. ($1000/YR)				(1.9)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T14	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			88.3	
OFF-PEAK KW			88.3	
BILLING KW	88.3		88.3	
ON-PEAK KWH			7042	
OFF-PEAK KWH			8233	
TOTAL KWH	15275		15275	
EXCESS OFF-PEAK KW			0	
ENERGY CHARGE:				
0 - 200 KWH/KW	15275	1,897	15275	1,897
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	15275	1,897	15275	1,897
ON-PEAK ENERGY SURCH			7042	141
OFF-PEAK ENERGY CREDIT			8233	(247)
SUBTOTAL			15275	-106
DEMAND CHARGE:				
BILLING KW	88.3	508	88.3	508
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		508		508
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	15275	2131	15275	2131
TEMP RATE DECR	15275	0	15275	0
SUBTOTAL		2181		2191
TOTAL REV. PER MONTH		4,586		4,490
TOTAL REV. PER YEAR ($1000)		55		53.9
RIDER T ADJ.($1000/YR)				(1.1)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T14	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			88.4	
OFF-PEAK KW			88.4	
BILLING KW	88.4		88.4	
ON-PEAK KWH			7,042	
OFF-PEAK KWH			8,233	
TOTAL KWH	15275		15,275	
EXCESS OFF-PEAK KW			0.0	
ENERGY CHARGE:				
0 - 200 KWH/KW	15275	3,895	15275	3,895
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	15275	3,895	15275	3,895
ON-PEAK ENERGY SURCH			7042	141
OFF-PEAK ENERGY CREDIT			8233	(247)
SUBTOTAL			15275	-106
DEMAND CHARGE:				
BILLING KW	88.4	1061	88.4	1061
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		1061		1061
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	15275	0	15275	0
TEMP RATE DECR	15275	0	15275	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		5,021		4,925
TOTAL REV. PER YEAR ($1000)		60.3		59.1
RIDER T ADJ.($1000/YR)				(1.2)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T15	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			147.3	
OFF-PEAK KW			155.8	
BILLING KW	155.8		147.3	
ON-PEAK KWH			21917	
OFF-PEAK KWH			30017	
TOTAL KWH	51934		51934	
EXCESS OFF-PEAK KW			8.5	
ENERGY CHARGE:				
0 - 200 KWH/KW	31160	3,869	29460	3,658
201 - 400 KWH/KW	20774	2,369	22474	2,563
> 400 KWH/KW	0	0	0	0
SUBTOTAL	51934	6,238	51934	6,221
ON-PEAK ENERGY SURCH			21917	438
OFF-PEAK ENERGY CREDIT			30017	(901)
SUBTOTAL			51934	-463
DEMAND CHARGE:				
BILLING KW	155.8	896	147.3	847
EXCESS OFF-PEAK DEMAND			8.5	0
SUBTOTAL		896		847
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	51934	7247	51934	7247
TEMP RATE DECR	51934	0	51934	0
SUBTOTAL		7297		7307
TOTAL REV. PER MONTH		14,431		13,912
TOTAL REV. PER YEAR ($1000)		173.2		166.9
RIDER T ADJ.($1000/YR)				(6.3)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T15	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			152.0	
OFF-PEAK KW			159.0	
BILLING KW	159		152.0	
ON-PEAK KWH			21,917	
OFF-PEAK KWH			30,017	
TOTAL KWH	51934		51,934	
EXCESS OFF-PEAK KW			8.5	
ENERGY CHARGE:				
0 - 200 KWH/KW	31800	8,109	30400	7,752
201 - 400 KWH/KW	20134	4,930	21534	5,273
> 400 KWH/KW	0	0	0	0
SUBTOTAL	51934	13,039	51934	13,025
ON-PEAK ENERGY SURCH			21917	438
OFF-PEAK ENERGY CREDIT			30017	(901)
SUBTOTAL			51934	-463
DEMAND CHARGE:				
BILLING KW	159	1908	152	1824
EXCESS OFF-PEAK DEMAND			8.5	0
SUBTOTAL		1908		1824
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	51934	0	51934	0
TEMP RATE DECR	51934	0	51934	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		15,012		14,461
TOTAL REV. PER YEAR ($1000)		180.1		173.5
RIDER T ADJ.($1000/YR)				(6.6)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T16	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			186.1	
OFF-PEAK KW			190.9	
BILLING KW	190.9		186.1	
ON-PEAK KWH			13300	
OFF-PEAK KWH			23638	
TOTAL KWH	36938		36938	
EXCESS OFF-PEAK KW			4.8	
ENERGY CHARGE:				
0 - 200 KWH/KW	36938	4,586	36938	4,586
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	36938	4,586	36938	4,586
ON-PEAK ENERGY SURCH			13300	266
OFF-PEAK ENERGY CREDIT			23638	(709)
SUBTOTAL			36938	-443
DEMAND CHARGE:				
BILLING KW	190.9	1098	186.1	1070
EXCESS OFF-PEAK DEMAND			4.8	0
SUBTOTAL		1098		1070
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	36938	5154	36938	5154
TEMP RATE DECR	36938	0	36938	0
SUBTOTAL		5204		5214
TOTAL REV. PER MONTH		10,888		10,427
TOTAL REV. PER YEAR ($1000)		130.7		125.1
RIDER T ADJ.($1000/YR)				(5.6)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T16	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			188.6	
OFF-PEAK KW			192.6	
BILLING KW	192.6		188.6	
ON-PEAK KWH			13,300	
OFF-PEAK KWH			23,638	
TOTAL KWH	36938		36,938	
EXCESS OFF-PEAK KW			4.8	
ENERGY CHARGE:				
0 - 200 KWH/KW	36938	9,419	36938	9,419
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	36938	9,419	36938	9,419
ON-PEAK ENERGY SURCH			13300	266
OFF-PEAK ENERGY CREDIT			23638	(709)
SUBTOTAL			36938	-443
DEMAND CHARGE:				
BILLING KW	192.6	2311	188.6	2263
EXCESS OFF-PEAK DEMAND			4.8	0
SUBTOTAL		2311		2263
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	36938	0	36938	0
TEMP RATE DECR	36938	0	36938	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		11,795		11,314
TOTAL REV. PER YEAR ($1000)		141.5		135.8
RIDER T ADJ.($1000/YR)				(5.7)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T17	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			59.1	
OFF-PEAK KW			75.5	
BILLING KW	75.5		59.1	
ON-PEAK KWH			1375	
OFF-PEAK KWH			6858	
TOTAL KWH	8233		8233	
EXCESS OFF-PEAK KW			16.4	
ENERGY CHARGE:				
0 - 200 KWH/KW	8233	1,022	8233	1,022
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	8233	1,022	8233	1,022
ON-PEAK ENERGY SURCH			1375	28
OFF-PEAK ENERGY CREDIT			6858	(206)
SUBTOTAL			8233	-178
DEMAND CHARGE:				
BILLING KW	75.5	434	59.1	340
EXCESS OFF-PEAK DEMAND			16.4	0
SUBTOTAL		434		340
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	8233	1149	8233	1149
TEMP RATE DECR	8233	0	8233	0
SUBTOTAL		1199		1209
TOTAL REV. PER MONTH		2,655		2,393
TOTAL REV. PER YEAR ($1000)		31.9		28.7
RIDER T ADJ.($1000/YR)				(3.2)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T17	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			53.0	
OFF-PEAK KW			76.0	
BILLING KW	76		53.0	
ON-PEAK KWH			1,375	
OFF-PEAK KWH			6,858	
TOTAL KWH	8233		8,233	
EXCESS OFF-PEAK KW			16.4	
ENERGY CHARGE:				
0 - 200 KWH/KW	8233	2,099	8233	2,099
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	8233	2,099	8233	2,099
ON-PEAK ENERGY SURCH			1375	28
OFF-PEAK ENERGY CREDIT			6858	(206)
SUBTOTAL			8233	-178
DEMAND CHARGE:				
BILLING KW	76	912	53	636
EXCESS OFF-PEAK DEMAND			16.4	0
SUBTOTAL		912		636
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	8233	0	8233	0
TEMP RATE DECR	8233	0	8233	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		3,076		2,632
TOTAL REV. PER YEAR ($1000)		36.9		31.6
RIDER T ADJ.($1000/YR)				(5.3)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T18	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			38.1	
OFF-PEAK KW			38.1	
BILLING KW	38.1		38.1	
ON-PEAK KWH			2367	
OFF-PEAK KWH			6187	
TOTAL KWH	8554		8554	
EXCESS OFF-PEAK KW			0	
ENERGY CHARGE:				
0 - 200 KWH/KW	7620	946	7620	946
201 - 400 KWH/KW	934	106	934	106
> 400 KWH/KW	0	0	0	0
SUBTOTAL	8554	1,052	8554	1,052
ON-PEAK ENERGY SURCH			2367	47
OFF-PEAK ENERGY CREDIT			6187	(186)
SUBTOTAL			8554	-139
DEMAND CHARGE:				
BILLING KW	38.1	219	38.1	219
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		219		219
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	8554	1194	8554	1194
TEMP RATE DECR	8554	0	8554	0
SUBTOTAL		1244		1254
TOTAL REV. PER MONTH		2,515		2,386
TOTAL REV. PER YEAR ($1000)		30.2		28.6
RIDER T ADJ.($1000/YR)				(1.6)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T18	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			38.3	
OFF-PEAK KW			38.4	
BILLING KW	38.4		38.3	
ON-PEAK KWH			2,367	
OFF-PEAK KWH			6,187	
TOTAL KWH	8554		8,554	
EXCESS OFF-PEAK KW			0.0	
ENERGY CHARGE:				
0 - 200 KWH/KW	7680	1,958	7660	1,953
201 - 400 KWH/KW	874	214	894	219
> 400 KWH/KW	0	0	0	0
SUBTOTAL	8554	2,172	8554	2,172
ON-PEAK ENERGY SURCH			2367	47
OFF-PEAK ENERGY CREDIT			6187	(186)
SUBTOTAL			8554	-139
DEMAND CHARGE:				
BILLING KW	38.4	461	38.3	460
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		461		460
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	8554	0	8554	0
TEMP RATE DECR	8554	0	8554	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		2,698		2,568
TOTAL REV. PER YEAR ($1000)		32.4		30.8
RIDER T ADJ. ($1000/YR)				(1.6)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T19	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			194.3	
OFF-PEAK KW			204.0	
BILLING KW	204		194.3	
ON-PEAK KWH			29000	
OFF-PEAK KWH			26800	
TOTAL KWH	55800		55800	
EXCESS OFF-PEAK KW			9.7	
ENERGY CHARGE:				
0 - 200 KWH/KW	40800	5,066	38860	4,825
201 - 400 KWH/KW	15000	1,710	16940	1,932
> 400 KWH/KW	0	0	0	0
SUBTOTAL	55800	6,776	55800	6,757
ON-PEAK ENERGY SURCH			29000	580
OFF-PEAK ENERGY CREDIT			26800	(804)
SUBTOTAL			55800	-224
DEMAND CHARGE:				
BILLING KW	204	1173	194.3	1117
EXCESS OFF-PEAK DEMAND			9.7	0
SUBTOTAL		1173		1117
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	55800	7786	55800	7786
TEMP RATE DECR	55800	0	55800	0
SUBTOTAL		7836		7846
TOTAL REV. PER MONTH		15,785		15,496
TOTAL REV. PER YEAR ($1000)		189.4		186
RIDER T ADJ. ($1000/YR)				(3.4)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T19	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			201.9	
OFF-PEAK KW			209.9	
BILLING KW	209.9		201.9	
ON-PEAK KWH			29,000	
OFF-PEAK KWH			26,800	
TOTAL KWH	55800		55,800	
EXCESS OFF-PEAK KW			9.7	
ENERGY CHARGE:				
0 - 200 KWH/KW	41980	10,705	40380	10,297
201 - 400 KWH/KW	13820	3,384	15420	3,776
> 400 KWH/KW	0	0	0	0
SUBTOTAL	55800	14,089	55800	14,073
ON-PEAK ENERGY SURCH			29000	580
OFF-PEAK ENERGY CREDIT			26800	(804)
SUBTOTAL			55800	-224
DEMAND CHARGE:				
BILLING KW	209.9	2519	201.9	2423
EXCESS OFF-PEAK DEMAND			9.7	0
SUBTOTAL		2519		2423
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	55800	0	55800	0
TEMP RATE DECR	55800	0	55800	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		16,673		16,347
TOTAL REV. PER YEAR ($1000)		200.1		196.2
RIDER T ADJ. ($1000/YR)				(3.9)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T20	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			138.9	
OFF-PEAK KW			138.9	
BILLING KW	138.9		138.9	
ON-PEAK KWH			17933	
OFF-PEAK KWH			9217	
TOTAL KWH	27150		27150	
EXCESS OFF-PEAK KW			0	
ENERGY CHARGE:				
0 - 200 KWH/KW	27150	3,371	27150	3,371
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	27150	3,371	27150	3,371
ON-PEAK ENERGY SURCH			17933	359
OFF-PEAK ENERGY CREDIT			9217	(277)
SUBTOTAL			27150	82
DEMAND CHARGE:				
BILLING KW	138.9	799	138.9	799
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		799		799
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	27150	3789	27150	3789
TEMP RATE DECR	27150	0	27150	0
SUBTOTAL		3839		3849
TOTAL REV. PER MONTH		8,009		8,101
TOTAL REV. PER YEAR ($1000)		96.1		97.2
RIDER T ADJ.($1000/YR)				1.1

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T20	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			140.8	
OFF-PEAK KW			140.8	
BILLING KW	140.8		140.8	
ON-PEAK KWH			17,933	
OFF-PEAK KWH			9,217	
TOTAL KWH	27150		27,150	
EXCESS OFF-PEAK KW			0.0	
ENERGY CHARGE:				
0 - 200 KWH/KW	27150	6,923	27150	6,923
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	27150	6,923	27150	6,923
ON-PEAK ENERGY SURCH			17933	359
OFF-PEAK ENERGY CREDIT			9217	(277)
SUBTOTAL			27150	82
DEMAND CHARGE:				
BILLING KW	140.8	1690	140.8	1690
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		1690		1690
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	27150	0	27150	0
TEMP RATE DECR	27150	0	27150	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		8,678		8,770
TOTAL REV. PER YEAR ($1000)		104.1		105.2
RIDER T ADJ.($1000/YR)				1.1

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T21	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			50.1	
OFF-PEAK KW			58.0	
BILLING KW	58		50.1	
ON-PEAK KWH			2160	
OFF-PEAK KWH			2147	
TOTAL KWH	4307		4307	
EXCESS OFF-PEAK KW			7.9	
ENERGY CHARGE:				
0 - 200 KWH/KW	4307	535	4307	535
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	4307	535	4307	535
ON-PEAK ENERGY SURCH			2160	43
OFF-PEAK ENERGY CREDIT			2147	(64)
SUBTOTAL			4307	-21
DEMAND CHARGE:				
BILLING KW	58	334	50.1	288
EXCESS OFF-PEAK DEMAND			7.9	0
SUBTOTAL		334		288
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	4307	601	4307	601
TEMP RATE DECR	4307	0	4307	0
SUBTOTAL		651		661
TOTAL REV. PER MONTH		1,520		1,463
TOTAL REV. PER YEAR ($1000)		18.2		17.6
RIDER T ADJ.($1000/YR)				(0.6)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T21	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			44.1	
OFF-PEAK KW			51.5	
BILLING KW	51.5		44.1	
ON-PEAK KWH			2,160	
OFF-PEAK KWH			2,147	
TOTAL KWH	4307		4,307	
EXCESS OFF-PEAK KW			7.9	
ENERGY CHARGE:				
0 - 200 KWH/KW	4307	1,098	4307	1,098
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	4307	1,098	4307	1,098
ON-PEAK ENERGY SURCH			2160	43
OFF-PEAK ENERGY CREDIT			2147	(64)
SUBTOTAL			4307	-21
DEMAND CHARGE:				
BILLING KW	51.5	618	44.1	529
EXCESS OFF-PEAK DEMAND			7.9	0
SUBTOTAL		618		529
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	4307	0	4307	0
TEMP RATE DECR	4307	0	4307	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		1,781		1,681
TOTAL REV. PER YEAR ($1000)		21.4		20.2
RIDER T ADJ.($1000/YR)				(1.2)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T22	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			194.6	
OFF-PEAK KW			201.2	
BILLING KW	201.2		194.6	
ON-PEAK KWH			20017	
OFF-PEAK KWH			17467	
TOTAL KWH	37484		37484	
EXCESS OFF-PEAK KW			6.6	
PF %	87		87	
ENERGY CHARGE:				
0 - 200 KWH/KW	37484	4,654	37484	4,654
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	37484	4,654	37484	4,654
ON-PEAK ENERGY SURCH			20017	400
OFF-PEAK ENERGY CREDIT			17467	(524)
SUBTOTAL			37484	-124
DEMAND CHARGE:				
BILLING KW	201.2	1157	194.6	1119
EXCESS OFF-PEAK DEMAND			6.6	0
SUBTOTAL		1157		1119
CUSTOMER CHARGE		50		50
PF ADJ		(9)		(9)
TOD METER CHARGE				10
FUEL OIL ADJUST	37484	5231	37484	5231
TEMP RATE DECR	37484	0	37484	0
SUBTOTAL		5272		5282
TOTAL REV. PER MONTH		11,083		10,931
TOTAL REV. PER YEAR ($1000)		133.0		131.2
RIDER T ADJ.($1000/YR)				(1.8)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T22	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			198.9	
OFF-PEAK KW			204.7	
BILLING KW	204.7		198.9	
ON-PEAK KWH			20,017	
OFF-PEAK KWH			17,467	
TOTAL KWH	37484		37,484	
EXCESS OFF-PEAK KW			6.6	
PF %	87		87	
ENERGY CHARGE:				
0 - 200 KWH/KW	37484	9,559	37484	9,559
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	37484	9,559	37484	9,559
ON-PEAK ENERGY SURCH			20017	400
OFF-PEAK ENERGY CREDIT			17467	(524)
SUBTOTAL			37484	-124
DEMAND CHARGE:				
BILLING KW	204.7	2456	198.9	2387
EXCESS OFF-PEAK DEMAND			6.6	0
SUBTOTAL		2456		2387
CUSTOMER CHARGE		65		65
PF ADJ		(19)		(19)
TOD METER CHARGE				10
FUEL OIL ADJUST	37484	0	37484	0
TEMP RATE DECR	37484	0	37484	0
SUBTOTAL		46		56
TOTAL REV. PER MONTH		12,061		11,878
TOTAL REV. PER YEAR ($1000)		144.7		142.5
RIDER T ADJ. ($1000/YR)				(2.2)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T23	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			35.8	
OFF-PEAK KW			110.4	
BILLING KW	110.4		35.8	
ON-PEAK KWH			7325	
OFF-PEAK KWH			17270	
TOTAL KWH	24595		24595	
EXCESS OFF-PEAK KW			74.6	
ENERGY CHARGE:				
0 - 200 KWH/KW	22080	2,742	7160	889
201 - 400 KWH/KW	2515	287	7160	816
> 400 KWH/KW	0	0	10275	867
SUBTOTAL	24595	3,029	24595	2,572
ON-PEAK ENERGY SURCH			7325	147
OFF-PEAK ENERGY CREDIT			17270	(518)
SUBTOTAL			24595	-371
DEMAND CHARGE:				
BILLING KW	110.4	635	35.8	206
EXCESS OFF-PEAK DEMAND			74.6	0
SUBTOTAL		635		206
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	24595	3432	24595	3432
TEMP RATE DECR	24595	0	24595	0
SUBTOTAL		3482		3492
TOTAL REV. PER MONTH		7,146		5,899
TOTAL REV. PER YEAR ($1000)		85.8		70.8
RIDER T ADJ. ($1000/YR)				(15.0)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T23	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			38.1	
OFF-PEAK KW			118.3	
BILLING KW	118.3		38.1	
ON-PEAK KWH			7,325	
OFF-PEAK KWH			17,270	
TOTAL KWH	24595		24,595	
EXCESS OFF-PEAK KW			74.6	
ENERGY CHARGE:				
0 - 200 KWH/KW	23660	6,033	7620	1,943
201 - 400 KWH/KW	935	229	7620	1,866
> 400 KWH/KW	0	0	9355	2014
SUBTOTAL	24595	6,262	24595	5,823
ON-PEAK ENERGY SURCH			7325	147
OFF-PEAK ENERGY CREDIT			17270	(518)
SUBTOTAL			24595	-371
DEMAND CHARGE:				
BILLING KW	118.3	1420	38.1	457
EXCESS OFF-PEAK DEMAND			74.6	0
SUBTOTAL		1420		457
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	24595	0	24595	0
TEMP RATE DECR	24595	0	24595	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		7,747		5,984
TOTAL REV. PER YEAR ($1000)		93		71.8
RIDER T ADJ.($1000/YR)				(21.2)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T24	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			28.8	
OFF-PEAK KW			29.3	
BILLING KW	29.3		28.8	
ON-PEAK KWH			879	
OFF-PEAK KWH			1772	
TOTAL KWH	2651		2651	
EXCESS OFF-PEAK KW			0.5	
ENERGY CHARGE:				
0 - 200 KWH/KW	2651	329	2651	329
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	2651	329	2651	329
ON-PEAK ENERGY SURCH			879	18
OFF-PEAK ENERGY CREDIT			1772	(53)
SUBTOTAL			2651	-35
DEMAND CHARGE:				
BILLING KW	29.3	168	28.8	166
EXCESS OFF-PEAK DEMAND			0.5	0
SUBTOTAL		168		166
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	2651	370	2651	370
TEMP RATE DECR	2651	0	2651	0
SUBTOTAL		420		430
TOTAL REV. PER MONTH		917		890
TOTAL REV. PER YEAR ($1000)		11.0		10.7
RIDER T ADJ.($1000/YR)				(0.3)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T24	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			29.2	
OFF-PEAK KW			29.7	
BILLING KW	29.7		29.2	
ON-PEAK KWH			879	
OFF-PEAK KWH			1,772	
TOTAL KWH	2651		2,651	
EXCESS OFF-PEAK KW			0.5	
ENERGY CHARGE:				
0 - 200 KWH/KW	2651	676	2651	676
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	2651	676	2651	676
ON-PEAK ENERGY SURCH			879	18
OFF-PEAK ENERGY CREDIT			1772	(53)
SUBTOTAL			2651	-35
DEMAND CHARGE:				
BILLING KW	29.7	356	29.2	350
EXCESS OFF-PEAK DEMAND			0.5	0
SUBTOTAL		356		350
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	2651	0	2651	0
TEMP RATE DECR	2651	0	2651	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		1,097		1,066
TOTAL REV. PER YEAR ($1000)		13.2		12.8
RIDER T ADJ. ($1000/YR)				(0.4)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T25	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			25	
OFF-PEAK KW			327.0	
BILLING KW	327		25.0	
ON-PEAK KWH			125	
OFF-PEAK KWH			58375	
TOTAL KWH	58500		58500	
EXCESS OFF-PEAK KW			302	
ENERGY CHARGE:				
0 - 200 KWH/KW	58500	7,264	5000	621
201 - 400 KWH/KW	0	0	5000	570
> 400 KWH/KW	0	0	48500	4094
SUBTOTAL	58500	7,264	58500	5,285
ON-PEAK ENERGY SURCH			125	3
OFF-PEAK ENERGY CREDIT			58375	(1,751)
SUBTOTAL			58500	-1748
DEMAND CHARGE:				
BILLING KW	327	1880	25	144
EXCESS OFF-PEAK DEMAND			302	0
SUBTOTAL		1880		144
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	58500	8163	58500	8163
TEMP RATE DECR	58500	0	58500	0
SUBTOTAL		8213		8223
TOTAL REV. PER MONTH		17,357		11,904
TOTAL REV. PER YEAR ($1000)		208.3		142.8
RIDER T ADJ. ($1000/YR)				(65.5)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T25	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			25.0	
OFF-PEAK KW			328.6	
BILLING KW	328.6		25.0	
ON-PEAK KWH			125	
OFF-PEAK KWH			58,375	
TOTAL KWH	58500		58,500	
EXCESS OFF-PEAK KW			302.0	
ENERGY CHARGE:				
0 - 200 KWH/KW	58500	14,918	5000	1,275
201 - 400 KWH/KW	0	0	5000	1,224
> 400 KWH/KW	0	0	48500	10439
SUBTOTAL	58500	14,918	58500	12,938
ON-PEAK ENERGY SURCH			125	3
OFF-PEAK ENERGY CREDIT			58375	(1,751)
SUBTOTAL			58500	-1748
DEMAND CHARGE:				
BILLING KW	328.6	3943	25	300
EXCESS OFF-PEAK DEMAND			302	0
SUBTOTAL		3943		300
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	58500	0	58500	0
TEMP RATE DECR	58500	0	58500	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		18,926		11,565
TOTAL REV. PER YEAR ($1000)		227.1		138.8
RIDER T ADJ.($1000/YR)				(88.3)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T26	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			86	
OFF-PEAK KW			86.2	
BILLING KW	86.2		86.0	
ON-PEAK KWH			5600	
OFF-PEAK KWH			12333	
TOTAL KWH	17933		17933	
EXCESS OFF-PEAK KW			0.2	
ENERGY CHARGE:				
0 - 200 KWH/KW	17240	2,141	17200	2,136
201 - 400 KWH/KW	693	79	733	84
> 400 KWH/KW	0	0	0	0
SUBTOTAL	17933	2,220	17933	2,220
ON-PEAK ENERGY SURCH			5600	112
OFF-PEAK ENERGY CREDIT			12333	(370)
SUBTOTAL			17933	-258
DEMAND CHARGE:				
BILLING KW	86.2	496	86	495
EXCESS OFF-PEAK DEMAND			0.2	0
SUBTOTAL		496		495
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	17933	2502	17933	2502
TEMP RATE DECR	17933	0	17933	0
SUBTOTAL		2552		2562
TOTAL REV. PER MONTH		5,268		5,019
TOTAL REV. PER YEAR ($1000)		63.2		60.2
RIDER T ADJ.($1000/YR)				(3.0)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T26	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			86.3	
OFF-PEAK KW			86.4	
BILLING KW	86.4		86.3	
ON-PEAK KWH			5,600	
OFF-PEAK KWH			12,333	
TOTAL KWH	17933		17,933	
EXCESS OFF-PEAK KW			0.2	
ENERGY CHARGE:				
0 - 200 KWH/KW	17280	4,406	17260	4,401
201 - 400 KWH/KW	653	160	673	165
> 400 KWH/KW	0	0	0	0
SUBTOTAL	17933	4,566	17933	4,566
ON-PEAK ENERGY SURCH			5600	112
OFF-PEAK ENERGY CREDIT			12333	(370)
SUBTOTAL			17933	-258
DEMAND CHARGE:				
BILLING KW	86.4	1037	86.3	1036
EXCESS OFF-PEAK DEMAND			0.2	0
SUBTOTAL		1037		1036
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	17933	0	17933	0
TEMP RATE DECR	17933	0	17933	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		5,668		5,419
TOTAL REV. PER YEAR ($1000)		68		65
RIDER T ADJ. ($1000/YR)				(3.0)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T27	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			85.6	
OFF-PEAK KW			129.9	
BILLING KW	129.9		85.6	
ON-PEAK KWH			213	
OFF-PEAK KWH			6750	
TOTAL KWH	6963		6963	
EXCESS OFF-PEAK KW			44.3	
ENERGY CHARGE:				
0 - 200 KWH/KW	6963	865	6963	865
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	6963	865	6963	865
ON-PEAK ENERGY SURCH			213	4
OFF-PEAK ENERGY CREDIT			6750	(203)
SUBTOTAL			6963	-199
DEMAND CHARGE:				
BILLING KW	129.9	747	85.6	492
EXCESS OFF-PEAK DEMAND			44.3	0
SUBTOTAL		747		492
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	6963	972	6963	972
TEMP RATE DECR	6963	0	6963	0
SUBTOTAL		1022		1032
TOTAL REV. PER MONTH		2,634		2,190
TOTAL REV. PER YEAR ($1000)		31.6		26.3
RIDER T ADJ.($1000/YR)				(5.3)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T27	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			73.0	
OFF-PEAK KW			142.6	
BILLING KW	142.6		73.0	
ON-PEAK KWH			213	
OFF-PEAK KWH			6,750	
TOTAL KWH	6963		6,963	
EXCESS OFF-PEAK KW			44.3	
ENERGY CHARGE:				
0 - 200 KWH/KW	6963	1,776	6963	1,776
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	6963	1,776	6963	1,776
ON-PEAK ENERGY SURCH			213	4
OFF-PEAK ENERGY CREDIT			6750	(203)
SUBTOTAL			6963	-199
DEMAND CHARGE:				
BILLING KW	142.6	1711	73	876
EXCESS OFF-PEAK DEMAND			44.3	0
SUBTOTAL		1711		876
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	6963	0	6963	0
TEMP RATE DECR	6963	0	6963	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		3,552		2,528
TOTAL REV. PER YEAR ($1000)		42.6		30.3
RIDER T ADJ. ($1000/YR)				(12.3)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T28	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			75.9	
OFF-PEAK KW			80.2	
BILLING KW	80.2		75.9	
ON-PEAK KWH			3922	
OFF-PEAK KWH			8659	
TOTAL KWH	12581		12581	
EXCESS OFF-PEAK KW			4.3	
ENERGY CHARGE:				
0 - 200 KWH/KW	12581	1,562	12581	1,562
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	12581	1,562	12581	1,562
ON-PEAK ENERGY SURCH			3922	78
OFF-PEAK ENERGY CREDIT			8659	(260)
SUBTOTAL			12581	-182
DEMAND CHARGE:				
BILLING KW	80.2	461	75.9	436
EXCESS OFF-PEAK DEMAND			4.3	0
SUBTOTAL		461		436
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	12581	1756	12581	1756
TEMP RATE DECR	12581	0	12581	0
SUBTOTAL		1806		1816
TOTAL REV. PER MONTH		3,829		3,632
TOTAL REV. PER YEAR ($1000)		45.9		43.6
RIDER T ADJ.($1000/YR)				(2.3)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T28	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			79.6	
OFF-PEAK KW			82.2	
BILLING KW	82.2		79.6	
ON-PEAK KWH			3,922	
OFF-PEAK KWH			8,659	
TOTAL KWH	12581		12,581	
EXCESS OFF-PEAK KW			4.3	
ENERGY CHARGE:				
0 - 200 KWH/KW	12581	3,208	12581	3,208
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	12581	3,208	12581	3,208
ON-PEAK ENERGY SURCH			3922	78
OFF-PEAK ENERGY CREDIT			8659	(260)
SUBTOTAL			12581	-182
DEMAND CHARGE:				
BILLING KW	82.2	986	79.6	955
EXCESS OFF-PEAK DEMAND			4.3	0
SUBTOTAL		986		955
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	12581	0	12581	0
TEMP RATE DECR	12581	0	12581	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		4,259		4,056
TOTAL REV. PER YEAR ($1000)		51.1		48.7
RIDER T ADJ. ($1000/YR)				(2.4)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T29	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			25	
OFF-PEAK KW			25.0	
BILLING KW	25		25.0	
ON-PEAK KWH			2906	
OFF-PEAK KWH			5224	
TOTAL KWH	8130		8130	
EXCESS OFF-PEAK KW			0	
ENERGY CHARGE:				
0 - 200 KWH/KW	5000	621	5000	621
201 - 400 KWH/KW	3130	357	3130	357
> 400 KWH/KW	0	0	0	0
SUBTOTAL	8130	978	8130	978
ON-PEAK ENERGY SURCH			2906	58
OFF-PEAK ENERGY CREDIT			5224	(157)
SUBTOTAL			8130	-99
DEMAND CHARGE:				
BILLING KW	25	144	25	144
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		144		144
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	8130	1134	8130	1134
TEMP RATE DECR	8130	0	8130	0
SUBTOTAL		1184		1194
TOTAL REV. PER MONTH		2,306		2,217
TOTAL REV. PER YEAR ($1000)		27.7		26.6
RIDER T ADJ.($1000/YR)				(1.1)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T29	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			25.1	
OFF-PEAK KW			25.1	
BILLING KW	25.1		25.1	
ON-PEAK KWH			2,906	
OFF-PEAK KWH			5,224	
TOTAL KWH	8130		8,130	
EXCESS OFF-PEAK KW			0.0	
ENERGY CHARGE:				
0 - 200 KWH/KW	5020	1,280	5020	1,280
201 - 400 KWH/KW	3110	762	3110	762
> 400 KWH/KW	0	0	0	0
SUBTOTAL	8130	2,042	8130	2,042
ON-PEAK ENERGY SURCH			2906	58
OFF-PEAK ENERGY CREDIT			5224	(157)
SUBTOTAL			8130	-99
DEMAND CHARGE:				
BILLING KW	25.1	301	25.1	301
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		301		301
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	8130	0	8130	0
TEMP RATE DECR	8130	0	8130	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		2,408		2,319
TOTAL REV. PER YEAR ($1000)		28.9		27.8
RIDER T ADJ.($1000/YR)				(1.1)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T30	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			25	
OFF-PEAK KW			25.0	
BILLING KW	25		25.0	
ON-PEAK KWH			600	
OFF-PEAK KWH			2400	
TOTAL KWH	3000		3000	
EXCESS OFF-PEAK KW			0	
ENERGY CHARGE:				
0 - 200 KWH/KW	3000	372	3000	372
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	3000	372	3000	372
ON-PEAK ENERGY SURCH			600	12
OFF-PEAK ENERGY CREDIT			2400	(72)
SUBTOTAL			3000	-60
DEMAND CHARGE:				
BILLING KW	25	144	25	144
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		144		144
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	3000	419	3000	419
TEMP RATE DECR	3000	0	3000	0
SUBTOTAL		469		479
Voltage Adjst. -2.0%		(10)		(9)
TOTAL REV. PER MONTH		975		926
TOTAL REV. PER YEAR ($1000)		11.7		11.1
RIDER T ADJ.($1000/YR)				(0.6)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T30	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			25.0	
OFF-PEAK KW			25.0	
BILLING KW	25		25.0	
ON-PEAK KWH			600	
OFF-PEAK KWH			2,400	
TOTAL KWH	3000		3,000	
EXCESS OFF-PEAK KW			0.0	
ENERGY CHARGE:				
0 - 200 KWH/KW	3000	765	3000	765
201 - 400 KWH/KW	0	0	0	0
> 400 KWH/KW	0	0	0	0
SUBTOTAL	3000	765	3000	765
ON-PEAK ENERGY SURCH			600	12
OFF-PEAK ENERGY CREDIT			2400	(72)
SUBTOTAL			3000	-60
DEMAND CHARGE:				
BILLING KW	25	300	25	300
EXCESS OFF-PEAK DEMAND			0	0
SUBTOTAL		300		300
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	3000	0	3000	0
TEMP RATE DECR	3000	0	3000	0
SUBTOTAL		65		75
Voltage Adjst. -1.1%		(12)		(11)
TOTAL REV. PER MONTH		1,118		1,069
TOTAL REV. PER YEAR ($1000)		13.4		12.8
RIDER T ADJ.($1000/YR)				(0.6)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PRESENT RATES

T31	PRESENT RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			124	
OFF-PEAK KW			170.6	
BILLING KW	170.6		124.0	
ON-PEAK KWH			13080	
OFF-PEAK KWH			28013	
TOTAL KWH	41093		41093	
EXCESS OFF-PEAK KW			46.6	
ENERGY CHARGE:				
0 - 200 KWH/KW	34120	4,237	24800	3,079
201 - 400 KWH/KW	6973	795	16293	1,858
> 400 KWH/KW	0	0	0	0
SUBTOTAL	41093	5,032	41093	4,937
ON-PEAK ENERGY SURCH			13080	262
OFF-PEAK ENERGY CREDIT			28013	(840)
SUBTOTAL			41093	-578
DEMAND CHARGE:				
BILLING KW	170.6	981	124	713
EXCESS OFF-PEAK DEMAND			46.6	0
SUBTOTAL		981		713
CUSTOMER CHARGE		50		50
TOD METER CHARGE				10
FUEL OIL ADJUST	41093	5734	41093	5734
TEMP RATE DECR	41093	0	41093	0
SUBTOTAL		5784		5794
TOTAL REV. PER MONTH		11,797		10,866
TOTAL REV. PER YEAR ($1000)		141.6		130.4
RIDER T ADJ.($1000/YR)				(11.2)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
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ESTIMATES OF RIDER T REVENUE ADJUSTMENT
AT PROPOSED RATES

T31	PROPOSED RATES			
	SCHEDULE J		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			109.5	
OFF-PEAK KW			186.8	
BILLING KW	186.8		109.5	
ON-PEAK KWH			13,080	
OFF-PEAK KWH			28,013	
TOTAL KWH	41093		41,093	
EXCESS OFF-PEAK KW			46.6	
ENERGY CHARGE:				
0 - 200 KWH/KW	37360	9,527	21900	5,585
201 - 400 KWH/KW	3733	914	19193	4,700
> 400 KWH/KW	0	0	0	0
SUBTOTAL	41093	10,441	41093	10,285
ON-PEAK ENERGY SURCH			13080	262
OFF-PEAK ENERGY CREDIT			28013	(840)
SUBTOTAL			41093	-578
DEMAND CHARGE:				
BILLING KW	186.8	2242	109.5	1314
EXCESS OFF-PEAK DEMAND			46.6	0
SUBTOTAL		2242		1314
CUSTOMER CHARGE		65		65
TOD METER CHARGE				10
FUEL OIL ADJUST	41093	0	41093	0
TEMP RATE DECR	41093	0	41093	0
SUBTOTAL		65		75
TOTAL REV. PER MONTH		12,748		11,096
TOTAL REV. PER YEAR ($1000)		153		133.2
RIDER T ADJ.($1000/YR)				(19.8)

Average Data

MECO, Maui Division Schedule J Rider Summary @ Present 50% demand ratchet

Rider T

Account	On-peak kWh	Off-peak kWh	Total kWh	% On-peak	% Off-peak	On-Peak kWh	Reg kWb	PF	No Mos	Notes
T1	3011	3174	6185	48.7%	51.3%	25	25.1	85	12	
T2	3677	6002	9679	38.0%	62.0%	27.5	27.5	85	12	
T3	3180	3759	6939	45.8%	54.2%	25.0	25.0	85	12	
T4	2540	10887	13427	18.9%	81.1%	62.6	82.9	85	12	
T5	11587	20747	32334	35.8%	64.2%	118.4	120.3	85	12	
T6	12295	9414	21709	56.6%	43.4%	44.7	44.7	85	12	
T7	14791	11196	25987	56.9%	43.1%	49.7	49.7	85	12	
T8	6293	8430	14723	42.7%	57.3%	38.8	38.8	85	12	
T9	9263	49050	58313	15.9%	84.1%	100.8	233.8	85	12	
T10	5900	6050	11950	49.4%	50.6%	61.0	61.0	85	12	
T11	9417	9800	19217	49.0%	51.0%	66.0	66.0	85	12	
T12	6333	16283	22616	28.0%	72.0%	107.8	112.1	85	12	
T13	3167	7883	11050	28.7%	71.3%	42.0	42.0	85	12	
T14	7042	8233	15275	46.1%	53.9%	88.4	88.4	85	12	
T15	21917	30017	51934	42.2%	57.8%	152	159	85	12	
T16	13300	23638	36938	36.0%	64.0%	188.6	192.6	85	12	
T17	1375	6858	8233	16.7%	83.3%	53	76	85	12	
T18	2367	6187	8554	27.7%	72.3%	38.3	38.4	85	12	
T19	29000	26800	55800	52.0%	48.0%	201.9	209.9	85	12	
T20	17933	9217	27150	66.1%	33.9%	140.8	140.8	85	12	
T21	2160	2147	4307	50.2%	49.8%	44.1	51.5	85	6	
T22	20017	17467	37484	53.4%	46.6%	198.9	204.7	87	12	
T23	7325	17270	24595	29.8%	70.2%	38.1	118.3	85	12	
T24	879	1772	2651	33.2%	66.8%	29.2	29.7	85	12	
T25	125	58375	58500	0.2%	99.8%	25	328.6	85	12	
T26	5600	12333	17933	31.2%	68.8%	86.3	86.4	85	12	
T27	213	6750	6963	3.1%	96.9%	73	142.6	85	12	
T28	3922	8659	12581	31.2%	68.8%	79.6	82.2	85	12	
T29	2906	5224	8130	35.7%	64.3%	25.1	25.1	85	12	
T30	600	2400	3000	20.0%	80.0%	25	25	85	12	
T31	13080	28013	41093	31.8%	68.2%	109.5	186.8	85	12	

Rider M(b)

Account	kWm	Priority kW	Curtailed kW	Reg kWb	Rider kWb	kWh	PF	No. Mos	Notes
M2	1005.5	963.6	41.9	1065.9	1034.5	105000	68	12	

Copy of MAJ_07 Proposed-FINAL.xls:Sched J Rider Summary- Maui 50%
Pricing:cm
2/20/2007

Average Data

MECO, Maui Division Schedule J Rider Summary @ Present 75% demand ratchet

Rider T

Account	Rate	On-peak kWh	Off-peak kWh	Total kWh	% On-peak	% Off-peak	On-Peak kWh	Reg kWb	PF	No Mos	Notes
T1	J	3011	3174	6185	48.7%	51.3%	25.1	25.1	85	12	
T2	J	3677	6002	9679	38.0%	62.0%	27.4	27.4	85	12	
T3	J	3180	3759	6939	45.8%	54.2%	25.0	25.0	85	12	
T4	J	2540	10887	13427	18.9%	81.1%	62.3	82	85	12	
T5	J	11587	20747	32334	35.8%	64.2%	106.7	106.9	85	12	
T6	J	12295	9414	21709	56.6%	43.4%	42.3	42.4	85	12	
T7	J	14791	11196	25987	56.9%	43.1%	46.9	46.9	85	12	
T8	J	6293	8430	14723	42.7%	57.3%	36.4	36.4	85	12	
T9	J	9263	49050	58313	15.9%	84.1%	126.3	229.6	85	12	
T10	J	5900	6050	11950	49.4%	50.6%	61.0	61.0	85	12	
T11	J	9417	9800	19217	49.0%	51.0%	66.0	66.0	85	12	
T12	J	6333	16283	22616	28.0%	72.0%	104.2	111.4	85	12	
T13	J	3167	7883	11050	28.7%	71.3%	42.0	42.0	85	12	
T14	J	7042	8233	15275	46.1%	53.9%	88.3	88.3	85	12	
T15	J	21917	30017	51934	42.2%	57.8%	147.3	155.8	85	12	
T16	J	13300	23638	36938	36.0%	64.0%	186.1	190.9	85	12	
T17	J	1375	6858	8233	16.7%	83.3%	59.1	75.5	85	12	
T18	J	2367	6187	8554	27.7%	72.3%	38.1	38.1	85	12	
T19	J	29000	26800	55800	52.0%	48.0%	194.3	204	85	12	
T20	J	17933	9217	27150	66.1%	33.9%	138.9	138.9	85	12	
T21	J	2160	2147	4307	50.2%	49.8%	50.1	58	85	6	
T22	J	20017	17467	37484	53.4%	46.6%	194.6	201.2	87	12	
T23	J	7325	17270	24595	29.8%	70.2%	35.8	110.4	85	12	
T24	J	879	1772	2651	33.2%	66.8%	28.8	29.3	85	12	
T25	J	125	58375	58500	0.2%	99.8%	25	327	85	12	
T26	J	5600	12333	17933	31.2%	68.8%	86	86.2	85	12	
T27	J	213	6750	6963	3.1%	96.9%	85.6	129.9	85	12	
T28	J	3922	8659	12581	31.2%	68.8%	75.9	80.2	85	12	
T29	J	2906	5224	8130	35.7%	64.3%	25	25	85	12	
T30	J3	600	2400	3000	20.0%	80.0%	25	25	85	12	
T31	JNM	13080	28013	41093	31.8%	68.2%	124.0	170.6	85	12	

Rider M(b)

Account	Rate	kWm	Priority kW	Curtailed kW	Reg kWb	Rider kWb	kWh	PF	No. Mos	Notes
M2	J	1005.5	963.6	41.9	1005.5	974.1	105000	68	12	

Copy of MAJ_07 Proposed-FINAL.xls:Sched J Rider Summary- Maui 75%
Pricing:cm
2/20/2007

Data From ACCESS Billing Data Extract
Maui Division

75% Ratchet

Total J

	LF	CUM KWH	CUM MWH	Cum kWb	No of Bills
0-200	200	23348204	23348.2	203060	2431
201-400	400	1.47E+08	146822.3	622223	11118
>400					
Total		2.41E+08	241276.4	816387	14345

Schedule J3

	LF	CUM KWH	CUM MWH	Cum kWb	No of Bills
0-200, lower	196.667	954760	954.76	9060.4	37
0-200, upper	205.714	1030360	1030.36	9427.9	38
201-400, lower	389.655	2429660	2429.66	14723.4	64
201-400, uppe	422.222	2486660	2486.66	14858.4	65
>400					
Total		2969660	2969.66	15873.4	72

Schedule J4

	LF	CUM KWH	CUM MWH	Cum kWb	No of Bills
0-200, lower					
0-200, upper	244.595	43440	43.44	177.6	1
201-400	400	864960	864.96	2844.0	22
>400					
Total		921840	921.84	2968.8	24

Schedule J, >200

	LF	CUM KWH	CUM MWH	Cum kWb	No of Bills
0-200	200	6005300	6005.3	56039.6	132
201-400, lower	373.485	13699320	13699.32	87301.8	234
201-400, uppe	408.325	13781720	13781.72	87503.6	235
>400					
Total		15495240	15495.24	90980	251

Schedule J, Secondary

	LF	CUM KWH	CUM MWH	Cum kWb	No of Bills
0-200	200	22393444	22393.44	194000	2394
201-400	400	1.44E+08	143527.7	604656	11032
>400					
Total		2.37E+08	237384.9	797545	14249

Data From ACCESS Billing Extract
Maui Division

50% Ratchet

Total J

	LF	CUM KWH	CUM MWH	Cum kWb	No of Bills
0-200	200	26382789	26382.79	220757	2661
201-400	400	1.59E+08	159274.4	672284	11600
>400					
Total		2.41E+08	241276.4	841830	14345

Schedule J3

	LF	CUM KWH	CUM MWH	Cum kWb	No of Bills
0-200, lower	192.523	1030360	1030.36	9381.0	38
0-200, upper	221.538	1131160	1131.16	9836.0	39
201-400, lowe	393.103	2486660	2486.66	15019.5	65
201-400, uppe	413.559	2547660	2547.66	15167	66
>400					
Total		2969660	2969.66	16069.5	72

Schedule J4

	LF	CUM KWH	CUM MWH	Cum kWb	No of Bills
0-200, lower					
0-200, upper	226.25	43440	43.44	192	1
201-400, lowe	389.091	864960	864.96	2989.2	22
201-400, uppe	403.846	890160	890.16	3051.6	23
>400					
Total		921840		3118.8	24

Schedule J, >200

	LF	CUM KWH	CUM MWH	Cum kWb	No of Bills
0-200, lower	199.387	6550320	6550.32	61150.7	142
0-200, upper	200.536	6625120	6625.12	61523.7	143
201-400, lowe	363.838	13699320	13699.32	91050.1	234
201-400, uppe	408.325	13781720	13781.72	91251.9	235
>400					
Total		15495240	15495.24	94825.1	251

Schedule J, secondary

	LF	CUM KWH	CUM MWH	Cum kWb	No of Bills
0-200	200	25352429	25352.43	211376	2623
201-400	400	1.56E+08	155922.8	654275	11513
>400					
Total		2.37E+08	237384.9	822641	14249

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE H - COMMERCIAL COOKING, HEATING, AIR CONDITIONING, AND REFRIGERATION SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

		PRESENT RATES		PROPOSED RATES	
	BILLING UNITS	UNIT PRICE	REVENUES $1000s	UNIT PRICE	REVENUES $1000S
	MWH	$/KWH		$/KWH	
ENERGY CHARGE:	21075	11.9675	2,522.2	26.3728	5558.1
	KW	$/KW		$/KW	
CAPACITY CHARGE:	74,581	4.50	335.6	7.00	522.1
	BILLS	$/BILL		$/BILL	
CUSTOMER CHARGE:					
1 PHASE	430	27.00	11.6	40.00	17.2
3 PHASE	2,366	43.00	101.7	55.00	130.1
SUBTOTAL	2796		113.3		147.3
ADJUSTMENTS:	MWH	$/KWH		$/KWH	
FUEL OIL ADJ.	21075	13.9540	2,940.8	0.000	0.0
TEMP RATE DECR.	21075	0.0000	0	0.000	0.0
FCS net	21075	-0.0769	-2.3	0.000	0.0
SCH. E ADJ.			0.0		(6.3)
INTERIM RATE INCREASE			0.0		0.0
TOTAL REVENUES			5,909.6		6,221.2

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE H - COMMERCIAL COOKING, HEATING, AIR CONDITIONING, AND REFRIGERATION SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES & BILLS BY SERVICE TYPE

	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES	PERCENT OF TOTAL
RECORDED:				
RATE H: NON-DEMAND	1702	59.782	5351.6	24.131
RATE K: DEMAND	1145	40.218	16826.1	75.869
TOTAL	2847	100.00	22177.7	100.00

	NO. OF BILLS		MWH SALES	
	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES
FORECASTS:				
RATE H: NON-DEMAND	59.782	1,672	24.131	5,085.6
RATE K: DEMAND	40.218	1,124	75.869	15,989.4
TOTAL	100.00	2796	100.00	21,075.0

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE H - COMMERCIAL COOKING, HEATING, AIR CONDITIONING, AND REFRIGERATION SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY PHASE

	NUMBER OF BILLS	PERCENT OF TOTAL	BILLED KW	KWH/KW
RECORDED:				
RATE H: NON-DEMAND				
1 PHASE	377	22.150	2672	
3 PHASE	1325	77.850	15096.7	
TOTAL	1702	100.00	17768.7	
RATE K: DEMAND				
1 PHASE	61	5.328	1885.2	
3 PHASE	1084	94.672	58830.3	
TOTAL	1145	100.00	60715.5	
RATES H & K TOTAL				
1 PHASE	438	15.385	4557.2	
3 PHASE	2409	84.615	73927	
TOTAL	2847	100.00	78484.2	282.58

	PERCENT OF TOTAL	NUMBER OF BILLS	
FORECASTS:			
1 PHASE	15.385	430	
3 PHASE	84.615	2,366	
TOTAL	100.00	2796	74,581

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE H - COMMERCIAL COOKING, HEATING, AIR CONDITIONING, AND REFRIGERATION SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

:STIMATES OF TEST-YEAR BILLS LOADS BY PHASE

	PERCENT OF TOTAL	NUMBER OF BILLS
FORECAST:		
RATE H: NON-DEMAND		
1 PHASE	22.150	370
3 PHASE	77.850	1,302
TOTAL	100.00	1,672
RATE K: DEMAND		
1 PHASE	5.328	60
3 PHASE	94.672	1,064
TOTAL	100.00	1,124
RATES H & K TOTAL		
1 PHASE	15.385	430
3 PHASE	84.615	2,366
TOTAL	100.00	2,796

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

		PRESENT RATES		PROPOSED RATES	
	BILLING UNITS	UNIT PRICE	REVENUES $1000S	UNIT PRICE	REVENUES $1000S
ENERGY CHARGE:	(MWH)	$/KWH		$/KWH	
0 - 200 KWH/KW	162,977	10.9997	17,927.0	24.4694	39,879.5
201 - 400 KWH/KW	145,104	9.4576	13,723.4	22.9273	33,268.4
> 400 KWH/KW	83,880	7.7456	6,497.0	21.2153	17,795.4
SUBTOTAL	391961		38,147.4		90943.3
DEMAND CHARGE:	(KW)	$/KW		$/KW	
0 - 500 KW	535,091	8.50	4,548.3	18.00	9,631.6
> 500 KW	287,746	8.00	2,302.0	17.00	4,891.7
SUBTOTAL	822,837		6,850.3		14,523.3
CUSTOMER CHARGE:	BILLS	$/BILL		$/BILL	
	1452	225.00	326.7	375.00	544.5
ADJUSTMENTS:	MWH	$/KWH		$/KWH	
FUEL OIL ADJ.	391961	13.9540	54,694.2	0.0000	0.0
TEMP RATE DECR.		0.0000	0.0	0.0000	0.0
FIRM CAP. SURCHARGE		(0.0769)	(34.1)	0.0000	0.0
MISCELLANEOUS*			(998.8)		(1,807.6)
INTERIM RATE INCREASE			0.0		
TOTAL REVENUES			98,985.7		104,203.5

* INCLUDES POWER FACTOR, TRANSMISSION VOLTAGE, DISTRIBUTION VOLTAGE, RIDER, SCHEDULE E ADJUSTMENTS

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES & BILLS BY SUPPLY VOLTAGE

RECORDED:	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES	PERCENT OF TOTAL
TP	0	0.000	0.0	0.000
DP	220	15.342	135,538.3	35.215
TS	12	0.837	2,719.5	0.707
DS	97	6.764	43,133.6	11.207
SEC	1105	77.057	203,494.6	52.871
TOTAL	1,434	100.000	384,886.0	100.000

FORECASTS:	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES
TP	0.000	0	0.000	0.0
DP	15.342	223	35.215	138,029.0
TS	0.837	12	0.707	2,771.0
DS	6.764	98	11.207	43,927.0
SEC	77.057	1,119	52.871	207,234.0
TOTAL	100.000	1452	100.000	391,961.0

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING KW BY LF BLOCKS

	RECORDED		FORECASTS	
TYPE OF CUSTOMERS:	KW	KWH/KW	KW	KWH/KW
TP	0.0	0.00	0	0.00
DP	277,980.7	487.58	283,090	487.58
TS	5,148.0	528.26	5,246	528.26
DS	83,185.2	518.52	84,716	518.52
SEC	441,672.9	460.74	449,785	460.74
TOTAL	807,986.8	476.35	822,837	476.35

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES BY LOAD FACTOR BLOCK
DISTRIBUTION SECONDARY SUPPLY SERVICE

	RECORDED		FORECASTS	
	MWH	% OF TOTAL	MWH	% OF TOTAL
SALES, MWH				
0 - 200 KWH/KW	59.7	0.14	60	0.14
201 - 400 KWH/KW	788.5	1.83	804	1.83
> 400 KWH/KW	42,285.4	98.03	43,062	98.03
TOTAL	43,133.6	100.00	43,927	100.00

KW BILLED	KW	KWH/KW	KW
0 - 200 KWH/KW	206.7	288.82	208
201 - 400 KWH/KW	2,232.0	353.26	2,276
> 400 KWH/KW	80,746.5	523.68	82,232
TOTAL	83,185.2		84,716

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
DISTRIBUTION SECONDARY SUPPLY SERVICE

	LOAD FACTOR BLOCKS (KWH/KW)			
	0 -200	201 - 400	> 400	TOTAL
0 - 200 KWH/KW	42	455	16,446	16,943
201 - 400 KWH/KW	18	349	16,446	16,813
> 400 KWH/KW	0	0	10,170	10,170
SUBTOTAL	60	804	43,062	43,926
FORECASTS:				
SALES, MWH	60	804	43,062	43,927
KW	208	2,276	82,232	84,716

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF BILLING LOADS BY LF BLOCKS
DISTRIBUTION SECONDARY SUPPLY SERVICE

	UPPER LIM. OF BLK. AS % OF AVE. USE/BILL	CUM UNIT @ EA. UPPER LIM. AS % OF TOTAL	% UNITS BILLED IN EA. BLOCK	UNITS BILLED IN EA. BLOCK
DEMAND CHARGE:				
0 - 500 KW	57.84	51.16	51.16	43,341
> 500 KW		100.00	48.84	41,375
TOTAL			100.00	84,716
ENERGY CHARGE:				
0 - 200 KWH/KW				16,943
201 - 400 KWH/KW				16,813
> 400 KWH/KW				10,170
TOTAL				43,926

FORECASTS:	
SALES, MWH	43,927
BILLS	98
KW	84,716
KWH/BILL	448,234.69
KW/BILL	864.45

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR DISTRIBUTION SECONDARY SUPPLY SERVICE

		PRESENT RATES		PROPOSED RATES	
RATE BLOCKS	BILLING UNITS	UNIT PRICE	REVENUES $1000S	UNIT PRICE	REVENUES $1000S
DEMAND CHARGE:	KW	$/KW		$/KW	
0 - 500 KW	43,341	8.50	368.4	18.00	780.1
> 500 kw	41,375	8.00	331.0	17.00	703.4
SUBTOTAL	84,716		699.4		1,483.5
ENERGY CHARGE:	MWH	$/KWH		$/KWH	
0 - 200 KWH/KW	16,943	10.9997	1,863.7	24.4694	4,145.9
201 - 400 KWH/KW	16,813	9.4576	1,590.1	22.9273	3,854.8
> 400 KWH/KW	10,170	7.7456	787.7	21.2153	2,157.6
SUBTOTAL	43,926		4,241.5		10,158.3
TOTAL ENERGY & DEMAND			4,940.9		11,641.8
		% ADJ.		% ADJ.	
DS ADJ.		-1	(49.4)	-0.5	(58.2)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES BY LOAD FACTOR BLOCK
DISTRIBUTION PRIMARY SUPPLY SERVICE

	RECORDED		FORECASTS	
	MWH	% OF TOTAL	MWH	% OF TOTAL
SALES, MWH				
0 - 200 KWH/KW	1337.1	0.99	1,366	0.99
201 - 400 KWH/KW	21740.1	16.04	22,140	16.04
> 400 KWH/KW	112,461.1	82.97	114,523	82.97
TOTAL	135,538.3	100.00	138,029	100.00

KW BILLED	KW	KWH/KW	KW
0 - 200 KWH/KW	7912	169.00	8,083
201 - 400 KWH/KW	73961.2	293.94	75,321
> 400 KWH/KW	196107.5	573.47	199,686
TOTAL	277,980.7		283,090

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
DISTRIBUTION PRIMARY SUPPLY SERVICE.

	LOAD FACTOR BLOCKS (KWH/KW)			
	0 -200	201 - 400	> 400	TOTAL
0 - 200 KWH/KW	1,366	15,064	39,937	56,367
201 - 400 KWH/KW	0	7,076	39,937	47,013
> 400 KWH/KW	0	0	34,649	34,649
SUBTOTAL	1,366	22,140	114,523	138,029
FORECASTS:				
SALES, MWH	1366	22,140	114,523	138,029
KW	8083	75,321	199,686	283,090

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
DISTRIBUTION PRIMARY SUPPLY SERVICE

	UPPER LIM. OF BLK. AS % OF AVE. USE/BILL	CUM UNIT @ EA. UPPER LIM. AS % OF TOTAL	% UNITS BILLED IN EA. BLOCK	UNITS BILLED IN EA. BLOCK
DEMAND CHARGE:				
0 - 500 KW	39.39	36.87	36.87	104,375
> 500 KW		100.00	63.13	178,715
TOTAL			100.00	283,090
ENERGY CHARGE:				
0 - 200 KWH/KW				56,367
201 - 400 KWH/KW				47,013
> 400 KWH/KW				34,649
TOTAL				138,029

FORECASTS:

SALES, MWH	138,029
BILLS	223
KW	283,090
KWH/BILL	618,964.13
KW/BILL	1,269.46

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR DISTRIBUTION PRIMARY SUPPLY SERVICE

		PRESENT RATES		PROPOSED RATES	
RATE BLOCKS	BILLING UNITS	UNIT PRICE	REVENUES $1000S	UNIT PRICI	REVENUES $1000S
DEMAND CHARGE:	KW	$/KW		$/KW	
0 - 500 KW	104,375	8.50	887.2	18.00	1,878.8
> 500 KW	178,715	8.00	1,429.7	17.00	3,038.2
SUBTOTAL	283,090		2,316.9		4,917.0
ENERGY CHARGE:	MWH	$/KWH		$/KWH	
0 - 200 KWH/KW	56,367	10.9997	6,200.2	24.4694	13,792.7
201 - 400 KWH/KW	47,013	9.4576	4,446.3	22.9273	10,778.8
> 400 KWH/KW	34,649	7.7456	2,683.8	21.2153	7,350.9
SUBTOTAL	138,029		13,330.3		31,922.4
TOTAL ENERGY & DEMAND			15,647.2		36,839.4
		% ADJ.		% ADJ.	
DP ADJ.		-2	(312.9)	-1.1	(405.2)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES BY LOAD FACTOR BLOCK
TRANSMISSION SECONDARY SUPPLY SERVICE

	RECORDED		FORECASTS	
	MWH	% OF TOTAL	MWH	% OF TOTAL
SALES, MWH				
0 - 200 KWH/KW	152.4	5.60	155	5.60
201 - 400 KWH/KW	227.8	8.38	232	8.38
> 400 KWH/KW	2,339.3	86.02	2,384	86.02
TOTAL	2719.5	100.00	2,771	100.00

KW BILLED	KW	KWH/KW	KW
0 - 200 KWH/KW	454.1	335.61	462
201 - 400 KWH/KW	602.8	377.90	614
> 400 KWH/KW	4,091.1	571.80	4,169
TOTAL	5,148.0		5,246

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
TRANSMISSION SECONDARY SUPPLY SERVICE

	LOAD FACTOR BLOCKS (KWH/KW)			
	0 -200	201 - 400	> 400	TOTAL
0 - 200 KWH/KW	92	123	834	1,049
201 - 400 KWH/KW	63	109	834	1,006
> 400 KWH/KW	0	0	716	716
SUBTOTAL	155	232	2,384	2,771
FORECASTS:				
SALES, MWH	155	232	2,384	2,771
KW	462	614	4,169	5,246

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
TRANSMISSION SECONDARY SUPPLY SERVICE

	UPPER LIM. OF BLK. AS % OF AVE. USE/BILL	CUM UNIT @ EA. UPPER LIM. AS % OF TOTAL	% UNITS BILLED IN EA. BLOCK	UNITS BILLED IN EA. BLOCK
DEMAND CHARGE:				
0 - 500 KW	114.37	94.73	94.73	4,970
> 500 KW		100.00	5.27	276
TOTAL			100.00	5,246
ENERGY CHARGE:				
0 - 200 KWH/KW				1,049
201 - 400 KWH/KW				1,006
> 400 KWH/KW				716
TOTAL				2,771

FORECASTS:	
SALES, MWH	2,771
BILLS	12
KW	5,246
KWH/BILL	230,916.67
KW/BILL	437.17

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR TRANSMISSION SECONDARY SUPPLY SERVICE

		PRESENT RATES		PROPOSED RATES	
RATE BLOCKS	BILLING UNITS	UNIT PRICE	REVENUES $1000S	UNIT PRICI	REVENUES $1000S
DEMAND CHARGE:	KW	$/KW		$/KW	
0 - 500 KW	4,970	8.50	42.2	18.00	89.5
501 - 1500 KW	276	8.00	2.2	17.00	4.7
SUBTOTAL	5,246		44.4		94.2
ENERGY CHARGE:	MWH	$/KWH		$/KWH	
0 - 200 KWH/KW	1,049	10.9997	115.4	24.4694	256.7
201 - 400 KWH/KW	1,006	9.4576	95.1	22.9273	230.6
> 400 KWH/KW	716	7.7456	55.5	21.2153	151.9
SUBTOTAL	2,771		266.0		639.2
TOTAL ENERGY & DEMAND			310.4		733.4
		% ADJ.		% ADJ.	
TS ADJ.		-3.9	(12.1)	-3.8	(27.9)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR POWER FACTOR ADJUSTMENT

GWH	384.886010
RKVAH	152.843430
POWER FACTOR	92.93988834

	PRESENT RATES	PROPOSED RATES
CALCULATED PF (%)	93	93
BASE PF (%)	85	85
DIFF.	(8)	-8
ADJ. FOR EA. 1% DIFF.	0.0010	0.0010
PF ADJ. RATE	(0.008)	(0.008)
TOTAL DMD/ENERGY CHR.	44,997.7	105,466.6
POWER FACTOR ADJ.	(360.0)	(843.7)

T

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ADJUSTMENTS
FOR RIDER M & T

SCHEDULE P ESTIMATE OF REV. ADJ. FOR RIDER M(B)

	PRESENT RATES ($1000s)	PROPOSED RATES ($1000s)
M1	(53.5)	(88.1)
M2	(61.7)	(100.5)
M3	(34.1)	(62.5)
TOTAL	(149.3)	(251.1)

SCHEDULE P ESTIMATE OF REV. ADJ. FOR RIDER T

	PRESENT RATES ($1000s)	PROPOSED RATES ($1000s)
T21	(14.3)	(18.5)
T22	(1.5)	(1.5)
T23	(97.1)	(136.0)
T24	(2.2)	(2.2)
TOTAL	(115.1)	(158.2)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR RIDER M AT PRESENT RATES

M1	PRESENT RATES			
	SCHEDULE P		RIDER M(B)	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
MEASURED KW				
CURTAILABLE DMD			442	
BILLING KW	760.5		429.0	
EXCESS OFF-PEAK KW			0	
KWH PER MONTH	229500		229500	
POWER FACTOR (%)	95		95	
VOLT. DISC. (%)	-3.9		-3.9	
ENERGY CHARGE:				
0 - 200 KWH/KW	152100	16,731	85800	9,438
201 - 400 KWH/KW	77400	7,320	85800	8115
> 400 KWH/KW	0	0	57900	4485
SUBTOTAL	229500	24,051	229500	22,038
CUSTOMER CHARGE:		225		225
DEMAND CHARGE:				
0 - 500 KW	500.0	4250	429.0	3647
> 500 KW	260.5	2084	0.0	0
SUBTOTAL	760.5	6,334	429.0	3,647
VOLT. DISC. ADJ.		(1,185)		(1,002)
PF ADJ.		(304)		(257)
EXCESS OFF-PEAK CHRG				
TOD METER CHARGE				10
FUEL OIL ADJUSTMENT	229500	32024	229500	32024
TEMPORARY RATE DECRE	229500	0	229500	0
SUBTOTAL		30535.15		30775.15
TOTAL REV. PER MONTH ($)		61,145		56,685
TOTAL REV. PER YEAR ($1000)		733.7		680.2
RIDER M ADJ.($1000/YR)				(53.5)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR RIDER M AT PRESENT RATES

M1	PROPOSED RATES			
	SCHEDULE P		RIDER M(B)	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
MEASURED KW				
CURTAILABLE DMD			442	
BILLING KW	760.5		429.0	
EXCESS OFF-PEAK KW			0	
KWH PER MONTH	229500		229500	
POWER FACTOR (%)	95		95	
VOLT. DISC. (%)	-3.8		-3.8	
ENERGY CHARGE:				
0 - 200 KWH/KW	152100	37,218	85800	20,995
201 - 400 KWH/KW	77400	17,746	85800	19,672
> 400 KWH/KW	0	0	57900	12284
SUBTOTAL	229500	54,964	229500	52,951
CUSTOMER CHARGE:		375		375
DEMAND CHARGE:				
0 - 500 KW	500.0	9000	429.0	7722
> 500 KW	260.5	4429	0.0	0
SUBTOTAL	760.5	13,429	429.0	7,722
VOLT. DISC. ADJ.		(2,599)		(2,306)
PF ADJ.		(684)		(607)
EXCESS OFF-PEAK CHRG				
TOD METER CHARGE				10
FUEL OIL ADJUSTMENT	229500	0	229500	0
TEMPORARY RATE DECRE	229500	0	229500	0
SUBTOTAL		-3283		-2903
TOTAL REV. PER MONTH ($)		65,485		58,145
TOTAL REV. PER YEAR ($1000)		785.8		697.7
RIDER M ADJ.($1000/YR)				(88.1)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR RIDER M AT PRESENT RATES

M2	PRESENT RATES			
	SCHEDULE P		RIDER M(B)	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
MEASURED KW				
CURTAILABLE DMD			481	
BILLING KW	1296		935.3	
EXCESS OFF-PEAK KW			0	
KWH PER MONTH	449000		449000	
POWER FACTOR (%)	90		90	
VOLT. DISC. (%)	-2		-2	
ENERGY CHARGE:				
0 - 200 KWH/KW	259200	28,511	187060	20,576
201 - 400 KWH/KW	189800	17,951	187060	17691
> 400 KWH/KW	0	0	74880	5800
SUBTOTAL	449000	46,462	449000	44,067
CUSTOMER CHARGE:		225		225
DEMAND CHARGE:				
0 - 500 KW	500.0	4250	500.0	4250
> 500 KW	796	6368	435.3	3482
SUBTOTAL	1,296.0	10,618	935.3	7,732
VOLT. DISC. ADJ.		(1,142)		(1,036)
PF ADJ.		(285)		(259)
EXCESS OFF-PEAK CHRG				
TOD METER CHARGE				10
FUEL OIL ADJUSTMENT	449000	62653	449000	62653
TEMPORARY RATE DECRE	449000	0	449000	0
SUBTOTAL		61225.6		61368.01
TOTAL REV. PER MONTH ($)		118,531		113,392
TOTAL REV. PER YEAR ($1000)		1422.4		1,360.7
RIDER M ADJ.($1000/YR)				(61.7)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR RIDER M AT PRESENT RATES

M2	PROPOSED RATES			
	SCHEDULE P		RIDER M(B)	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
MEASURED KW				
CURTAILABLE DMD			481	
BILLING KW	1296		935.3	
EXCESS OFF-PEAK KW			0	
KWH PER MONTH	449000		449000	
POWER FACTOR (%)	90		90	
VOLT. DISC. (%)	-1.1		-1.1	
ENERGY CHARGE:				
0 - 200 KWH/KW	259200	63,425	187060	45,772
201 - 400 KWH/KW	189800	43,516	187060	42,888
> 400 KWH/KW	0	0	74880	15886
SUBTOTAL	449000	106,941	449000	104,546
CUSTOMER CHARGE:		375		375
DEMAND CHARGE:				
0 - 500 KW	500.0	9000	500.0	9000
> 500 KW	796.0	13532	435.3	7400
SUBTOTAL	1,296.0	22,532	935.3	16,400
VOLT. DISC. ADJ.		(1,424)		(1,330)
PF ADJ.		(647)		(605)
EXCESS OFF-PEAK CHRG				
TOD METER CHARGE				10
FUEL OIL ADJUSTMENT	449000	0	449000	0
TEMPORARY RATE DECRE	449000	0	449000	0
SUBTOTAL		-2071		-1925
TOTAL REV. PER MONTH ($)		127,777		119,396
TOTAL REV. PER YEAR ($1000)		1533.3		1,432.8
RIDER M ADJ.($1000/YR)				(100.5)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR RIDER M AT PRESENT RATES

M3	PRESENT RATES			
	SCHEDULE P		RIDER M(B)	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
MEASURED KW				
CURTAILABLE DMD			351.2	
BILLING KW	1130.9		867.5	
EXCESS OFF-PEAK KW			0	
KWH PER MONTH	329900		329900	
POWER FACTOR (%)	88		88	
VOLT. DISC. (%)	-2		-2	
ENERGY CHARGE:				
0 - 200 KWH/KW	226180	24,879	173500	19,084
201 - 400 KWH/KW	103720	9,809	156400	14792
> 400 KWH/KW	0	0	0	0
SUBTOTAL	329900	34,688	329900	33,876
CUSTOMER CHARGE:		225		225
DEMAND CHARGE:				
0 - 500 KW	500.0	4250	500.0	4250
> 500 KW	630.9	5047	367.5	2940
SUBTOTAL	1,130.9	9,297	867.5	7,190
VOLT. DISC. ADJ.		(880)		(821)
PF ADJ.		(132)		(123)
EXCESS OFF-PEAK CHRG				
TOD METER CHARGE				10
FUEL OIL ADJUSTMENT	329900	46034	329900	46034
TEMPORARY RATE DECRE	329900	0	329900	0
SUBTOTAL		45022.05		45099.8
TOTAL REV. PER MONTH ($)		89,232		86,391
TOTAL REV. PER YEAR ($1000)		1070.8		1,036.7
RIDER M ADJ.($1000/YR)				(34.1)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR RIDER M AT PRESENT RATES

M3	PROPOSED RATES			
	SCHEDULE P		RIDER M(B)	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
MEASURED KW				
CURTAILABLE DMD			351.2	
BILLING KW	1130.9		867.5	
EXCESS OFF-PEAK KW			0	
KWH PER MONTH	329900		329900	
POWER FACTOR (%)	88		88	
VOLT. DISC. (%)	-1.1		-1.1	
ENERGY CHARGE:				
0 - 200 KWH/KW	226180	55,345	173500	42,454
201 - 400 KWH/KW	103720	23,780	156400	35,858
> 400 KWH/KW	0	0	0	0
SUBTOTAL	329900	79,125	329900	78,312
CUSTOMER CHARGE:		375		375
DEMAND CHARGE:				
0 - 500 KW	500.0	9000	500.0	9000
> 500 KW	630.9	10725	367.5	6248
SUBTOTAL	1,130.9	19,725	867.5	15,248
VOLT. DISC. ADJ.		(1,087)		(1,029)
PF ADJ.		(297)		(281)
EXCESS OFF-PEAK CHRG				
TOD METER CHARGE				10
FUEL OIL ADJUSTMENT	329900	0	329900	0
TEMPORARY RATE DECRE	329900	0	329900	0
SUBTOTAL		-1384		-1300
TOTAL REV. PER MONTH ($)		97,841		92,635
TOTAL REV. PER YEAR ($1000)		1174.1		1,111.6
RIDER M ADJ.($1000/YR)				(62.5)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR RIDER T AT PRESENT RATES

T21	PRESENT RATES			
	SCHEDULE P		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			209.9	
OFF-PEAK KW			246.3	
BILLING KW	246.3		209.9	
ON-PEAK KWH			20133	
OFF-PEAK KWH			39483	
TOTAL KWH	59616		59616	
EXCESS OFF-PEAK KW				
POWER FACTOR (%)	84		84	
ENERGY CHARGE:				
0 - 200 KWH/KW	49260	5,418	41980	4,618
201 - 400 KWH/KW	10356	979	17636	1,668
> 400 KWH/KW	0	0	0	0
SUBTOTAL	59616	6,397	59616	6,286
ON-PEAK ENERGY SURCH:			20133	403
OFF-PEAK ENERGY CREDIT:			39483	(1,184)
SUBTOTAL			59616	-781
ON-PEAK DEMAND CHARGE:				
0 - 500 KW	246.3	2094	209.9	1784
> 500 KW	0	0	0	0
SUBTOTAL	246.3	2,094	209.9	1,784
VOLTAGE ADJ.		0.0		0.0
PF ADJ.		9		7
CUSTOMER CHARGE:		225		225
TOD METER CHARGE:				10
FUEL OIL ADJUST:	59616	8319	59616	8319
TEMP RATE DECR:	59616	0	59616	0
SUBTOTAL		8552.5		8561.3
TOTAL REV. PER MONTH		17,044		15,850
TOTAL REV. PER YEAR ($1000)		204.5		190.2
RIDER T ADJ.($1000/YR)				(14.3)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR RIDER T AT PROPOSED RATES

T21	PROPOSED RATES			
	SCHEDULE P		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			209.9	
OFF-PEAK KW			246.3	
BILLING KW	246.3		209.9	
ON-PEAK KWH			20133	
OFF-PEAK KWH			39483	
TOTAL KWH	59616		59616	
EXCESS OFF-PEAK KW				
POWER FACTOR (%)	84		84	
ENERGY CHARGE:				
0 - 200 KWH/KW	49260	12,054	41980	10,272
201 - 400 KWH/KW	10356	2,374	17636	4,043
> 400 KWH/KW	0	0	0	0
SUBTOTAL	59616	14,428	59616	14,315
ON-PEAK ENERGY SURCH:			20133	403
OFF-PEAK ENERGY CREDIT:			39483	(1,184)
SUBTOTAL			59616	-781
ON-PEAK DEMAND CHARGE:				
0 - 500 KW	246.3	4433	209.9	3778
501 - 1500 KW	0	0	0	0
1501 - 5000 KW	0	0	0	0
> 5000 KW	0	0	0	0
SUBTOTAL	246.3	4,433	209.9	3,778
VOLTAGE ADJ.		0		0
PF ADJ.		19		17
CUSTOMER CHARGE:		375		375
TOD METER CHARGE:				10
FUEL OIL ADJUST:	59616	0	59616	0
TEMP RATE DECR:	59616	0	59616	0
SUBTOTAL		394		402
TOTAL REV. PER MONTH		19,255		17,714
TOTAL REV. PER YEAR ($1000)		231.1		212.6
RIDER T ADJ.($1000/YR)				(18.5)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR RIDER T AT PRESENT RATES

T22	PRESENT RATES			
	SCHEDULE P		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			733.5	
OFF-PEAK KW			733.5	
BILLING KW	733.5		733.5	
ON-PEAK KWH			246150	
OFF-PEAK KWH			168750	
TOTAL KWH	414900		414900	
EXCESS OFF-PEAK KW			0	
POWER FACTOR (%)	92		92	
ENERGY CHARGE:				
0 - 200 KWH/KW	146700	16,137	146700	16,137
201 - 400 KWH/KW	146700	13,874	146700	13,874
> 400 KWH/KW	121500	9411	121500	9411
SUBTOTAL	414900	39,422	414900	39,422
ON-PEAK ENERGY SURCH:			246150	4,923
OFF-PEAK ENERGY CREDIT:			168750	(5,063)
SUBTOTAL			414900	-140
ON-PEAK DEMAND CHARGE:				
0 - 500 KW	500	4250	500	4250
> 500 KW	233.5	1868	233.5	1868
SUBTOTAL	733.5	6,118	733.5	6,118
VOLTAGE ADJ. 2%		(910.8)		(908.0)
PF ADJ.		(319)		(318)
CUSTOMER CHARGE:		225		225
TOD METER CHARGE:				10
FUEL OIL ADJUST:	414900	57895	414900	57895
TEMP RATE DECR:	414900	0	414900	0
SUBTOTAL		57801.2		57812.2
TOTAL REV. PER MONTH		102,430		102,304
TOTAL REV. PER YEAR ($1000)		1229.2		1227.7
RIDER T ADJ.($1000/YR)				(1.5)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR RIDER T AT PROPOSED RATES

T22	PROPOSED RATES			
	SCHEDULE P		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			733.5	
OFF-PEAK KW			733.5	
BILLING KW	733.5		733.5	
ON-PEAK KWH			246150	
OFF-PEAK KWH			168750	
TOTAL KWH	414900		414900	
EXCESS OFF-PEAK KW			0	
POWER FACTOR (%)	92		92	
ENERGY CHARGE:				
0 - 200 KWH/KW	146700	35,897	146700	35,897
201 - 400 KWH/KW	146700	33,634	146700	33,634
> 400 KWH/KW	121500	25777	121500	25777
SUBTOTAL	414900	95,308	414900	95,308
ON-PEAK ENERGY SURCH:			246150	4,923
OFF-PEAK ENERGY CREDIT:			168750	(5,063)
SUBTOTAL			414900	-140
ON-PEAK DEMAND CHARGE:				
0 - 500 KW	500	9000	500	9000
501 - 1500 KW	233.5	3970	233.5	3970
1501 - 5000 KW	0	0	0	0
> 5000 KW	0	0	0	0
SUBTOTAL	733.5	12,970	733.5	12,970
PF ADJ.		(758)		(757)
CUSTOMER CHARGE:		375		375
TOD METER CHARGE:				10
FUEL OIL ADJUST:	414900	0	414900	0
TEMP RATE DECR:	414900	0	414900	0
SUBTOTAL		(383)		(372)
Voltage Adjst. -1.1%		(1,191)		(1,190)
TOTAL REV. PER MONTH		106,704		106,576
TOTAL REV. PER YEAR ($1000)		1,280.4		1278.9
RIDER T ADJ.($1000/YR)				(1.5)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR RIDER T AT PRESENT RATES

T23	PRESENT RATES			
	SCHEDULE P		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			305	
OFF-PEAK KW			656	
BILLING KW	656		305.0	
ON-PEAK KWH			97000	
OFF-PEAK KWH			143700	
TOTAL KWH	240700		240700	
EXCESS OFF-PEAK KW				
POWER FACTOR (%)	100		100	
ENERGY CHARGE:				
0 - 200 KWH/KW	131200	14,432	61000	6,710
201 - 400 KWH/KW	109500	10,356	61000	5,769
> 400 KWH/KW	0	0	118700	9194
SUBTOTAL	240700	24,788	240700	21,673
ON-PEAK ENERGY SURCH:			97000	1,940
OFF-PEAK ENERGY CREDIT:			143700	(4,311)
SUBTOTAL			240700	-2371
ON-PEAK DEMAND CHARGE:				
0 - 500 KW	500	4250	305	2593
> 500 KW	156	1248	0	0
SUBTOTAL	656	5,498	305.0	2,593
VOLTAGE ADJ. 2%		(605.7)		(437.9)
PF ADJ.		(454)		(328)
CUSTOMER CHARGE:		225		225
TOD METER CHARGE:				10
FUEL OIL ADJUST:	240700	33587	240700	33587
TEMP RATE DECR:	240700	0	240700	0
SUBTOTAL		33357.7		33493.6
TOTAL REV. PER MONTH		63,038		54,951
TOTAL REV. PER YEAR ($1000)		756.5		659.4
RIDER T ADJ.($1000/YR)				(97.1)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR RIDER T AT PROPOSED RATES

T23	PROPOSED RATES			
	SCHEDULE P		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			305	
OFF-PEAK KW			656	
BILLING KW	656		305	
ON-PEAK KWH			97000	
OFF-PEAK KWH			143700	
TOTAL KWH	240700		240700	
EXCESS OFF-PEAK KW			0	
POWER FACTOR (%)	100		100	
ENERGY CHARGE:				
0 - 200 KWH/KW	131200	32,104	61000	14,926
201 - 400 KWH/KW	109500	25,105	61000	13,986
> 400 KWH/KW	0	0	118700	25183
SUBTOTAL	240700	57,209	240700	54,095
ON-PEAK ENERGY SURCH:			97000	1,940
OFF-PEAK ENERGY CREDIT:			143700	(4,311)
SUBTOTAL			240700	-2371
ON-PEAK DEMAND CHARGE:				
0 - 500 KW	500	9000	305	5490
501 - 1500 KW	156	2652	0	0
1501 - 5000 KW	0	0	0	0
> 5000 KW	0	0	0	0
SUBTOTAL	656	11,652	305.0	5,490
PF ADJ.		(1,033)		(858)
CUSTOMER CHARGE:		375		375
TOD METER CHARGE:				10
FUEL OIL ADJUST:	240700	0	240700	0
TEMP RATE DECR:	240700	0	240700	0
SUBTOTAL		(658)		(473)
Voltage Adjst. -1.1%		(757)		(629)
TOTAL REV. PER MONTH		67,446		56,111
TOTAL REV. PER YEAR ($1000)		809.3		673.3
RIDER T ADJ.($1000/YR)				(136.0)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR RIDER T AT PRESENT RATES

T24	PRESENT RATES			
	SCHEDULE P		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			793.4	
OFF-PEAK KW			793.9	
BILLING KW	793.9		793.4	
ON-PEAK KWH			245600	
OFF-PEAK KWH			170000	
TOTAL KWH	415600		415600	
EXCESS OFF-PEAK KW				
POWER FACTOR (%)	99		99	
ENERGY CHARGE:				
0 - 200 KWH/KW	158780	17,465	158680	17,454
201 - 400 KWH/KW	158780	15,017	158680	15,007
> 400 KWH/KW	98040	7594	98240	7609
SUBTOTAL	415600	40,076	415600	40,070
ON-PEAK ENERGY SURCH:			245600	4,912
OFF-PEAK ENERGY CREDIT:			170000	(5,100)
SUBTOTAL			415600	-188
ON-PEAK DEMAND CHARGE:				
0 - 500 KW	500	4250	500	4250
> 500 KW	293.9	2351	293.4	2347
SUBTOTAL	793.9	6,601	793.4	6,597
VOLTAGE ADJ. 2%		(933.5)		(929.6)
PF ADJ.		(654)		(651)
CUSTOMER CHARGE:		225		225
TOD METER CHARGE:				10
FUEL OIL ADJUST:	415600	57993	415600	57993
TEMP RATE DECR:	415600	0	415600	0
SUBTOTAL		57564.5		57577.3
TOTAL REV. PER MONTH		103,308		103,127
TOTAL REV. PER YEAR ($1000)		1239.7		1237.5
RIDER T ADJ.($1000/YR)				(2.2)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR RIDER T AT PROPOSED RATES

T24	PROPOSED RATES			
	SCHEDULE P		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO.:				
ON-PEAK KW			793.4	
OFF-PEAK KW			793.9	
BILLING KW	793.9		793.4	
ON-PEAK KWH			245600	
OFF-PEAK KWH			170000	
TOTAL KWH	415600		415600	
EXCESS OFF-PEAK KW			0	
POWER FACTOR (%)	99		99	
ENERGY CHARGE:				
0 - 200 KWH/KW	158780	38,853	158680	38,828
201 - 400 KWH/KW	158780	36,404	158680	36,381
> 400 KWH/KW	98040	20799	98240	20842
SUBTOTAL	415600	96,056	415600	96,051
ON-PEAK ENERGY SURCH:			245600	4,912
OFF-PEAK ENERGY CREDIT:			170000	(5,100)
SUBTOTAL			415600	-188
ON-PEAK DEMAND CHARGE:				
0 - 500 KW	500	9000	500	9000
501 - 1500 KW	293.9	4996	293.4	4988
1501 - 5000 KW	0	0	0	0
> 5000 KW	0	0	0	0
SUBTOTAL	793.9	13,996	793.4	13,988
PF ADJ.		(1,541)		(1,538)
CUSTOMER CHARGE:		375		375
TOD METER CHARGE:				10
FUEL OIL ADJUST:	415600	0	415600	0
TEMP RATE DECR:	415600	0	415600	0
SUBTOTAL		(1,166)		(1,153)
Voltage Adjst. -1.1%		(1,211)		(1,208)
TOTAL REV. PER MONTH		107,676		107,490
TOTAL REV. PER YEAR ($1000)		1,292.1		1289.9
RIDER T ADJ.($1000/YR)				(2.2)

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
FOR TOTAL CLASS

	UPPER LIM. OF BLK. AS % OF AVE. USE/BILL	CUM UNIT @ EA. UPPER LIM. AS % OF TOTAL	% UNITS BILLED IN EA. BLOCK	UNITS BILLED IN EA. BLOCK
DEMAND CHARGE:				
0 - 500 KW	88.23	65.03	65.03	535,091
> 500 KW		100.00	34.97	287,746
TOTAL			100.00	822,837
ENERGY CHARGE:				
0 - 200 KWH/KW		41.58	41.58	162,977
201 - 400 KWH/KW		78.60	37.02	145,104
> 400 KWH/KW		100.00	21.40	83,880
TOTAL			100.00	391,961

FORECASTS:

SALES, MWH	391,961
BILLS	1,452
KW	822,837
KWH/BILL	269945.6
KW/BILL	566.69

MECO- Maui Division Schedule P, Rider Data
Average Data

Rider M(b)

Account	Rate	kWm	Priority kW	Curtailed kW	Reg kWb	Rider kWb	kWh	PF	No. Mos
M1	P2	758.0	316	442	760.5	429	229500	95	12
M2	P3	1296	815	481	1296	935.3	449000	90	12
M3	P3	957.7	606.5	351.2	1130.9	867.5	329900	88	12

Rider T

Account	Rate	On-peak kWh	Off-peak kW	Total kWh	% On-pea	% Off-pea	On-Peak kWt	Reg kWb	PF
T21	P	20133	39483	59616	33.8%	66.2%	209.9	246.3	84
T22	P3	246150	168750	414900	59.3%	40.7%	733.5	733.5	92
T23	P3	97000	143700	240700	40.3%	59.7%	305	656	100
T24	P3	245600	170000	415600	59.1%	40.9%	793.4	793.9	99

Copy of MAP_07 Proposed-FINAL.xls:Sched P Rider Summary
Pricing:cm
2/20/2007

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

		PRESENT RATES		PROPOSED RATES	
	BILLING UNITS (MWH)	UNIT PRICE CENTS/KWH	REVENUES $1000S	UNIT PRICE CENTS/KWH	REVENUES $1000S
ENERGY CHARGE:					
0 - 150 KWH/KW	2,350.8	15.173	356.7	30.59540	719.2
> 150 KWH/KW	2,989.2	10.675	319.1	26.09740	780.1
SUBTOTAL	5,340.0		675.8		1499.3
ADJUSTMENTS *			745.9		-3.2
INTERIM RATE INCREASE			0.0		
TOTAL REVENUES			1,421.7		1,496.1

* INCLUDES FUEL OIL ADJUSTMENT AND SCHEDULE E ADJ.

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DETERMINATION OF TEST-YEAR BILLING KW

	RECORDED		FORECAST	
	KWH	%	KWH	%
TOTAL F SALES				
METERED ACCTS.	404978	7.77	414918	7.77
FLAT ACCTS.	4807571	92.23	4925082	92.23
TOTAL	5212549	100.00	5340000	100.00

	RECORDED		FORECAST	
	KW	KWH/KW	KWB	MWH
TOTAL F SALES				
METERED ACCTS.	1014.5	399.19	1039	414.9
FLAT ACCTS.	14300.2	416.7	11819	4,925.1
TOTAL	15,314.7	340.36	12858	5,340.0

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS

	CUM AT EACH UPPER LIMIT AS % OF TOTAL	PERCENT OF UNITS IN EACH BLOCK	MWH BILLED IN EACH BLOCK
METERED ACCOUNTS:			
0 - 150 KWH/KW	36.93	36.93	153.2
OVER 150 KWH/KW	100.00	63.07	261.7
TOTAL		100.00	414.9
FLAT ACCOUNTS:			
0 - 150 KWH/KW	44.62	44.62	2197.6
OVER 150 KWH/KW	100.00	55.38	2,727.5
TOTAL		100.00	4,925.1
METERED + FLAT ACCTS.:			
0 - 150 KWH/KW			2,350.8
OVER 150 KWH/KW			2,989.2
TOTAL			5,340.0

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES	PROPOSED RATES
MINIMUM CHARGE $/MO.	25.00	25.00
BASE RATE $/KWH	0.15173	0.30595
F.O.A. $/KWH	0.13954	0.00000
T.R.A. $/KWH	0.00000	0.00000
FCS ADJ. $/KWH	0.00000	0.00000
CUSTOMER CHARGE $/MO.	0	0
MINIMUM KWH/MO.	85.83	81.71

	AT PRESENT RATES		AT PROPOSED RATES	
	RECORDED	FORECAST	RECORDED	FORECAST
SALES, MWH				
TOTAL	5212.5	5340	5212.5	5340
LT/EQ TO MIN. MWH	6.7	6.9	6.7	6.9
% OF TOTAL	0.129	0.129	0.129	0.129
NUMBER OF BILLS				
TOTAL	1898	2028	1898	2028
LT/EQ TO MIN. MWH	105	112	105	112
% OF TOTAL	5.532	5.523	5.532	5.523

MAUI ELECTRIC COMPANY, LTD. - MAUI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR REVENUE ADJSUTMENTS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES		
	UNITS BILLED (MWH)	UNIT PRICE CENTS/KWH	REVENUES $1000S
IF NO PROVISION FOR MINIMUM CHRG.:			
BASE ENERGY CHARGE	6.9	15.1733	1.0
F.O.A. ADJUSTMENT	6.9	13.9540	1.0
TRA ADJUSTMENT	6.9	0.0000	0.0
fcs	6.9	(0.0769)	0.0
TOTAL			2.0
	BILLS	$/BILL	
AS BILLED WITH MINIMUM CHARGE:	112	25.00	2.8
MINIMUM BILL ADJ.:			0.8

	PROPOSED RATES		
	UNITS BILLED (MWH)	UNIT PRICE CENTS/KWH	REVENUES $1000S
IF NO PROVISION FOR MINIMUM CHRG.:			
BASE ENERGY CHARGE	6.9	30.59540	2.1
F.O.A. ADJUSTMENT	6.9	0.0000	0.0
TRA ADJUSTMENT	6.9	0.0000	0.0
fcs	6.9	0.0000	0.0
TOTAL			2.1
	BILLS	$/BILL	
AS BILLED WITH MINIMUM CHARGE:	112	25.00	2.8
MINIMUM BILL ADJ.:			0.7

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

	PRESENT RATES			PROPOSED RATES		
	BILLING UNITS	UNIT PRICE	REVENUES $1000s	BILLING UNITS	UNIT PRICE	REVENUES $1000s
	MWH	¢/KWH		MWH	¢/KWH	
ENERGY CHARGE:						
NON-FUEL	8182.7	9.0028	736.7			
0-250 kWh				3,664.4	10.4932	384.5
250-750 kWh				3,291.6	10.9998	362.1
Over 750 kWh				1,226.7	11.7853	144.6
Total	8182.7	9.0028		4,891.1		891.2
BASE FUEL	8182.7	9.0620	741.5		22.7573	1,862.2
SUBTOTAL ENERGY			1,478.2			2,753.4
CUSTOMER CHARGE:	BILLS	$/BILL			$/BILL	
1 Phase	16464	7.50	123.4		7.50	123.4
3 Phase	12	12	0.1		12.00	0.1
SUBTOTAL CUSTOMER			123.5			123.5
ADJUSTMENTS:						
FUEL OIL ADJ.	8182.7	13.9130	1,138.5		0.0000	0.0
MISCELLANEOUS*			(8.6)			(1.2)
TOTAL REVENUES			2,731.6			2,875.7

* INCLUDES EMPLOYEE DISCOUNT, MINIMUM BILL ADJUSTMENT

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES & BILLS BY CUSTOMER GROUP

	NO. OF BILLS		MWH SALES	
	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES	PERCENT OF TOTAL
RECORDED:				
RESIDENTIAL-R				
1 PHASE	16259	99.13	7,621.1	97.83
3 PHASE	12	0.07	66.7	0.86
TOTAL R	16271	99.20	7,687.8	98.69
EMPLOYEES-E	132	0.80	102.3	1.31
MULTI-RESIDENTIAL	0	0.00	0.0	0.00
10% APT. HOUSE	0	0.00	0.0	0.00
TOTAL R AND E	16403	100.00	7,790.1	100.00

	NO. OF BILLS		MWH SALES	
	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES
FORECASTS:				
RESIDENTIAL-R				
1 PHASE	99.13	16,320	97.83	8,005
3 PHASE	0.07	12	0.86	70
TOTAL R	99.20	16,332	98.69	8,076
EMPLOYEES-E	0.80	132	1.31	107
MULTI-RESIDENTIAL	0.00	0	0.00	0
10% APT. HOUSE	0.00	0	0.00	0
TOTAL R AND E	100.00	16,464	100.00	8,183

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES AND BILLS

RECORDED:	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES	PERCENT OF TOTAL
Usage Per Month:				
0 - 250 kWh	4675	28.5009	686.8	8.8163
250 - 750 kWh	9432	57.5017	4,289.6	55.0648
Over 750 kWh	2296	13.9974	2,813.7	36.1189
TOTAL R AND E	16403	100.0000	7,790.1	100.0000

FORECAST:	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES
Usage Per Month:				
0 - 250 kWh	28.5009	4,692	8.8163	721.4
250 - 750 kWh	57.5017	9,467	55.0648	4,505.8
Over 750 kWh	13.9974	2,305	36.1189	2,955.5
TOTAL R AND E	100.0000	16,464	100.0000	8,182.7

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR BILLING LOADS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES	*PROPOSED RATES*
MINIMUM CHRG.,$/MO.	17.00	17.00
BASE RATE,$/KWH	0.180648	0.332505
F.O.A.,$/KWH	0.13913	0.00000
CUSTOMER CHRG, $/MO	7.50	7.50
TRA, $/KWH	0.00000	0.00000
FCS ADJ., $/KWH	0.00000	0.00000
MINIMUM KWH/MONTH	29.71	28.57

	PRESENT RATES		PROPOSED RATES	
	RECORDED	FORECAST	RECORDED	FORECAST
SALES, MWH				
TOTAL R,E	7,790.1	8,182.7	7,790.1	8,182.7
LT/EQ TO MIN. KWH	3.0	3.3	2.8	3.3
% OF TOTAL	0.04		0.04	
NUMBER OF BILLS				
TOTAL R,E	16403	16,464	16,403	16,464
LT/EQ TO MIN. KWH	445	446	438	440
% OF TOTAL	2.71		2.67	

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENTS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES		
IF NO PROVISION FOR MINIMUM CHRG.:	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000S
BASE ENERGY CHARGE	3.3	18.0648	0.6
F.O.A. ADJUSTMENT	3.3	13.913	0.5
TRA ADJUSTMENT	3.3	0.000	0.0
FCS ADJ.	3.3	0.000	0.0
SUBTOTAL			1.1
	BILLS	$/MONTH	
CUSTOMER CHARGE	446	7.50	3.3
TOTAL			4.4
AS BILLED WITH MINIMUM CHARGE:	BILLS 446	$/MONTH 17.00	7.6
MINIMUM BILL ADJ.			3.2

	PROPOSED RATES		
IF NO PROVISION FOR MINIMUM CHRGE.:	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000S
BASE ENERGY CHARGE	3.3	33.2505	1.1
F.O.A. ADJUSTMENT	3.3	0.000	0.0
TRA ADJUSTMENT	3.3	0.000	0.0
FCS ADJ.	3.3	0.000	0.0
SUBTOTAL			1.1
	BILLS	$/MONTH	
CUSTOMER CHARGE	440	7.50	3.3
TOTAL			4.4
AS BILLED WITH MINIMUM CHARGE	BILLS 440	$/MONTH 17.00	7.5
MINIMUM BILL ADJ.			3.1

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES AND BILLS
FOR EMPLOYEE DISCOUNT ADJUSTMENT

	RECORDED	FORECAST
MWH SALES:		
0-250 KWH	0.0	0
250-750 KWH	46.8	48.9
750-825 KWH	4.7	4.9
>825 KWH	50.8	53.2
TOTAL	102.3	107
NUMBER OF BILLS:		
0-250 KWH	0	0
250-750 KWH	82	82
750-825 KWH	6	6
>825 KWH	44	44
TOTAL	132	132

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR EMPLOYEE DISCOUNT ADJUSTMENT

EMPLOYEE DISCOUNT	UNITS BILLED (MWH)	PRESENT RATES UNIT PRICE $/KWH	PRESENT RATES REVENUES $1000s	PROPOSED RATES UNIT PRICE $/KWH	PROPOSED RATES REVENUES $1000s
ENERGY CHARGE					
0 - 250 kWh	22.0			10.4932	2.3
250 - 750 kWh	31.4			10.9998	3.5
750 - 825 kWh	0.4			11.7853	0.0
Total	53.8				5.8
Total	53.8	18.0648	9.7		5.8
Base Fuel Energy	53.8		0.0	22.7573	12.2
FOA	53.8	13.9130	7.5	0.0000	0.0
SUBTOTAL			17.2		18.0
	BILLS				
CUSTOMER CHARGE	88	7.50	0.7	7.50	0.7
TOTAL			17.9		18.7
-1/3% EMP. ADJ.			(6.0)		(6.2)

EMPLOYEE DISCOUNT LIMITED to 825 KWH	UNITS BILLED (MWH)	PRESENT RATES UNIT PRICE $/KWH	PRESENT RATES REVENUES $1000s	PROPOSED RATES UNIT PRICE $/KWH	PROPOSED RATES REVENUES $1000s
ENERGY CHARGE					
Over 825					
First 250 kWh	11.0			10.4932	1.2
250 - 750 kWh	22.0			10.9998	2.4
kWh above 750	3.3			11.7853	0.4
Over 825 kWh Total	36.3				4.0
Total	36.3	18.0648	6.6		4.0
Base Fuel Energy	36.3		0.0	22.7573	8.3
FOA	36.3	13.9130	5.1	0.0000	0.0
SUBTOTAL			11.7		12.3
	BILLS				
CUSTOMER CHARGE	44	7.50	0.3	7.50	0.3
TOTAL			12.0		12.6
-1/3% EMP. ADJ.			(4.0)		(4.2)
TOTAL EMPLOYEE ADJ:			(10.0)		(10.4)

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

		PRESENT RATES		PROPOSED RATES	
	BILLING UNITS (MWH)	UNIT PRICE $/KWH	REVENUES $1000S	UNIT PRICE $/KWH	REVENUES $1000S
ENERGY CHARGE:	1949.4	20.4188	398	35.4062	690.2
	BILLS	$/BILL		$/BILL	
CUSTOMER CHARGE:					
1 PHASE	1906	22.00	41.9	30.00	57.2
3 PHASE	350	38.00	13.3	45.00	15.8
ADJUSTMENTS:					
FOA			271.2		0.0
TRA			0		0.0
SCHEDULE E ADJ.			0		-0.8
MISCELLANEOUS *			0.8		0.9
INTERIM INCREASE			0		
TOTAL REVENUES			725.2		763.3

* INCLUDES MINIMUM BILL ADJ.,

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES AND BILLS BY TYPE OF SERVICE

	RECORDED	FORECASTED
TOTAL G:		
SALES, MWH	1,861.5	1,949.4
NO. OF BILLS	2076	2,256

	MWH SALES		NO. OF BILLS	
RECORDED:	SALES (MWH)	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL
1 PHASE	1155.5	62.074	1754	84.489
3 PHASE	706	37.926	322	15.511
TOTAL	1,861.5	100.00	2076	100.00

FORECAST:	PERCENT OF TOTAL	SALES (MWH)	PERCENT OF TOTAL	NUMBER OF BILLS
1 PHASE	62.074	1,210.1	84.489	1,906
3 PHASE	37.926	739.3	15.511	350
TOTAL	100.00	1,949.4	100.00	2,256

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR PRIMARY SUPPLY VOLTAGE SERVICE

	AT PRESENT RATES		AT PROPOSED RATES	
	RECORDED	FORECAST	RECORDED	FORECAST
SALES, MWH				
TOTAL G:	1861.5	1,949.4		1,949.4
PRIMARY SERVICE	0.0	0.0		0
PERCENT OF TOTAL	0.000			

	BILLING UNITS MWH	PRESENT RATES UNIT PRICE $/KWH	PRESENT RATES REVENUES $1000S	PROPOSED RATES UNIT PRICE $/KWH	PROPOSED RATES REVENUES $1000S
ENERGY CHARGE:	0	20.4188	0	35.4062	0.0
		% ADJ.		% ADJ.	
PRIMARY SERV. ADJ.:		-2	0.0	-1.1	0.0

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR BILLING LOADS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES	PROPOSED RATES
1 PHASE		
MINIMUM CHRG., $/MO.	27.00	35.00
BASE RATE, $/KWH	0.204188	0.35406
F.O.A., $/KWH	0.13913	0.00000
CUSTOMER CHRG., $/MO	22.00	30.00
TRA, $/KWH	0.0000	0.0000
FCS ADJ., $/KWH	0.0000	0.0000
MINIMUM KWH/MONTH	14.56	14.12
MINIMUM CHRG., $/MO.	43.00	50.00
BASE RATE, $/KWH	0.204188	0.35406
F.O.A., $/KWH	0.13913	0.00000
CUSTOMER CHRG., $/MO	38.00	45.00
TRA, $/KWH	0.0000	0.0000
FCS ADJ., $/KWH	0.0000	0.0000
MINIMUM KWH/MONTH	14.56	14.12

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR BILLING LOADS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES		PROPOSED RATES	
	RECORDED	FORECAST	RECORDED	FORECAST
SALES, MWH				
TOTAL G	1861.5	1,949.4	1861.5	1,949.4
LT/EQ TO MIN. KWH				
1 PHASE	1.3	1.4	1.3	1.4
3 PHASE	0.0	0.0	0.0	0.0
TOTAL	1.3	1.4	1.3	1.4
% OF TOTAL	0.072	0.072	0.072	0.072
NUMBER OF BILLS				
TOTAL G	2076	2,256	2076	2,256
LT/EQ TO MIN. KWH				
1 PHASE	236	257	236	257
3 PHASE	15	16	15	16
TOTAL	251	273	251	273
% OF TOTAL	12.09	12.10	12.09	12.10

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSMENT
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES			PROPOSED RATES		
	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000s	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000s
IF NO PROVISION FOR MIN. CHRG.:						
BASE ENERGY CHRG	1.4	20.4188	0.3	1.4	35.4062	0.5
F.O.A. ADJ.	1.4	13.913	0.2	1.4	0.000	0.0
FCS ADJUSTMENT	1.4	0.000	0.0	1.4	0.000	0.0
SUBTOTAL			0.5			0.5
	BILLS	$/MONTH		BILLS	$/MONTH	
CUSTOMER CHARGE						
1 PHASE	257	22.00	5.7	257	30.00	7.7
3 PHASE	16	38.00	0.6	16	45.00	0.7
	273		6.3	273		8.4
TOTAL			6.8			8.9
	BILLS	$/MONTH		BILLS	$/MONTH	
AS BILLED WITH MINIMUM CHARGE:						
1 PHASE	257	27.00	6.9	257	35.00	9.0
3 PHASE	16	43.00	0.7	16	50.00	0.8
SUBTOTAL			7.6			9.8
MINIMUM BILL ADJ.			0.8			0.9

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

	BILLING UNITS (MWH)	PRESENT RATES UNIT PRICE $/KWH	PRESENT RATES REVENUES $1000S	BILLING UNITS (MWH)	PROPOSED RATES UNIT PRICE $/KWH	PROPOSED RATES REVENUES $1000S
ENERGY CHARGE:						
0 - 200 KWH/KW	3787.9	20.6089	780.6	4101.6	34.9321	1,432.8
201 - 400 KWH/KW	2,062.5	19.4319	400.8	2,033.4	33.7551	686.4
> 400 KWH/KW	364.2	16.4719	60.0	79.6	30.7951	24.5
TOTAL	6214.6		1,241.4	6214.6		2,143.7
DEMAND CHARGE:						
KW, BILLED	22108	5.75	127.1	22898	9.00	206.1
CUSTOMER CHARGE:						
1 PHASE	65	35.00	2.3	65	45.00	2.9
3 PHASE	367	50.00	18.4	367	60.00	22.0
SUBTOTAL	432		20.7	432		24.9
ADJUSTMENTS:						
MISCELLANEOUS*			0.0			(2.0)
FUEL OIL ADJ.	6214.6	13.9130	864.6	6214.6	0.0000	0.0
TEMP RATE DECR.		0.0000	0.0		0.0000	0.0
			0.0			
TOTAL REVENUE			2,253.8			2,372.7

* INCLUDES SERVICE VOLT. ADJ., SCHEDULE E ADJ., AND RIDER ADJUSTMENTS.

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY PHASE

	MWH SALES		NO. OF BILLS	
RECORDED:	SALES (MWH)	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL
1 PHASE	588.8	9.813	61	15.136
3 PHASE	5,411.2	90.187	342	84.864
TOTAL	6000.0	100.00	403	100.00

FORECAST:	PERCENT OF TOTAL	SALES (MWH)	PERCENT OF TOTAL	NUMBER OF BILLS
1 PHASE	9.813	609.8	15.136	65
3 PHASE	90.187	5604.8	84.864	367
TOTAL	100.00	6,214.6	100.00	432

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS
FOR TOTAL CLASS

	SALES		NUMBER OF BILLS	
RECORDED:	MWH	% OF TOTAL	BILLS	% OF TOTAL
0 - 200 KWH/KW	695.9	11.60	98	24.32
201 - 400 KWH/KW	2,529.2	42.15	198	49.13
> 400 KWH/KW	2,774.9	46.25	107	26.55
TOTAL	6,000.0	100.00	403	100.00

FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	11.60	720.9	24.32	105
201 - 200 KWH/KW	42.15	2,619.5	49.13	212
> 400 KWH/KW	46.25	2,874.2	26.55	115
TOTAL	100.00	6,214.6	100.00	432

AT PROPOSED RATES

ing Sch J Extact Data - 75% at Present; Average Ratchet at Proposed

At Present

	SALES		NUMBER OF BILLS	
RECORDED:	MWH	% OF TOTAL	BILLS	% OF TOTAL
0 - 200 KWH/KW	672.1	14.5954	93	29.9038
201 - 400 KWH/KW	1,929.3	41.8968	145	46.3782
> 400 KWH/KW	2,003.5	43.5079	74	23.7179
TOTAL	4,604.9	100.0001	312	99.9999

FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	14.5954	907.0	29.9038	129
201 - 200 KWH/KW	41.8968	2,603.7	46.3782	200
> 400 KWH/KW	43.5079	2,703.8	23.7179	102
TOTAL	100.0001	6,214.6	99.9999	432

At Proposed

	SALES		NUMBER OF BILLS	
RECORDED:	MWH	% OF TOTAL	BILLS	% OF TOTAL
0 - 200 KWH/KW	704.7	15.3033	96	30.7692
201 - 400 KWH/KW	2,055.5	44.6374	150	48.0769
> 400 KWH/KW	1,844.7	40.0593	66	21.1538
TOTAL	4,604.9	100.0000	312	99.9999

FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	15.3033	951.0	30.7692	133
201 - 200 KWH/KW	44.6374	2,774.0	48.0769	208
> 400 KWH/KW	40.0593	2,489.6	21.1538	91
TOTAL	100.0000	6,214.6	99.9999	432

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING KW
FOR TOTAL CLASS

	RECORDED		KW FORECAST	
LOAD FACTOR BLOCKS	KW	KWH/KW	PRESENT	PROPOSED
0 - 200 KWH/KW	6,538.4	106.43	6,773	7,145
201 - 400 KWH/KW	8,747.5	289.13	9,060	9,728
> 400 KWH/KW	6058.1	458.05	6,275	6,025
TOTAL	21344	281.11	22,108	22,898

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

TOTAL CLASS DETERMINATION OF KW

Using Sch J Extact Data - 75% at Present; Average Ratchet at Proposed

AT PRESENT RATES

	RECORDED		FORECAST	
LOAD FACTOR BLOCKS	KW	KWH/KW	KW	MWH
0 - 200 KWH/KW	6,302.2	106.65	8,504	907.0
201 - 400 KWH/KW	6,595.4	292.52	8,901	2,603.7
> 400 KWH/KW	4,308.2	465.04	5,814	2,703.8
TOTAL	17,205.8	267.64	23,219	6,214.5

AT PROPOSED RATES

	RECORDED		FORECAST	
LOAD FACTOR BLOCKS	KW	KWH/KW	KW	MWH
0 - 200 KWH/KW	6,647.5	106.01	8,971	951.0
201 - 400 KWH/KW	7,081.9	290.25	9,557	2,774.0
> 400 KWH/KW	4,136.0	446.01	5,582	2,489.6
TOTAL	17,865.4	257.75	24,110	6,214.6

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
FOR TOTAL CLASS

PRESENT RATES

	LOAD FACTOR BLOCK (KWH/KW)			
LOAD FACTOR BLOCK	0 - 200	201 - 400	> 400	TOTAL
0 - 200 KWH/KW	720.9	1,812.0	1,255.0	3,787.9
201 - 400 KWH/KW	0.0	807.5	1,255.0	2,062.5
> 400 KWH/KW	0.0	0.0	364.2	364.2
TOTAL	720.9	2,619.5	2,874.2	6,214.6
FORECAST AT PRESENT RATES:				
SALES - MWH	720.9	2,619.5	2,874.2	6,214.6
BILLS	105	212	115	432
KW, BILLED	6,773	9,060	6,275	22,108

PROPOSED RATES

	LOAD FACTOR BLOCK (KWH/KW)			
LOAD FACTOR BLOCK	0 - 200	201 - 400	> 400	TOTAL
0 - 200 KWH/KW	951.0	1,945.6	1,205.0	4,101.6
201 - 400 KWH/KW	0.0	828.4	1,205.0	2,033.4
> 400 KWH/KW	0.0	0.0	79.6	79.6
TOTAL	951.0	2,774.0	2,489.6	6,214.6
FORECAST AT PROPOSED RATES:				
SALES - MWH	951.0	2,774.0	2,489.6	6,214.6
BILLS	133	208	91	432
KW, BILLED	7145	9728	6025	22898

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF BILLING LOADS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES	PROPOSED RATES
1 PHASE		
MINIMUM CHRG., $/MO.	178.75	178.75
BASE RATE, $/KWH	0.20609	0.34932
F.O.A., $/KWH	0.13913	0.00000
CUSTOMER CHRG., $/MO.	35.00	45.00
MINIMUM DEMAND CHARGE	93.75	225
TRA, $/KWH	0	0
MINIMUM KWH/MONTH	144.84	(261.22)
3 PHASE		
MINIMUM CHRG., $/MO.	193.75	193.75
BASE RATE, $/KWH	0.20609	0.34932
F.O.A., $/KWH	0.13913	0.00000
CUSTOMER CHRG., $/MO.	50.00	60.00
MINIMUM DEMAND CHARGE	93.75	225
TRA, $/KWH	0	0
MINIMUM KWH/MONTH	*144.84*	*(261.22)*

Data From ACCESS Billing Data Extract
Lanai Division

75% Ratchet

Total J

	LF	CUM KWH	CUM MWH	Cum kWb	No of Bills
0-200, lower	198.611	668688	668.688	6285.4	93
0-200, upper	203.906	681738	681.738	6349.4	94
201-400	400	2601448	2601.448	12897.6	238
>400					
Total		4604888	4604.888	17205.8	312

Data From ACCESS Billing Extract
Lanai Division

50% Ratchet

Total J

	LF	CUM KWH	CUM MWH	Cum kWb	No of Bills
0-200	200	704678	704.678	6647.5	96
201-400	400	2760228	2760.228	13729.4	246
>400					
Total		4604888	4604.888	17865.4	312

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE H - COMMERCIAL COOKING, HEATING, AIR CONDITIONING, AND REFRIGERATION SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

		PRESENT RATES		PROPOSED RATES	
	BILLING UNITS	UNIT PRICE	REVENUES $1000s	UNIT PRICE	REVENUES $1000S
	MWH	$/KWH		$/KWH	
ENERGY CHARGE:	545	18.0021	98.1	32.8358	179
	KW	$/KW		$/KW	
CAPACITY CHARGE:	1,101	4.50	5.0	8.00	8.8
	BILLS	$/BILL		$/BILL	
CUSTOMER CHARGE:					
1 PHASE	24	27.00	0.6	40.00	1.0
3 PHASE	24	43.00	1.0	55.00	1.3
SUBTOTAL	48		1.6		2.3
ADJUSTMENTS:	MWH	$/KWH		$/KWH	
FUEL OIL ADJ.	545	13.9130	75.8	0.000	0.0
TEMP RATE DECR.	545	0.0000	0	0.000	0.0
SCHEDULE E ADJ.			0.0		-0.1
REVENUE ADJ.					0.0
INTERIM INCREASE			0.0		
TOTAL REVENUES			180.5		190.0

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE H - COMMERCIAL COOKING, HEATING, AIR CONDITIONING, AND REFRIGERATION SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES & BILLS BY SERVICE TYPE

	NO. OF BILLS		MWH SALES	
	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES	PERCENT OF TOTAL
RECORDED:				
RATE H: NON-DEMAND	25	51.020	135	25.084
RATE K: DEMAND	24	48.980	403.2	74.916
TOTAL	49	100.00	538.2	100.00

	NO. OF BILLS		MWH SALES	
	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES
FORECASTS:				
RATE H: NON-DEMAND	51.020	24	25.084	136.7
RATE K: DEMAND	48.980	24	74.916	408.3
TOTAL	100.00	48	100.00	545.0

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE H - COMMERCIAL COOKING, HEATING, AIR CONDITIONING, AND REFRIGERATION SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY PHASE

RECORDED:	NUMBER OF BILLS	PERCENT OF TOTAL	BILLED KW	KWH/KW
RATE H: NON-DEMAND				
1 PHASE	25	100.000	244.6	
3 PHASE	0	0.000	0	
TOTAL	25	100.00	244.6	
RATE K: DEMAND				
1 PHASE	0	0.000	0	
3 PHASE	24	100.000	843	
TOTAL	24	100.00	843	
RATES H & K TOTAL				
1 PHASE	25	51.020	244.6	
3 PHASE	24	48.980	843	
TOTAL	49	100.00	1087.6	494.85

FORECASTS:	PERCENT OF TOTAL	NUMBER OF BILLS	
1 PHASE	51.020	24	
3 PHASE	48.980	24	
TOTAL	100.00	48	1,101

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE H - COMMERCIAL COOKING, HEATING, AIR CONDITIONING, AND REFRIGERATION SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY PHASE

FORECAST:	PERCENT OF TOTAL	NUMBER OF BILLS
RATE H: NON-DEMAND		
1 PHASE	100.000	24
3 PHASE	0.000	0
TOTAL	100.00	24
RATE K: DEMAND		
1 PHASE	0.000	0
3 PHASE	100.000	24
TOTAL	100.00	24
RATES H & K TOTAL		
1 PHASE	50.000	24
3 PHASE	50.000	24
TOTAL	100.00	48

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUES FOR TOTAL CLASS

	PRESENT RATES			PROPOSED RATES		
	BILLING UNITS	UNIT PRICE	REVENUES $1000s	BILLING UNITS	UNIT PRICE	REVENUES $1000s
ENERGY CHARGE:	(MWH)	$/KWH		(MWH)	$/KWH	
0 - 200 KWH/KW	3,852.6	18.8358	725.7	3,852.6	32.1715	1,239.4
201 - 400 KWH/KW	3,852.6	17.2958	666.3	3,852.6	30.6315	1,180.1
> 400 KWH/KW	2,257.5	15.5858	351.8	2,257.5	28.9215	652.9
SUBTOTAL	9,962.7		1,743.8	9,962.7		3072.4
DEMAND CHARGE:	(KW)	$/KW		(KW)	$/KW	
0 - 500 KW	10,754	8.50	91.4	10,754	22.00	236.6
501 - 1500 KW	8,671	8.00	69.4	8,671	20.00	173.4
1501 - 5000 KW	0	8.00	0.0	0	20.00	0.0
> 5000 KW	0	8.00	0.0	0	20.00	0.0
SUBTOTAL	19,425		160.8	19,425		410.0
	BILLS	$/BILL		BILLS	$/BILL	
CUSTOMER CHARGE:	24	200.00	4.8	24	200.00	4.8
SUBTOTAL			1,909.4			3,487.2
SPECIAL CONTRACT			894.7			941.9
	(MWH)			(MWH)		
FUEL OIL REV.	9962.7	13.9130	1,386.1	9,962.7	0.0000	0.0
MISC ADJ.*			-51.5			-72.1
INTERIM RATE INCREASE			0.0			
TOTAL REVENUES			4,138.7			4,357.0

*INCLUDES SERVICE VOLTAGE ADJ., POWER FACTOR ADJ., SCHED. E ADJ.

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES & BILLS BY SUPPLY VOLTAGE

RECORDED:	NUMBER OF BILLS	MWH SALES	MWH SALES % OF TOTAL
TP	0	0.0	0
DP	12	6,711.4	75.67
TS	0	0.0	0
DS	0	0.0	0
NWK	0	0.0	0
SEC	12	2,157.8	24.33
TOTAL	24	8,869.2	

FORECASTS:		
TP	0	0.0
DP	12	7,991.4
TS	0	0.0
DS	0	0.0
NWK	0	0.0
SEC	12	1,971.3
TOTAL	24	9,962.7

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING KW BY LF BLOCKS

	RECORDED		FORECASTS	
TYPE OF CUSTOMERS:	KW	KWH/KW	KW	KWH/KW
TP	0.0	0.00	0	0.00
DP	13,065.0	513.69	15,557	513.69
TS	0.0	0.00	0	0.00
DS	0.0	0.00	0	0.00
NWK	0.0	0.00	0	0.00
SEC	4,234.0	509.64	3,868	509.64
TOTAL	17,299.0	512.70	19,425	512.70

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES BY LOAD FACTOR BLOCK
DISTRIBUTION PRIMARY SUPPLY SERVICE.

	RECORDED		FORECASTS	
	MWH	% OF TOTAL	MWH	% OF TOTAL
SALES, MWH				
0 - 200 KWH/KW	215.4	3.21	256.5	3.21
201 - 400 KWH/KW	215.4	3.21	256.5	3.21
> 400 KWH/KW	6,280.6	93.58	7,478.4	93.58
TOTAL	6711.4	100.00	7,991.4	100.00

KW BILLED	KW	KWH/KW	KW
0 - 200 KWH/KW	466.6	461.64	556
201 - 400 KWH/KW	466.6	461.64	556
> 400 KWH/KW	12131.8	517.70	14,445
TOTAL	13,065.0		15,557

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
DISTRIBUTION PRIMARY SUPPLY SERVICE.

	LOAD FACTOR BLOCKS (KWH/KW)			
	0 -200	201 - 400	> 400	TOTAL
0 - 200 KWH/KW	111.2	111.2	2,889.0	3,111.4
201 - 400 KWH/KW	111.2	111.2	2,889.0	3,111.4
> 400 KWH/KW	34.1	34.1	1,700.4	1,768.6
SUBTOTAL	256.5	256.5	7,478.4	7,991.4
FORECASTS:				
SALES, MWH	256.5	256.5	7,478.4	7,991.4
KW	556	556	14,445	15,557

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
DISTRIBUTION PRIMARY SUPPLY SERVICE

	UPPER LIM. OF BLK. AS % OF AVE. USE/BILL	CUM UNIT @ EA. UPPER LIM. AS % OF TOTAL	BILLED IN EA. BLOCK	UNITS BILLED IN EA. BLOCK
DEMAND CHARGE:				
0 - 500 KW	38.57	38.57	38.57	6,000
501 - 1500 KW	115.70	100.00	61.43	9,557
1501 - 5000 KW			0.00	0
> 5000 KW			0.00	0
TOTAL			100.00	15,557
ENERGY CHARGE:				
0 - 200 KWH/KW				3,111.4
201 - 400 KWH/KW				3,111.4
> 400 KWH/KW				1,768.6
TOTAL				7,991.4

FORECASTS:

SALES, MWH	7,991.4
BILLS	12
KW	15,557
KWH/BILL	665,950
KW/BILL	1,296.42

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF DISTRIBUTION PRIMARY VOLTAGE ADJUSTMENT

		PRESENT RATES		PROPOSED RATES	
	BILLING UNITS	UNIT PRICE	REVENUES $1000S	UNIT PRICE	REVENUES $1000S
DEMAND CHARGE:	KW	$/KW		$/KW	
0 - 500 KW	6,000	8.50	51.0	22.00	132.0
501 - 1500 KW	9,557	8.00	76.5	20.00	191.1
1501 - 5000 KW	0	8.00	0.0	20.00	0.0
> 5000 KW	0	8.00	0.0	20.00	0.0
SUBTOTAL	15,557		127.5		323.1
ENERGY CHARGE:	MWH	$/KWH		$/KWH	
0 - 200 KWH/KW	3,111.4	18.8358	586.1	32.1715	1,001.0
201 - 400 KWH/KW	3,111.4	17.2958	538.1	30.6315	953.1
> 400 KWH/KW	1,768.6	15.5858	275.7	28.9215	511.5
SUBTOTAL	7,991.4		1,399.9		2,465.6
TOTAL ENERGY & DEMAND			1,527.4		2,788.7
DP VOLTAGE ADJUSTMENT		-2.0%	(30.5)	-1.1%	(30.7)

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUES FOR SPECIAL CONTRACT CUSTOMER
(DOLE LANAI)

		PRESENT RATES		PROPOSED RATES	
	BILLING UNITS	UNIT PRICE	REVENUES $1000S	UNIT PRICE	REVENUES $1000S
DEMAND CHARGE:	KW	$/KW		$/KW	
0 - 500 KW	0	0.00	0.0	0.00	0.0
501 - 1500 KW	0	0.00	0.0	0.00	0.0
1501 - 5000 KW	0	0.00	0.0	0.00	0.0
> 5000 KW	0	0.00	0.0	0.00	0.0
SUBTOTAL	0		0.0		0.0
ENERGY CHARGE:	MWH	$/KWH		$/KWH	
0 - 200 KWH/KW			0.0	0.000	0.0
201 - 400 KWH/KW			0.0	0.000	0.0
> 400 KWH/KW			0.0	0.000	0.0
SUBTOTAL	2,811.2	15.4929	435.5	31.0833	873.8
TOTAL ENERGY & DEMAND			435.5		873.8
	BILLS	$/BILL		$/BILL	
CUSTOMER CHARGE	12	0.00	0.0	0.00	0.0
ADJUSTMENTS					
DP ADJ. (DMD + ENE)		0	0.0%	0.0%	0
FUEL OIL ADJ.	2,811.2	16.3360	459.2	2.4230	68.1
TEMP RATE DECR	2,811.2	0.0000	0.0	0.0000	0.0
SUBTOTAL			459.2		
TOTAL REVENUE			894.7		941.9

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR POWER FACTOR ADJUSTMENT

GWH	8.8692
RKVAH	2.4318
POWER FACTOR	96.44

	PRESENT RATES	PROPOSED RATES
CALCULATED PF (%)	96	96
BASE PF (%)	85	85
DIFF.	(11)	-11
ADJ. FOR EA. 1% DIFF	0.001	0.001
PF ADJ. RATE	(0.011)	(0.011)
TOTAL DMD/ENERGY CHR	1,904.6	3,482.4
POWER FACTOR ADJ.	(21.0)	(38.3)

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
FOR TOTAL CLASS

	UPPER LIM. OF BLK. AS % OF AVE. USE/BILL	CUM UNIT @ EA. UPPER LIM. AS % OF TOTAL	% UNITS BILLED IN EA. BLOCK	UNITS BILLED IN EA. BLOCK
DEMAND CHARGE:				
0 - 500 KW	61.78	55.36	55.36	10,754
501 - 1500 KW		100.00	44.64	8,671
1501 - 5000 KW			0.00	0
> 5000 KW			0.00	0
TOTAL			100.00	19,425
ENERGY CHARGE:				
0 - 200 KWH/KW		38.67	38.67	3,852.6
201 - 400 KWH/KW		77.34	38.67	3,852.6
> 400 KWH/KW		100.00	22.66	2,257.5
TOTAL			100.00	9,962.7

FORECASTS:

SALES, MWH	9,962.7
BILLS	24
KW	19,425
KWH/BILL	415112.5
KW/BILL	809.38

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

		PRESENT RATES		PROPOSED RATES	
	BILLING UNITS (MWH)	UNIT PRICE CENTS/KWH	REVENUES $1000S	UNIT PRICE CENTS/KWH	REVENUES $1000S
ENERGY CHARGE:					
0 - 150 KWH/KW	51.0	21.0335	10.7	36.8235	18.8
> 150 KWH/KW	62.0	16.5415	10.3	32.3315	20.0
SUBTOTAL	113.0		21		38.8
ADJUSTMENTS*			15.8		-0.1
INTERIM RATE INCREASE			0		
TOTAL REVENUES			36.8		38.7

* INCLUDES FUEL OIL ADJUSTMENT

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DETERMINATION OF TEST-YEAR BILLING KW

	RECORDED		FORECAST	
	KWH	%	KWH	%
TOTAL F SALES				
METERED ACCTS.	686	0.61	693.6	0.61
FLAT ACCTS.	112053	99.39	113006.4	99.39
TOTAL	112739	100.00	113700	100.00

	RECORDED		FORECAST	
	KW	KWH/KW	KWB	MWH
TOTAL F SALES				
METERED ACCTS.	9.6	71.46	10	0.7
FLAT ACCTS.	334.8	340.00	332	113.0
TOTAL	344.4	327.35	342	113.7

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS

	CUM AT EACH UPPER LIMIT AS % OF TOTAL	PERCENT OF UNITS IN EACH BLOCK	MWH BILLED IN EACH BLOCK
METERED ACCOUNTS:			
0 - 150 KWH/KW	100.00	100	0.7
OVER 150 KWH/KW	100.00	0	0
TOTAL		100.00	0.7
FLAT ACCOUNTS:			
0 - 150 KWH/KW	44.82	44.82	50.6
OVER 150 KWH/KW	100.00	55.18	62.4
TOTAL		100.00	113.0
METERED + FLAT ACCTS.:			
0 - 150 KWH/KW			51.0
OVER 150 KWH/KW			62.0
TOTAL			113.0

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DETERMINATION OF TEST-YEAR BILLING LOADS

	RECORDED	FORECASTS
TOTAL F		
SALES, MWH	112.7	113.7
BILLED KW	344.4	342.0
KWH/KW	327.35	332.50
NUMBER OF BILLS	36	36
SECONDARY METERING		
SALES, MWH	0.0	0.0
% OF TOTAL	0.000	0.000
BILLED KW	344.4	342.0
KWH/KW	0.00	332.50
NUMBER OF BILLS	0	0
% OF TOTAL	0.00	0.00

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES	PROPOSED RATES
	FIX CHRG	FIX CHRG
MINIMUM CHRG.,$/MO.	25.00	25.00
BASE ENERGY ,$/KWH	0.210335	0.368235
F.O.A., $/KWH	0.13913	0.00000
TRA, $/KWH	0.0000	0.0000
FCS ADJ., $/KWH	0.0000	0.0000
MINIMUM KWH/MO.	71.54	67.89

	PRESENT RATES		PROPOSED RATES	
	RECORDED	FORECAST	RECORDED	FORECAST
SALES, MWH				
TOTAL F	112.739	113.70	112.739	113.70
LT/EQ TO MIN. KWH	1.4	1.4	0.9	0.9
% OF TOTAL	1.242	1.242	0.798	0.798
NUMBER OF BILLS				
TOTAL F	36	36	36	36
LT/EQ TO MIN. KWH	23	23	16	16
% OF TOTAL	63.889	63.889	44.444	44.444

MAUI ELECTRIC COMPANY, LTD. - LANAI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR REVENUE ADJSUTMENTS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES		
	UNITS BILLED (MWH)	UNIT PRICE CENTS/KWH	REVENUES $1000S
IF NO PROVISION FOR MINIMUM CHRG.:			
BASE ENERGY CHARGE	1.4	21.0335	0.3
F.O.A. ADJUSTMENT	1.4	13.9130	0.2
TRA ADJUSTMENT	1.4	0	0.0
TOTAL			0.5
	BILLS	$/BILL	
AS BILLED WITH MINIMUM CHARGE:	23	25.00	0.6
MINIMUM BILL ADJ.:			0.1

	PROPOSED RATES		
	UNITS BILLED (MWH)	UNIT PRICE CENTS/KWH	REVENUES $1000S
IF NO PROVISION FOR MINIMUM CHRG.:			
BASE ENERGY CHARGE	0.9	36.824	0.3
F.O.A. ADJUSTMENT	0.9	0.0000	0.0
TRA ADJUSTMENT	0.9	0.0000	0.0
TOTAL			0.3
	BILLS	$/BILL	
AS BILLED WITH MINIMUM CHARGE:	16	25.00	0.4
MINIMUM BILL ADJ.:			0.1

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

	PRESENT RATES			PROPOSED RATES		
	BILLING UNITS	UNIT PRICE	REVENUES $1000s	BILLING UNITS	UNIT PRICE	REVENUES $1000s
	MWH	$/KWH		MWH	$/KWH	
ENERGY CHARGE:						
NON-FUEL	13077.0	12.039	1,574.4			
0-250 kWh				1316.9	12.5944	829.8
250 - 750 kWh				8012.1	13.7500	736.5
Over 250 kWh				3748.0	14.0055	158.5
Total				5064.9		1,724.8
BASE FUEL			706.0			2,848.0
SUBTOTAL ENERGY	13077.0	5.399	2,280.4		21.7788	4,572.8
	BILLS	$/BILL			$/BILL	
CUSTOMER CHARGE:	30552	7.50	229.1		7.50	229.1
ADJUSTMENTS:						
FUEL OIL ADJ.	13077.0	15.7740	2,062.8	0	0.0000	0.0
MISCELLANEOUS*			(15.6)			(4.9)
INTERIM RATE INCREASE			0.0			
TOTAL REVENUES			4,556.7			4,797.0

* INCLUDES SCHEDULE E ADJ., APT-HOUSE DISCOUNT, AND MINIMUM BILL ADJ.

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES & BILLS BY CUSTOMER GROUP

	NO. OF BILLS		MWH SALES	
	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES	PERCENT OF TOTAL
RECORDED:				
RESIDENTIAL-R	29841	99.04	12,725.8	98.43
EMPLOYEES-E	289	0.96	202.7	1.57
MULTI-RESIDENTIAL	0	0.00	0.0	0.00
10% APT. HOUSE	1020	3.39	162.7	1.26
TOTAL R AND E	30130	100.00	12,928.5	100.00

	NO. OF BILLS		MWH SALES	
	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES
FORECASTS:				
RESIDENTIAL-R	99.04	30,259	98.43	12,872
EMPLOYEES-E	0.96	293	1.57	205
MULTI-RESIDENTIAL	0.00	0	0.00	0
10% APT. HOUSE	3.39	1,036	1.26	165
TOTAL R AND E	100.00	30,552	100.00	13,077

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES AND BILLS

RECORDED:	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES	PERCENT OF TOTAL
Usage Per Month:				
0 - 250 kWh	9333	30.9758	1,301.9	10.0700
250 - 750 kWh	17357	57.6070	7,921.1	61.2685
Over 750 kWh	3440	11.4172	3,705.5	28.6615
TOTAL R AND E	30130	100.0000	12,928.5	100.0000

FORECAST:	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES
Usage Per Month:				
0 - 250 kWh	30.9758	9,464	10.0700	1,316.9
250 - 750 kWh	57.6070	17,600	61.2685	8,012.1
Over 750 kWh	11.4172	3,488	28.6615	3,748.0
TOTAL R AND E	100.0000	30,552	100.0000	13,077.0

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR BILLING LOADS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES	PROPOSED RATES
MINIMUM CHRG.,$/MO.	17.00	17.00
BASE RATE,$/KWH	0.174383	0.343732
F.O.A.,$/KWH	0.15774	0.00000
CUSTOMER CHRG, $/MO	7.50	7.50
TRA, $/KWH	0.00000	0.00000
FCS ADJ., $/KWH	0.00000	0.00000
MINIMUM KWH/MONTH	28.60	27.64

	PRESENT RATES		PROPOSED RATES	
	RECORDED	FORECAST	RECORDED	FORECAST
SALES, MWH				
TOTAL R,E	12,928.5	13,077.0	12,928.5	13,077.0
LT/EQ TO MIN. KWH	4.7	5.2	4.4	3.9
% OF TOTAL	0.04		0.03	
NUMBER OF BILLS				
TOTAL R,E	30130	30,552	30,130	30,552
LT/EQ TO MIN. KWH	1129	1,146	1,118	1,133
% OF TOTAL	3.75		3.71	

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENTS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES		
IF NO PROVISION FOR MINIMUM CHRG.:	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000s
BASE ENERGY CHARGE	5.2	17.4383	0.9
F.O.A. ADJUSTMENT	5.2	15.774	0.8
TRA ADJUSTMENT	5.2	0.000	0.0
FCS ADJ.	5.2	0.000	0.0
SUBTOTAL			1.7
	BILLS	$/MONTH	
CUSTOMER CHARGE	1,146	7.50	8.6
TOTAL			10.3
	BILLS	$/MONTH	
AS BILLED WITH MINIMUM CHARGE:	1,146	17.00	19.5
MINIMUM BILL ADJ.			9.2

	PROPOSED RATES		
IF NO PROVISION FOR MINIMUM CHRGE.:	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000s
BASE ENERGY CHARGE	3.9	34.373	1.3
F.O.A. ADJUSTMENT	3.9	0.000	0.0
TRA ADJUSTMENT	3.9	0.000	0.0
FCS ADJ.	3.9	0.000	0.0
SUBTOTAL			1.3
	BILLS	$/MONTH	8.5
CUSTOMER CHARGE	1,133	7.50	
TOTAL			9.8
AS BILLED WITH MINIMUM CHARGE	BILLS 1,133	$/MONTH 17.00	19.3
MINIMUM BILL ADJ.			9.5

D

AUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR EMPLOYEE DISCOUNT ADJUSTMENT

	RECORDED	FORECAST
MWH SALES:		
0-250 KWH	3.2	3
250-750 KWH	76.5	77
750-825 KWH	15.7	16
>825 KWH	107.3	109
TOTAL	202.7	205
NUMBER OF BILLS:		
0-250 KWH	24	24
250-750 KWH	149	152
750-825 KWH	20	20
>825 KWH	96	97
TOTAL	289	293

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR EMPLOYEE DISCOUNT ADJUSTMENT

EMPLOYEE DISCOUNT	UNITS BILLED (MWH)	PRESENT RATES UNIT PRICE $/KWH	PRESENT RATES REVENUES $1000s	PROPOSED RATES UNIT PRICE $/KWH	PROPOSED RATES REVENUES $1000s
ENERGY CHARGE					
<825 KWH					
0-250 KWH	3			12.5944	0.4
250-750 KWH	77			13.7500	10.6
750-825 KWH	16			14.0055	2.2
Total	96				13.2
Total	96	17.4383	16.7		13.2
Base Fuel Energy	96			21.7788	20.9
FOA	96	15.7740	15.1	0.0000	0.0
SUBTOTAL			31.8		34.1
	BILLS				
CUSTOMER CHARGE	196	7.50	1.5	7.50	1.5
TOTAL			33.3		35.6
-1/3% EMP. ADJ.			(11.1)		(11.9)

EMPLOYEE DISCOUNT LIMITED to 825 KWH	UNITS *BILLED* (MWH)	PRESENT RATES UNIT *PRICE* $/KWH	PRESENT RATES *REVENUES* $1000s	PROPOSED RATES UNIT *PRICE* $/KWH	PROPOSED RATES *REVENUES* $1000s
ENERGY CHARGE					
Over 825					
0-250 KWH	24.3			12.5944	3.1
250-750 KWH	48.5			13.7500	6.7
More than 750 KWH	7.2			14.0055	1.0
Over 825 kWh Total	80.0				10.8
Total	80.0	17.4383	14.0		10.8
Base Fuel Energy	80.0			21.7788	17.4
FOA	80.0	15.7740	12.6	0.0000	0.0
SUBTOTAL			26.6		28.2
	BILLS				
CUSTOMER CHARGE	97	7.50	0.7	7.50	0.7
TOTAL			27.3		28.9
-1/3% EMP. ADJ.			(9.1)		(9.6)
TOTAL EMPLOYEE ADJ:			(20.2)		(21.5)

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR BILLING LOADS
FOR APARTMENT HOUSE COLLECTION ARRANGEMENT

	PRESENT RATES	PROPOSED RATES
MAXIMUM DISC.,$/MO.	65.00	65.0
BASE ENERGY ,$/KWH	0.174383	0.343732
F.O.A., $/KWH	0.15774	0.00000
CUST. CHG., $/BILL	7.50	7.50
TRA, $/KWH	0.00000	0.00000
FCS ADJ., %	0.00000	0.00000
KWH BLOCK @ MAX.DISC	173.13	167.28

	PRESENT RATES		PROPOSED RATES	
	RECORDED (MWH)	FORECAST (MWH)	RECORDED (MWH)	FORECAST (MWH)
SALES:				
0-173 (167) KWH	47.499	48.2	42.7	43
>173 (167) KWH	115.201	116.8	120.0	122
TOTAL	162.7	165.0	162.7	165
NUMBER OF BILLS:				
0-173 (167) KWH	645	655	617	627
>173 (167) KWH	375	381	403	409
TOTAL	1020	1,036	1,020	1,036

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE R - RESIDENTIAL SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR APARTMENT HOUSE COLLECTION ARRANGEMENT

	UNITS BILLED (MWH)	PRESENT RATES UNIT PRICE $/KWH	REVENUES $1000s
NO. W/IN MAX. DISC.			
ENERGY CHARGE	48	17.4383	8.4
	(BILLS)	($/MO)	
CUSTOMER CHARGE	655	7.50	4.9
TOTAL BASE			13.3
FCS (%)		0	0.0
FOA (¢/kWh)	48	15.7740	7.6
Total of Bills subject to 10% Discount			20.9
10% APT. DISC.			(2.1)
NO. > MAX. DISC.	381	6.50	(2.5)
APT.-HOUSE REV. ADJ.			(4.6)

	UNITS BILLED (MWH)	PROPOSED RATES UNIT PRICE $/KWH	REVENUES $1000s
NO. W/IN MAX. DISC.			
ENERGY CHARGE	43	34.373	14.8
	(BILLS)	($/MO)	
CUSTOMER CHARGE	627	7.50	4.7
TOTAL BASE			19.5
FCS (%)		0	0.0
FOA (¢/kWh)	43	0.0000	0.0
Total Bills Subject to 10% Discount			19.5
10% APT. DISC.			(2.0)
	(BILLS)	($/MO)	
NO. > MAX. DISC.	409	6.50	(2.7)
APT.-HOUSE REV. ADJ.			(4.7)

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

	BILLING UNITS (MWH)	PRESENT RATES UNIT PRICE $/KWH	PRESENT RATES REVENUES $1000S	PROPOSED RATES UNIT PRICE $/KWH	PROPOSED RATES REVENUES $1000S
ENERGY CHARGE:	3953.9	23.7929	940.7	41.7728	1651.7
	BILLS	$/BILL		$/BILL	
CUSTOMER CHARGE:					
1 PHASE	4181	22.00	92	23.00	96.2
3 PHASE	1351	33.00	44.6	34.00	45.9
ADJUSTMENTS:					
FOA			623.7		0.0
FCS			0		0
MISCELLANEOUS *			2.72		-0.3
TRD			0		0.0
INTERIM RATE INCREASE			0		
TOTAL REVENUES			1703.72		1793.5

* INCLUDES MINIMUM BILL ADJ. AND EMPLOYEE DISCOUNT ADJ.

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

DISTRIBUTION OF SALES AND BILLS BY TYPE OF SERVICE

	RECORDED	FORECASTED
TOTAL G:		
SALES, MWH	3794.8	3,953.9
NO. OF BILLS	5191	5,532

	MWH SALES		NO. OF BILLS	
RECORDED:	SALES (MWH)	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL
1 PHASE	2266.2	59.719	3923	75.573
3 PHASE	1,528.6	40.281	1268	24.427
TOTAL	3794.8	100.00	5191	100.00

FORECAST:	PERCENT OF TOTAL	SALES (MWH)	PERCENT OF TOTAL	NUMBER OF BILLS
1 PHASE	59.719	2,361.2	75.573	4,181
3 PHASE	40.281	1,592.7	24.427	1,351
TOTAL	100.00	3,953.9	100.00	5,532

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR PRIMARY SUPPLY VOLTAGE SERVICE

	AT PRESENT RATES		AT PROPOSED RATES	
	RECORDED	FORECAST	RECORDED	FORECAST
SALES, MWH				
TOTAL G:	3794.8	3,953.9		3,953.9
PRIMARY SERVICE	0.0	0.0		0
PERCENT OF TOTAL	0.000			

	BILLING UNITS MWH	PRESENT RATES UNIT PRICE $/KWH	PRESENT RATES REVENUES $1000S	PROPOSED RATES UNIT PRICE $/KWH	PROPOSED RATES REVENUES $1000S
ENERGY CHARGE:	0	23.7929	0	41.7728	0.0
		% ADJ.		% ADJ.	
PRIMARY SERV. ADJ.:		-2	0.0	-1.1	0.0

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR BILLING LOADS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES	PROPOSED RATES
1 PHASE		
MINIMUM CHRG., $/MO.	27.00	28.00
BASE RATE, $/KWH	0.237929	0.41773
F.O.A., $/KWH	0.15774	0.0000
CUSTOMER CHRG., $/MO	22.00	23.00
TRA, $/KWH	0.0000	0.0000
FCS ADJ., $/KWH	0.0000	0.0000
MINIMUM KWH/MONTH	12.64	11.97
3 PHASE		
MINIMUM CHRG., $/MO.	38.00	39.00
BASE RATE, $/KWH	0.237929	0.417728
F.O.A., $/KWH	0.15774	0.00000
CUSTOMER CHRG., $/MO	33.00	34.00
TRA, $/KWH	0	0.000000
FCS ADJ., $/KWH	0	0
MINIMUM KWH/MONTH	12.64	11.97

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR BILLING LOADS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES		PROPOSED RATES	
	RECORDED	FORECAST	RECORDED	FORECAST
SALES, MWH				
TOTAL G	3794.8	3,953.9	3794.8	3,953.9
LT/EQ TO MIN. KWH				
1 PHASE	1.1	1.1	0.9	1.0
3 PHASE	0.1	0.1	0.1	0.1
TOTAL	1.168	1.2	1.012	1.1
% OF TOTAL	0.031	0.031	0.027	
NUMBER OF BILLS				
TOTAL G	5191	5,532	5191	5,532
LT/EQ TO MIN. KWH				
1 PHASE	495	527	482	514
3 PHASE	105	112	105	112
TOTAL	600	639	587	626
% OF TOTAL	11.56	11.55	11.31	11.32

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE G - GENERAL SERVICE NON-DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSMENT
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES			PROPOSED RATES		
	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000S	UNITS BILLED (MWH)	UNIT PRICE $/KWH	REVENUES $1000S
IF NO PROVISION FOR MIN. CHRG.:						
BASE ENERGY CHRG	1.2	23.7929	0.3	1.1	41.7728	0.5
F.O.A. ADJ	1.2	15.7740	0.2	1.1	0.0000	0.0
FCS ADJUSTMENT	1.2	0.0000	0.0	1.1	0.0000	0.0
SUBTOTAL			0.5			0.5
	BILLS	$/MONTH		BILLS	$/MONTH	
CUSTOMER CHARGE						
1 PHASE	527	22.00	11.6	514	23.00	11.8
3 PHASE	112	33.00	3.7	112	34.00	3.8
SUBTOTAL	639		15.3	626		15.6
TOTAL			15.8			16.1
	BILLS	$/MONTH		BILLS	$/MONTH	
AS BILLED WITH MINIMUM CHARGE:						
1 PHASE	527	27.00	14.2	514	28.00	14.4
3 PHASE	112	38.00	4.3	112	39.00	4.4
			18.5			18.8
MINIMUM BILL ADJ.			2.7			2.7

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

	BILLING UNITS (MWH)	PRESENT RATES UNIT PRICE $/KWH	PRESENT RATES REVENUES $1000S	BILLING UNITS (MWH)	PROPOSED RATES UNIT PRICE $/KWH	PROPOSED RATES REVENUES $1000S
ENERGY CHARGE:						
0 - 200 KWH/KW	5016	19.620	984.2	5087	34.7806	1,769.3
201 - 400 KWH/KW	2370.6	13.773	326.5	2269.8	28.9336	656.7
> 400 KWH/KW	638.5	11.944	76.3	668.3	27.1046	181.1
TOTAL	8025.1		1,387.0	8025.1		2,607.1
DEMAND CHARGE:			143.5			340.2
DIST. CAP. CHARGE:			0.0			0.0
CUSTOMER CHARGE:						
1 PHASE	255	30.00	7.7	255	32.00	8.2
3 PHASE	693	40.00	27.7	693	42.00	29.1
SUBTOTAL	948		35.4	948		37.3
ADJUSTMENTS: *			1,265.9			(3.5)
INTERIM RATE INCREASE			0.0			
TOTAL REVENUE			2,831.8			2,981.1

* INCLUDES FUEL OIL ADJ. AND EMPLOYEE DISCOUNT ADJ.

R

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY PHASE

	MWH SALES		NO. OF BILLS	
	SALES (MWH)	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL
RECORDED:				
1 PHASE	1,530.1	19.765	240	26.846
3 PHASE	6,211.4	80.235	654	73.154
TOTAL	7,741.5	100.00	894	100.00

	PERCENT OF TOTAL	SALES (MWH)	PERCENT OF TOTAL	NUMBER OF BILLS
FORECAST:				
1 PHASE	19.765	1586.2	26.846	255
3 PHASE	80.235	6438.9	73.154	693
TOTAL	100.00	8,025.1	100.00	948

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS
FOR PRIMARY SUPPLY VOLTAGE SERVICE

	AT PRESENT RATES		AT PROPOSED RATES	
	RECORDED	FORECAST	RECORDED	FORECAST
SALES, MWH				
TOTAL J:	7741.5	8,025.1		8025.1
PRIMARY SERVICE	0.0	0.0		0.0
PERCENT OF TOTAL	0.000			
NUMBER OF BILLS				
TOTAL J:	894	948		948
PRIMARY SERVICE	0	0		0
PERCENT OF TOTAL	0.000			

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS
FOR TOTAL CLASS

	SALES		NUMBER OF BILLS	
RECORDED:	MWH	% OF TOTAL	BILLS	% OF TOTAL
0 - 200 KWH/KW	982.0	12.68	316	35.35
201 - 400 KWH/KW	3,875.5	50.06	440	49.22
> 400 KWH/KW	2,884.0	37.26	138	15.43
TOTAL	7,741.5	100.00	894	100.00

FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	12.68	1,017.6	35.35	335
201 - 200 KWH/KW	50.06	4,017.4	49.22	467
> 400 KWH/KW	37.26	2,990.1	15.43	146
TOTAL	100.00	8,025.1	100.00	948

AT PROPOSED RATES

ing Sch J Extact Data - 75% at Present; Average Ratchet at Proposed

At Present

	SALES		NUMBER OF BILLS	
RECORDED:	MWH	% OF TOTAL	BILLS	% OF TOTAL
0 - 200 KWH/KW	924.3	12.0271	285	33.4507
201 - 400 KWH/KW	3,789.9	49.3133	425	49.8357
> 400 KWH/KW	2,971.1	38.6596	142	16.7136
TOTAL	7,685.3	100.0000	852	100.0000

FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	12.0271	965.2	33.4507	317
201 - 200 KWH/KW	49.3133	3,957.4	49.8357	472
> 400 KWH/KW	38.6596	3,102.5	16.7136	158
TOTAL	100.0000	8,025.1	100.0000	948

At Proposed

	SALES		NUMBER OF BILLS	
RECORDED:	MWH	% OF TOTAL	BILLS	% OF TOTAL
0 - 200 KWH/KW	950.7	12.3706	289	33.9202
201 - 400 KWH/KW	3,968.6	51.6386	433	50.8216
> 400 KWH/KW	2,766.0	35.9908	130	15.2582
TOTAL	7,685.3	100.0000	852	100.0000

FORECAST:	% OF TOTAL	MWH	% OF TOTAL	BILLS
0 - 200 KWH/KW	12.3706	992.8	33.9202	322
201 - 200 KWH/KW	51.6386	4,144.0	50.8216	482
> 400 KWH/KW	35.9908	2,888.3	15.2582	144
TOTAL	100.0000	8,025.1	100.0000	948

J MWH proposed

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING KW
FOR TOTAL CLASS

	RECORDED		KW FORECAST	
LOAD FACTOR BLOCKS	KW	KWH/KW	PRESENT	PROPOSED
0 - 200 KWH/KW	9,852.5	99.67	10,210	10,452
201 - 400 KWH/KW	13,614.3	284.66	14,113	14,921
> 400 KWH/KW	5,670.5	508.60	5,879	5,550
TOTAL	29,137.3	265.69	30,202	30,923

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

TOTAL CLASS DETERMINATION OF KW

Using Sch J Extact Data - 75% at Present; Average Ratchet at Proposed

AT PRESENT RATES

	RECORDED		FORECAST	
LOAD FACTOR BLOCKS	KW	KWH/KW	KW	MWH
0 - 200 KWH/KW	8,920.8	103.61	9,316	965.2
201 - 400 KWH/KW	13,111.3	289.05	13,691	3,957.4
> 400 KWH/KW	5,777.5	514.25	6,033	3,102.5
TOTAL	27,809.6	276.35	29,040	8,025.1

AT PROPOSED RATES

	RECORDED		FORECAST	
LOAD FACTOR BLOCKS	KW	KWH/KW	KW	MWH
0 - 200 KWH/KW	9,133.1	104.10	9,537	992.8
201 - 400 KWH/KW	13,861.9	286.29	14,475	4,144.0
> 400 KWH/KW	5,453.7	507.18	5,695	2,888.3
TOTAL	28,448.7	270.15	29,707	8,025.1

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE J - GENERAL SERVICE DEMAND
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
FOR TOTAL CLASS

PRESENT RATES

	LOAD FACTOR BLOCK (KWH/KW)			
LOAD FACTOR BLOCK	0 - 200	201 - 400	> 400	TOTAL
0 - 200 KWH/KW	1,017.6	2,822.6	1,175.8	5,016.0
201 - 400 KWH/KW	0.0	1,194.8	1,175.8	2,370.6
> 400 KWH/KW	0.0	0.0	638.5	638.5
TOTAL	1,017.6	4,017.4	2,990.1	8,025.1
FORECAST AT PRESENT RATES:				
SALES - MWH	1,017.6	4,017.4	2,990.1	8,025.1
BILLS	335	467	146	948
KW, BILLED	10,210	14,113	5,879	30,202

PROPOSED RATES

	LOAD FACTOR BLOCK (KWH/KW)			
LOAD FACTOR BLOCK	0 - 200	201 - 400	> 400	TOTAL
0 - 200 KWH/KW	992.8	2,984.2	1,110.0	5,087.0
201 - 400 KWH/KW	0.0	1,159.8	1,110.0	2,269.8
> 400 KWH/KW	0.0	0.0	668.3	668.3
TOTAL	992.8	4,144.0	2,888.3	8,025.1
FORECAST AT PROPOSED RATES:				
SALES - MWH	992.8	4,144.0	2,888.3	8,025.1
BILLS	322	482	144	948
KW, BILLED	10,452	14,921	5,550	30,923

Data From ACCESS Billing Data Extract
Molokai Division

75% Ratchet

Total J

	LF	CUM KWH	CUM MWH	Cum kWh	No of Bills
0-200	200	924320	924.32	8920.8	285
201-400, lower	399.346	4707980	4707.98	22016.6	709
201-400, uppe	400.4	4717990	4717.99	22041.6	710
>400					
Total		7685304	7685.304	27809.6	852

Data From ACCESS Billing Extract
Molokai Division

50% Ratchet

Total J

	LF	CUM KWH	CUM MWH	Cum kWb	No of Bills
0-200	200	950721	950.721	9133.1	289
201-400	400	4919304	4919.304	22995	722
>400					
Total		7685304	7685.304	28448.7	852

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE H - COMMERCIAL COOKING, HEATING, AIR CONDITIONING, AND REFRIGERATION SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

		PRESENT RATES		PROPOSED RATES	
	BILLING UNITS	UNIT PRICE	REVENUES $1000s	UNIT PRICE	REVENUES $1000s
	MWH	$/KWH		$/KWH	
ENERGY CHARGE:	1,994.2	14.0975	281.1	30.3625	605.5
	KW	$/KW		$/KW	
CAPACITY CHARGE:	6,265	6.00	37.6	10.00	62.7
	BILLS	$/BILL		$/BILL	
CUSTOMER CHARGE:					
1 PHASE	97	22.00	2.1	22.00	2.1
3 PHASE	287	28.00	8.0	28.00	8.0
SUBTOTAL	384		10.1		10.1
ADJUSTMENTS:*			314.6		-1
INTERIM RATE INCREASE			0.0		
TOTAL REVENUES			643.4		677.3

* *INCLUDES FUEL OIL ADJ., AND SCHEDULE E ADJ.*

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE H - COMMERCIAL COOKING, HEATING, AIR CONDITIONING, AND REFRIGERATION SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY PHASE

	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES	BILLED KW	KWH/KW
RECORDED:					
1 PHASE	98	25.26	345.1	1,244.4	
3 PHASE	290	74.74	1,638.8	4,988.6	
TOTAL	388	100.00	1,983.9	6,233.0	318.29

	PERCENT OF TOTAL	NUMBER OF BILLS		
FORECASTS:				
1 PHASE	25.26	97		
3 PHASE	74.74	287		
TOTAL	100.00	384	1,994.2	6,265.0

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE H - COMMERCIAL COOKING, HEATING, AIR CONDITIONING, AND REFRIGERATION SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUES

		PRESENT RATES		PROPOSED RATES	
	BILLING UNITS	UNIT PRICE	REVENUES $1000S	UNIT PRICE	REVENUES $1000S
	MWH	¢/KWH		¢/KWH	
ENERGY CHARGE:	1,994.2	14.0975	281.1	30.3625	605.5
	KW	$/KW		$/KW	
DEMAND CHARGE:	6,265	6.00	37.6	10.00	62.7
CUSTOMER CHARGE:	BILLS	$/BILL		$/BILL	
1 PHASE	97	22.00	2.1	22.00	2.1
3 PHASE	287	28.00	8.0	28.00	8.0
SUBTOTAL	384		10.1		10.1
	MWH	¢/KWH		¢/KWH	
FUEL OIL ADJ.:	1,994.2	15.7740	314.6	0.000	0.0
UNADJUSTED REVENUES			643.4		678.3
TEMP. RATE DECREASE			0		0
SCHEDULE E ADJ.					(1.0)
INTERIM RATE INCREASE			0.0		
TOTAL REVENUES			643.4		677.3

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

		PRESENT RATES		PROPOSED RATES	
	BILLING UNITS	UNIT PRICE	REVENUES $1000S	UNIT PRICE	REVENUES $1000S
ENERGY CHARGE:	(MWH)	¢/KWH		¢/KWH	
ALL KWH (NIGHT RATE)	865.9	7.1313	61.7	23.0823	199.9
REGULAR P:					
0 - 200 KWH/KW	4,467.3	16.376	731.6	32.3273	1,444.2
201 - 400 KWH/KW	2,743.7	14.276	391.7	30.2273	829.3
> 400 KWH/KW	942.5	7.131	67.2	23.0823	217.6
SUBTOTAL	8153.5		1,190.5		2491.1
TOTAL ENERGY			1,252.2		2691
DEMAND CHARGE:	(KW)	$/KW		$/KW	
ALL KW NIGHT RATE	5786.6	1.70	9.8	3.50	20.3
REGULAR P:					
0 - 500 KW	24,817	5.00	124.1	11.00	273.0
501 - 1500 KW	0	4.85	0.0	10.00	0.0
1501 - 5000 KW	0	4.85	0.0	10.00	0.0
> 5000 KW	0	4.85	0.0	10.00	0.0
SUBTOTAL	24,817		124.1		273.0
TOTAL DEMAND			133.9		293.3
	BILLS	$/BILL		$/BILL	
CUSTOMER CHARGE:					
REGULAR P	132	75.00	9.9	75.00	9.9
NIGHT RATE	36	75.00	2.7	75.00	2.7
TOTAL			12.6		12.6
ADJUSTMENTS:	MWH	¢/KWH		¢/KWH	
FUEL OIL ADJ.	9,019.4	15.7740	1,422.7	0.0000	0.0
TEMP RATE DECR.	9,019.4	0.00	0.0	0.00	0.0
MISCELLANEOUS*	9,019.4		(86.5)		(113.8)
SCHEDULE E ADJ.					-4
INTERIM RATE INCREASE			0.0		
TOTAL REVENUES			2,734.9		2,879.1

* INCLUDES POWER FACTOR, TRANSMISSION VOLTAGE, DISTRIBUTION VOLTAGE AND RIDER ADJUSTMENTS.

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DETERMINATION OF TEST-YEAR BILLING LOADS

	RECORDED:		FORECAST:	
	TOTAL BILLS	PERCENT OF TOTAL	TOTAL BILLS	PERCENT OF TOTAL
SCHEDULE P	152	80.85	132	78.57
NIGHT RATE	36	19.15	36	21.43
TOTAL	188	100.00	168	100.00

	RECORDED:		FORECAST:	
	TOTAL MWH	PERCENT OF TOTAL	TOTAL MWH	PERCENT OF TOTAL
SCHEDULE P	7929.0	90.40	8,153.5	90.40
NIGHT RATE	841.7	9.60	865.9	9.60
TOTAL	8770.7	100.00	9,019.4	100.00

	RECORDED:		FORECAST:	
	TOTAL KW	KWH/KW	TOTAL KW	KWH/KW
SCHEDULE P	24133.0	328.55	24,816.6	328.55
NIGHT RATE	5624.7	149.64	5786.6	149.64
TOTAL	29757.7	294.74	30603.2	294.72

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING KW BY LF BLOCKS

RECORDED:	NUMBER OF BILLS	PERCENT OF TOTAL	TOTAL MWH SALES	PERCENT OF TOTAL
TP	0.0	0.00	0.0	0.00
DP	13.0	6.91	1,072.1	12.22
TS	0.0	0.00	0.0	0.00
DS	0.0	0.00	0.0	0.00
SEC	175.0	93.09	7,698.6	87.78
TOTAL	188.0	100.00	8,770.7	100.00

FORECASTS:	PERCENT OF TOTAL	NUMBER OF BILLS	PERCENT OF TOTAL	MWH SALES
TP	0.000	0	0.000	0.0
DP	7.143	12	12.220	1,102.2
TS	0.000	0	0.000	0.0
DS	0.000	0	0.000	0.0
SEC	92.857	156	87.780	7,917.2
TOTAL	100.000	168	100.000	9,019.4

	RECORDED		FORECASTS	
TYPE OF CUSTOMERS:	KW	KWH/KW	KW	KWH/KW
TP	0.0	0.00	0.0	0.00
DP	3,685.0	290.94	3,788.4	290.94
TS	0.0	0.00	0.0	0.00
DS	0.0	0.00	0.0	0.00
SEC	26,072.7	295.27	26,814.8	295.25
TOTAL	29,757.7	294.74	30,603.2	294.72

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
DISTRIBUTION PRIMARY SUPPLY SERVICE

	UPPER LIM. OF BLK. AS % OF AVE. USE/BILL	CUM UNIT @ EA. UPPER LIM. AS % OF TOTAL	% UNITS BILLED IN EA. BLOCK	UNITS BILLED IN EA. BLOCK
DEMAND CHARGE:				
0 - 500 KW	158.39	100.00	100.00	3,788
501 - 1500 KW	475.18	100.00	0.00	0
1501 - 5000 KW	1,583.93	100.00	0.00	0
> 5000 KW		100.00	0.00	0
TOTAL			100.00	3,788
ENERGY CHARGE:				
0 - 200 KWH/KW		68.41	68.41	754
201 - 400 KWH/KW		100.00	31.59	348
> 400 KWH/KW		100.00	0.00	0
TOTAL			100.00	1,102

FORECASTS:

SALES, MWH	1,102
BILLS	12
KW	3,788
KWH/BILL	91,833
KW/BILL	315.67

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR DISTRIBUTION PRIMARY SUPPLY SERVICE

		PRESENT RATES		PROPOSED RATES	
RATE BLOCKS	BILLING UNITS	UNIT PRICE	REVENUES $1000s	UNIT PRICE	REVENUES $1000s
DEMAND CHARGE:	KW	$/KW		$/KW	
0 - 500 KW	3,788	5.00	18.9	11.00	41.7
501 - 1500 KW	0	4.85	0.0	10.00	0.0
1501 - 5000 KW	0	4.85	0.0	10.00	0.0
> 5000 KW	0	4.85	0.0	10.00	0.0
SUBTOTAL	3,788		18.9		41.7
ENERGY CHARGE:	MWH	$/KWH		$/KWH	
0 - 200 KWH/KW	754	16.376	123.5	32.327	243.7
201 - 400 KWH/KW	348	14.276	49.7	30.227	105.2
> 400 KWH/KW	0	7.131	0.0	23.082	0.0
SUBTOTAL	1,102		173.2		348.9
TOTAL ENERGY & DEMAND			192.1		390.6
		% ADJ.		% ADJ.	
DP ADJ.		-2	(3.8)	-1.1	(4.3)

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR POWER FACTOR ADJUSTMENT SCHEDULE P

GWH	7.929	
RKVAH	2.757989	211
POWER FACTOR	94	

	PRESENT RATES	PROPOSED RATES
CALCULATED PF (%)	94	94
BASE PF (%)	90	90
DIFF.	(4)	(4)
ADJ. FOR EA. 1% DIFF	0.0015	0.0015
PF ADJ. RATE	(0.006)	(0.006)
TOTAL DMD/ENERGY CHR	1,314.6	2,764.1
POWER FACTOR ADJ.	(7.9)	(16.6)

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE N - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUE ADJUSTMENT
FOR POWER FACTOR ADJUSTMENT SCHEDULE N

GWH	0.8417	
RKVAH	0.60088	211
POWER FACTOR	81	

	PRESENT RATES	PROPOSED RATES
CALCULATED PF (%)	81	81
BASE PF (%)	90	90
DIFF.	9	9
ADJ. FOR EA. 1% DIFF	0.0015	0.0015
PF ADJ. RATE	0.014	0.014
TOTAL DMD/ENERGY CHR	71.5	220.2
POWER FACTOR ADJ.	1.0	3.0

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
REGULAR SCHEDULE P

	UPPER LIM. OF BLK. AS % OF AVE. USE/BILL	CUM UNIT @ EA. UPPER LIM. AS % OF TOTAL	% UNITS BILLED IN EA. BLOCK	UNITS BILLED IN EA. BLOCK
DEMAND CHARGE:				
0 - 500 KW	265.96	100.00	100.00	24,816.6
501 - 1500 KW				0.0
1501 - 5000 KW				0.0
> 5000 KW				0.0
TOTAL			100.00	24,816.6
ENERGY CHARGE:				
0 - 200 KWH/KW		54.79	54.79	4,467.3
201 - 400 KWH/KW		88.44	33.65	2,743.7
> 400 KWH/KW		100	11.56	942.5
TOTAL			100.00	8,153.5

FORECASTS:

SALES, MWH	8,153.5
BILLS	132
KW	24,816.6
KWH/BILL	61768.94
KW/BILL	188.00

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS
CONTRACT NIGHT RATE

	UPPER LIM. OF BLK. AS % OF AVE. USE/BILL	CUM UNIT @ EA. UPPER LIM. AS % OF TOTAL	% UNITS BILLED IN EA. BLOCK	UNITS BILLED IN EA. BLOCK
DEMAND CHARGE:				
0 - 500 KW	311.06	100.00	100.00	5,786.6
501 - 1500 KW				0.0
1501 - 5000 KW				0.0
> 5000 KW				0.0
TOTAL			100.00	5,786.6
ENERGY CHARGE:				
0 - 200 KWH/KW		98.47	98.47	852.7
201 - 400 KWH/KW		100	1.53	13.2
> 400 KWH/KW		100	0	0.0
TOTAL			100.00	865.9

FORECASTS:

SALES, MWH	865.9
BILLS	36
KW	5,786.6
KWH/BILL	24052.78
KW/BILL	160.74

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MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUES FOR TOTAL CLASS AT PRESENT RATES

REGULAR SCHEDULE P:	BILLING UNITS (MWH)	UNIT PRICE $/KWH	REVENUES $1000S
ENERGY CHARGE:			
0 - 200 KWH/KW	4,467.3	16.3763	731.6
201 - 400 KWH/KW	2,743.7	14.2763	391.7
> 400 KWH/KW	942.5	7.1313	67.2
SUBTOTAL	8,153.5		1190.5
DEMAND CHARGE:	(KW)	$/KW	
0 - 500 KW	24,817	5.00	124.1
501 - 1500 KW	0	4.85	0.0
1501 - 5000 KW	0	4.85	0.0
> 5000 KW	0	4.85	0.0
SUBTOTAL	24,817		124.1
	BILLS	$/BILL	
CUSTOMER CHARGE:	132.0	75.00	9.9
ADJUSTMENTS:			
PF			(7.9)
DP			(3.8)
	(MWH)	$/KWH	
FUEL OIL REV.	8,153.5	15.774	1,286.1
RIDER M(B) ADJ			-74.4
RIDER T ADJ			-1.4
SUBTOTAL			2,523.1
TEMP RATE DECR. (%)		0.0000	0.0
TOTAL REVENUES REGULAR SCHEDULE P			2,523.1
NIGHT CONTRACT RATE:	(KW)	$/KW	
DEMAND CHARGE: (ALL KW)	5,786.6	1.70	9.8
ENERGY CHARGE:	(MWH)	$/KWH	
ALL MWH	865.9	7.1313	61.7
ADJUSTMENTS:			
PF			1.0
	BILLS	$/BILL	
CUSTOMER CHARGE:	36.0	75.00	2.7
	(MWH)	$/KWH	
FUEL OIL REV.	865.9	15.774	136.6
SUBTOTAL			211.8
TEMP RATE DECR. (%)		0.0000	0.0
TOTAL REVENUES NIGHT CONTRACT RATE:			211.8
TOTAL REVENUES (REGULAR P + NIGHT CONTRACT)			2,734.9

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MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUES FOR REGULAR P CUSTOMERS
AT PROPOSED RATES

	BILLING UNITS	UNIT PRICE	REVENUES $1000S
ENERGY CHARGE:	(MWH)	$/KWH	
0 - 200 KWH/KW	4,467.3	32.3273	1,444.2
201 - 400 KWH/KW	2,743.7	30.2273	829.3
> 400 KWH/KW	942.5	23.0823	217.6
SUBTOTAL	8,153.5		2491.1
DEMAND CHARGE:	(KW)	$/KW	
0 - 500 KW	24,817	11.00	273.0
501 - 1500 KW	0	10.00	0.0
1501 - 5000 KW	0	10.00	0.0
> 5000 KW	0	10.00	0.0
SUBTOTAL	24,817		273.0
	BILLS	$/BILL	
CUSTOMER CHARGE:	132	75.00	9.9
ADJUSTMENTS:			
PF			(16.6)
TP			0.0
DP			(4.3)
TS			0.0
DS			0.0
SUBTOTAL			(20.9)
FUEL OIL REV.	8,153.5	0.000	0.0
UNADJUSTED REVENUES			2,753.1
TEMP RATE DECR. (%)		0.0000	0.0
RIDER M(B) ADJ			-94.2
RIDER T ADJ			-1.7
TOTAL REVENUES REGULAR SCHEDULE P			2,657.2

T

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUES FOR COMBINED
SCHEDULE P AND N CUSTOMERS AT PROPOSED RATES

	BILLING *UNITS*	*UNIT PRICE*	REVENUES *$1000S*
ENERGY CHARGE:			2691
DEMAND CHARGE:			293.3
CUSTOMER CHARGE:			12.6
ADJUSTMENTS:			-17.9
FUEL OIL REV.			0.0
UNADJUSTED REVENUES			2,979.0
TEMP RATE DECR. (%)			
RIDER M(B) ADJ			-94.2
RIDER T ADJ			-1.7
EMPLOYEE DISCOUNT			-4
PROPOSED REVENUES SCHEDULE P AND N			2,879.1

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATE OF TEST-YEAR REVENUES FOR NIGHT CONTRACT RATE
AT PROPOSED RATES

	BILLING UNITS	UNIT PRICE	REVENUES $1000S
ENERGY CHARGE:	(MWH)	$/KWH	
ALL KWH/KW	865.9	23.082	199.9
DEMAND CHARGE:	(KW)	$/KW	
ALL KW	5,787	3.50	20.3
	BILLS	$/BILL	
CUSTOMER CHARGE:	36	75.00	2.7
ADJUSTMENTS:			
PF			3.0
TP			0.0
DP			0.0
TS			0.0
DS			0.0
SUBTOTAL			3.0
FUEL OIL REV.	865.9	0.000	0.0
UNADJUSTED REVENUES			225.9
TEMP RATE DECR. (%)		0.000	0.0
TOTAL REVENUES NIGHT CONTRACT RATE			225.9

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF RIDER ADJUSTMENTS

RIDER M(B)	PRESENT	PROPOSED
M3	-74.4	-94.2
RIDER T		
T17	-1.4	-1.7

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DETERMINATION OF BILLING ADJUSTMENTS
FOR RIDER M(B) SERVICE

M3	PRESENT RATES			
	SCHEDULE P		RIDER M(B)	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO:				
PRIORITY PEAK KW				
OUTSIDE PRIORITY KW				
CURTAILABLE LOAD			368.2	
BILLING KW	453		176.9	
KWH/MONTH	122400		122400	
POWER FACTOR	92		92	
ENERGY CHARGE:				
0 - 200 KWH/KW	90600	14837	35380	5794
201 - 400 KWH/KW	31800	4540	35380	5051
> 400 KWH/KW	0	0	51640	3683
SUBTOTAL	122400	19377	122400	14528
DEMAND CHARGE:				
0 - 500 KW	453	2265	176.9	885
> 500 KW	0	0	0	0
SUBTOTAL	453	2265	176.9	885
POWER FACTOR ADJ.		-65		-46
CUSTOMER CHARGE		75		75
TOD METER CHARGE				10
FUEL OIL ADJ	122400	19307	122400	19307
TEMP RATE DECREASE:	122400	0	122400	0
FIRM CAPACITY SURCHARGE:	122400	0	122400	0
FCS ADJUSTMENT:	122400	0	122400	0
SUBTOTAL		19317		19346
TOTAL REV.		40959		34759
TOTAL REV. PER YEAR ($1000)		491.5		417.1
RIDER M ADJ. ($1000/YR)				-74.4

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DETERMINATION OF BILLING ADJUSTMENTS
FOR RIDER M(B) SERVICE

M3	PROPOSED RATES			
	SCHEDULE P		RIDER M(B)	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO:				
PRIORITY PEAK KW				
OUTSIDE PRIORITY KW				
CURTAILABLE LOAD			368.2	
BILLING KW	453		176.9	
KWH/MONTH	122400		122400	
POWER FACTOR	92		92	
ENERGY CHARGE:				
0 - 200 KWH/KW	90600	29289	35380	11437
201 - 400 KWH/KW	31800	9612	35380	10694
> 400 KWH/KW	0	0	51640	11920
SUBTOTAL	122400	38901	122400	34051
DEMAND CHARGE:				
0 - 500 KW	453	4983	176.9	1946
> 500 KW	0	0	0	0
SUBTOTAL	453	4983	176.9	1946
POWER FACTOR ADJ.		-132		-108
CUSTOMER CHARGE		75		75
TOD METER CHARGE				10
FUEL OIL ADJ	122400	0	122400	0
TEMP RATE DECREASE:	122400	0	122400	0
FIRM CAPACITY SURCHARGE:	122400	0	122400	0
FCS ADJUSTMENT:	122400	0	122400	0
SUBTOTAL		-57		-23
TOTAL REV.		43827		35974
TOTAL REV. PER YEAR ($1000)		525.9		431.7
RIDER M ADJ. ($1000/YR)				-94.2

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MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DETERMINATION OF BILLING ADJUSTMENTS
FOR RIDER T SERVICE

T17	PRESENT RATES			
	SCHEDULE P		RIDER T	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO:				
ON-PEAK KW			275	
OFF-PEAK KW			277.7	
BILLING KW	277.7		275	
ON-PEAK KWH			47125	
OFF-PEAK KWH			35208	
TOTAL KWH	82333		82333	
POWER FACTOR	100		100	
ENERGY CHARGE:				
0 - 200 KWH/KW	55540	9095	55000	9007
201 - 400 KWH/KW	26793	3825	27333	3902
> 400 KWH/KW	0	0	0	0
SUBTOTAL	82333	12920	82333	12909
ON-PEAK ENERGY CREDIT			47125	943
OFF-PEAK ENERGY CREDIT			35208	-1056
SUBTOTAL				-113
DEMAND CHARGE:				
0 - 500 KW	277.7	1389	275	1375
> 500 KW	0	0	0	0
SUBTOTAL	277.7	1389	275	1375
POWER FACTOR ADJ.		-215		-213
VOLTAGE ADJ. (DP, 2%)		-286		-283
CUSTOMER CHARGE		75		75
TOD METER CHARGE				10
FUEL OIL ADJ	82333	12987	82333	12987
TEMP RATE DECREASE:	82333	0	82333	0
FIRM CAPACITY SURCHARGE:	82333	0	82333	0
FCS ADJUSTMENT:	82333	0	82333	0
SUBTOTAL		12561		12576
TOTAL REV. PER MONTH		26870		26747
TOTAL REV. PER YEAR ($1000)		322.4		321
RIDER T ADJ. ($1000/YR)				(1.4)

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE P - LARGE POWER SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DETERMINATION OF BILLING ADJUSTMENTS
FOR RIDER T SERVICE

T17	PROPOSED RATES			
	SCHEDULE P		RIDER M(B)	
	BILLING UNITS	REVENUES ($)	BILLING UNITS	REVENUES ($)
BILLING LOAD PER MO:				
ON-PEAK KW			275	
OFF-PEAK KW			277.7	
BILLING KW	277.7		275	
ON-PEAK KWH			47125	
OFF-PEAK KWH			35208	
TOTAL KWH	82333		82333	
POWER FACTOR	100		100	
ENERGY CHARGE:				
0 - 200 KWH/KW	55540	17955	55000	17780
201 - 400 KWH/KW	26793	8099	27333	8262
> 400 KWH/KW	0	0	0	0
SUBTOTAL	82333	26054	82333	26042
ON-PEAK ENERGY CREDIT			47125	943
OFF-PEAK ENERGY CREDIT			35208	-1056
SUBTOTAL				-113
DEMAND CHARGE:				
0 - 500 KW	277.7	3055	275	3025
> 500 KW	0	0	0	0
SUBTOTAL	277.7	3055	275	3025
POWER FACTOR ADJ.		-437		-434
VOLTAGE ADJ. (DP, 1.1%)		-320		-318
CUSTOMER CHARGE		75		75
TOD METER CHARGE				10
FUEL OIL ADJ	82333	0	82333	0
TEMP RATE DECREASE:	82333	0	82333	0
FIRM CAPACITY SURCHARGE:	82333	0	82333	0
FCS ADJUSTMENT:	82333	0	82333	0
SUBTOTAL		-682		-667
TOTAL REV. PER MONTH		28427		28287
TOTAL REV. PER YEAR ($1000)		341.1		339.4
RIDER T ADJ. ($1000/YR)				-1.7

MECO- Molokai Division Schedule P, Rider Data
Average Data

Rider M(b)

Account	Name	Rate	kWm	Priority kW	Curtailed kW	Reg kWb	Rider kWb	kWh	PF	No. Mos	Notes
M3	SOH-Dept of HHL	P0	386.6	18.5	368.2	453	176.9	122400	92	12	0

Rider T

Account	Name	Rate	On-peak kWh	Off-peak kW	Total kWh	% On-pea	% Off-pea	On-Peak kWt	Reg kWb	PF	No Mos
T17	SOH- Dept of Agricultur	P3	47125	35208	82333	57.2%	42.8%	275	277.7	100	12

MOP_07final-v2-proposed.xls:Rider Summary
Pricing:cm
2/20/2007

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

SUMMARY OF TEST-YEAR REVENUE ESTIMATES

		CURRENT EFFECTIVE RATES		PROPOSED RATES	
	BILLING UNITS (MWH)	UNIT PRICE CENTS/KWH	REVENUES $1000s	UNIT PRICE CENTS/KWH	REVENUES $1000s
ENERGY CHARGE:					
0 - 150 KWH/KW	213.7	20.2685	43.3	37.9215	81.0
> 150 KWH/KW	264.8	15.8625	42.0	33.5155	88.7
SUBTOTAL	478.5		85.3		169.7
ADJUSTMENTS*			75.6		-0.3
INTERIM RATE INCREASE			0		
TOTAL REVENUES			160.9		169.4

* INCLUDES FUEL OIL ADJUSTMENT, EMPLOYEE DISCOUNT ADJUSTMENT

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DETERMINATION OF TEST-YEAR BILLING KW

	RECORDED		FORECAST	
	MWH	%	MWH	%
TOTAL F SALES				
METERED ACCTS.	0.0	0.00	0.0	0
FLAT ACCTS.	470.7	100.00	478.5	100
TOTAL	470.7	100.00	478.5	100.00

	RECORDED		FORECAST	
	KW	KWH/KW	KWB	MWH
TOTAL F SALES				
METERED ACCTS.	0	0.00	0	0
FLAT ACCTS.	1401.6	335.82	1425	478.5
TOTAL	1401.6		1425	478.5

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS BY LF BLOCKS

	CUM AT EACH UPPER LIMIT AS % OF TOTAL	OF UNITS IN EACH BLOCK	MWH BILLED IN EACH BLOCK
METERED ACCOUNTS:			
0 - 150 KWH/KW		0	0
OVER 150 KWH/KW		0	0.0
TOTAL		0.00	0.0
FLAT ACCOUNTS:			
0 - 150 KWH/KW	44.67	44.67	213.7
OVER 150 KWH/KW	100.00	55.33	264.8
TOTAL			478.5
METERED + FLAT ACCTS.:			
0 - 150 KWH/KW			213.7
OVER 150 KWH/KW			264.8
TOTAL			478.5

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

DETERMINATION OF TEST-YEAR BILLING LOADS
FOR SECONDARY SUPPLY VOLTAGE SERVICE

	RECORDED	FORECASTS
TOTAL F		
SALES, MWH	470.7	478.5
BILLED KW	1,401.6	1,425.0
KWH/KW	335.82	335.82
NUMBER OF BILLS	108	108
SECONDARY METERING		
SALES, MWH	0.0	0.0
% OF TOTAL	0.00	0.000
KWH/KW	0	0.00
BILLED KW	#DIV/0!	#DIV/0!
NUMBER OF BILLS	0	0
% OF TOTAL	0.00	0.00

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR BILLING LOADS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES	PROPOSED RATES
	(FIXTURE CHARGE + $25.00)	
MINIMUM CHRG.,$/MO.	25.00	25.00
BASE ENERGY ,$/KWH	0.202685	0.379215
F.O.A., $/KWH	0.15774	0.00000
FCS ADJ., $/KWH	0	0
MINIMUM KWH/MO.	69.36	65.93

	PRESENT RATES		PROPOSED RATES	
	RECORDED	FORECAST	RECORDED	FORECAST
SALES, MWH				
TOTAL F	470.686	478.5	470.686	478.5
LT/EQ TO MIN. KWH	0.403	0.4	0.403	0.4
% OF TOTAL	0.086	0.086	0.086	0.086
NUMBER OF BILLS				
TOTAL F	108	108	108	108
LT/EQ TO MIN. KWH	12	12	12	12
% OF TOTAL	11.111	11.111	11.111	11.111

MAUI ELECTRIC COMPANY, LTD. - MOLOKAI DIVISION
SCHEDULE F - PUBLIC STREET LIGHTING SERVICE
DOCKET NO. 2006-0387 TEST-YEAR 2007

ESTIMATES OF TEST-YEAR REVENUE ADJSUTMENTS
FOR MINIMUM CHARGE PROVISION

	PRESENT RATES		
	UNITS BILLED (MWH)	UNIT PRICE CENTS/KWH	REVENUES $1000S
IF NO PROVISION FOR MINIMUM CHRG.:			
BASE ENERGY CHARGE	0.4	20.2685	0.1
F.O.A. ADJUSTMENT	0.4	15.774	0.1
TRA ADJUSTMENT	0.4	0	0.0
TOTAL			0.2
	BILLS	$/BILL	
AS BILLED WITH MINIMUM CHARGE:	12	25.00	0.3
MINIMUM BILL ADJ.:			0.1

	PROPOSED RATES		
	UNITS BILLED (MWH)	UNIT PRICE CENTS/KWH	REVENUES $1000S
IF NO PROVISION FOR MINIMUM CHRG.:			
BASE ENERGY CHARGE	0.4	37.922	0.2
F.O.A. ADJUSTMENT	0.4	0.0000	0.0
TRA ADJUSTMENT	0.4	0.0000	0.0
TOTAL			0.2
	BILLS	$/BILL	
AS BILLED WITH MINIMUM CHARGE:	12	25.00	0.3
MINIMUM BILL ADJ.:			0.1

Index of Workpapers for MECO Rate Case - Direct Testimony
TEST YEAR 2007
DOCKET NO. 2006-0387

Header		Page(s)	Description
MECO - WP	400	1	Index
MECO - WP	402	1-3	TY 2007 Fuel price derivation (confidential)
MECO - WP	403	1	Net Generation Input Into the Production Simulation
MECO - WP	403	2	Historical No-Charge and Loss %, Recorded Sales
MECO - WP	403	3	Estimated Demand and Energy Losses
			Base Case Workpapers
MECO - WP	404	1	Unadjusted Output From Production Simulation
MECO - WP	404	2	Adjusted Output From Production Simulation Application of Calibration Factor
MECO - WP	404	3	This Page Intentionally Omitted
MECO - WP	404	4	Test Year Fuel Oil Expense Summary/Composite Price
MECO - WP	404	5-9	Raw Output From Production Simulation Model
MECO - WP	404	10-13	Input File Into the Production Simulation
MECO - WP	404	14-15	Fuel Input File Into Production Simulations
MECO - WP	404	16-20	Unit costs/Performance/Maintenance Input Files
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MECO - WP	404	23	Regulating Reserve Input File
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MECO - WP	404	54-65	Test Year Derived From 2005 Data Calibration Factors
MECO - WP	404	66-83	2005 Calibration Year Production Simulation Input Files
			Other Workpapers
MECO - WP	404	84	Overhaul Schedule Developed by MECO
MECO - WP	404	85	Maui Division Unit Ratings Used in Production Simulation
MECO - WP	404	86	Lanai Division Unit Ratings
MECO - WP	404	87	Molokai Division Unit Ratings
MECO - WP	404	88	Commitment Penalty Factors Used in Production Simulation
MECO - WP	404	89	Unit Heat Rate Constants in Production Simulation
MECO - WP	404	90	Variable O&M Data
MECO - WP	404	91	MECO Historical Forced Outage Rates
MECO - WP	404	92	Historical Maintenance Outage Rates
MECO - WP	404	93	Lanai Generation and Purchased Power
MECO - WP	404	94	Lanai Test Year Fuel Forecast
MECO - WP	404	95	Lanai Historical Generation Statistics
MECO - WP	404	96	Molokai Generation and Purchased Power
MECO - WP	404	97	Molokai Test Year Fuel Forecast
MECO - WP	404	98	Molokai Historical Generation Statistics
MECO - WP	404	99-101	Derivation of Transaction File Inputs
			Miscellaneous Workpapers
MECO - WP	405	1	Historical and Test Year Propane Start-Up Costs
MECO - WP	405	2	Maui Historical and Test Year Fuel Additive and Petroleum Inspection Costs
MECO - WP	405	3-4	Maui Ocean Cargo Insurance
MECO - WP	405	5	Lanai Petroleum Inspection Expense
MECO - WP	405	6	Molokai Petroleum Inspection Expense
MECO - WP	406	1-3	Maui Test Year Sales Fuel Efficiency
MECO - WP	406	4	Lanai Test Year Sales Fuel Efficiency
MECO - WP	406	5	Molokai Test Year Sales Fuel Efficiency
MECO - WP	407	1	Maui Historical Net Heat Rate
MECO - WP	407	2	Lanai & Molokai Historical Net Heat Rate
MECO - WP	408	1	Maui Fuel Oil Tank Capacities
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MECO - WP	408	3	Molokai Fuel Oil Tank Capacities
MECO - WP	408	4	Typical Fuel Oil Tank Diagram
MECO - WP	408	5	Maui Test Year Average Burn Rate
MECO - WP	408	6-7	Maui Biodiesel Test Year Burn Rate
MECO - WP	408	8	Hana Test Year Fuel Inventory
MECO - WP	408	9	Lanai Test Year Average Burn Rate
MECO - WP	408	10	Molokai Test Year Burn Rate

Confidential Information Deleted
Pursuant to Protective Order No._____

This workpaper contains confidential fuel pricing information.
Pages 1 to 3 will be provided pursuant to an appropriate protective order.

Maui Electric Company, Limited

NET GENERATION INPUT TO PRODUCTION SIMULATION (MWH)
TEST YEAR 2007
Direct Testimony

(Maui Division)

	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07
Adjusted Sales	99,786	89,167	99,047	96,504	101,141	102,546
+ No Charge [1]	125	130	127	132	139	142
Sales + NC	99,911	89,297	99,173	96,637	101,280	102,687
Losses [2]	6,321	5,649	6,274	6,114	6,407	6,496
Net-to-Sys	106,232	94,946	105,448	102,750	107,687	109,184

	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Test Year 2007
Adjusted Sales	107,142	109,955	103,083	105,944	99,710	98,905	1,212,929
+ No Charge	148	151	151	144	139	136	1,662
Sales + NC	107,290	110,106	103,234	106,087	99,849	99,040	1,214,591
Losses	6,788	6,966	6,531	6,712	6,317	6,266	76,840
Net-to-Sys	114,078	117,072	109,765	112,799	106,166	105,306	1,291,431

Reference

[1] No Charge: 1,662 MWH based on 5 year actual average.

[2] Losses: 5.95% of Net-to-System. MECO-WP-403, page 2.

Maui Electric Company, Limited

HISTORICAL NO CHARGE AND LOSS PERCENTAGE
RECORDED SALES

(Maui Division)

	2001	2002	2003	2004	2005	2001-2005 (5-yr Ave)
Recorded Sales (MWH)	1,071,486	1,096,739	1,142,689	1,184,544	1,188,253	1,136,742
No Charge (MWH)	1,690	1,611	1,647	1,655	1,709	1,662
NC as % of AdjustedSales	0.16%	0.15%	0.14%	0.14%	0.14%	0.15%
Sales + No Charge	1,073,176	1,098,350	1,144,336	1,186,199	1,189,962	1,138,404
Net-to-System (MWH)	1,142,676	1,166,909	1,215,421	1,262,035	1,262,241	1,209,856
% Losses	6.08%	5.88%	5.85%	6.01%	5.73%	5.91%

Test Year 2007 Adjusted Sales (MECO-WP-103, page 1)	=	1,212,929	MWH
No Charge Using 2001-2005 (5-yr) Average % of Adjusted Sales	=	1,774	MWH
No Charge Using 2005 % of Adjusted Sales	=	1,745	MWH
No Charge Using 2001-2005 (5-yr) Average MWH	=	1,662	MWH
No Charge Using 2005 MWH	=	1,709	MWH
Test Year 2007 No Charge Assumption:			
No Charge Using 2001-2005 (5-yr) Average MWH	**=**	**1,662**	**MWH**

Maui Electric Company, Limited

TEST YEAR 2007 ESTIMATED DEMAND & ENERGY LOSSES

(Maui Division)

	Energy Losses		Demand Losses For System Peak		Demand Losses For System Minimum	
	(GWH)	Percent	(MW)	Percent	(MW)	Percent
A. MECO Total Gen	1,316.4		213.8		86.5	
B. Delivered to MECO GSU Tsf.	1,080.5	83.71%	183.6	87.95%	62.5	74.01%
MECO GSU Tsf Losses	5.1	0.39%	1.1	0.52%	0.3	0.34%
C. MECO Gen Delivered To 69/23 kV	1,290.9	100.00%	208.8	100.00%	84.5	100.00%
69 kV Transmission Loss	15.0	1.16%	3.2	1.52%	0.4	0.51%
23 kV Transmission Loss	8.6	0.67%	1.8	0.88%	0.4	0.45%
F. Delivered To Dist. Subs	1,267.3	98.18%	203.8	97.60%	83.7	99.04%
Dist Tsf Losses	6.9	0.53%	1.5	0.70%	0.7	0.86%
G. Delivered To Dist	1,260.4	97.64%	202.3	96.90%	83.0	98.18%
Dist Losses	32.7	2.53%	7.0	3.33%	2.7	3.15%
H. Delivered To Dist/Sec Tsf.	1,227.7	95.11%	195.4	93.57%	80.3	95.03%
Sec Tsf Losses	7.2	0.56%	1.5	0.73%	1.4	1.69%
I. Delivered To Sec	1,220.6	94.55%	193.8	92.84%	78.9	93.34%
Sec Losses	6.5	0.50%	1.4	0.66%	0.3	0.39%
J. Delivered To Meter	1,214.0	94.05%	192.5	92.17%	78.5	92.94%
Company Use	1.7	0.13%	0.3	0.14%	0.1	0.12%
Sales	1,212.3	93.92%	192.2	92.04%	78.4	92.83%
Total Losses	76.8	5.95%	16.3	7.83%	6.0	7.06%
System Total	1,290.9		208.8		84.5	

Notes:
1) "Total Losses" do not include auxiliary station loads.
2) Percent values are percent of the "System Total."
3) Demand values are estimated assuming there are no transmission line outages and no generating unit outages
4) Energy generated values are estimated per MECO-WP-404, pages 1-2.

Maui Electric Company, Limited

TEST YEAR 2007 PRODUCTION SIMULATION
SUMMARY (UNADJUSTED)
Direct Testimony

(Maui Division)

Location	Unit No.	Hours Run	Net MWHs	Fuel Consumption BBL	Fuel Consumption MBTU
		PMONTH	*PMONTH*		*PMONTH*
Kahului	1	4,576	17,043	45,143	284,400
	2	4,698	20,159	52,921	333,400
	3	8,076	87,886	183,079	1,153,400
	4	8,076	93,600	209,794	1,321,700
	Total	25,426	218,688	490,937	3,092,900
Maalaea	X1	1	3	0	0
	X2	1	2	0	0
	1	2	6	17	100
	2	4	11	17	100
	3	8	21	34	200
	sub total	17	43	68	400
	4	132	464	802	4,700
	5	20	69	119	700
	6	465	1,626	2,833	16,600
	7	50	175	307	1,800
	sub total	667	2,334	4,061	23,800
	8	912	3181	5,273	30,900
	9	1,479	5163	8,567	50,200
	sub total	2,391	8,344	13,840	81,100
	10	3,103	26,105	40,324	236,300
	11	4,437	37,221	57,509	337,000
	12	4,490	37,645	58,157	340,800
	13	6,095	50,845	78,618	460,700
	sub total	18,125	151,816	234,608	1,374,800
	M14&15	8,225	197,723	290,512	1,702,400
	M15&16	8,177	189,056	278,925	1,634,500
	M17&18	8,579	219,021	320,137	1,876,000
	M18&19	7,032	90,194	139,352	816,600
	sub total	32,013	695,994	1,028,925	6,029,500
	Total	53,212	858,531	1,281,502	7,509,600
Hana	H1	40	40	75	442
	H2	40	40	75	442
	Total	80	80	151	885
IPP					
HC&S			90,427		
KWP			122,912		
Makila Hydro			875		
	Total		214,214		
IPP Total			214,214		
MECO Total		78,718	1,077,299	1,772,589	10,603,385
SYSTEM TOTAL		78,718	1,291,513		

Maui Electric Company, Limited

TEST YEAR 2007 FUEL CONSUMPTION
PRODUCTION SIMULATION
Direct Testimony

(Maui Division)

Adjustment for Calibration Factor:

Steam	Net MWHs	Prod Sim Barrels	Calibration Factor	Adjusted Barrels	Net KWH / Barrel	Barrels Per Day	MBTU @ 6.30 MBTU / BBL	Net Heat Rate (MBTU/KWH)
K1	17,043	45,143	1.017	45,899	371	126	289,164	16,967
K2	20,159	52,921	1.017	53,807	375	147	338,984	16,816
K3	87,886	183,079	1.017	186,145	472	510	1,172,714	13,344
K4	93,600	209,794	1.017	213,306	439	584	1,343,828	14,357
Kahului Total	218,688	490,937		499,157	438	1,368	3,144,689	14,380

Diesel	Net MWHs	Prod Sim Barrels	p. 54 Calibration Factor	Adjusted Barrels	Net KWH / Barrel	Barrels Per Day	MBTU @ 5.86 MBTU / BBL	Net Heat Rate (MBTU/KWH)
M1-3, X1-2	43	68	1.016	69	623	0	404	9,395
M 4-7	2,334	4,061	1.016	4,125	566	11	24,173	10,357
M 8-9	8,344	13,840	1.016	14,058	594	39	82,380	9,873
M10-13	151,816	234,608	1.016	238,308	637	653	1,396,485	9,199
M14&15	197,723	290,512	1.016	295,094	670	808	1,729,251	8,746
M15&16	189,056	278,925	1.016	283,324	667	776	1,660,279	8,782
M17&18	219,021	320,137	1.016	325,186	674	891	1,905,590	8,700
M18&19	90,194	139,352	1.016	141,549	637	388	829,477	9,197
Maalaea Total	858,531	1,281,502		1,301,713	660	3,566	7,628,038	8,885
H1	40	75	1.016	77	519	0.2	451	11,275
H2	40	75	1.016	77	519	0.2	451	11,275
Hana Total	80	151		154	519	0.4	902	11,275
Diesel total	858,611	1,281,653		1,301,867	660		7,628,941	8,885

Plant	Net MWHs		Adjusted Barrels	Barrels Per Day	Adjusted MBTU	Net HR (MBTU/KWH)
Kahului	218,688		499,157	1,368	3,144,689	14,380
Maalaea (incl Hana)	858,611		1,301,867	3,567	7,628,941	8,885
IPP	214,214	MECO Only MWH				
System	1,291,513	1,077,299	1,801,024	4,934	10,773,630	10,001

Notes:
Industrial Fuel Oil (IFO) heat content = 6.3 million Btu per barrel
Diesel fuel oil het content = 5.86 million Btu per barrel

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Maui Electric Company, Limited

TEST YEAR 2007 FUEL OIL EXPENSE
Direct Testimony

(Maui Division)

Plant	(1) Fuel Consumption (BBLs)	(2) Fuel Prices ($/BBL)	(3) = (1) x (2) Fuel Expense ($000)
Kahului	499,157	59.6359	29,767.7
Maalaea	1,301,713	104.8621	136,500.3
Maalaea Biodiesel	2,193	109.2000	239.5
Hana	154	115.8105	17.8
	1,803,217		166,525.3
	COMPOSITE FUEL PRICE ($ / BBL)		92.3490

Reference
Column 1: MECO-WP-404, page 2
Column 2: MECO-WP-402, page 1

Case Name: meco_ty2007
Simulation Period: 2007/ 1 - 2007/12

File	Name	File Date/Time
Study Data:	meco_ty2007.stu	
Report Control:	meco_ty2007.rfc	
Area Data:	meco_ty2007.ara	
Plant Data:	meco_ty2007.plt	
Fuel Class Data:	meco_ty2007.fcl	
Spot Fuel Data:	meco_ty2007.sfu	
Contract Fuel Data:		
Thermal Basic Data:	meco_ty2007.ubo	
Thermal Cost Data:	meco_ty2007.ucs	
Thermal Performance Data:	meco_ty2007.upf	
Thermal NOx Data:		
Hourly Pattern # 19:	ptn19.hcp	
Hydro Data:		
Pumped Storage Data:		
Fixed Energy Transaction Data:	meco_ty2007.trf	
Hourly Transaction # 12:	ptn12.htr	
Hourly Transaction # 13:	ptn13.htr	
Hourly Transaction # 15:	ptn15.htr	
Economy Transaction Data:		
DSM Data:		
Monte Carlo Scenario Data:	meco_ty2007.mcs	
Thermal Maintenance Data:	meco_ty2007.umt	
Hydro Maintenance Data:		
P-S Maintenance Data:		
Load Data:	meco_ty2007.eei	
CC Data #1:		
CC Data #2:		
CC Data #3:		
CC Data #4:		
CC Maintenance Data:		
Quick Load Pick Up Curve Data:		
Spinning Reserve Data:	meco_ty2007.spn	

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Monthly system Load and Capacity Summary

Mnth	Peak Load MW	Mnthly Energy GWh	Load Factor %	Installed Capacity MW	Maint outage MW	Adjusted Capacity MW	Capacity Reserve MW	Capacity Reserve %
Jan	197.6	106.2	72.3	234.2	5.5	228.7	31.1	15.73
Feb	195.8	94.9	72.2	234.2	12.3	221.9	26.1	13.3
Mar	195.5	105.4	72.5	234.2	12.3	221.9	26.4	13.48
Apr	192.2	102.7	74.2	234.2	11.9	222.3	30.1	15.67
May	192.8	107.7	75.1	234.2	26.8	207.4	14.6	7.59
Jun	193.3	109.2	78.4	234.2	26.8	207.4	14.1	7.32
Jul	202.4	114.1	75.8	234.2	0	234.2	31.8	15.71
Aug	208.8	117.1	75.4	234.2	0	234.2	25.4	12.16
Sep	202.8	109.8	75.2	234.2	4.7	229.5	26.7	13.16
Oct	207	112.8	73.2	234.2	0	234.2	27.2	13.14
Nov	206	106.2	71.6	234.2	11	223.2	17.2	8.35
Dec	206.7	105.3	68.5	234.2	0	234.2	27.5	13.3

Summary for Period:

Peak Load	(MW):	208.8
Total Energy	(GWh):	1291.44
Load Factor	(%):	70.61

Month	AM Peak (MW)	PM Peak (MW)	Capacity (MW)	Maint. (MW)	Reserve (MW)	Largest (MW)	LSC (MW)	Diff. (MW)
Jan	179.4	197.6	234.2	5.5	31.1	26.8	201.9	4.3
Feb	177.6	195.8	234.2	12.3	26	26.8	195.1	-0.7
Mar	181.6	195.5	234.2	12.3	26.4	26.8	195.1	-0.4
Apr	174	192.2	234.2	11.9	30.1	26.8	195.6	3.4
May	178.7	192.8	234.2	26.8	14.6	26.8	180.7	-12.1
Jun	185.6	193.3	234.2	26.8	14.1	26.8	180.7	-12.6
Jul	196.1	202.4	234.2	0	31.8	26.8	207.4	5
Aug	197.9	208.8	234.2	0	25.4	26.8	207.4	-1.4
Sep	188.9	202.8	234.2	4.7	26.7	26.8	202.7	-0.1
Oct	189.4	207	234.2	0	27.2	26.8	207.4	0.4
Nov	182.4	206	234.2	11	17.2	26.8	196.5	-9.5
Dec	174.1	206.7	234.2	0	27.5	26.8	207.4	0.7

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Station Summary

	Station	Capacity MW	Unit	Hours	CF %	Energy GWh	MBtu k	Cold Start	Warm Start	Stup Cst M$	Fuel Cst M$	VO&M Cs M$	FO&M Cs M$	Oper Cst $/MWh	Tot Cst $/MWh	Ave Hrt Btu/kWh
1	Kahului1	4.7	1	4576.4	41.28	17.043	284.4	302	0	0	2.6925	0.0247	1.3089	155.92	236.24	16690
2	Kahului2	4.8	1	4697.7	48.32	20.159	333.4	302	0	0	3.1564	0.0294	1.2988	155.06	222.46	16541
3	Kahului3	11	1	8076	91.32	87.886	1153.4	2	0	0	10.9179	0.1113	1.2199	125.49	139.37	13124
4	Kahului4	11.9	1	8076	89.89	93.6	1321.7	2	0	0	12.5112	0.1272	1.2383	135.02	148.25	14121
7	MaalaeX1	2.5	1	1.2	0.01	0.003	0	1	0	0	0.0006	0	0.3854	196	99999	10288
8	MaalaeX2	2.5	1	0.7	0.01	0.002	0	0	0	0	0.0003	0	0.3854	196	99999	10288
9	Maalaea1	2.5	1	2.2	0.03	0.006	0.1	1	0	0	0.001	0.0001	0.3854	196	69643	10288
10	Maalaea2	2.5	1	4.4	0.05	0.011	0.1	2	0	0	0.002	0.0001	0.3854	196	35395	10288
11	Maalaea3	2.5	1	8.4	0.1	0.021	0.2	5	0	0	0.0039	0.0003	0.3854	196	18485	10288
12	Maalaea4	5.5	1	132.4	0.96	0.464	4.7	67	0	0	0.0848	0.0036	0.5304	190.72	1334.8	10225
13	Maalaea5	5.5	1	19.6	0.14	0.069	0.7	10	0	0	0.0126	0.0005	0.5304	190.68	7900.7	10223
14	Maalaea6	5.5	1	464.6	3.37	1.626	16.6	155	0	0	0.2976	0.0126	0.5304	190.72	516.84	10225
15	Maalaea7	5.5	1	49.9	0.36	0.175	1.8	29	0	0	0.032	0.0014	0.5304	190.71	3224.6	10225
16	Maalaea8	5.5	1	911.5	6.62	3.181	30.9	234	0	0	0.5538	0.036	0.4234	185.4	318.48	9728
17	Maalaea9	5.5	1	1479.3	10.75	5.163	50.2	335	0	0	0.8988	0.0585	0.4234	185.4	267.4	9728
18	Maalae10	12.3	1	3103	24.14	26.105	236.3	394	0	0	4.2288	0.2779	0.5253	172.64	192.76	9052
19	Maalae11	12.3	1	4436.8	34.41	37.221	337	375	0	0	6.0304	0.3973	0.5253	172.69	186.81	9054
20	Maalae12	12.3	1	4490	34.81	37.645	340.8	301	0	0	6.0993	0.402	0.5253	172.7	186.66	9054
21	Maalae13	12.3	1	6095.2	47.01	50.845	460.7	313	0	0	8.244	0.5456	0.5253	172.87	183.2	9061
24	M14&15	26.8	1	8225.3	84.33	197.723	1702.4	4	0	0	30.4647	1.0266	1.2468	159.27	165.58	8610
25	M15&16	26.8	1	8177.3	80.64	189.056	1634.5	3	0	0	29.249	1.018	1.2468	160.1	166.69	8645
28	M17&18	26.8	1	8578.6	93.42	219.021	1876	2	0	0	33.5716	0.9929	1.2468	157.81	163.51	8566
29	M19&18	26.8	1	7031.5	38.47	90.194	816.6	210	0	0	14.6133	0.7828	1.2468	170.7	184.52	9054
	System					1077.22	10603	3046	0	0	163.667	5.8488	17.0498	157.25	173.19	9843

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Transaction Summary

ID	Transactic Type		Energy GWh	Engy Cost M$	CAP Cost M$	Total Cos M$	Ave Cost $/MWh
3	HCS_ON	ON-PEAK	62.103	0	0	0	0
4	HCS_OFF	OFF-PEA	28.324	0	0	0	0
10	Makila Hy	CONSTAI	0.875	0	0	0	0
12	KWPON	HOURLY	67.549	0	0	0	0
13	KWPOFF	HOURLY	55.363	0	0	0	0
15	Hana	HOURLY	0.08	0	0	0	0

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Fuel Type Summary

	Type	Energy GWh	Fuel ,000	Fuel Unit	MBtu ,000	Fuel Cost M$	Fuel Cost $/MWh	Heat Rati Btu/kWh	Fuel Cost C/MBtu
S	pot:								
1	Kahului	218.688	490.947	Bbl	3093	29.278	133.88	14143	946.6
2	Maalaea	858.53	1281.54	Bbl	7509.8	134.389	156.53	8747	1789.5

Fuel Class Summary

	Class	Energy GWh	Fuel ,000	Fuel Unit	MBtu ,000	Fuel Cost M$	Fuel Cost $/MWh	Heat Rati Btu/kWh	Fuel Cost C/MBtu
1	MSFO	218.688	490.947	Bbl	3093	29.278	133.88	14143	946.6
2	Diesel	858.53	1281.54	Bbl	7509.8	134.389	156.53	8747	1789.5

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System Energy and Cost Summary

Demand	GWh	Cost M$	Cost $/MWh	Supply	GWh	Cost M$	Cost $/MWh
Load:	1291.43			Thermal G	1077.2	186.565	173.19
				Hydro Ge	0	0	0
P-S Pumpi	0			P-S Gen:	0	0	0
P-S Payba	0						
F. E. Sale:	0	0	0	F. E. Purc	214.29	0	0
Econ. Sale	0	0	0	Econ. Pur	0	0	0
Unit Sale:	0	0	0				
Transm Lo	0			Rej. Fuel:		0	
Dsm Load:	0			Dsm Redu	0		
				Emerg Pu	0	0	0
Dumped E	0.06	0	0	E.U. Ener	0	0	0
				Lvl Cost:		0	
Total:	1291.49	0	0	Total:	1291.5	186.565	144.45
				System Net:		186.565	144.45
				LOLH(hr)	0		

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Plant Summary

	Plant	CF %	Energy GWh	MBtu 1000	Start Ups	Stup Cst M$	Fuel Cst M$	O&M Cst M$	Tot Cst $/MWh
1	Kahului	77.2	218.688	3093	607	0	29.278	5.3585	158.38
2	Maalaea	48.6	858.53	7509.8	2439	0	134.39	17.5401	176.96

Fiscal Year: 2007

Yearly Fuel & Var O&M Cost by Subperiod (M$)

Off P	Shoulder	Priority P	Total
53.2	80.9463	35.384	169.515

Study Period: 2007/Jan - 2007/Dec
Total Fuel & Var O&M Cost by Subperiod (M$)

Off Peak	Shoulder Peak	Priority Peak	Total
53.184925	80.946312	35.384045	169.515274

System Study Summary

SetID	YR	PRD	Exec Flag	UC Flag	Load Bandpc	Load Band MW	Spin Rsvpc	Spin RsvMW	Marg Cost	Marg CstIncr	Fix DispIncr	MC Option	EUE Cost	EUE Cos Esc	Dump Cost	Dump Cost Esc	Nox	Sox	CO2	ROG	Other	Num WkDay	WD PkHr1	WD PkHrn	WE PkHr1	WE PkHrn	I26	X31
MECO_TY2007	2007	1	0	0	0	0	0	0	0	1	1	2	100	0	0	0	0	0	0	0	0	7	7	20	1	24	0	0

Report Control Summary

SetID	YR	PRD	Fiscal Yr	Prd Cntrl	Yr Cntrl	Alloc File	Stn Rept	Plt Rept	Area Rept	PS Rept	Diag Rept	HrInf File	MonIn f File	YrInf File	I26
MECO_TY2007	2007	1	12	2	0	0	1	1	0	0	1	1	1	1	0

Area Summary

SetID	ID	NAME	YR	PRD	Spin Rsvpc	Spin RsvMW	Ld Adjpc	LdAdj MW	Tie MW	Tie Cost	Tie Cost Esc
MECO_TY2007	1	maui	2007	1	0	0	0	0	0	0	0

Plant Summary

SetID	ID	NAME	YR	PRD	X31	X32	X33	X34	X35
MECO_TY2007	1	Kahului	2007	1	0	0.022125	0.022125	0.022125	0.022125
MECO_TY2007	2	Maalaea	2007	1	0	0.022125	0.022125	0.022125	0.022125

Fuel Class

SetID	ID	NAME	YR	PRD	FuelUnit
MECO_TY2007	1	MSFO	2007	1	1
MECO_TY2007	2	Diesel	2007	1	1

Spot Fuel Summary

SetID	ID	NAME	YR	PRD	FuelClass	FuelCost	CmtCost	CostEsc	HeatCont	Sox	CO2	ROG	Other
MECO_TY2007	1	Kahului	2007	1	1	946.6	0	0	6.3	0	0	0	0
MECO_TY2007	1	Kahului	2007	2	1	946.6	0	0	6.3	0	0	0	0
MECO_TY2007	1	Kahului	2007	3	1	946.6	0	0	6.3	0	0	0	0
MECO_TY2007	1	Kahului	2007	4	1	946.6	0	0	6.3	0	0	0	0
MECO_TY2007	1	Kahului	2007	5	1	946.6	0	0	6.3	0	0	0	0
MECO_TY2007	1	Kahului	2007	6	1	946.6	0	0	6.3	0	0	0	0
MECO_TY2007	1	Kahului	2007	7	1	946.6	0	0	6.3	0	0	0	0
MECO_TY2007	1	Kahului	2007	8	1	946.6	0	0	6.3	0	0	0	0
MECO_TY2007	1	Kahului	2007	9	1	946.6	0	0	6.3	0	0	0	0
MECO_TY2007	1	Kahului	2007	10	1	946.6	0	0	6.3	0	0	0	0
MECO_TY2007	1	Kahului	2007	11	1	946.6	0	0	6.3	0	0	0	0
MECO_TY2007	1	Kahului	2007	12	1	946.6	0	0	6.3	0	0	0	0
MECO_TY2007	2	Maalaea	2007	1	2	1789.5	0	0	5.86	0	0	0	0
MECO_TY2007	2	Maalaea	2007	2	2	1789.5	0	0	5.86	0	0	0	0
MECO_TY2007	2	Maalaea	2007	3	2	1789.5	0	0	5.86	0	0	0	0
MECO_TY2007	2	Maalaea	2007	4	2	1789.5	0	0	5.86	0	0	0	0
MECO_TY2007	2	Maalaea	2007	5	2	1789.5	0	0	5.86	0	0	0	0
MECO_TY2007	2	Maalaea	2007	6	2	1789.5	0	0	5.86	0	0	0	0
MECO_TY2007	2	Maalaea	2007	7	2	1789.5	0	0	5.86	0	0	0	0
MECO_TY2007	2	Maalaea	2007	8	2	1789.5	0	0	5.86	0	0	0	0
MECO_TY2007	2	Maalaea	2007	9	2	1789.5	0	0	5.86	0	0	0	0
MECO_TY2007	2	Maalaea	2007	10	2	1789.5	0	0	5.86	0	0	0	0
MECO_TY2007	2	Maalaea	2007	11	2	1789.5	0	0	5.86	0	0	0	0
MECO_TY2007	2	Maalaea	2007	12	2	1789.5	0	0	5.86	0	0	0	0

Thermal Basic Summary

SetID	ID	NAME	YR	PRD	AreaID	PlantID	Units	HrPattern	Branching	Firm	OpType	Quick	Derate	EngLmt Cmt	RampRate	Down Time	Up Time	SpinRsv	Ownership	CmtCost Ftr	CmtEmis Ftr	DspCost Ftr	DspEmis Ftr	Scrub Eff
MECO_TY2007	1	Kahului1	2007	1	1	1	1	19	0	0	3	0	0	0	9999.9004	5	5	100	100	1	0	1	0	0
MECO_TY2007	1	Kahului1	2007	4	1	1	1	19	0	0	1	0	0	0	9999.9004	5	5	100	100	1	0	1	0	0
MECO_TY2007	1	Kahului1	2007	5	1	1	1	19	0	0	3	0	0	0	9999.9004	5	5	100	100	1	0	1	0	0
MECO_TY2007	1	Kahului1	2007	11	1	1	1	19	0	0	1	0	0	0	9999.9004	5	5	100	100	1	0	1	0	0
MECO_TY2007	1	Kahului1	2007	12	1	1	1	19	0	0	3	0	0	0	9999.9004	5	5	100	100	1	0	1	0	0
MECO_TY2007	2	Kahului2	2007	1	1	1	1	19	0	0	3	0	0	0	9999.9004	5	5	100	100	1	0	1	0	0
MECO_TY2007	2	Kahului2	2007	4	1	1	1	19	0	0	1	0	0	0	9999.9004	5	5	100	100	1	0	1	0	0
MECO_TY2007	2	Kahului2	2007	5	1	1	1	19	0	0	3	0	0	0	9999.9004	5	5	100	100	1	0	1	0	0
MECO_TY2007	2	Kahului2	2007	11	1	1	1	19	0	0	1	0	0	0	9999.9004	5	5	100	100	1	0	1	0	0
MECO_TY2007	2	Kahului2	2007	12	1	1	1	19	0	0	3	0	0	0	9999.9004	5	5	100	100	1	0	1	0	0
MECO_TY2007	3	Kahului3	2007	1	1	1	1	0	0	0	1	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	4	Kahului4	2007	1	1	1	1	0	0	0	1	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	7	MaalaeX1	2007	1	1	2	1	0	0	0	5	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	8	MaalaeX2	2007	1	1	2	1	0	0	0	5	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	9	Maalaea1	2007	1	1	2	1	0	0	0	5	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	10	Maalaea2	2007	1	1	2	1	0	0	0	5	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	11	Maalaea3	2007	1	1	2	1	0	0	0	5	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	12	Maalaea4	2007	1	1	2	1	0	0	0	3	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	13	Maalaea5	2007	1	1	2	1	0	0	0	3	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	14	Maalaea6	2007	1	1	2	1	0	0	0	3	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	15	Maalaea7	2007	1	1	2	1	0	0	0	3	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	16	Maalaea8	2007	1	1	2	1	0	0	0	3	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	17	Maalaea9	2007	1	1	2	1	0	0	0	3	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	18	Maalae10	2007	1	1	2	1	0	0	0	3	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	19	Maalae11	2007	1	1	2	1	0	0	0	3	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	20	Maalae12	2007	1	1	2	1	0	0	0	3	0	0	0	9999.9004	5	5	100	100	1	0	1	0	0
MECO_TY2007	21	Maalae13	2007	1	1	2	1	0	0	0	3	0	0	0	9999.9004	5	5	100	100	1	0	1	0	0
MECO_TY2007	24	M14&15	2007	1	1	2	1	0	0	0	1	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	25	M15&16	2007	1	1	2	1	0	0	0	1	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	28	M17&18	2007	1	1	2	1	0	0	0	1	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0
MECO_TY2007	29	M19&18	2007	1	1	2	1	0	0	0	3	0	0	0	9999.9004	1	1	100	100	1	0	1	0	0

Thermal Cost and Variable Summary

SetID	ID	NAME	YR	PRD	Spot Fuel	Cont Fuel1	Cont1 Targt	Cont Fuel2	Cont2 Targt	Cont Fuel3	Cont3 Targt	Start Fuel	Start BTU	Stn Eng	VarOM	FixOM	Fix Start	Cap Cost	VarOM Esc	FixOM Esc	Cost Cmt	Dsp Pnlty	Cmt Pnlty	Trnsm Loss	Start Cost	Hr VarOM	I26	X31	X32
MECO_TY2007	1	Kahului1	2007	1	1	0	0	0	0	0	0	1	21	0	1.412292	109078.4	0	0	1.99	1.99	1	1	2	1	0	0.13922	0	0	0
MECO_TY2007	2	Kahului2	2007	1	1	0	0	0	0	0	0	1	21	0	1.42693	108233.2	0	0	1.99	1.99	1	1	2	1	0	0.13922	0	0	0
MECO_TY2007	3	Kahului3	2007	1	1	0	0	0	0	0	0	1	20	0	1.253263	101654.2	0	0	1.99	1.99	1	1	1	1	0	0.13922	0	0	0
MECO_TY2007	4	Kahului4	2007	1	1	0	0	0	0	0	0	1	20	0	1.346897	103193.7	0	0	1.99	1.99	1	1	1	1	0	0.13922	0	0	0
MECO_TY2007	7	MaalaeX1	2007	1	2	0	0	0	0	0	0	2	0	0	0.507019	32119.26	0	0	1.99	1.99	1	1	2.5	1	0	28.48502	0	0	0
MECO_TY2007	8	MaalaeX2	2007	1	2	0	0	0	0	0	0	2	0	0	0.507019	32119.26	0	0	1.99	1.99	1	1	3	1	0	28.48502	0	0	0
MECO_TY2007	9	Maalaea1	2007	1	2	0	0	0	0	0	0	2	0	0	0.507019	32119.26	0	0	1.99	1.99	1	1	2	1	0	28.48502	0	0	0
MECO_TY2007	10	Maalaea2	2007	1	2	0	0	0	0	0	0	2	0	0	0.507019	32119.26	0	0	1.99	1.99	1	1	1.5	1	0	28.48502	0	0	0
MECO_TY2007	11	Maalaea3	2007	1	2	0	0	0	0	0	0	2	0	0	0.507019	32119.26	0	0	1.99	1.99	1	1	1	1	0	28.48502	0	0	0
MECO_TY2007	12	Maalaea4	2007	1	2	0	0	0	0	0	0	2	0	0	1.574695	44197.88	0	0	1.99	1.99	1	1	3.5	1	0	21.59214	0	0	0
MECO_TY2007	13	Maalaea5	2007	1	2	0	0	0	0	0	0	2	0	0	1.574695	44197.88	0	0	1.99	1.99	1	1	4.5	1	0	21.59214	0	0	0
MECO_TY2007	14	Maalaea6	2007	1	2	0	0	0	0	0	0	2	0	0	1.574695	44197.88	0	0	1.99	1.99	1	1	3	1	0	21.59214	0	0	0
MECO_TY2007	15	Maalaea7	2007	1	2	0	0	0	0	0	0	2	0	0	1.574695	44197.88	0	0	1.99	1.99	1	1	4	1	0	21.59214	0	0	0
MECO_TY2007	16	Maalaea8	2007	1	2	0	0	0	0	0	0	2	0	0	0.843635	35281.38	0	0	1.99	1.99	1	1	3	1	0	36.5738	0	0	0
MECO_TY2007	17	Maalaea9	2007	1	2	0	0	0	0	0	0	2	0	0	0.843635	35281.38	0	0	1.99	1.99	1	1	2.5	1	0	36.5738	0	0	0
MECO_TY2007	18	Maalae10	2007	1	2	0	0	0	0	0	0	2	0	0	0.508783	43777	0	0	1.99	1.99	1	1	2.5	1	0	85.27442	0	0	0
MECO_TY2007	19	Maalae11	2007	1	2	0	0	0	0	0	0	2	0	0	0.508783	43777	0	0	1.99	1.99	1	1	2	1	0	85.27442	0	0	0
MECO_TY2007	20	Maalae12	2007	1	2	0	0	0	0	0	0	2	0	0	0.508783	43777	0	0	1.99	1.99	1	1	1.5	1	390	85.27442	0	0	0
MECO_TY2007	21	Maalae13	2007	1	2	0	0	0	0	0	0	2	0	0	0.508783	43777	0	0	1.99	1.99	1	1	1	1	390	85.27442	0	0	0
MECO_TY2007	24	M14&15	2007	1	2	0	0	0	0	0	0	2	0	0	0.347158	103899	0	0	1.99	1.99	1	1	1	1	0	116.4646	0	0	0
MECO_TY2007	25	M15&16	2007	1	2	0	0	0	0	0	0	2	0	0	0.347158	103899	0	0	1.99	1.99	1	1	1	1	0	116.4646	0	0	0
MECO_TY2007	28	M17&18	2007	1	2	0	0	0	0	0	0	2	0	0	0.347158	103899	0	0	1.99	1.99	1	1	1.5	1	0	106.8815	0	0	0
MECO_TY2007	29	M19&18	2007	1	2	0	0	0	0	0	0	2	0	0	0.347158	103899	0	0	1.99	1.99	1	1	1	1	0	106.8815	0	0	0

Thermal Performance Summary

SetID	ID	NAME	YR	PRD	Cap1	Cap2	Cap3	Cap4	Cap5	Cap6	Cap7	Cap8	MinLd HR	HR Option	HR1	HR2	HR3
MECO_TY2007	1	Kahului1	2007	1	2.3	3.1033	3.9067	4.71	0	0	0	0	10000	1	14.04674	9.462961	0.82076
MECO_TY2007	2	Kahului2	2007	1	2.3	3.12	3.94	4.76	0	0	0	0	10000	1	7.757865	12.93512	0.33426
MECO_TY2007	3	Kahului3	2007	1	6.6	8.06	9.52	10.98	0	0	0	0	10000	1	21.1064	9.65501	0.140188
MECO_TY2007	4	Kahului4	2007	1	7.5	8.96	10.42	11.88	0	0	0	0	10000	1	39.01512	7.008074	0.321204
MECO_TY2007	7	MaalaeX1	2007	1	2.5	2.5	2.5	2.5	0	0	0	0	10000	1	0	10.2878	0
MECO_TY2007	8	MaalaeX2	2007	1	2.5	2.5	2.5	2.5	0	0	0	0	10000	1	0	10.2878	0
MECO_TY2007	9	Maalaea1	2007	1	2.5	2.5	2.5	2.5	0	0	0	0	10000	1	0	10.2878	0
MECO_TY2007	10	Maalaea2	2007	1	2.5	2.5	2.5	2.5	0	0	0	0	10000	1	0	10.2878	0
MECO_TY2007	11	Maalaea3	2007	1	2.5	2.5	2.5	2.5	0	0	0	0	10000	1	0	10.2878	0
MECO_TY2007	12	Maalaea4	2007	1	2.5	3.5	4.51	5.51	0	0	0	0	10000	1	23.39263	-0.954462	1.284635
MECO_TY2007	13	Maalaea5	2007	1	2.5	3.5	4.51	5.51	0	0	0	0	10000	1	23.39263	-0.954462	1.284635
MECO_TY2007	14	Maalaea6	2007	1	2.5	3.5	4.51	5.51	0	0	0	0	10000	1	23.39263	-0.954462	1.284635
MECO_TY2007	15	Maalaea7	2007	1	2.5	3.5	4.51	5.51	0	0	0	0	10000	1	23.39263	-0.954462	1.284635
MECO_TY2007	16	Maalaea8	2007	1	2.5	3.49	4.49	5.48	0	0	0	0	10000	1	18.18521	1.154795	0.963405
MECO_TY2007	17	Maalaea9	2007	1	2.5	3.49	4.49	5.48	0	0	0	0	10000	1	18.18521	1.154795	0.963405
MECO_TY2007	18	Maalae10	2007	1	6.4	8.38	10.36	12.34	0	0	0	0	10000	1	26.65565	3.569745	0.274891
MECO_TY2007	19	Maalae11	2007	1	6.4	8.38	10.36	12.34	0	0	0	0	10000	1	26.65565	3.569745	0.274891
MECO_TY2007	20	Maalae12	2007	1	6.4	8.38	10.36	12.34	0	0	0	0	10000	1	26.65565	3.569745	0.274891
MECO_TY2007	21	Maalae13	2007	1	6.4	8.38	10.36	12.34	0	0	0	0	10000	1	26.65565	3.569745	0.274891
MECO_TY2007	24	M14&15	2007	1	17.6	20.65	23.7	26.75	0	0	0	0	10000	1	2.11241	9.471323	-0.038401
MECO_TY2007	25	M15&16	2007	1	17.6	20.65	23.7	26.75	0	0	0	0	10000	1	2.11241	9.471323	-0.038401
MECO_TY2007	28	M17&18	2007	1	20.4	22.517	24.633	26.75	0	0	0	0	10000	1	2.11241	9.471323	-0.038401
MECO_TY2007	29	M19&18	2007	1	8.1	14.317	20.533	26.75	0	0	0	0	10000	1	2.11241	9.471323	-0.038401

Thermal Performance Summary

SetID	ID	NAME	YR	HR4	HR5	HR6	HR7	HR8	Avail1	Avail2	Avail3	Avail4	Avail5	Avail6	Avail7	Avail8	FOR	MOR
MECO_TY2007	1	Kahului1	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.13724	1.099
MECO_TY2007	2	Kahului2	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.13724	1.099
MECO_TY2007	3	Kahului3	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.16124	0.517
MECO_TY2007	4	Kahului4	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.16124	0.517
MECO_TY2007	7	MaalaeX1	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.528149	1.357
MECO_TY2007	8	MaalaeX2	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.528149	1.357
MECO_TY2007	9	Maalaea1	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.528149	1.357
MECO_TY2007	10	Maalaea2	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.528149	1.357
MECO_TY2007	11	Maalaea3	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.528149	1.357
MECO_TY2007	12	Maalaea4	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.559072	1.938
MECO_TY2007	13	Maalaea5	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.559072	1.938
MECO_TY2007	14	Maalaea6	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.559072	1.938
MECO_TY2007	15	Maalaea7	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.559072	1.938
MECO_TY2007	16	Maalaea8	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	1.29017	1.93
MECO_TY2007	17	Maalaea9	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	1.29017	1.93
MECO_TY2007	18	Maalae10	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.301103	1.486
MECO_TY2007	19	Maalae11	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.301103	1.486
MECO_TY2007	20	Maalae12	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.301103	1.486
MECO_TY2007	21	Maalae13	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.301103	1.486
MECO_TY2007	24	M14&15	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.075927	1.059
MECO_TY2007	25	M15&16	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.075927	1.059
MECO_TY2007	28	M17&18	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.14838	0.964
MECO_TY2007	29	M19&18	2007	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.14838	0.964

Thermal Maintenance Summary

SetID	ID	NAME	YR	PRD	StartDay	Days
MECO_TY2007	1		2007	1	22	7
MECO_TY2007	1		2007	9	3	28
MECO_TY2007	2		2007	1	1	28
MECO_TY2007	2		2007	12	10	7
MECO_TY2007	3		2007	11	5	28
MECO_TY2007	4		2007	4	2	28
MECO_TY2007	7		2007	8	27	7
MECO_TY2007	8		2007	7	9	7
MECO_TY2007	9		2007	7	23	7
MECO_TY2007	10		2007	10	15	7
MECO_TY2007	11		2007	4	23	7
MECO_TY2007	11		2007	8	6	1
MECO_TY2007	12		2007	2	19	7
MECO_TY2007	12		2007	7	9	4
MECO_TY2007	13		2007	1	29	7
MECO_TY2007	14		2007	4	9	7
MECO_TY2007	15		2007	10	8	7
MECO_TY2007	16		2007	7	23	1
MECO_TY2007	16		2007	9	24	7
MECO_TY2007	17		2007	3	5	7
MECO_TY2007	18		2007	7	16	7
MECO_TY2007	18		2007	10	1	6
MECO_TY2007	19		2007	1	8	7
MECO_TY2007	20		2007	1	1	7
MECO_TY2007	20		2007	2	5	56
MECO_TY2007	21		2007	12	17	7
MECO_TY2007	24		2007	1	15	7
MECO_TY2007	24		2007	2	2	1
MECO_TY2007	24		2007	6	4	14
MECO_TY2007	25		2007	3	2	3
MECO_TY2007	25		2007	6	18	14
MECO_TY2007	25		2007	7	2	7
MECO_TY2007	28		2007	3	19	7
MECO_TY2007	29		2007	4	30	7
MECO_TY2007	29		2007	5	7	28
MECO_TY2007	29		2007	7	13	3

Fixed Energy Transaction Summary

SetID	ID	NAME	YR	PRD	Areal D	Type	Peak Def	Firm	Min Cap	MaxCap	Energy	Eng Cost	Cap Cost	EngCostEsc	CapCost Esc	Wk Days	WD PkHr1	WD PkHm	WE PkHr1	WE PkHm
MECO_TY2007	3	HCS_ON	2007	1	1	4	1	0	6	7.730415	3.355	0	0	0	0	7	8	21	8	21
MECO_TY2007	3	HCS_ON	2007	2	1	4	1	0	6	11.571429	4.536	0	0	0	0	7	8	21	8	21
MECO_TY2007	3	HCS_ON	2007	3	1	4	1	0	6	12.483871	5.418	0	0	0	0	7	8	21	8	21
MECO_TY2007	3	HCS_ON	2007	4	1	4	1	0	6	13.097619	5.501	0	0	0	0	7	8	21	8	21
MECO_TY2007	3	HCS_ON	2007	5	1	4	1	0	6	12.912442	5.604	0	0	0	0	7	8	21	8	21
MECO_TY2007	3	HCS_ON	2007	6	1	4	1	0	6	12.621429	5.301	0	0	0	0	7	8	21	8	21
MECO_TY2007	3	HCS_ON	2007	7	1	4	1	0	6	12	5.208	0	0	0	0	7	8	21	8	21
MECO_TY2007	3	HCS_ON	2007	8	1	4	1	0	6	12.036866	5.224	0	0	0	0	7	8	21	8	21
MECO_TY2007	3	HCS_ON	2007	9	1	4	1	0	6	12.188095	5.119	0	0	0	0	7	8	21	8	21
MECO_TY2007	3	HCS_ON	2007	10	1	4	1	0	6	12.965438	5.627	0	0	0	0	7	8	21	8	21
MECO_TY2007	3	HCS_ON	2007	11	1	4	1	0	6	13.238095	5.56	0	0	0	0	7	8	21	8	21
MECO_TY2007	3	HCS_ON	2007	12	1	4	1	0	6	13	5.642	0	0	0	0	7	8	21	8	21
MECO_TY2007	4	HCS_OFF	2007	1	1	5	1	0	5.16	5.16	1.6	0	0	0	0	7	8	21	8	21
MECO_TY2007	4	HCS_OFF	2007	2	1	5	1	0	6	8	2.24	0	0	0	0	7	8	21	8	21
MECO_TY2007	4	HCS_OFF	2007	3	1	5	1	0	6	8	2.48	0	0	0	0	7	8	21	8	21
MECO_TY2007	4	HCS_OFF	2007	4	1	5	1	0	6	8	2.4	0	0	0	0	7	8	21	8	21
MECO_TY2007	4	HCS_OFF	2007	5	1	5	1	0	6	8	2.48	0	0	0	0	7	8	21	8	21
MECO_TY2007	4	HCS_OFF	2007	6	1	5	1	0	6	8	2.4	0	0	0	0	7	8	21	8	21
MECO_TY2007	4	HCS_OFF	2007	7	1	5	1	0	6	8	2.48	0	0	0	0	7	8	21	8	21
MECO_TY2007	4	HCS_OFF	2007	8	1	5	1	0	6	8	2.48	0	0	0	0	7	8	21	8	21
MECO_TY2007	4	HCS_OFF	2007	9	1	5	1	0	6	8	2.4	0	0	0	0	7	8	21	8	21
MECO_TY2007	4	HCS_OFF	2007	10	1	5	1	0	6	8	2.48	0	0	0	0	7	8	21	8	21
MECO_TY2007	4	HCS_OFF	2007	11	1	5	1	0	6	8	2.4	0	0	0	0	7	8	21	8	21
MECO_TY2007	4	HCS_OFF	2007	12	1	5	1	0	6	8	2.48	0	0	0	0	7	8	21	8	21
MECO_TY2007	10	Makila Hydro	2007	1	1	6	1	0	0.1	0.1	0.0744	0	0	0	0	7	8	21	8	21
MECO_TY2007	10	Makila Hydro	2007	2	1	6	1	0	0.1	0.1	0.0672	0	0	0	0	7	8	21	8	21
MECO_TY2007	10	Makila Hydro	2007	3	1	6	1	0	0.1	0.1	0.0744	0	0	0	0	7	8	21	8	21
MECO_TY2007	10	Makila Hydro	2007	4	1	6	1	0	0.1	0.1	0.072	0	0	0	0	7	8	21	8	21
MECO_TY2007	10	Makila Hydro	2007	5	1	6	1	0	0.1	0.1	0.0744	0	0	0	0	7	8	21	8	21
MECO_TY2007	10	Makila Hydro	2007	6	1	6	1	0	0.1	0.1	0.072	0	0	0	0	7	8	21	8	21
MECO_TY2007	10	Makila Hydro	2007	7	1	6	1	0	0.1	0.1	0.0744	0	0	0	0	7	8	21	8	21
MECO_TY2007	10	Makila Hydro	2007	8	1	6	1	0	0.1	0.1	0.0744	0	0	0	0	7	8	21	8	21
MECO_TY2007	10	Makila Hydro	2007	9	1	6	1	0	0.1	0.1	0.072	0	0	0	0	7	8	21	8	21
MECO_TY2007	10	Makila Hydro	2007	10	1	6	1	0	0.1	0.1	0.0744	0	0	0	0	7	8	21	8	21
MECO_TY2007	10	Makila Hydro	2007	11	1	6	1	0	0.1	0.1	0.072	0	0	0	0	7	8	21	8	21
MECO_TY2007	10	Makila Hydro	2007	12	1	6	1	0	0.1	0.1	0.0744	0	0	0	0	7	8	21	8	21
MECO_TY2007	12	KWPON	2007	1	1	8	1	0	0	30	4.038	0	0	0	0	7	8	21	8	21
MECO_TY2007	13	KWPOFF	2007	1	1	8	1	0	0	30	3.125	0	0	0	0	7	8	21	8	21
MECO_TY2007	15	Hana	2007	1	1	8	1	0	2	2	2	0	0	0	0	7	8	21	8	21

Load Summary

YR	MW1	MW2	MW3	MW4	MW5	MW6	MW7	MW8	MW9	MW10	MW11	MW12	GWH1	GWH2	GWH3	GWH4	GWH5	GWH6	GWH7	GWH8	GWH9	GWH10	GWH11	GWH12
2007	198	196	196	192	193	193	202	209	203	207	206	207	106.2	94.9	105.4	102.8	107.7	109.2	114.1	117.1	109.8	112.8	106.2	105.3

Regulating Reserve Input File

SetID	Year	Month	Day	Hour	SpinReq
MECO_TY2007	2007	1	1	1	15
MECO_TY2007	2007	1	2	1	15
MECO_TY2007	2007	1	3	1	15
MECO_TY2007	2007	1	4	1	15
MECO_TY2007	2007	1	5	1	15
MECO_TY2007	2007	1	6	1	15
MECO_TY2007	2007	1	7	1	15

Pattern 12

SetID	Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
PTN12	1/1/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/2/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/3/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/4/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/5/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/6/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/7/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/8/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/9/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/10/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/11/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/12/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/13/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/14/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/15/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/16/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/17/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/18/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/19/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/20/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/21/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/22/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/23/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/24/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/25/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/26/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/27/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/28/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/29/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/30/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	1/31/2007	0	0	0	0	0	0	0	10.3	10	9.3	9.1	9	8.9	9	9	9	9	9.2	9.4	9.4	9.8	0	0	0
PTN12	2/1/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/2/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/3/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/4/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/5/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/6/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/7/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/8/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/9/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/10/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/11/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/12/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/13/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/14/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/15/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/16/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/17/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/18/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/19/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/20/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/21/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/22/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/23/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/24/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/25/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/26/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/27/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0
PTN12	2/28/2007	0	0	0	0	0	0	0	12.9	11.8	11.3	10.1	8.5	7.1	6.6	6.5	6.2	6.8	7.3	8.1	9.6	9.6	0	0	0

Pattern 12

SetID	Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
PTN12	3/1/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/2/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/3/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/4/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/5/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/6/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/7/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/8/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/9/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/10/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/11/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/12/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/13/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/14/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/15/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/16/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/17/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/18/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/19/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/20/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/21/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/22/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/23/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/24/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/25/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/26/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/27/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/28/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/29/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/30/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	3/31/2007	0	0	0	0	0	0	0	14.2	13.6	13.1	12	11.8	11.3	11.6	11.4	11.7	11.9	12.1	11.8	12.1	12.3	0	0	0
PTN12	4/1/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/2/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/3/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/4/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/5/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/6/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/7/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/8/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/9/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/10/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/11/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/12/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/13/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/14/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/15/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/16/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/17/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/18/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/19/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/20/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/21/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/22/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/23/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/24/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/25/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/26/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/27/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/28/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/29/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0
PTN12	4/30/2007	0	0	0	0	0	0	0	14.3	13.4	12.7	12.3	12.1	11.8	11.7	12	12.4	13.4	13.5	14.1	14.1	14.5	0	0	0

Pattern 12

SetID	Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
PTN12	5/1/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/2/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/3/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/4/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/5/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/6/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/7/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/8/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/9/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/10/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/11/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/12/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/13/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/14/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/15/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/16/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/17/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/18/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/19/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/20/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/21/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/22/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/23/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/24/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/25/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/26/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/27/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/28/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/29/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/30/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	5/31/2007	0	0	0	0	0	0	0	15.2	14.4	13.8	12.8	12	12	12.5	13.3	13.5	14.3	14.6	15	16	16.1	0	0	0
PTN12	6/1/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/2/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/3/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/4/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/5/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/6/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/7/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/8/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/9/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/10/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/11/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/12/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/13/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/14/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/15/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/16/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/17/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/18/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/19/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/20/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/21/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/22/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/23/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/24/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/25/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/26/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/27/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/28/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/29/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0
PTN12	6/30/2007	0	0	0	0	0	0	0	18	17.4	17.4	15.8	15.3	15.8	16.4	16.5	17.3	18	18.5	19.3	20.3	19.7	0	0	0

Pattern 12

SetID	Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
PTN12	7/1/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/2/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/3/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/4/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/5/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/6/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/7/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/8/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/9/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/10/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/11/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/12/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/13/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/14/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/15/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/16/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/17/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/18/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/19/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/20/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/21/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/22/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/23/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/24/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/25/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/26/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/27/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/28/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/29/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/30/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	7/31/2007	0	0	0	0	0	0	0	18.8	18.4	17.6	16.5	16.3	15.8	15.8	16	16.4	17.6	18.3	18.8	19.5	20	0	0	0
PTN12	8/1/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/2/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/3/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/4/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/5/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/6/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/7/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/8/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/9/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/10/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/11/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/12/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/13/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/14/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/15/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/16/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/17/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/18/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/19/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/20/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/21/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/22/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/23/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/24/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/25/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/26/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/27/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/28/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/29/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/30/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0
PTN12	8/31/2007	0	0	0	0	0	0	0	16.4	15.4	12.7	11.3	10	9.1	8.8	9.2	10.1	10.9	12.5	14.1	16.7	17.1	0	0	0

Pattern 12

SetID	Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
PTN12	9/1/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/2/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/3/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/4/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/5/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/6/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/7/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/8/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/9/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/10/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/11/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/12/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/13/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/14/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/15/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/16/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/17/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/18/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/19/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/20/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/21/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/22/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/23/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/24/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/25/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/26/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/27/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/28/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/29/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	9/30/2007	0	0	0	0	0	0	0	16.4	15.6	14.2	13.1	12	11.5	11.2	11.7	12.1	13.2	14.1	15	16.2	16.7	0	0	0
PTN12	10/1/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/2/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/3/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/4/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/5/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/6/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/7/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/8/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/9/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/10/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/11/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/12/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/13/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/14/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/15/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/16/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/17/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/18/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/19/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/20/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/21/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/22/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/23/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/24/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/25/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/26/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/27/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/28/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/29/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/30/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0
PTN12	10/31/2007	0	0	0	0	0	0	0	15.2	15.1	13.7	13.5	12.7	11.9	11.4	11.6	11.7	12.3	13.3	14.4	15.2	15.6	0	0	0

Pattern 12

SetID	Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
PTN12	11/1/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/2/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/3/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/4/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/5/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/6/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/7/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/8/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/9/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/10/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/11/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/12/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/13/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/14/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/15/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/16/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/17/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/18/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/19/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/20/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/21/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/22/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/23/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/24/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/25/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/26/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/27/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/28/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/29/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	11/30/2007	0	0	0	0	0	0	0	14.5	14.6	13.8	13.2	13	12.6	12.6	12.5	13.2	13.8	13.9	15	15.4	15.1	0	0	0
PTN12	12/1/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/2/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/3/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/4/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/5/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/6/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/7/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/8/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/9/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/10/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/11/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/12/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/13/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/14/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/15/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/16/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/17/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/18/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/19/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/20/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/21/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/22/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/23/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/24/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/25/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/26/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/27/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/28/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/29/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/30/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0
PTN12	12/31/2007	0	0	0	0	0	0	0	13.1	11.9	12.5	12.5	12.1	12.2	11.8	11.6	12.2	12.6	12.7	13.1	14	13.7	0	0	0

Pattern 13

SetID	Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
PTN13	1/1/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/2/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/3/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/4/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/5/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/6/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/7/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/8/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/9/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/10/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/11/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/12/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/13/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/14/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/15/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/16/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/17/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/18/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/19/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/20/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/21/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/22/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/23/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/24/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/25/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/26/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/27/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/28/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/29/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/30/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	1/31/2007	10.3	10.1	10	9.9	10	9.8	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	10.1	10.5
PTN13	2/1/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/2/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/3/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/4/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/5/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/6/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/7/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/8/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/9/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/10/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/11/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/12/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/13/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/14/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/15/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/16/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/17/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/18/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/19/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/20/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/21/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/22/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/23/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/24/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/25/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/26/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/27/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6
PTN13	2/28/2007	11.6	11.6	11.9	11.8	13	13	13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	11.5	11.6

Pattern 13

SetID	Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
PTN13	3/1/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/2/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/3/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/4/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/5/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/6/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/7/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/8/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/9/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/10/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/11/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/12/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/13/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/14/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/15/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/16/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/17/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/18/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/19/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/20/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/21/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/22/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/23/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/24/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/25/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/26/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/27/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/28/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/29/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/30/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	3/31/2007	12.7	12.9	13.4	13.7	14	13.3	13.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.7	12.7	12.8
PTN13	4/1/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/2/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/3/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/4/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/5/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/6/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/7/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/8/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/9/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/10/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/11/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/12/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/13/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/14/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/15/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/16/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/17/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/18/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/19/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/20/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/21/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/22/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/23/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/24/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/25/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/26/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/27/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/28/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/29/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1
PTN13	4/30/2007	16	15.9	16.3	15.5	14.5	15	14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.6	16	16.1

Pattern 13

SetID	Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
PTN13	5/1/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/2/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/3/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/4/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/5/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/6/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/7/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/8/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/9/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/10/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/11/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/12/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/13/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/14/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/15/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/16/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/17/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/18/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/19/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/20/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/21/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/22/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/23/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/24/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/25/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/26/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/27/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/28/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/29/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/30/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	5/31/2007	15.5	15.2	14.9	15.5	15.5	15.6	15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	16.4	15.6
PTN13	6/1/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/2/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/3/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/4/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/5/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/6/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/7/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/8/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/9/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/10/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/11/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/12/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/13/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/14/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/15/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/16/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/17/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/18/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/19/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/20/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/21/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/22/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/23/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/24/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/25/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/26/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/27/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/28/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/29/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1
PTN13	6/30/2007	19.1	18.8	18.6	18.4	18.4	18.1	18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	20.2	20.1

Pattern 13

SetID	Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
PTN13	7/1/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/2/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/3/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/4/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/5/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/6/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/7/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/8/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/9/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/10/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/11/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/12/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/13/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/14/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/15/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/16/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/17/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/18/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/19/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/20/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/21/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/22/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/23/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/24/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/25/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/26/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/27/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/28/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/29/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/30/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	7/31/2007	20.9	20.7	20.4	20.2	20.1	20.1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	20.9	21
PTN13	8/1/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/2/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/3/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/4/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/5/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/6/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/7/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/8/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/9/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/10/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/11/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/12/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/13/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/14/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/15/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/16/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/17/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/18/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/19/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/20/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/21/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/22/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/23/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/24/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/25/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/26/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/27/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/28/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/29/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/30/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3
PTN13	8/31/2007	16.7	17	15.9	15.9	15.3	15.9	16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	17.9	17.3

Pattern 13

SetID	Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
PTN13	9/1/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/2/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/3/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/4/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/5/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/6/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/7/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/8/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/9/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/10/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/11/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/12/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/13/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/14/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/15/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/16/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/17/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/18/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/19/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/20/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/21/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/22/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/23/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/24/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/25/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/26/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/27/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/28/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/29/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	9/30/2007	16.8	16.1	15.4	15.3	15.3	15.8	16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	17.1	16.7
PTN13	10/1/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/2/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/3/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/4/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/5/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/6/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/7/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/8/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/9/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/10/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/11/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/12/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/13/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/14/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/15/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/16/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/17/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/18/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/19/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/20/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/21/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/22/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/23/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/24/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/25/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/26/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/27/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/28/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/29/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/30/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4
PTN13	10/31/2007	15.3	14.8	13.9	14.1	14.4	14.7	15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	15.9	15.4

Pattern 13

SetID	Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
PTN13	11/1/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/2/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/3/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/4/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/5/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/6/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/7/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/8/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/9/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/10/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/11/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/12/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/13/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/14/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/15/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/16/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/17/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/18/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/19/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/20/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/21/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/22/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/23/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/24/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/25/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/26/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/27/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/28/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/29/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	11/30/2007	15	14.8	14.8	15	15.2	14.8	14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14.7	14.7
PTN13	12/1/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/2/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/3/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/4/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/5/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/6/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/7/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/8/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/9/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/10/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/11/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/12/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/13/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/14/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/15/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/16/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/17/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/18/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/19/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/20/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/21/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/22/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/23/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/24/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/25/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/26/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/27/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/28/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/29/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/30/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1
PTN13	12/31/2007	14.4	13.5	13.1	12.4	12.3	12.3	12.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	13.3	14.1

Pattern 15

SetID	Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
PTN15	1/1/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/2/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/3/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/4/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/5/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/6/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/7/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/8/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/9/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/10/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/11/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/12/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/13/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/14/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/15/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/16/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/17/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/18/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/19/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/20/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/21/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/22/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/23/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/24/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/25/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/26/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/27/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/28/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/29/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/30/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	1/31/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/1/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/2/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/3/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/4/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/5/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/6/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/7/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/8/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/9/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/10/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/11/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/12/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/13/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/14/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/15/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/16/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/17/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/18/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/19/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/20/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/21/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/22/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/23/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/24/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/25/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/26/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/27/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	2/28/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pattern 15 (continued)

PTN15	3/1/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/2/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/3/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/4/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/5/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/6/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/7/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/8/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/9/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/10/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/11/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/12/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/13/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/14/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/15/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/16/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/17/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/18/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/19/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/20/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/21/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/22/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/23/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/24/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/25/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/26/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/27/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/28/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/29/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/30/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	3/31/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/1/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/2/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/3/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/4/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/5/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/6/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/7/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/8/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/9/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/10/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/11/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/12/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/13/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/14/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/15/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/16/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/17/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/18/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/19/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/20/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/21/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/22/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/23/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/24/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/25/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/26/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/27/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/28/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/29/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	4/30/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pattern 15 (continued)

PTN15	5/1/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/2/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/3/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/4/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/5/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/6/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/7/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/8/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/9/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/10/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/11/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/12/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/13/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/14/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/15/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/16/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/17/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/18/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/19/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/20/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/21/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/22/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/23/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/24/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/25/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/26/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/27/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/28/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/29/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/30/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	5/31/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/1/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/2/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/3/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/4/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/5/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/6/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/7/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/8/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/9/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/10/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/11/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/12/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/13/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/14/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/15/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/16/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/17/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/18/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/19/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/20/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/21/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/22/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/23/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/24/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/25/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/26/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/27/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/28/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/29/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	6/30/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pattern 15 (continued)

PTN15	7/1/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/2/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/3/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/4/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/5/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/6/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/7/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/8/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/9/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/10/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/11/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/12/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/13/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/14/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/15/2007	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0
PTN15	7/16/2007	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0
PTN15	7/17/2007	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0
PTN15	7/18/2007	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0
PTN15	7/19/2007	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0
PTN15	7/20/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/21/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/22/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/23/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/24/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/25/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/26/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/27/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/28/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/29/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/30/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	7/31/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/1/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/2/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/3/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/4/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/5/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/6/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/7/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/8/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/9/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/10/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/11/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/12/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/13/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/14/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/15/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/16/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/17/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/18/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/19/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/20/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/21/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/22/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/23/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/24/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/25/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/26/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/27/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/28/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/29/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/30/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	8/31/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pattern 15 (continued)

PTN15	9/1/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/2/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/3/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/4/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/5/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/6/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/7/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/8/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/9/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/10/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/11/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/12/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/13/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/14/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/15/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/16/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/17/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/18/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/19/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/20/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/21/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/22/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/23/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/24/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/25/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/26/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/27/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/28/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/29/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	9/30/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/1/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/2/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/3/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/4/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/5/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/6/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/7/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/8/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/9/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/10/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/11/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/12/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/13/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/14/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/15/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/16/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/17/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/18/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/19/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/20/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/21/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/22/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/23/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/24/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/25/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/26/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/27/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/28/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/29/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/30/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	10/31/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pattern 15 (continued)

PTN15	11/1/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/2/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/3/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/4/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/5/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/6/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/7/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/8/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/9/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/10/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/11/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/12/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/13/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/14/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/15/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/16/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/17/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/18/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/19/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/20/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/21/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/22/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/23/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/24/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/25/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/26/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/27/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/28/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/29/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	11/30/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/1/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/2/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/3/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/4/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/5/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/6/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/7/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/8/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/9/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/10/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/11/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/12/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/13/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/14/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/15/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/16/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/17/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/18/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/19/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/20/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/21/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/22/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/23/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/24/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/25/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/26/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/27/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/28/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/29/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/30/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTN15	12/31/2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pattern 19

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	1	1	1	0	1
PTN19	2007	1	1	5	1	1
PTN19	2007	1	1	22	0	1
PTN19	2007	1	2	1	0	1
PTN19	2007	1	2	5	1	1
PTN19	2007	1	2	22	0	1
PTN19	2007	1	3	1	0	1
PTN19	2007	1	3	5	1	1
PTN19	2007	1	3	22	0	1
PTN19	2007	1	4	1	0	1
PTN19	2007	1	4	5	1	1
PTN19	2007	1	4	22	0	1
PTN19	2007	1	5	1	0	1
PTN19	2007	1	5	5	1	1
PTN19	2007	1	5	22	0	1
PTN19	2007	1	6	1	0	1
PTN19	2007	1	6	5	1	1
PTN19	2007	1	6	22	0	1
PTN19	2007	1	7	1	0	1
PTN19	2007	1	7	5	1	1
PTN19	2007	1	7	22	0	1
PTN19	2007	1	8	1	0	1
PTN19	2007	1	8	5	1	1
PTN19	2007	1	8	22	0	1
PTN19	2007	1	9	1	0	1
PTN19	2007	1	9	5	1	1
PTN19	2007	1	9	22	0	1
PTN19	2007	1	10	1	0	1
PTN19	2007	1	10	5	1	1
PTN19	2007	1	10	22	0	1
PTN19	2007	1	11	1	0	1
PTN19	2007	1	11	5	1	1
PTN19	2007	1	11	22	0	1
PTN19	2007	1	12	1	0	1
PTN19	2007	1	12	5	1	1
PTN19	2007	1	12	22	0	1
PTN19	2007	1	13	1	0	1
PTN19	2007	1	13	5	1	1
PTN19	2007	1	13	22	0	1
PTN19	2007	1	14	1	0	1
PTN19	2007	1	14	5	1	1
PTN19	2007	1	14	22	0	1
PTN19	2007	1	15	1	0	1
PTN19	2007	1	15	5	1	1
PTN19	2007	1	15	22	0	1
PTN19	2007	1	16	1	0	1
PTN19	2007	1	16	5	1	1
PTN19	2007	1	16	22	0	1

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	1	17	1	0	1
PTN19	2007	1	17	5	1	1
PTN19	2007	1	17	22	0	1
PTN19	2007	1	18	1	0	1
PTN19	2007	1	18	5	1	1
PTN19	2007	1	18	22	0	1
PTN19	2007	1	19	1	0	1
PTN19	2007	1	19	5	1	1
PTN19	2007	1	19	22	0	1
PTN19	2007	1	20	1	0	1
PTN19	2007	1	20	5	1	1
PTN19	2007	1	20	22	0	1
PTN19	2007	1	21	1	0	1
PTN19	2007	1	21	5	1	1
PTN19	2007	1	21	22	0	1
PTN19	2007	1	22	1	0	1
PTN19	2007	1	22	5	1	1
PTN19	2007	1	22	22	0	1
PTN19	2007	1	23	1	0	1
PTN19	2007	1	23	5	1	1
PTN19	2007	1	23	22	0	1
PTN19	2007	1	24	1	0	1
PTN19	2007	1	24	5	1	1
PTN19	2007	1	24	22	0	1
PTN19	2007	1	25	1	0	1
PTN19	2007	1	25	5	1	1
PTN19	2007	1	25	22	0	1
PTN19	2007	1	26	1	0	1
PTN19	2007	1	26	5	1	1
PTN19	2007	1	26	22	0	1
PTN19	2007	1	27	1	0	1
PTN19	2007	1	27	5	1	1
PTN19	2007	1	27	22	0	1
PTN19	2007	1	28	1	0	1
PTN19	2007	1	28	5	1	1
PTN19	2007	1	28	22	0	1
PTN19	2007	1	29	1	0	1
PTN19	2007	1	29	5	1	1
PTN19	2007	1	29	22	0	1
PTN19	2007	1	30	1	0	1
PTN19	2007	1	30	5	1	1
PTN19	2007	1	30	22	0	1
PTN19	2007	1	31	1	0	1
PTN19	2007	1	31	5	1	1
PTN19	2007	1	31	22	0	1

Pattern 19 (continued)

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	2	1	1	0	1
PTN19	2007	2	1	5	1	1
PTN19	2007	2	1	22	0	1
PTN19	2007	2	2	1	0	1
PTN19	2007	2	2	5	1	1
PTN19	2007	2	2	22	0	1
PTN19	2007	2	3	1	0	1
PTN19	2007	2	3	5	1	1
PTN19	2007	2	3	22	0	1
PTN19	2007	2	4	1	0	1
PTN19	2007	2	4	5	1	1
PTN19	2007	2	4	22	0	1
PTN19	2007	2	5	1	0	1
PTN19	2007	2	5	5	1	1
PTN19	2007	2	5	22	0	1
PTN19	2007	2	6	1	0	1
PTN19	2007	2	6	5	1	1
PTN19	2007	2	6	22	0	1
PTN19	2007	2	7	1	0	1
PTN19	2007	2	7	5	1	1
PTN19	2007	2	7	22	0	1
PTN19	2007	2	8	1	0	1
PTN19	2007	2	8	5	1	1
PTN19	2007	2	8	22	0	1
PTN19	2007	2	9	1	0	1
PTN19	2007	2	9	5	1	1
PTN19	2007	2	9	22	0	1
PTN19	2007	2	10	1	0	1
PTN19	2007	2	10	5	1	1
PTN19	2007	2	10	22	0	1
PTN19	2007	2	11	1	0	1
PTN19	2007	2	11	5	1	1
PTN19	2007	2	11	22	0	1
PTN19	2007	2	12	1	0	1
PTN19	2007	2	12	5	1	1
PTN19	2007	2	12	22	0	1
PTN19	2007	2	13	1	0	1
PTN19	2007	2	13	5	1	1
PTN19	2007	2	13	22	0	1
PTN19	2007	2	14	1	0	1
PTN19	2007	2	14	5	1	1
PTN19	2007	2	14	22	0	1

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	2	15	1	0	1
PTN19	2007	2	15	5	1	1
PTN19	2007	2	15	22	0	1
PTN19	2007	2	16	1	0	1
PTN19	2007	2	16	5	1	1
PTN19	2007	2	16	22	0	1
PTN19	2007	2	17	1	0	1
PTN19	2007	2	17	5	1	1
PTN19	2007	2	17	22	0	1
PTN19	2007	2	18	1	0	1
PTN19	2007	2	18	5	1	1
PTN19	2007	2	18	22	0	1
PTN19	2007	2	19	1	0	1
PTN19	2007	2	19	5	1	1
PTN19	2007	2	19	22	0	1
PTN19	2007	2	20	1	0	1
PTN19	2007	2	20	5	1	1
PTN19	2007	2	20	22	0	1
PTN19	2007	2	21	1	0	1
PTN19	2007	2	21	5	1	1
PTN19	2007	2	21	22	0	1
PTN19	2007	2	22	1	0	1
PTN19	2007	2	22	5	1	1
PTN19	2007	2	22	22	0	1
PTN19	2007	2	23	1	0	1
PTN19	2007	2	23	5	1	1
PTN19	2007	2	23	22	0	1
PTN19	2007	2	24	1	0	1
PTN19	2007	2	24	5	1	1
PTN19	2007	2	24	22	0	1
PTN19	2007	2	25	1	0	1
PTN19	2007	2	25	5	1	1
PTN19	2007	2	25	22	0	1
PTN19	2007	2	26	1	0	1
PTN19	2007	2	26	5	1	1
PTN19	2007	2	26	22	0	1
PTN19	2007	2	27	1	0	1
PTN19	2007	2	27	5	1	1
PTN19	2007	2	27	22	0	1
PTN19	2007	2	28	1	0	1
PTN19	2007	2	28	5	1	1
PTN19	2007	2	28	22	0	1

Pattern 19 (continued)

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	3	1	1	0	1
PTN19	2007	3	1	5	1	1
PTN19	2007	3	1	22	0	1
PTN19	2007	3	2	1	0	1
PTN19	2007	3	2	5	1	1
PTN19	2007	3	2	22	0	1
PTN19	2007	3	3	1	0	1
PTN19	2007	3	3	5	1	1
PTN19	2007	3	3	22	0	1
PTN19	2007	3	4	1	0	1
PTN19	2007	3	4	5	1	1
PTN19	2007	3	4	22	0	1
PTN19	2007	3	5	1	0	1
PTN19	2007	3	5	5	1	1
PTN19	2007	3	5	22	0	1
PTN19	2007	3	6	1	0	1
PTN19	2007	3	6	5	1	1
PTN19	2007	3	6	22	0	1
PTN19	2007	3	7	1	0	1
PTN19	2007	3	7	5	1	1
PTN19	2007	3	7	22	0	1
PTN19	2007	3	8	1	0	1
PTN19	2007	3	8	5	1	1
PTN19	2007	3	8	22	0	1
PTN19	2007	3	9	1	0	1
PTN19	2007	3	9	5	1	1
PTN19	2007	3	9	22	0	1
PTN19	2007	3	10	1	0	1
PTN19	2007	3	10	5	1	1
PTN19	2007	3	10	22	0	1
PTN19	2007	3	11	1	0	1
PTN19	2007	3	11	5	1	1
PTN19	2007	3	11	22	0	1
PTN19	2007	3	12	1	0	1
PTN19	2007	3	12	5	1	1
PTN19	2007	3	12	22	0	1
PTN19	2007	3	13	1	0	1
PTN19	2007	3	13	5	1	1
PTN19	2007	3	13	22	0	1
PTN19	2007	3	14	1	0	1
PTN19	2007	3	14	5	1	1
PTN19	2007	3	14	22	0	1
PTN19	2007	3	15	1	0	1
PTN19	2007	3	15	5	1	1
PTN19	2007	3	15	22	0	1
PTN19	2007	3	16	1	0	1
PTN19	2007	3	16	5	1	1
PTN19	2007	3	16	22	0	1

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	3	17	1	0	1
PTN19	2007	3	17	5	1	1
PTN19	2007	3	17	22	0	1
PTN19	2007	3	18	1	0	1
PTN19	2007	3	18	5	1	1
PTN19	2007	3	18	22	0	1
PTN19	2007	3	19	1	0	1
PTN19	2007	3	19	5	1	1
PTN19	2007	3	19	22	0	1
PTN19	2007	3	20	1	0	1
PTN19	2007	3	20	5	1	1
PTN19	2007	3	20	22	0	1
PTN19	2007	3	21	1	0	1
PTN19	2007	3	21	5	1	1
PTN19	2007	3	21	22	0	1
PTN19	2007	3	22	1	0	1
PTN19	2007	3	22	5	1	1
PTN19	2007	3	22	22	0	1
PTN19	2007	3	23	1	0	1
PTN19	2007	3	23	5	1	1
PTN19	2007	3	23	22	0	1
PTN19	2007	3	24	1	0	1
PTN19	2007	3	24	5	1	1
PTN19	2007	3	24	22	0	1
PTN19	2007	3	25	1	0	1
PTN19	2007	3	25	5	1	1
PTN19	2007	3	25	22	0	1
PTN19	2007	3	26	1	0	1
PTN19	2007	3	26	5	1	1
PTN19	2007	3	26	22	0	1
PTN19	2007	3	27	1	0	1
PTN19	2007	3	27	5	1	1
PTN19	2007	3	27	22	0	1
PTN19	2007	3	28	1	0	1
PTN19	2007	3	28	5	1	1
PTN19	2007	3	28	22	0	1
PTN19	2007	3	29	1	0	1
PTN19	2007	3	29	5	1	1
PTN19	2007	3	29	22	0	1
PTN19	2007	3	30	1	0	1
PTN19	2007	3	30	5	1	1
PTN19	2007	3	30	22	0	1
PTN19	2007	3	31	1	0	1
PTN19	2007	3	31	5	1	1
PTN19	2007	3	31	22	0	1

Pattern 19 (continued)

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	4	1	1	0	1
PTN19	2007	4	1	5	1	1
PTN19	2007	4	1	22	0	1
PTN19	2007	4	2	1	1	1
PTN19	2007	4	3	1	1	1
PTN19	2007	4	4	1	1	1
PTN19	2007	4	5	1	1	1
PTN19	2007	4	6	1	1	1
PTN19	2007	4	7	1	1	1
PTN19	2007	4	8	1	1	1
PTN19	2007	4	9	1	1	1
PTN19	2007	4	10	1	1	1
PTN19	2007	4	11	1	1	1
PTN19	2007	4	12	1	1	1
PTN19	2007	4	13	1	1	1
PTN19	2007	4	14	1	1	1
PTN19	2007	4	15	1	1	1

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	4	16	1	1	1
PTN19	2007	4	17	1	1	1
PTN19	2007	4	18	1	1	1
PTN19	2007	4	19	1	1	1
PTN19	2007	4	20	1	1	1
PTN19	2007	4	21	1	1	1
PTN19	2007	4	22	1	1	1
PTN19	2007	4	23	1	1	1
PTN19	2007	4	24	1	1	1
PTN19	2007	4	25	1	1	1
PTN19	2007	4	26	1	1	1
PTN19	2007	4	27	1	1	1
PTN19	2007	4	28	1	1	1
PTN19	2007	4	29	1	1	1
PTN19	2007	4	30	1	0	1
PTN19	2007	4	30	5	1	1
PTN19	2007	4	30	22	0	1

Pattern 19 (continued)

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	5	1	1	0	1
PTN19	2007	5	1	5	1	1
PTN19	2007	5	1	22	0	1
PTN19	2007	5	2	1	0	1
PTN19	2007	5	2	5	1	1
PTN19	2007	5	2	22	0	1
PTN19	2007	5	3	1	0	1
PTN19	2007	5	3	5	1	1
PTN19	2007	5	3	22	0	1
PTN19	2007	5	4	1	0	1
PTN19	2007	5	4	5	1	1
PTN19	2007	5	4	22	0	1
PTN19	2007	5	5	1	0	1
PTN19	2007	5	5	5	1	1
PTN19	2007	5	5	22	0	1
PTN19	2007	5	6	1	0	1
PTN19	2007	5	6	5	1	1
PTN19	2007	5	6	22	0	1
PTN19	2007	5	7	1	0	1
PTN19	2007	5	7	5	1	1
PTN19	2007	5	7	22	0	1
PTN19	2007	5	8	1	0	1
PTN19	2007	5	8	5	1	1
PTN19	2007	5	8	22	0	1
PTN19	2007	5	9	1	0	1
PTN19	2007	5	9	5	1	1
PTN19	2007	5	9	22	0	1
PTN19	2007	5	10	1	0	1
PTN19	2007	5	10	5	1	1
PTN19	2007	5	10	22	0	1
PTN19	2007	5	11	1	0	1
PTN19	2007	5	11	5	1	1
PTN19	2007	5	11	22	0	1
PTN19	2007	5	12	1	0	1
PTN19	2007	5	12	5	1	1
PTN19	2007	5	12	22	0	1
PTN19	2007	5	13	1	0	1
PTN19	2007	5	13	5	1	1
PTN19	2007	5	13	22	0	1
PTN19	2007	5	14	1	0	1
PTN19	2007	5	14	5	1	1
PTN19	2007	5	14	22	0	1
PTN19	2007	5	15	1	0	1
PTN19	2007	5	15	5	1	1
PTN19	2007	5	15	22	0	1
PTN19	2007	5	16	1	0	1
PTN19	2007	5	16	5	1	1
PTN19	2007	5	16	22	0	1

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	5	17	1	0	1
PTN19	2007	5	17	5	1	1
PTN19	2007	5	17	22	0	1
PTN19	2007	5	18	1	0	1
PTN19	2007	5	18	5	1	1
PTN19	2007	5	18	22	0	1
PTN19	2007	5	19	1	0	1
PTN19	2007	5	19	5	1	1
PTN19	2007	5	19	22	0	1
PTN19	2007	5	20	1	0	1
PTN19	2007	5	20	5	1	1
PTN19	2007	5	20	22	0	1
PTN19	2007	5	21	1	0	1
PTN19	2007	5	21	5	1	1
PTN19	2007	5	21	22	0	1
PTN19	2007	5	22	1	0	1
PTN19	2007	5	22	5	1	1
PTN19	2007	5	22	22	0	1
PTN19	2007	5	23	1	0	1
PTN19	2007	5	23	5	1	1
PTN19	2007	5	23	22	0	1
PTN19	2007	5	24	1	0	1
PTN19	2007	5	24	5	1	1
PTN19	2007	5	24	22	0	1
PTN19	2007	5	25	1	0	1
PTN19	2007	5	25	5	1	1
PTN19	2007	5	25	22	0	1
PTN19	2007	5	26	1	0	1
PTN19	2007	5	26	5	1	1
PTN19	2007	5	26	22	0	1
PTN19	2007	5	27	1	0	1
PTN19	2007	5	27	5	1	1
PTN19	2007	5	27	22	0	1
PTN19	2007	5	28	1	0	1
PTN19	2007	5	28	5	1	1
PTN19	2007	5	28	22	0	1
PTN19	2007	5	29	1	0	1
PTN19	2007	5	29	5	1	1
PTN19	2007	5	29	22	0	1
PTN19	2007	5	30	1	0	1
PTN19	2007	5	30	5	1	1
PTN19	2007	5	30	22	0	1
PTN19	2007	5	31	1	0	1
PTN19	2007	5	31	5	1	1
PTN19	2007	5	31	22	0	1

Pattern 19 (continued)

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	6	1	1	0	1
PTN19	2007	6	1	5	1	1
PTN19	2007	6	1	22	0	1
PTN19	2007	6	2	1	0	1
PTN19	2007	6	2	5	1	1
PTN19	2007	6	2	22	0	1
PTN19	2007	6	3	1	0	1
PTN19	2007	6	3	5	1	1
PTN19	2007	6	3	22	0	1
PTN19	2007	6	4	1	0	1
PTN19	2007	6	4	5	1	1
PTN19	2007	6	4	22	0	1
PTN19	2007	6	5	1	0	1
PTN19	2007	6	5	5	1	1
PTN19	2007	6	5	22	0	1
PTN19	2007	6	6	1	0	1
PTN19	2007	6	6	5	1	1
PTN19	2007	6	6	22	0	1
PTN19	2007	6	7	1	0	1
PTN19	2007	6	7	5	1	1
PTN19	2007	6	7	22	0	1
PTN19	2007	6	8	1	0	1
PTN19	2007	6	8	5	1	1
PTN19	2007	6	8	22	0	1
PTN19	2007	6	9	1	0	1
PTN19	2007	6	9	5	1	1
PTN19	2007	6	9	22	0	1
PTN19	2007	6	10	1	0	1
PTN19	2007	6	10	5	1	1
PTN19	2007	6	10	22	0	1
PTN19	2007	6	11	1	0	1
PTN19	2007	6	11	5	1	1
PTN19	2007	6	11	22	0	1
PTN19	2007	6	12	1	0	1
PTN19	2007	6	12	5	1	1
PTN19	2007	6	12	22	0	1
PTN19	2007	6	13	1	0	1
PTN19	2007	6	13	5	1	1
PTN19	2007	6	13	22	0	1
PTN19	2007	6	14	1	0	1
PTN19	2007	6	14	5	1	1
PTN19	2007	6	14	22	0	1
PTN19	2007	6	15	1	0	1
PTN19	2007	6	15	5	1	1
PTN19	2007	6	15	22	0	1

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	6	16	1	0	1
PTN19	2007	6	16	5	1	1
PTN19	2007	6	16	22	0	1
PTN19	2007	6	17	1	0	1
PTN19	2007	6	17	5	1	1
PTN19	2007	6	17	22	0	1
PTN19	2007	6	18	1	0	1
PTN19	2007	6	18	5	1	1
PTN19	2007	6	18	22	0	1
PTN19	2007	6	19	1	0	1
PTN19	2007	6	19	5	1	1
PTN19	2007	6	19	22	0	1
PTN19	2007	6	20	1	0	1
PTN19	2007	6	20	5	1	1
PTN19	2007	6	20	22	0	1
PTN19	2007	6	21	1	0	1
PTN19	2007	6	21	5	1	1
PTN19	2007	6	21	22	0	1
PTN19	2007	6	22	1	0	1
PTN19	2007	6	22	5	1	1
PTN19	2007	6	22	22	0	1
PTN19	2007	6	23	1	0	1
PTN19	2007	6	23	5	1	1
PTN19	2007	6	23	22	0	1
PTN19	2007	6	24	1	0	1
PTN19	2007	6	24	5	1	1
PTN19	2007	6	24	22	0	1
PTN19	2007	6	25	1	0	1
PTN19	2007	6	25	5	1	1
PTN19	2007	6	25	22	0	1
PTN19	2007	6	26	1	0	1
PTN19	2007	6	26	5	1	1
PTN19	2007	6	26	22	0	1
PTN19	2007	6	27	1	0	1
PTN19	2007	6	27	5	1	1
PTN19	2007	6	27	22	0	1
PTN19	2007	6	28	1	0	1
PTN19	2007	6	28	5	1	1
PTN19	2007	6	28	22	0	1
PTN19	2007	6	29	1	0	1
PTN19	2007	6	29	5	1	1
PTN19	2007	6	29	22	0	1
PTN19	2007	6	30	1	0	1
PTN19	2007	6	30	5	1	1
PTN19	2007	6	30	22	0	1

Pattern 19 (continued)

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	7	1	1	0	1
PTN19	2007	7	1	5	1	1
PTN19	2007	7	1	22	0	1
PTN19	2007	7	2	1	0	1
PTN19	2007	7	2	5	1	1
PTN19	2007	7	2	22	0	1
PTN19	2007	7	3	1	0	1
PTN19	2007	7	3	5	1	1
PTN19	2007	7	3	22	0	1
PTN19	2007	7	4	1	0	1
PTN19	2007	7	4	5	1	1
PTN19	2007	7	4	22	0	1
PTN19	2007	7	5	1	0	1
PTN19	2007	7	5	5	1	1
PTN19	2007	7	5	22	0	1
PTN19	2007	7	6	1	0	1
PTN19	2007	7	6	5	1	1
PTN19	2007	7	6	22	0	1
PTN19	2007	7	7	1	0	1
PTN19	2007	7	7	5	1	1
PTN19	2007	7	7	22	0	1
PTN19	2007	7	8	1	0	1
PTN19	2007	7	8	5	1	1
PTN19	2007	7	8	22	0	1
PTN19	2007	7	9	1	0	1
PTN19	2007	7	9	5	1	1
PTN19	2007	7	9	22	0	1
PTN19	2007	7	10	1	0	1
PTN19	2007	7	10	5	1	1
PTN19	2007	7	10	22	0	1
PTN19	2007	7	11	1	0	1
PTN19	2007	7	11	5	1	1
PTN19	2007	7	11	22	0	1
PTN19	2007	7	12	1	0	1
PTN19	2007	7	12	5	1	1
PTN19	2007	7	12	22	0	1
PTN19	2007	7	13	1	0	1
PTN19	2007	7	13	5	1	1
PTN19	2007	7	13	22	0	1
PTN19	2007	7	14	1	0	1
PTN19	2007	7	14	5	1	1
PTN19	2007	7	14	22	0	1
PTN19	2007	7	15	1	0	1
PTN19	2007	7	15	5	1	1
PTN19	2007	7	15	22	0	1
PTN19	2007	7	16	1	0	1
PTN19	2007	7	16	5	1	1
PTN19	2007	7	16	22	0	1
PTN19	2007	7	17	1	0	1
PTN19	2007	7	17	5	1	1
PTN19	2007	7	17	22	0	1
PTN19	2007	7	18	1	0	1
PTN19	2007	7	18	5	1	1
PTN19	2007	7	18	22	0	1
PTN19	2007	7	19	1	0	1
PTN19	2007	7	19	5	1	1
PTN19	2007	7	19	22	0	1
PTN19	2007	7	20	1	0	1
PTN19	2007	7	20	5	1	1
PTN19	2007	7	20	22	0	1
PTN19	2007	7	21	1	0	1
PTN19	2007	7	21	5	1	1
PTN19	2007	7	21	22	0	1
PTN19	2007	7	22	1	0	1
PTN19	2007	7	22	5	1	1
PTN19	2007	7	22	22	0	1
PTN19	2007	7	23	1	0	1
PTN19	2007	7	23	5	1	1
PTN19	2007	7	23	22	0	1
PTN19	2007	7	24	1	0	1
PTN19	2007	7	24	5	1	1
PTN19	2007	7	24	22	0	1
PTN19	2007	7	25	1	0	1
PTN19	2007	7	25	5	1	1
PTN19	2007	7	25	22	0	1
PTN19	2007	7	26	1	0	1
PTN19	2007	7	26	5	1	1
PTN19	2007	7	26	22	0	1
PTN19	2007	7	27	1	0	1
PTN19	2007	7	27	5	1	1
PTN19	2007	7	27	22	0	1
PTN19	2007	7	28	1	0	1
PTN19	2007	7	28	5	1	1
PTN19	2007	7	28	22	0	1
PTN19	2007	7	29	1	0	1
PTN19	2007	7	29	5	1	1
PTN19	2007	7	29	22	0	1
PTN19	2007	7	30	1	0	1
PTN19	2007	7	30	5	1	1
PTN19	2007	7	30	22	0	1
PTN19	2007	7	31	1	0	1
PTN19	2007	7	31	5	1	1
PTN19	2007	7	31	22	0	1

Pattern 19 (continued)

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	8	1	1	0	1
PTN19	2007	8	1	5	1	1
PTN19	2007	8	1	22	0	1
PTN19	2007	8	2	1	0	1
PTN19	2007	8	2	5	1	1
PTN19	2007	8	2	22	0	1
PTN19	2007	8	3	1	0	1
PTN19	2007	8	3	5	1	1
PTN19	2007	8	3	22	0	1
PTN19	2007	8	4	1	0	1
PTN19	2007	8	4	5	1	1
PTN19	2007	8	4	22	0	1
PTN19	2007	8	5	1	0	1
PTN19	2007	8	5	5	1	1
PTN19	2007	8	5	22	0	1
PTN19	2007	8	6	1	0	1
PTN19	2007	8	6	5	1	1
PTN19	2007	8	6	22	0	1
PTN19	2007	8	7	1	0	1
PTN19	2007	8	7	5	1	1
PTN19	2007	8	7	22	0	1
PTN19	2007	8	8	1	0	1
PTN19	2007	8	8	5	1	1
PTN19	2007	8	8	22	0	1
PTN19	2007	8	9	1	0	1
PTN19	2007	8	9	5	1	1
PTN19	2007	8	9	22	0	1
PTN19	2007	8	10	1	0	1
PTN19	2007	8	10	5	1	1
PTN19	2007	8	10	22	0	1
PTN19	2007	8	11	1	0	1
PTN19	2007	8	11	5	1	1
PTN19	2007	8	11	22	0	1
PTN19	2007	8	12	1	0	1
PTN19	2007	8	12	5	1	1
PTN19	2007	8	12	22	0	1
PTN19	2007	8	13	1	0	1
PTN19	2007	8	13	5	1	1
PTN19	2007	8	13	22	0	1
PTN19	2007	8	14	1	0	1
PTN19	2007	8	14	5	1	1
PTN19	2007	8	14	22	0	1
PTN19	2007	8	15	1	0	1
PTN19	2007	8	15	5	1	1
PTN19	2007	8	15	22	0	1
PTN19	2007	8	16	1	0	1
PTN19	2007	8	16	5	1	1
PTN19	2007	8	16	22	0	1

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	8	17	1	0	1
PTN19	2007	8	17	5	1	1
PTN19	2007	8	17	22	0	1
PTN19	2007	8	18	1	0	1
PTN19	2007	8	18	5	1	1
PTN19	2007	8	18	22	0	1
PTN19	2007	8	19	1	0	1
PTN19	2007	8	19	5	1	1
PTN19	2007	8	19	22	0	1
PTN19	2007	8	20	1	0	1
PTN19	2007	8	20	5	1	1
PTN19	2007	8	20	22	0	1
PTN19	2007	8	21	1	0	1
PTN19	2007	8	21	5	1	1
PTN19	2007	8	21	22	0	1
PTN19	2007	8	22	1	0	1
PTN19	2007	8	22	5	1	1
PTN19	2007	8	22	22	0	1
PTN19	2007	8	23	1	0	1
PTN19	2007	8	23	5	1	1
PTN19	2007	8	23	22	0	1
PTN19	2007	8	24	1	0	1
PTN19	2007	8	24	5	1	1
PTN19	2007	8	24	22	0	1
PTN19	2007	8	25	1	0	1
PTN19	2007	8	25	5	1	1
PTN19	2007	8	25	22	0	1
PTN19	2007	8	26	1	0	1
PTN19	2007	8	26	5	1	1
PTN19	2007	8	26	22	0	1
PTN19	2007	8	27	1	0	1
PTN19	2007	8	27	5	1	1
PTN19	2007	8	27	22	0	1
PTN19	2007	8	28	1	0	1
PTN19	2007	8	28	5	1	1
PTN19	2007	8	28	22	0	1
PTN19	2007	8	29	1	0	1
PTN19	2007	8	29	5	1	1
PTN19	2007	8	29	22	0	1
PTN19	2007	8	30	1	0	1
PTN19	2007	8	30	5	1	1
PTN19	2007	8	30	22	0	1
PTN19	2007	8	31	1	0	1
PTN19	2007	8	31	5	1	1
PTN19	2007	8	31	22	0	1

Pattern 19 (continued)

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	9	1	1	0	1
PTN19	2007	9	1	5	1	1
PTN19	2007	9	1	22	0	1
PTN19	2007	9	2	1	0	1
PTN19	2007	9	2	5	1	1
PTN19	2007	9	2	22	0	1
PTN19	2007	9	3	1	0	1
PTN19	2007	9	3	5	1	1
PTN19	2007	9	3	22	0	1
PTN19	2007	9	4	1	0	1
PTN19	2007	9	4	5	1	1
PTN19	2007	9	4	22	0	1
PTN19	2007	9	5	1	0	1
PTN19	2007	9	5	5	1	1
PTN19	2007	9	5	22	0	1
PTN19	2007	9	6	1	0	1
PTN19	2007	9	6	5	1	1
PTN19	2007	9	6	22	0	1
PTN19	2007	9	7	1	0	1
PTN19	2007	9	7	5	1	1
PTN19	2007	9	7	22	0	1
PTN19	2007	9	8	1	0	1
PTN19	2007	9	8	5	1	1
PTN19	2007	9	8	22	0	1
PTN19	2007	9	9	1	0	1
PTN19	2007	9	9	5	1	1
PTN19	2007	9	9	22	0	1
PTN19	2007	9	10	1	0	1
PTN19	2007	9	10	5	1	1
PTN19	2007	9	10	22	0	1
PTN19	2007	9	11	1	0	1
PTN19	2007	9	11	5	1	1
PTN19	2007	9	11	22	0	1
PTN19	2007	9	12	1	0	1
PTN19	2007	9	12	5	1	1
PTN19	2007	9	12	22	0	1
PTN19	2007	9	13	1	0	1
PTN19	2007	9	13	5	1	1
PTN19	2007	9	13	22	0	1
PTN19	2007	9	14	1	0	1
PTN19	2007	9	14	5	1	1
PTN19	2007	9	14	22	0	1
PTN19	2007	9	15	1	0	1
PTN19	2007	9	15	5	1	1
PTN19	2007	9	15	22	0	1
PTN19	2007	9	16	1	0	1
PTN19	2007	9	16	5	1	1
PTN19	2007	9	16	22	0	1
PTN19	2007	9	17	1	0	1
PTN19	2007	9	17	5	1	1
PTN19	2007	9	17	22	0	1
PTN19	2007	9	18	1	0	1
PTN19	2007	9	18	5	1	1
PTN19	2007	9	18	22	0	1
PTN19	2007	9	19	1	0	1
PTN19	2007	9	19	5	1	1
PTN19	2007	9	19	22	0	1
PTN19	2007	9	20	1	0	1
PTN19	2007	9	20	5	1	1
PTN19	2007	9	20	22	0	1
PTN19	2007	9	21	1	0	1
PTN19	2007	9	21	5	1	1
PTN19	2007	9	21	22	0	1
PTN19	2007	9	22	1	0	1
PTN19	2007	9	22	5	1	1
PTN19	2007	9	22	22	0	1
PTN19	2007	9	23	1	0	1
PTN19	2007	9	23	5	1	1
PTN19	2007	9	23	22	0	1
PTN19	2007	9	24	1	0	1
PTN19	2007	9	24	5	1	1
PTN19	2007	9	24	22	0	1
PTN19	2007	9	25	1	0	1
PTN19	2007	9	25	5	1	1
PTN19	2007	9	25	22	0	1
PTN19	2007	9	26	1	0	1
PTN19	2007	9	26	5	1	1
PTN19	2007	9	26	22	0	1
PTN19	2007	9	27	1	0	1
PTN19	2007	9	27	5	1	1
PTN19	2007	9	27	22	0	1
PTN19	2007	9	28	1	0	1
PTN19	2007	9	28	5	1	1
PTN19	2007	9	28	22	0	1
PTN19	2007	9	29	1	0	1
PTN19	2007	9	29	5	1	1
PTN19	2007	9	29	22	0	1
PTN19	2007	9	30	1	0	1
PTN19	2007	9	30	5	1	1
PTN19	2007	9	30	22	0	1

Pattern 19 (continued)

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	10	1	1	0	1
PTN19	2007	10	1	5	1	1
PTN19	2007	10	1	22	0	1
PTN19	2007	10	2	1	0	1
PTN19	2007	10	2	5	1	1
PTN19	2007	10	2	22	0	1
PTN19	2007	10	3	1	0	1
PTN19	2007	10	3	5	1	1
PTN19	2007	10	3	22	0	1
PTN19	2007	10	4	1	0	1
PTN19	2007	10	4	5	1	1
PTN19	2007	10	4	22	0	1
PTN19	2007	10	5	1	0	1
PTN19	2007	10	5	5	1	1
PTN19	2007	10	5	22	0	1
PTN19	2007	10	6	1	0	1
PTN19	2007	10	6	5	1	1
PTN19	2007	10	6	22	0	1
PTN19	2007	10	7	1	0	1
PTN19	2007	10	7	5	1	1
PTN19	2007	10	7	22	0	1
PTN19	2007	10	8	1	0	1
PTN19	2007	10	8	5	1	1
PTN19	2007	10	8	22	0	1
PTN19	2007	10	9	1	0	1
PTN19	2007	10	9	5	1	1
PTN19	2007	10	9	22	0	1
PTN19	2007	10	10	1	0	1
PTN19	2007	10	10	5	1	1
PTN19	2007	10	10	22	0	1
PTN19	2007	10	11	1	0	1
PTN19	2007	10	11	5	1	1
PTN19	2007	10	11	22	0	1
PTN19	2007	10	12	1	0	1
PTN19	2007	10	12	5	1	1
PTN19	2007	10	12	22	0	1
PTN19	2007	10	13	1	0	1
PTN19	2007	10	13	5	1	1
PTN19	2007	10	13	22	0	1
PTN19	2007	10	14	1	0	1
PTN19	2007	10	14	5	1	1
PTN19	2007	10	14	22	0	1
PTN19	2007	10	15	1	0	1
PTN19	2007	10	15	5	1	1
PTN19	2007	10	15	22	0	1
PTN19	2007	10	16	1	0	1
PTN19	2007	10	16	5	1	1
PTN19	2007	10	16	22	0	1
PTN19	2007	10	17	1	0	1
PTN19	2007	10	17	5	1	1
PTN19	2007	10	17	22	0	1
PTN19	2007	10	18	1	0	1
PTN19	2007	10	18	5	1	1
PTN19	2007	10	18	22	0	1
PTN19	2007	10	19	1	0	1
PTN19	2007	10	19	5	1	1
PTN19	2007	10	19	22	0	1
PTN19	2007	10	20	1	0	1
PTN19	2007	10	20	5	1	1
PTN19	2007	10	20	22	0	1
PTN19	2007	10	21	1	0	1
PTN19	2007	10	21	5	1	1
PTN19	2007	10	21	22	0	1
PTN19	2007	10	22	1	0	1
PTN19	2007	10	22	5	1	1
PTN19	2007	10	22	22	0	1
PTN19	2007	10	23	1	0	1
PTN19	2007	10	23	5	1	1
PTN19	2007	10	23	22	0	1
PTN19	2007	10	24	1	0	1
PTN19	2007	10	24	5	1	1
PTN19	2007	10	24	22	0	1
PTN19	2007	10	25	1	0	1
PTN19	2007	10	25	5	1	1
PTN19	2007	10	25	22	0	1
PTN19	2007	10	26	1	0	1
PTN19	2007	10	26	5	1	1
PTN19	2007	10	26	22	0	1
PTN19	2007	10	27	1	0	1
PTN19	2007	10	27	5	1	1
PTN19	2007	10	27	22	0	1
PTN19	2007	10	28	1	0	1
PTN19	2007	10	28	5	1	1
PTN19	2007	10	28	22	0	1
PTN19	2007	10	29	1	0	1
PTN19	2007	10	29	5	1	1
PTN19	2007	10	29	22	0	1
PTN19	2007	10	30	1	0	1
PTN19	2007	10	30	5	1	1
PTN19	2007	10	30	22	0	1
PTN19	2007	10	31	1	0	1
PTN19	2007	10	31	5	1	1
PTN19	2007	10	31	22	0	1

Pattern 19 (continued)

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	11	1	1	0	1
PTN19	2007	11	1	5	1	1
PTN19	2007	11	1	22	0	1
PTN19	2007	11	2	1	0	1
PTN19	2007	11	2	5	1	1
PTN19	2007	11	2	22	0	1
PTN19	2007	11	3	1	0	1
PTN19	2007	11	3	5	1	1
PTN19	2007	11	3	22	0	1
PTN19	2007	11	4	1	0	1
PTN19	2007	11	4	5	1	1
PTN19	2007	11	4	22	0	1
PTN19	2007	11	5	1	1	1
PTN19	2007	11	6	1	1	1
PTN19	2007	11	7	1	1	1
PTN19	2007	11	8	1	1	1
PTN19	2007	11	9	1	1	1
PTN19	2007	11	10	1	1	1
PTN19	2007	11	11	1	1	1
PTN19	2007	11	12	1	1	1
PTN19	2007	11	13	1	1	1
PTN19	2007	11	14	1	1	1
PTN19	2007	11	15	1	1	1

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	11	16	1	1	1
PTN19	2007	11	17	1	1	1
PTN19	2007	11	18	1	1	1
PTN19	2007	11	19	1	1	1
PTN19	2007	11	20	1	1	1
PTN19	2007	11	21	1	1	1
PTN19	2007	11	22	1	1	1
PTN19	2007	11	23	1	1	1
PTN19	2007	11	24	1	1	1
PTN19	2007	11	25	1	1	1
PTN19	2007	11	26	1	1	1
PTN19	2007	11	27	1	1	1
PTN19	2007	11	28	1	1	1
PTN19	2007	11	29	1	1	1
PTN19	2007	11	30	1	1	1

Pattern 19 (continued)

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN19	2007	12	1	1	1	1
PTN19	2007	12	2	1	1	1
PTN19	2007	12	3	1	0	1
PTN19	2007	12	3	5	1	1
PTN19	2007	12	3	22	0	1
PTN19	2007	12	4	1	0	1
PTN19	2007	12	4	5	1	1
PTN19	2007	12	4	22	0	1
PTN19	2007	12	5	1	0	1
PTN19	2007	12	5	5	1	1
PTN19	2007	12	5	22	0	1
PTN19	2007	12	6	1	0	1
PTN19	2007	12	6	5	1	1
PTN19	2007	12	6	22	0	1
PTN19	2007	12	7	1	0	1
PTN19	2007	12	7	5	1	1
PTN19	2007	12	7	22	0	1
PTN19	2007	12	8	1	0	1
PTN19	2007	12	8	5	1	1
PTN19	2007	12	8	22	0	1
PTN19	2007	12	9	1	0	1
PTN19	2007	12	9	5	1	1
PTN19	2007	12	9	22	0	1
PTN19	2007	12	10	1	0	1
PTN19	2007	12	10	5	1	1
PTN19	2007	12	10	22	0	1
PTN19	2007	12	11	1	0	1
PTN19	2007	12	11	5	1	1
PTN19	2007	12	11	22	0	1
PTN19	2007	12	12	1	0	1
PTN19	2007	12	12	5	1	1
PTN19	2007	12	12	22	0	1
PTN19	2007	12	13	1	0	1
PTN19	2007	12	13	5	1	1
PTN19	2007	12	13	22	0	1
PTN19	2007	12	14	1	0	1
PTN19	2007	12	14	5	1	1
PTN19	2007	12	14	22	0	1
PTN19	2007	12	15	1	0	1
PTN19	2007	12	15	5	1	1
PTN19	2007	12	15	22	0	1
PTN19	2007	12	16	1	0	1
PTN19	2007	12	16	5	1	1
PTN19	2007	12	16	22	0	1
PTN19	2007	12	17	1	0	1
PTN19	2007	12	17	5	1	1
PTN19	2007	12	17	22	0	1
PTN19	2007	12	18	1	0	1
PTN19	2007	12	18	5	1	1
PTN19	2007	12	18	22	0	1
PTN19	2007	12	19	1	0	1
PTN19	2007	12	19	5	1	1
PTN19	2007	12	19	22	0	1
PTN19	2007	12	20	1	0	1
PTN19	2007	12	20	5	1	1
PTN19	2007	12	20	22	0	1
PTN19	2007	12	21	1	0	1
PTN19	2007	12	21	5	1	1
PTN19	2007	12	21	22	0	1
PTN19	2007	12	22	1	0	1
PTN19	2007	12	22	5	1	1
PTN19	2007	12	22	22	0	1
PTN19	2007	12	23	1	0	1
PTN19	2007	12	23	5	1	1
PTN19	2007	12	23	22	0	1
PTN19	2007	12	24	1	0	1
PTN19	2007	12	24	5	1	1
PTN19	2007	12	24	22	0	1
PTN19	2007	12	25	1	0	1
PTN19	2007	12	25	5	1	1
PTN19	2007	12	25	22	0	1
PTN19	2007	12	26	1	0	1
PTN19	2007	12	26	5	1	1
PTN19	2007	12	26	22	0	1
PTN19	2007	12	27	1	0	1
PTN19	2007	12	27	5	1	1
PTN19	2007	12	27	22	0	1
PTN19	2007	12	28	1	0	1
PTN19	2007	12	28	5	1	1
PTN19	2007	12	28	22	0	1
PTN19	2007	12	29	1	0	1
PTN19	2007	12	29	5	1	1
PTN19	2007	12	29	22	0	1
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PTN19	2007	12	30	5	1	1
PTN19	2007	12	30	22	0	1
PTN19	2007	12	31	1	0	1
PTN19	2007	12	31	5	1	1
PTN19	2007	12	31	22	0	1

Maui Electric Company, Limited

2007 Test Year Calibration Factors

2005 PRODUCTION SIMULATION CALIBRATION RUN

(Maui Division)

Kahului						
Actual Net MWH	=	224,104				
Actual MBTU	=	3,271,532				
Actual Net Heat Rate	=	14,598	BTU/kWh			
Simulated Net MWH	=	224,943				
Simulated MBTU	=	3,229,700				
Simulated Net Heat Rate	=	14,358	BTU/kWh			
IFO Calibration Factor	=	Actual Heat Rate / Simulated Heat Rate				
	=	14,598	/	14,358	=	**1.017**

Maalaea						
Actual Net MWH	=	941,017				
Actual MBTU	=	8,981,017				
Actual Net Heat Rate	=	9,544	BTU/kWh			
Simulated Net MWH	=	940,212				
Simulated MBTU	=	8,834,000				
Simulated Net Heat Rate	=	9,396	BTU/kWh			
Diesel Calibration Factor	=	Actual Heat Rate / Simulated Heat Rate				
	=	9,544	/	9,396	=	**1.016**

TOTAL SYSTEM						
Actual Net MWH	=	1,165,122				
Actual MBTU	=	12,252,549				
Simulated Net MWH	=	1,165,155				
Simulated MBTU	=	12,063,700				
Actual Net Heat Rate	=	10,516	BTU/kWh			
Simulated Net Heat Rate	=	10,354	BTU/kWh			
Proposed Calib. Factor	=	Actual Heat Rate / Simulated Heat Rate				
	=	10,516	/	10,354	=	**1.016**

DOCKET NO. 2006-0387

2007 Test Year Calibration Factors

2005 PRODUCTION SIMULATION - CALIBRATION RUN

(Maui Division)

COMPARISON OF PMONTH TO ACTUALS

HEAT RATE (Btu/kWh)

	KAHULUI			MAALAEA		
	Pmonth 2005	RECORDED	% DIFF	Pmonth 2005	RECORDED	% DIFF
Jan	14.125	14.649	-3.58%	9.361	9.465	-1.09%
Feb	14.824	14.578	1.68%	9.352	9.534	-1.90%
Mar	14.870	14.593	1.90%	9.310	9.452	-1.51%
Apr	15.106	14.826	1.89%	9.384	9.488	-1.10%
May	15.133	14.566	3.89%	9.380	9.767	-3.95%
Jun	14.064	14.418	-2.46%	9.447	9.551	-1.08%
Jul	13.931	14.605	-4.62%	9.475	9.549	-0.78%
Aug	14.183	14.723	-3.67%	9.464	9.620	-1.62%
Sep	14.122	14.420	-2.07%	9.413	9.605	-2.01%
Oct	14.428	14.893	-3.13%	9.387	9.560	-1.81%
Nov	14.082	14.681	-4.08%	9.356	9.459	-1.09%
Dec	13.692	14.285	-4.15%	9.395	9.437	-0.45%
Total	14.358	14.598	-1.65%	9.396	9.544	-1.55%

DOCKET NO. 2006-0387

2007 Test Year Calibration Factors

2005 PRODUCTION SIMULATION - CALIBRATION RUN

(Maui Division)

COMPARISON OF PMONTH TO ACTUALS

NET ENERGY (MWH)

Unit	2005 PMONTH	2005 ACTUAL	Difference MWH	Difference %	% of Net Gen PMONTH	% of Net Gen ACTUAL	% of Net Gen DIFF
Kahului1	21,698	25,628	-3,930	-15%	1.72%	2.03%	-0.31%
Kahului2	20,866	22,451	-1,585	-7%	1.65%	1.78%	-0.13%
Kahului3	87,831	82,863	4,968	6%	6.96%	6.56%	0.39%
Kahului4	94,548	93,162	1,386	1%	7.49%	7.38%	0.11%
MaalaeaX1	4,662	7,015	-2,353	-34%	0.37%	0.56%	-0.19%
MaalaeaX2	5,419	6,949	-1,530	-22%	0.43%	0.55%	-0.12%
Maalaea1	8,862	7,258	1,604	22%	0.70%	0.57%	0.13%
Maalaea2	7,473	7,258	215	3%	0.59%	0.57%	0.02%
Maalaea3	2,056	7,258	-5,202	-72%	0.16%	0.57%	-0.41%
Maalaea4	14,832	13,913	919	7%	1.18%	1.10%	0.07%
Maalaea5	2,426	3,505	-1,079	-31%	0.19%	0.28%	-0.09%
Maalaea6	25,954	25,741	213	1%	2.06%	2.04%	0.02%
Maalaea7	2,320	3,107	-787	-25%	0.18%	0.25%	-0.06%
Maalaea8	21,878	18,123	3,755	21%	1.73%	1.44%	0.30%
Maalaea9	19,536	16,520	3,016	18%	1.55%	1.31%	0.24%
Maalae10	84,493	70,667	13,826	20%	6.69%	5.60%	1.10%
Maalae11	78,547	72,338	6,209	9%	6.22%	5.73%	0.49%
Maalae12	77,357	56,742	20,615	36%	6.13%	4.50%	1.63%
Maalae13	66,965	47,269	19,696	42%	5.31%	3.74%	1.56%
M14&15	222,704	215,264	7,440	3%	17.64%	17.05%	0.59%
M15&16	227,250	216,992	10,258	5%	18.00%	17.19%	0.81%
M17	20,456	63,335	-42,879	-68%	1.62%	5.02%	-3.40%
M19	47,022	81,764	-34,742	-42%	3.73%	6.48%	-2.75%
HC&S (IPP)	97,073	97,083	-10	0%			
TOTAL	1,262,228	1,262,205	23	0%			

GROUP	2005 PMONTH	2005 ACTUAL	Difference MWH	Difference %
KAHULUI	#REF!	#REF!	#REF!	#REF!
MAALAEA	#REF!	#REF!	#REF!	#REF!
MECO TOTAL	#REF!	#REF!	#REF!	#REF!

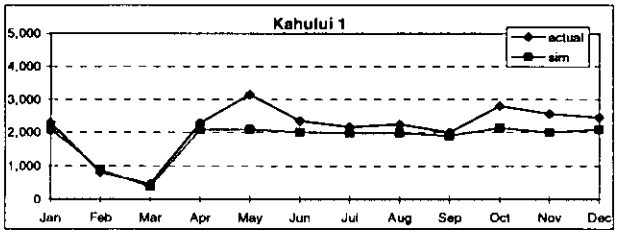
Maui Electric Company, Limited

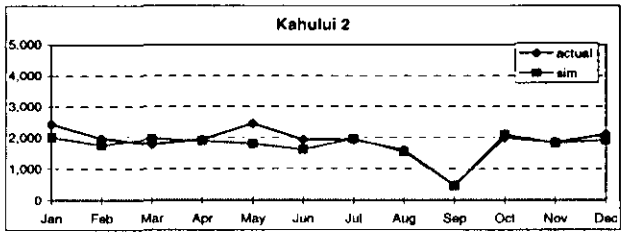
2007 Test Year Calibration Factors

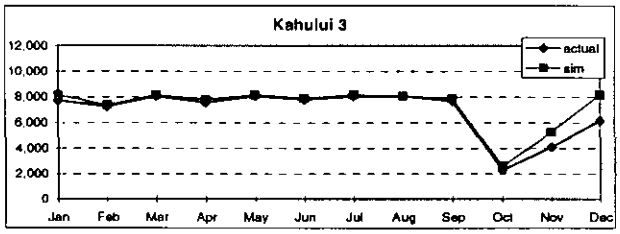
2005 PRODUCTION SIMULATION - CALIBRATION RUN

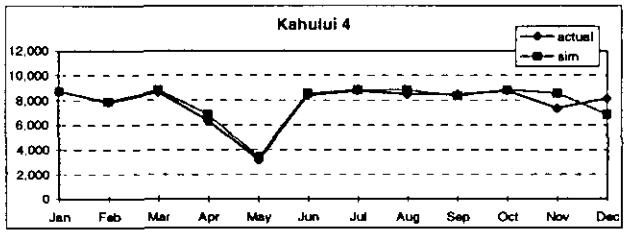
(Maui Division)

COMPARISON OF PMONTH TO ACTUALS
NET ENERGY (MWH)









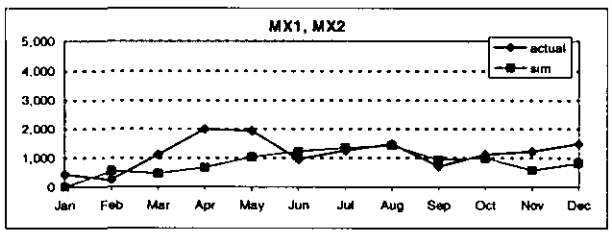
Maui Electric Company, Limited

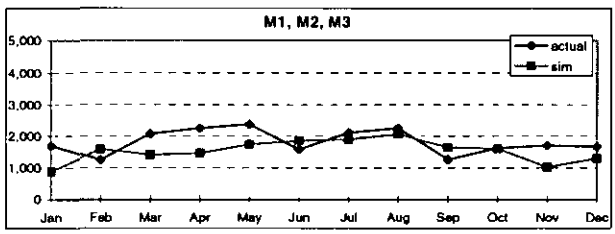
2007 Test Year Calibration Factors

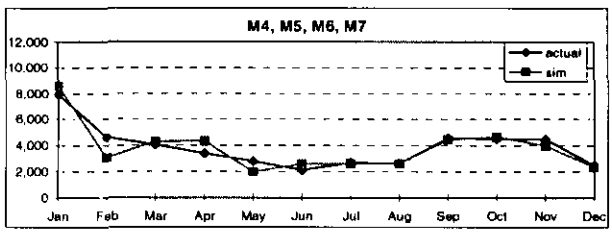
2005 PRODUCTION SIMULATION - CALIBRATION RUN

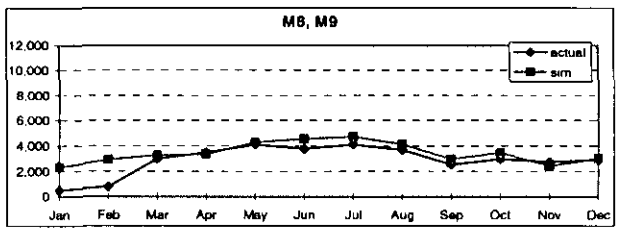
(Maui Division)

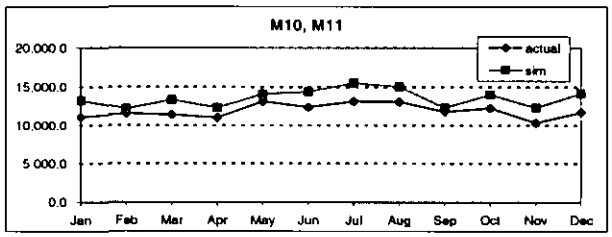
COMPARISON OF PMONTH TO ACTUALS
NET ENERGY (MWH)

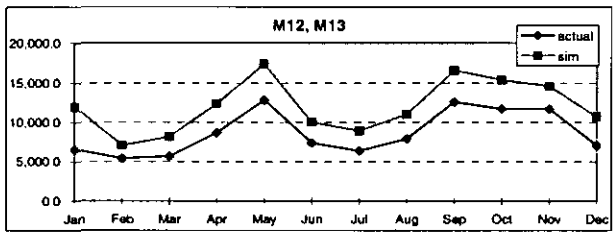


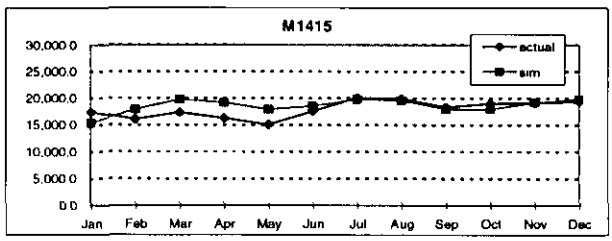


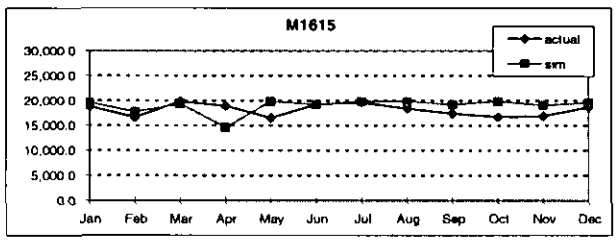


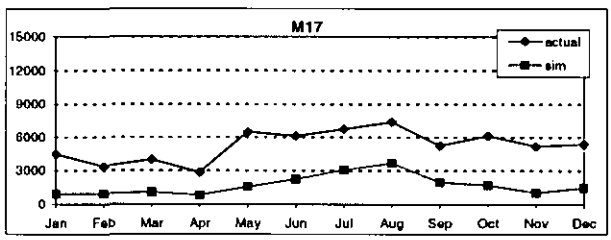


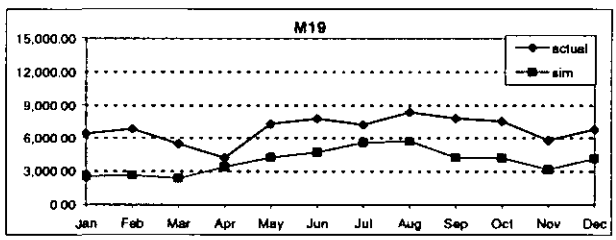












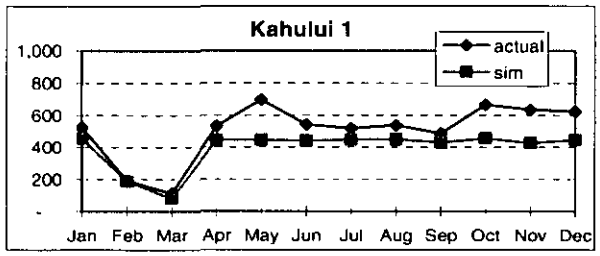
Maui Electric Company, Limited

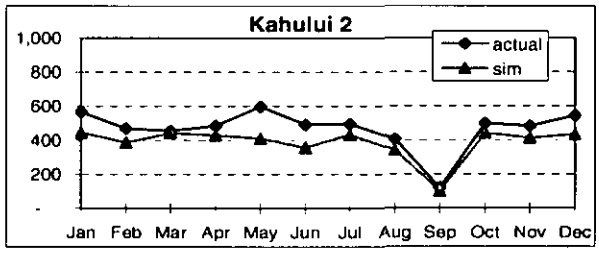
2007 Test Year Calibration Factors

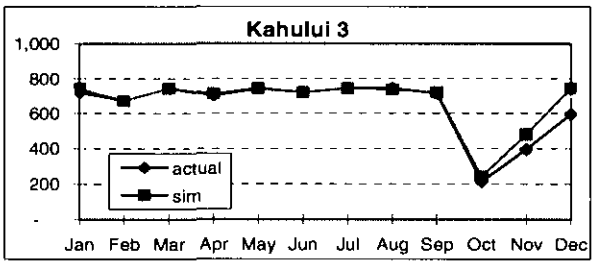
2005 PRODUCTION SIMULATION - CALIBRATION RUN

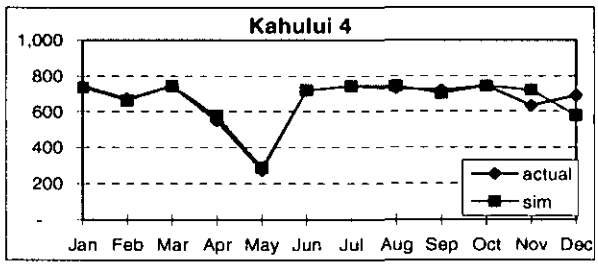
(Maui Division)

COMPARISON OF PMONTH TO ACTUALS
RUN TIME IN HOURS









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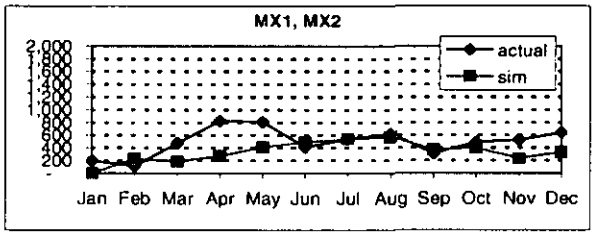
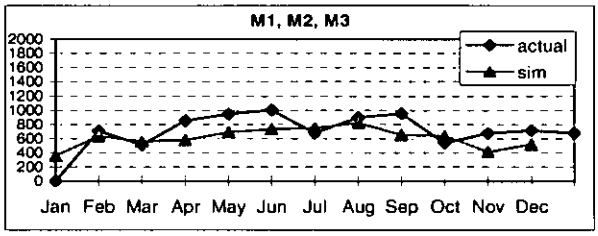
2007 Test Year Calibration Factors

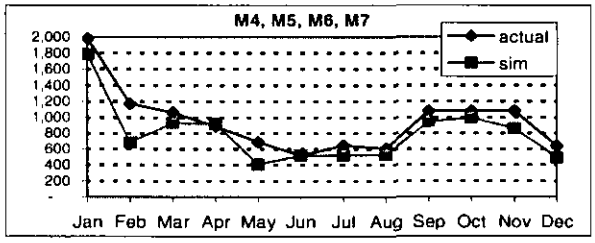
2005 PRODUCTION SIMULATION - CALIBRATION RUN

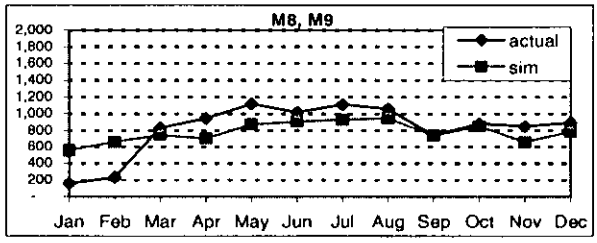
(Maui Division)

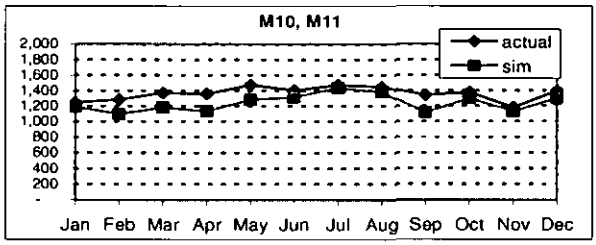
COMPARISON OF PMONTH TO ACTUALS
RUN TIME IN HOURS

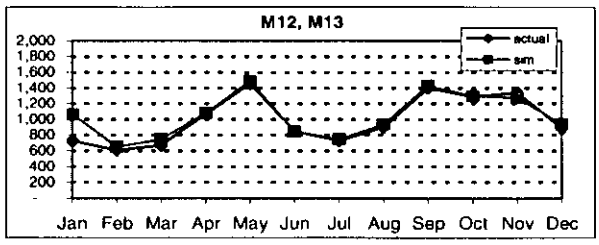


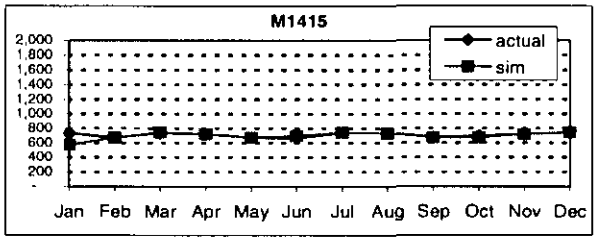


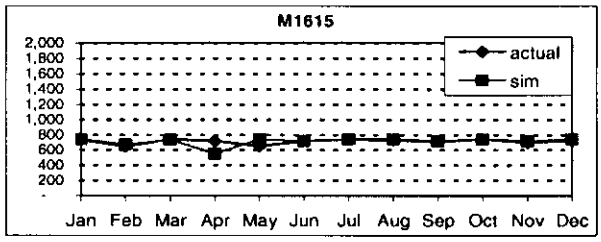


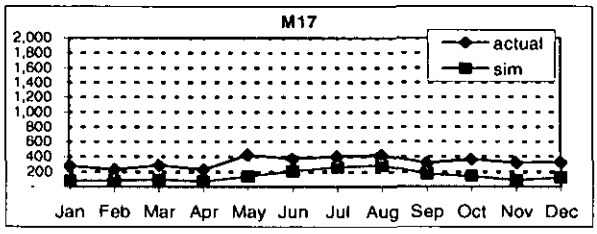


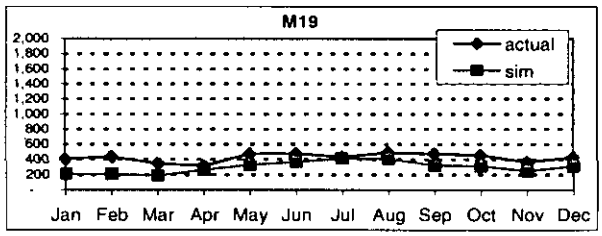












Maui Electric Company, Limited

2007 Test Year Calibration Factors

2005 PRODUCTION SIMULATION - CALIBRATION RUN

(Maui Division)

PPC Proprietary Program Licensed to HECO Till 12/2099 HECO PMONTH V.022504
MECO System-Production Simulation to Calculate 2005 Calibration Factor Page: 1
10/31/06 11:19:42

Case Name: calib05_mc100
Simulation Period: 2005/ 1 - 2005/12

File	Name
Study Data:	wind10.stu
Report Control:	maui.rfc
Area Data:	maui.ara
Plant Data:	calib05_r1.plt
Fuel Class Data:	calib05_r1.fcl
Spot Fuel Data:	calib05_r1.sfu
Contract Fuel Data:	
Thermal Basic Data:	calib05_mc100.uba
Thermal Cost Data:	calib05_mc100.ucs
Thermal Performance Data:	calib05_mc100.upf
Thermal NOx Data:	
Hourly Pattern # 18:	ptn18.hcp
Hydro Data:	
Pumped Storage Data:	
Fixed Energy Transaction Data:	calib05_mc100.trf
Economy Transaction Data:	
DSM Data:	
Monte Carlo Scenario Data:	calib05_mc100.mcs
Thermal Maintenance Data:	calib05_mc100.umt
Hydro Maintenance Data:	
P-S Maintenance Data:	
Load Data:	calibration05.eei
CC Data #1:	
CC Data #2:	
CC Data #3:	
CC Data #4:	
CC Maintenance Data:	
Quick Load Pick Up Curve Data:	
Spinning Reserve Data:	calib05hcs4mw.spn

Maui Electric Company, Limited

2007 Test Year Calibration Factors

2005 PRODUCTION SIMULATION - CALIBRATION RUN

(Maui Division)

PPC Proprietary Program Licensed to HECO Till 12/2099 HECO PMONTH V.022504
MECO System-Production Simulation to Calculate 2005 Calibration Factor Page: 2
10/31/06 11:20:17

Calendar Year: 2005

Monthly system Load and Capacity Summary

Mnth	Peak Load MW	Mnthly Energy GWh	Load Factor %	Installed Capacity MW	Maint outage MW	Adjusted Capacity MW	Capacity Reserve MW	Capacity Reserve %
Jan	198	102.8	69.8	221.3	12.3	209	11	5.56
Feb	195.8	91.1	69.2	221.3	17.8	203.5	7.7	3.94
Mar	196.9	101.1	69	221	17	204	7.1	3.6
Apr	189.6	99.1	72.6	219.7	14.8	204.9	15.3	8.09
May	194.9	108.1	74.5	221.3	36.9	184.4	-10.5	-5.37
Jun	195.5	107	76	221.3	36.9	184.4	-11.1	-5.66
Jul	198.6	112.5	76.1	221.3	20.3	201	2.4	1.21
Aug	206.5	113.8	74.1	219.7	17.8	201.9	-4.6	-2.23
Sep	201.3	108.5	74.9	218.2	4.8	213.5	12.2	6.05
Oct	202.3	108.7	72.2	218.7	11	207.7	5.4	2.68
Nov	206.4	103.7	69.8	218.2	0	218.2	11.8	5.72
Dec	204.6	105.8	69.5	218.9	17.8	201	-3.6	-1.74

Summary for Period:

Pea	k Load	(MW):	206.5
Tot	al Energy	(GWh):	1262.24
Loa	d Factor	(%):	69.78

Month	AM Peak (MW)	PM Peak (MW)	Capacity (MW)	Maint. (MW)	Reserve (MW)	Largest (MW)	LSC (MW)	Diff. (MW)
Jan	174.8	198	221.3	12.3	11	26.6	182.4	-15.6
Feb	172.5	195.8	221.3	17.8	7.7	26.6	176.9	-18.9
Mar	176.9	196.9	221	17	7.1	26.6	177.4	-19.5
Apr	168.6	189.6	219.7	14.8	15.3	26.6	178.3	-11.3
May	183.7	194.9	221.3	36.9	-10.5	26.6	157.8	-37.1
Jun	183.1	195.5	221.3	36.9	-11.1	26.6	157.8	-37.7
Jul	192.4	198.6	221.3	20.3	2.4	26.6	174.4	-24.2
Aug	193.9	206.5	219.7	17.8	-4.6	26.6	175.3	-31.2
Sep	186	201.3	218.2	4.8	12.2	26.6	186.9	-14.4
Oct	184	202.3	218.7	11	5.4	26.6	181.1	-21.2
Nov	178.7	206.4	218.2	0	11.8	26.6	191.6	-14.8
Dec	174.1	204.6	218.9	17.8	-3.6	26.6	174.4	-30.2

Maui Electric Company, Limited

2007 Test Year Calibration Factors

2005 PRODUCTION SIMULATION - CALIBRATION RUN

(Maui Division)

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MECO System-Production Simulation to Calculate 2005 Calibration Factor Page. 3
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Fiscal Year 2005

Station Summary

	Station	Capacity MW	Unit	Hours	CF %	Energy GWh	MBtu k	Cold Start	Warm Start	Stup Cst M$	Fuel Cst M$	VO&M Cst M$	FO&M Cst M$	Oper Cst $/MWh	Tot Cst $/MWh	Ave Hrt Btu/kWh
1	Kahului1	4.7	1	4706.7	52.59	21.697	360.1	324	0	0	2.5268	0.0414	1.3055	116.17	178.54	16598
2	Kahului2	4.8	1	4638	50.05	20.866	325.6	327	0	0	2.2119	0.0439	1.2988	105.68	170.35	15602
3	Kahului3	11	1	7999.2	91.33	87.831	1238.7	2	0	0	8.3167	0.1446	1.4333	96.33	112.66	14103
4	Kahului4	11.9	1	7958.4	90.86	94.545	1305.9	3	0	0	8.8906	0.1588	1.3693	95.71	110.2	13812
7	MaloeX1	2.5	1	1865.2	21.3	4.663	47.4	548	0	0	0.6489	0.0541	0.375	150.76	231.19	10163
8	MaloeX2	2.5	1	2167.6	24.75	5.419	55.1	516	0	0	0.7563	0.0631	0.375	151.2	220.41	10163
9	Maloea1	2.5	1	3545.1	40.47	8.863	90.1	559	0	0	1.2281	0.1088	0.375	150.85	193.17	10167
10	Maloea2	2.5	1	2988.9	34.12	7.472	76	591	0	0	1.0379	0.0912	0.375	151.1	201.29	10167
11	Maloea3	2.5	1	822.1	9.39	2.055	21	202	0	0	0.2335	0.0255	0.375	125.98	308.47	10208
12	Maloea4	5.5	1	3215.3	31.25	14.831	151.5	200	0	0	1.9676	0.0964	0.4164	139.17	167.24	10218
13	Maloea5	5.5	1	491.8	5.03	2.427	24.6	55	0	0	0.2965	0.0255	0.4164	132.72	304.32	10157
14	Maloea6	5.5	1	5372.1	54.03	25.955	257.6	348	0	0	3.4998	0.1417	0.4164	140.3	156.35	9923
15	Maloea7	5.5	1	503.4	4.81	2.321	22.7	49	0	0	0.2695	0.0286	0.4164	128.47	307.91	9762
16	Maloea8	5.5	1	4782.3	47.44	21.878	211.5	428	0	0	2.8856	0.1844	0.3815	140.33	157.76	9669
17	Maloea9	5.5	1	4586.7	46.96	19.537	186.3	443	0	0	2.4431	0.1775	0.3815	134.14	153.66	9535
18	Maloe10	12.3	1	8025.9	78.43	84.493	755.5	144	0	0	10.1628	0.7167	0.5412	128.76	135.17	8942
19	Maloe11	12.3	1	6833.5	72.91	78.547	691.8	327	0	0	9.3154	0.6148	0.5412	126.42	133.31	8808
20	Maloe12	12.3	1	6567.6	71.81	77.356	720.6	5	0	0	10.0797	0.6367	0.5412	138.53	145.53	9315
21	Maloe13	12.3	1	5904	62.16	66.964	616.4	4	0	0	8.1843	0.5749	0.5412	130.81	138.89	9205
22	M14	20.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	M16	20.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	M14&15	26.6	1	8367.6	95.53	222.705	2024.8	4	0	0	27.2422	1.0547	1.1547	127.06	132.24	9092
25	M15&16	26.6	1	8583.6	97.48	227.25	2068.3	2	0	0	27.8884	1.0815	1.1547	127.48	132.56	9101
26	M17	20.5	1	1743.3	11.39	20.456	249.7	308	0	0	3.3997	0.1911	0.5874	175.53	204.25	12208
27	M19	20.5	1	3609.4	26.19	47.022	563.9	370	0	0	7.6924	0.3967	0.6223	172.03	185.26	11993
	System					1165.153	12065	5757	0	0	141.1778	6.6527	15.3946	126.79	140.09	10355

Maui Electric Company, Limited

2007 Test Year Calibration Factors

2005 PRODUCTION SIMULATION - CALIBRATION RUN

(Maui Division)

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Fiscal Year: 2005

Transaction Summary

ID	Transaction	Type	Energy GWh	Engy Cost M$	CAP Cost M$	Total Cost M$	Ave Cost $/MWh
--							
3	HCS_ON	ON-PEAK P	63.095	0	0	0	0
4	HCS_OFF	OFF-PEAK P	33.978	0	0	0	0

0

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MECO System-Production Simulation to Calculate 2005 Calibration Factor Page: 5
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Fiscal Year: 2005

Fuel Type Summary

	Type	Energy GWh	Fuel ,000	Fuel Unit	MBtu ,000	Fuel Cost M$	Fuel Cost $/MWh	Heat Rate Btu/kWh	Fuel Cost C/MBtu
-									
S	pot:								
1	Kahului	224.941	512.74	Bbl	3230.3	21.9461	97.56	14361	679.39
2	Maalaea	940.212	1507.653	Bbl	8834.8	119.2317	126.81	9397	1349.56

Fuel Class Summary

	Class	Energy GWh	Fuel ,000	Fuel Unit	MBtu ,000	Fuel Cost M$	Fuel Cost $/MWh	Heat Rate Btu/kWh	Fuel Cost C/MBtu
-									
1	MSFO	224.941	512.74	Bbl	3230.3	21.9461	97.56	14361	679.4
2	Diesel	940.212	1507.653	Bbl	8834.8	119.2317	126.81	9397	1349.6

Maui Electric Company, Limited

2007 Test Year Calibration Factors

2005 PRODUCTION SIMULATION - CALIBRATION RUN

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MECO System-Production Simulation to Calculate 2005 Calibration Factor Page: 6
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Fiscal Year: 2005

System Energy and Cost Summary

Demand	GWh	Cost M$	Cost $/MWh	Supply	GWh	Cost M$	Cost $/MWh
Load:	1262.24			Thermal Gen:	1165.15	163.2251	140.09
				Hydro Gen:	0	0	0
P-S Pumping:	0			P-S Gen:	0	0	0
P-S Payback:	0						
F. E. Sale:	0	0	0	F. E. Purc:	97.07	0	0
Econ. Sale:	0	0	0	Econ. Purc:	0	0	0
Unit Sale:	0	0	0				
Transm Loss:	0			Rej Fuel:		0	
Dsm Load:	0			Dsm Reductn	0		
				Emerg Purc:	0	0	0
Dumped Engy	0	0	0	E.U. Energy:	0.01	0.001	100
				Lvl Cost:		0	
Total:	1262.24	0	0	Total:	1262.24	163.2261	129.32
				System Net:		163.2261	129.32
				LOLH(hr):	1.9		

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MECO System-Production Simulation to Calculate 2005 Calibration Factor Page: 7
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Fiscal Year: 2005

Plant Summary

	Plant	CF %	Energy GWh	MBtu 1000	Start Ups	Stup Cst M$	Fuel Cst M$	O&M Cst M$	Tot Cst $/MWh
1	Kahului	79.4	224.9406	3230.3	657	0	21.9461	5.7957	123.33
2	Maalaea	57.2	940.2119	8834.8	5100	0	119.2317	16.2516	144.1

Fiscal Year: 2005

Yearly Fuel & Var O&M Cost by Subperiod (M$)

Off Peak	Shoulder Pea	Priority Peak	Total
47.226799	69.483353	31.120144	147.83029

Study Period: 2005/Jan - 2005/Dec
Total Fuel & Var O&M Cost by Subperiod (M$)

Off Peak	Shoulder Peak	Priority Peak	Total
47.226799	69.483353	31.120144	147.830292

System Study Summary

SetID	YR	PRD	Exec Flag	UC Flag	Load Bandpc	Load BandM	Spin Rsvpc	Spin RsvMW	Marg Cost	Marg CstIncr	Fix DispIncr	MC Option	EUE Cost	EUE CostEs	Dump Cost	Dump CostEsc	Nox	Sox	CO2	ROG	Other	Num WkDay	WD PkHr1	WD PkHrn	WE PkHr1	WE PkHrn	I26	X31
wind10	1998	1	0	0	0	0	0	0	0	1	1	2	100	0	0	0	0	0	0	0	0	7	7	20	1	24	0	0

WIND10.STU

Report Control Summary

SetID	YR	PRD	Fiscal Yr	Prd Cntrl	Yr Cntrl	Alloc File	Stn Rept	Plt Rept	Area Rept	PS Rept	Diag Rept	HrInf File	MonInf File	YrInf File	I26
maui	1996	1	12	2	0	0	1	1	0	0	1	1	1	1	0

Area Summary

SetID	ID	NAME	YR	PRD	SpinRsvpc	SpinRsvMW	LdAdjpc	LdAdjMW	TieMW	TieCost	TieCostEsc
MAUI	1	maui	1996	1	0	0	0	0	0	0	0

Plant Summary

SetID	ID	NAME	YR	PRD	X31	X32	X33	X34	X35
calib05_r1	1	Kahului	1996	1	0	0.022125	0.022125	0.022125	0.022125
calib05_r1	2	Maalaea	1996	1	0	0.022125	0.022125	0.022125	0.022125

Fuel Class

SetID	ID	NAME	YR	PRD	FuelUnit
calib05_r1	1	MSFO	1996	1	1
calib05_r1	2	Diesel	1996	1	1

Spot Fuel Summary

SetID	ID	NAME	YR	PRD	FuelClass	FuelCost	CmtCost	CostEsc	HeatCont	Sox	CO2	ROG	Other
calib05_r1	1	Kahului	2005	1	1	644.5	0	0	6.3	0	0	0	0
calib05_r1	1	Kahului	2005	2	1	550.8	0	0	6.3	0	0	0	0
calib05_r1	1	Kahului	2005	3	1	534.7	0	0	6.3	0	0	0	0
calib05_r1	1	Kahului	2005	4	1	568.2	0	0	6.3	0	0	0	0
calib05_r1	1	Kahului	2005	5	1	618.7	0	0	6.3	0	0	0	0
calib05_r1	1	Kahului	2005	6	1	675.6	0	0	6.3	0	0	0	0
calib05_r1	1	Kahului	2005	7	1	749.5	0	0	6.3	0	0	0	0
calib05_r1	1	Kahului	2005	8	1	721.1	0	0	6.3	0	0	0	0
calib05_r1	1	Kahului	2005	9	1	724.1	0	0	6.3	0	0	0	0
calib05_r1	1	Kahului	2005	10	1	724.6	0	0	6.3	0	0	0	0
calib05_r1	1	Kahului	2005	11	1	800.6	0	0	6.3	0	0	0	0
calib05_r1	1	Kahului	2005	12	1	863.6	0	0	6.3	0	0	0	0
calib05_r1	2	Maalaea	2005	1	2	1181.8	0	0	5.86	0	0	0	0
calib05_r1	2	Maalaea	2005	2	2	1055.1	0	0	5.86	0	0	0	0
calib05_r1	2	Maalaea	2005	3	2	1041.4	0	0	5.86	0	0	0	0
calib05_r1	2	Maalaea	2005	4	2	1143.3	0	0	5.86	0	0	0	0
calib05_r1	2	Maalaea	2005	5	2	1277.4	0	0	5.86	0	0	0	0
calib05_r1	2	Maalaea	2005	6	2	1387.9	0	0	5.86	0	0	0	0
calib05_r1	2	Maalaea	2005	7	2	1317.5	0	0	5.86	0	0	0	0
calib05_r1	2	Maalaea	2005	8	2	1331.8	0	0	5.86	0	0	0	0
calib05_r1	2	Maalaea	2005	9	2	1390.9	0	0	5.86	0	0	0	0
calib05_r1	2	Maalaea	2005	10	2	1577.6	0	0	5.86	0	0	0	0
calib05_r1	2	Maalaea	2005	11	2	1656.8	0	0	5.86	0	0	0	0
calib05_r1	2	Maalaea	2005	12	2	1744.6	0	0	5.86	0	0	0	0

Thermal Basic Summary

SetID	ID	NAME	YR	PRD	AreaID	PlantID	Units	Hr Pattern	Branching	Firm	Op Type	Quick	Derate	EngLmt Cmt	Ramp Rate	Down Time	Up Time	Spin Rsv	Ownership	CmtCost Ftr	CmtEmis Ftr	DspCost Ftr	DspEmis Ftr	Scrub Eff
calib05_MC100	1	Kahului1	2005	1	1	1	1	18	0	0	3	0	0	0	9999.9	5	5	100	100	1	0	1	0	0
calib05_MC100	2	Kahului2	2005	1	1	1	1	18	0	0	3	0	0	0	9999.9	5	5	100	100	1	0	1	0	0
calib05_MC100	3	Kahului3	2005	1	1	1	1	0	0	0	1	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	4	Kahului4	2005	1	1	1	1	0	0	0	1	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	7	MaalaeX1	2005	1	1	2	1	0	0	0	5	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	8	MaalaeX2	2005	1	1	2	1	0	0	0	5	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	9	Maalaea1	2005	1	1	2	1	0	0	0	5	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	10	Maalaea2	2005	1	1	2	1	0	0	0	5	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	11	Maalaea3	2005	1	1	2	1	0	0	0	5	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	12	Maalaea4	2005	1	1	2	1	0	0	0	3	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	13	Maalaea5	2005	1	1	2	1	0	0	0	3	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	13	Maalaea5	2005	2	1	2	1	0	0	0	5	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	14	Maalaea6	2005	1	1	2	1	0	0	0	3	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	15	Maalaea7	2005	1	1	2	1	0	0	0	3	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	15	Maalaea7	2005	2	1	2	1	0	0	0	5	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	16	Maalaea8	2005	1	1	2	1	0	0	0	3	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	16	Maalaea8	2005	10	1	2	1	0	0	0	3	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	17	Maalaea9	2005	1	1	2	1	0	0	0	3	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	18	Maalae10	2005	1	1	2	1	0	0	0	3	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	19	Maalae11	2005	1	1	2	1	0	0	0	3	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	20	Maalae12	2005	1	1	2	1	0	0	0	1	0	0	0	9999.9	5	5	100	100	1	0	1	0	0
calib05_MC100	20	Maalae12	2005	10	1	2	1	0	0	0	1	0	0	0	9999.9	5	5	100	100	1	0	1	0	0
calib05_MC100	21	Maalae13	2005	1	1	2	1	0	0	0	1	0	0	0	9999.9	5	5	100	100	1	0	1	0	0
calib05_MC100	21	Maalae13	2005	10	1	2	1	0	0	0	1	0	0	0	9999.9	5	5	100	100	1	0	1	0	0
calib05_MC100	24	M14&15	2005	1	1	2	1	0	0	0	1	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	25	M15&16	2005	1	1	2	1	0	0	0	1	0	0	0	9999.9	1	1	100	100	1	0	1	0	0
calib05_MC100	26	M17	2005	1	1	2	1	0	0	0	5	0	0	0	9999.9	1	4	100	100	1	0	1	0	0
calib05_MC100	27	M19	2005	1	1	2	1	0	0	0	5	0	0	0	9999.9	1	4	100	100	1	0	1	0	0
calib05_MC100	27	M19	2005	11	1	2	1	0	0	0	5	0	0	0	9999.9	1	4	100	100	1	0	1	0	0

Thermal Cost and Variable Summary

SetID	ID	NAME	YR	PRD	Spot Fuel	Cont Fuel1	Cont1 Targt	Cont Fuel2	Cont2 Targt	Cont Fuel3	Cont3 Targt	Start Fuel	Start BTU	Stn Eng	VarOM	FixOM	Fix Start	Cap Cost	VarOM Esc	FixOM Esc	Cost Cmt	Dsp Pnlty	Cmt Pnlty	Trnsm Loss	Start Cost	HrVarOM	I26	X31	X32
calib05_MC100	1	Kahului1	2005	1	1	0	0	0	0	0	0	1	21	0	1.878574	108794.8	0	0	1.99	1.99	0	4.5	1	1	0	0.13922	0	0	0
calib05_MC100	1	Kahului1	2005	2	1	0	0	0	0	0	0	1	21	0	1.878574	108794.8	0	0	1.99	1.99	0	4.5	1	1	0	0.13922	0	0	0
calib05_MC100	1	Kahului1	2005	3	1	0	0	0	0	0	0	1	21	0	1.878574	108794.8	0	0	1.99	1.99	0	4.5	0.9	1	0	0.13922	0	0	0
calib05_MC100	1	Kahului1	2005	4	1	0	0	0	0	0	0	1	21	0	1.878574	108794.8	0	0	1.99	1.99	0	4.5	1.03	1	0	0.13922	0	0	0
calib05_MC100	1	Kahului1	2005	5	1	0	0	0	0	0	0	1	21	0	1.878574	108794.8	0	0	1.99	1.99	0	4.5	1.03	1	0	0.13922	0	0	0
calib05_MC100	1	Kahului1	2005	6	1	0	0	0	0	0	0	1	21	0	1.878574	108794.8	0	0	1.99	1.99	0	4.5	1.03	1	0	0.13922	0	0	0
calib05_MC100	1	Kahului1	2005	7	1	0	0	0	0	0	0	1	21	0	1.878574	108794.8	0	0	1.99	1.99	0	4.5	0.9	1	0	0.13922	0	0	0
calib05_MC100	1	Kahului1	2005	8	1	0	0	0	0	0	0	1	21	0	1.878574	108794.8	0	0	1.99	1.99	0	4.5	0.8	1	0	0.13922	0	0	0
calib05_MC100	1	Kahului1	2005	9	1	0	0	0	0	0	0	1	21	0	1.878574	108794.8	0	0	1.99	1.99	0	4.5	0.8	1	0	0.13922	0	0	0
calib05_MC100	1	Kahului1	2005	10	1	0	0	0	0	0	0	1	21	0	1.878574	108794.8	0	0	1.99	1.99	0	4.5	0.8	1	0	0.13922	0	0	0
calib05_MC100	1	Kahului1	2005	11	1	0	0	0	0	0	0	1	21	0	1.878574	108794.8	0	0	1.99	1.99	0	4.5	0.9	1	0	0.13922	0	0	0
calib05_MC100	1	Kahului1	2005	12	1	0	0	0	0	0	0	1	21	0	1.878574	108794.8	0	0	1.99	1.99	0	4.5	0.9	1	0	0.13922	0	0	0
calib05_MC100	2	Kahului2	2005	1	1	0	0	0	0	0	0	1	21	0	2.073802	108233.2	0	0	1.99	1.99	0	5	1	1	0	0.13922	0	0	0
calib05_MC100	2	Kahului2	2005	2	1	0	0	0	0	0	0	1	21	0	2.073802	108233.2	0	0	1.99	1.99	0	5	1.05	1	0	0.13922	0	0	0
calib05_MC100	2	Kahului2	2005	3	1	0	0	0	0	0	0	1	21	0	2.073802	108233.2	0	0	1.99	1.99	0	5	1.05	1	0	0.13922	0	0	0
calib05_MC100	2	Kahului2	2005	4	1	0	0	0	0	0	0	1	21	0	2.073802	108233.2	0	0	1.99	1.99	0	5	1.05	1	0	0.13922	0	0	0
calib05_MC100	2	Kahului2	2005	5	1	0	0	0	0	0	0	1	21	0	2.073802	108233.2	0	0	1.99	1.99	0	5	1.05	1	0	0.13922	0	0	0
calib05_MC100	2	Kahului2	2005	6	1	0	0	0	0	0	0	1	21	0	2.073802	108233.2	0	0	1.99	1.99	0	5	1.1	1	0	0.13922	0	0	0
calib05_MC100	2	Kahului2	2005	7	1	0	0	0	0	0	0	1	21	0	2.073802	108233.2	0	0	1.99	1.99	0	5	1	1	0	0.13922	0	0	0
calib05_MC100	2	Kahului2	2005	8	1	0	0	0	0	0	0	1	21	0	2.073802	108233.2	0	0	1.99	1.99	0	5	1	1	0	0.13922	0	0	0
calib05_MC100	2	Kahului2	2005	9	1	0	0	0	0	0	0	1	21	0	2.073802	108233.2	0	0	1.99	1.99	0	5	1	1	0	0.13922	0	0	0
calib05_MC100	2	Kahului2	2005	10	1	0	0	0	0	0	0	1	21	0	2.073802	108233.2	0	0	1.99	1.99	0	5	1	1	0	0.13922	0	0	0
calib05_MC100	2	Kahului2	2005	11	1	0	0	0	0	0	0	1	21	0	2.073802	108233.2	0	0	1.99	1.99	0	5	1	1	0	0.13922	0	0	0
calib05_MC100	2	Kahului2	2005	12	1	0	0	0	0	0	0	1	21	0	2.073802	108233.2	0	0	1.99	1.99	0	5	1	1	0	0.13922	0	0	0
calib05_MC100	3	Kahului3	2005	1	1	0	0	0	0	0	0	1	20	0	1.633858	119443.5	0	0	1.99	1.99	0	0.5	1	1	0	0.13922	0	0	0
calib05_MC100	3	Kahului3	2005	2	1	0	0	0	0	0	0	1	20	0	1.633858	119443.5	0	0	1.99	1.99	0	0.5	0.9	1	0	0.13922	0	0	0
calib05_MC100	4	Kahului4	2005	1	1	0	0	0	0	0	0	1	20	0	1.667701	114109.7	0	0	1.99	1.99	0	1	1	1	0	0.13922	0	0	0
calib05_MC100	7	MaalaeX1	2005	1	2	0	0	0	0	0	0	2	0	0	0.214248	31252.4	0	0	1.99	1.99	0	15	1.15	1	0	28.48502	0	0	0
calib05_MC100	7	MaalaeX1	2005	2	2	0	0	0	0	0	0	2	0	0	0.214248	31252.4	0	0	1.99	1.99	0	13	1	1	0	28.48502	0	0	0
calib05_MC100	7	MaalaeX1	2005	5	2	0	0	0	0	0	0	2	0	0	0.214248	31252.4	0	0	1.99	1.99	0	12.5	1	1	0	28.48502	0	0	0
calib05_MC100	8	MaalaeX2	2005	1	2	0	0	0	0	0	0	2	0	0	0.253556	31252.4	0	0	1.99	1.99	0	14.5	1.1	1	0	28.48502	0	0	0
calib05_MC100	8	MaalaeX2	2005	2	2	0	0	0	0	0	0	2	0	0	0.253556	31252.4	0	0	1.99	1.99	0	12.5	0.95	1	0	28.48502	0	0	0
calib05_MC100	8	MaalaeX2	2005	5	2	0	0	0	0	0	0	2	0	0	0.253556	31252.4	0	0	1.99	1.99	0	12	0.95	1	0	28.48502	0	0	0
calib05_MC100	9	Maalaea1	2005	1	2	0	0	0	0	0	0	2	0	0	0.884435	31252.4	0	0	1.99	1.99	0	13	0.95	1	0	28.48502	0	0	0
calib05_MC100	9	Maalaea1	2005	2	2	0	0	0	0	0	0	2	0	0	0.884435	31252.4	0	0	1.99	1.99	0	9.5	0.85	1	0	28.48502	0	0	0
calib05_MC100	9	Maalaea1	2005	5	2	0	0	0	0	0	0	2	0	0	0.884435	31252.4	0	0	1.99	1.99	0	9	0.85	1	0	28.48502	0	0	0
calib05_MC100	10	Maalaea2	2005	1	2	0	0	0	0	0	0	2	0	0	0.813027	31252.4	0	0	1.99	1.99	0	13	1	1	0	28.48502	0	0	0
calib05_MC100	10	Maalaea2	2005	2	2	0	0	0	0	0	0	2	0	0	0.813027	31252.4	0	0	1.99	1.99	0	12	0.9	1	0	28.48502	0	0	0
calib05_MC100	10	Maalaea2	2005	5	2	0	0	0	0	0	0	2	0	0	0.813027	31252.4	0	0	1.99	1.99	0	9.5	0.9	1	0	28.48502	0	0	0
calib05_MC100	11	Maalaea3	2005	1	2	0	0	0	0	0	0	2	0	0	0.991549	31252.4	0	0	1.99	1.99	0	12	0.9	1	0	28.48502	0	0	0
calib05_MC100	11	Maalaea3	2005	2	2	0	0	0	0	0	0	2	0	0	0.991549	31252.4	0	0	1.99	1.99	0	9	0.8	1	0	28.48502	0	0	0
calib05_MC100	11	Maalaea3	2005	5	2	0	0	0	0	0	0	2	0	0	0.991549	31252.4	0	0	1.99	1.99	0	15	1.2	1	0	28.48502	0	0	0
calib05_MC100	11	Maalaea3	2005	8	2	0	0	0	0	0	0	2	0	0	0.991549	31252.4	0	0	1.99	1.99	0	14	1.1	1	0	28.48502	0	0	0

Thermal Cost and Variable Summary (continued)

SetID	ID	NAME	YR	PRD	Spot Fuel	Cont Fuel1	Cont1 Targt	Cont Fuel2	Cont2 Targt	Cont Fuel3	Cont3 Targt	Start Fuel	Start BTU	Stn Eng	VarOM	FixOM	Fix Start	Cap Cost	VarOM Esc	FixOM Esc	Cost Cmt	Dsp Pnlty	Cmt Pnlty	Tmsm Loss	Start Cost	HrVarOM	I26	X31	X32
calib05_MC100	12	Maalaea4	2005	1	2	0	0	0	0	0	0	2	0	0	1.815767	34700.97	0	0	1.99	1.99	0	5.5	0.9	1	0	21.59214	0	0	0
calib05_MC100	12	Maalaea4	2005	2	2	0	0	0	0	0	0	2	0	0	1.815767	34700.97	0	0	1.99	1.99	0	5.5	0.88	1	0	21.59214	0	0	0
calib05_MC100	12	Maalaea4	2005	7	2	0	0	0	0	0	0	2	0	0	1.815767	34700.97	0	0	1.99	1.99	0	5.5	1	1	0	21.59214	0	0	0
calib05_MC100	13	Maalaea5	2005	1	2	0	0	0	0	0	0	2	0	0	6.132361	34700.97	0	0	1.99	1.99	0	6.5	0.95	1	0	21.59214	0	0	0
calib05_MC100	13	Maalaea5	2005	2	2	0	0	0	0	0	0	2	0	0	6.132361	34700.97	0	0	1.99	1.99	0	14.5	1.1	1	0	21.59214	0	0	0
calib05_MC100	13	Maalaea5	2005	5	2	0	0	0	0	0	0	2	0	0	6.132361	34700.97	0	0	1.99	1.99	0	14	1.1	1	0	21.59214	0	0	0
calib05_MC100	13	Maalaea5	2005	8	2	0	0	0	0	0	0	2	0	0	6.132361	34700.97	0	0	1.99	1.99	0	14.5	1.2	1	0	21.59214	0	0	0
calib05_MC100	14	Maalaea6	2005	1	2	0	0	0	0	0	0	2	0	0	0.99067	34700.97	0	0	1.99	1.99	0	7	1	1	0	21.59214	0	0	0
calib05_MC100	14	Maalaea6	2005	2	2	0	0	0	0	0	0	2	0	0	0.99067	34700.97	0	0	1.99	1.99	0	6	0.9	1	0	21.59214	0	0	0
calib05_MC100	14	Maalaea6	2005	7	2	0	0	0	0	0	0	2	0	0	0.99067	34700.97	0	0	1.99	1.99	0	6	1	1	0	21.59214	0	0	0
calib05_MC100	15	Maalaea7	2005	1	2	0	0	0	0	0	0	2	0	0	7.656824	34700.97	0	0	1.99	1.99	0	6	1	1	0	21.59214	0	0	0
calib05_MC100	15	Maalaea7	2005	2	2	0	0	0	0	0	0	2	0	0	7.656824	34700.97	0	0	1.99	1.99	0	15	1.2	1	0	21.59214	0	0	0
calib05_MC100	15	Maalaea7	2005	5	2	0	0	0	0	0	0	2	0	0	7.656824	34700.97	0	0	1.99	1.99	0	14.5	1.2	1	0	21.59214	0	0	0
calib05_MC100	15	Maalaea7	2005	8	2	0	0	0	0	0	0	2	0	0	7.656824	34700.97	0	0	1.99	1.99	0	15	1.2	1	0	21.59214	0	0	0
calib05_MC100	15	Maalaea7	2005	9	2	0	0	0	0	0	0	2	0	0	7.656824	34700.97	0	0	1.99	1.99	0	15	1.3	1	0	21.59214	0	0	0
calib05_MC100	16	Maalaea8	2005	1	2	0	0	0	0	0	0	2	0	0	0.435094	31791.97	0	0	1.99	1.99	0	9.5	1.2	1	0	36.5738	0	0	0
calib05_MC100	16	Maalaea8	2005	2	2	0	0	0	0	0	0	2	0	0	0.435094	31791.97	0	0	1.99	1.99	0	7	1.1	1	0	36.5738	0	0	0
calib05_MC100	16	Maalaea8	2005	5	2	0	0	0	0	0	0	2	0	0	0.435094	31791.97	0	0	1.99	1.99	0	6.5	0.98	1	0	36.5738	0	0	0
calib05_MC100	16	Maalaea8	2005	7	2	0	0	0	0	0	0	2	0	0	0.435094	31791.97	0	0	1.99	1.99	0	6.5	1.08	1	0	36.5738	0	0	0
calib05_MC100	16	Maalaea8	2005	12	2	0	0	0	0	0	0	2	0	0	0.435094	31791.97	0	0	1.99	1.99	0	6.5	1.04	1	0	36.5738	0	0	0
calib05_MC100	17	Maalaea9	2005	1	2	0	0	0	0	0	0	2	0	0	0.49765	31791.97	0	0	1.99	1.99	0	9	1	1	0	36.5738	0	0	0
calib05_MC100	17	Maalaea9	2005	2	2	0	0	0	0	0	0	2	0	0	0.49765	31791.97	0	0	1.99	1.99	0	6.5	1	1	0	36.5738	0	0	0
calib05_MC100	17	Maalaea9	2005	5	2	0	0	0	0	0	0	2	0	0	0.49765	31791.97	0	0	1.99	1.99	0	7	1	1	0	36.5738	0	0	0
calib05_MC100	17	Maalaea9	2005	7	2	0	0	0	0	0	0	2	0	0	0.49765	31791.97	0	0	1.99	1.99	0	7	1.1	1	0	36.5738	0	0	0
calib05_MC100	18	Maalae10	2005	1	2	0	0	0	0	0	0	2	0	0	0.382159	45100.76	0	0	1.99	1.99	0	3.5	0.8	1	0	85.27442	0	0	0
calib05_MC100	18	Maalae10	2005	2	2	0	0	0	0	0	0	2	0	0	0.382159	45100.76	0	0	1.99	1.99	0	4	0.8	1	0	85.27442	0	0	0
calib05_MC100	18	Maalae10	2005	10	2	0	0	0	0	0	0	2	0	0	0.382159	45100.76	0	0	1.99	1.99	0	4	0.7	1	0	85.27442	0	0	0
calib05_MC100	19	Maalae11	2005	1	2	0	0	0	0	0	0	2	0	0	0.408663	45100.76	0	0	1.99	1.99	0	4	0.9	1	0	85.27442	0	0	0
calib05_MC100	19	Maalae11	2005	2	2	0	0	0	0	0	0	2	0	0	0.408663	45100.76	0	0	1.99	1.99	0	4	0.85	1	0	85.27442	0	0	0
calib05_MC100	19	Maalae11	2005	10	2	0	0	0	0	0	0	2	0	0	0.408663	45100.76	0	0	1.99	1.99	0	4	0.75	1	0	85.27442	0	0	0
calib05_MC100	20	Maalae12	2005	1	2	0	0	0	0	0	0	2	0	0	0.991356	45100.76	0	0	1.99	1.99	0	2.5	1	1	13523	85.27442	0	0	0
calib05_MC100	20	Maalae12	2005	9	2	0	0	0	0	0	0	2	0	0	0.991356	45100.76	0	0	1.99	1.99	0	2.2	1	1	13523	85.27442	0	0	0
calib05_MC100	21	Maalae13	2005	1	2	0	0	0	0	0	0	2	0	0	1.067401	45100.76	0	0	1.99	1.99	0	3	1	1	12557	85.27442	0	0	0
calib05_MC100	21	Maalae13	2005	9	2	0	0	0	0	0	0	2	0	0	1.067401	45100.76	0	0	1.99	1.99	0	2.4	1.1	1	12557	85.27442	0	0	0
calib05_MC100	24	M14&15	2005	1	2	0	0	0	0	0	0	2	0	0	0.35987	96220.99	0	0	1.99	1.99	0	1.5	1	1	0	116.4646	0	0	0
calib05_MC100	25	M15&16	2005	1	2	0	0	0	0	0	0	2	0	0	0.35987	96220.99	0	0	1.99	1.99	0	2	1	1	0	116.4646	0	0	0
calib05_MC100	26	M17	2005	1	2	0	0	0	0	0	0	2	0	0	0.233142	48951.38	0	0	1.99	1.99	0	14	1	1	0	106.8815	0	0	0
calib05_MC100	26	M17	2005	5	2	0	0	0	0	0	0	2	0	0	0.233142	48951.38	0	0	1.99	1.99	0	13.5	1	1	0	106.8815	0	0	0
calib05_MC100	27	M19	2005	1	2	0	0	0	0	0	0	2	0	0	0.233142	51855.25	0	0	1.99	1.99	0	13.5	0.97	1	0	106.8815	0	0	0
calib05_MC100	27	M19	2005	2	2	0	0	0	0	0	0	2	0	0	0.233142	51855.25	0	0	1.99	1.99	0	13.5	0.98	1	0	106.8815	0	0	0
calib05_MC100	27	M19	2005	5	2	0	0	0	0	0	0	2	0	0	0.233142	51855.25	0	0	1.99	1.99	0	13	0.98	1	0	106.8815	0	0	0

Thermal Performance Summary

SetID	ID	NAME	YR	PRD	Cap1	Cap2	Cap3	Cap4	Cap5	Cap6	Cap7	Cap8	MinLdHR	HR Option	HR1	HR2	HR3
calib05_MC100	1	Kahului1	2005	1	2.3	3.103333	3.906667	4.71	0	0	0	0	10000	1	17.388908	7.3333595	0.8385144
calib05_MC100	1	Kahului1	2005	3	2.3	3.103333	3.906667	4.71	0	0	0	0	10000	1	5.7786978	20.844534	-1.1808116
calib05_MC100	1	Kahului1	2005	4	2.3	3.103333	3.906667	4.71	0	0	0	0	10000	1	17.388908	7.3333595	0.8385144
calib05_MC100	1	Kahului1	2005	6	2.3	3.103333	3.906667	4.71	0	0	0	0	10000	1	9.1824567	10.355642	0.7671098
calib05_MC100	1	Kahului1	2005	8	2.3	3.103333	3.906667	4.71	0	0	0	0	10000	1	13.827543	13.955254	0.2878385
calib05_MC100	1	Kahului1	2005	11	2.3	3.103333	3.906667	4.71	0	0	0	0	10000	1	2.8411464	16.702038	-0.2974531
calib05_MC100	2	Kahului2	2005	1	2.3	3.12	3.94	4.76	0	0	0	0	10000	1	3.4831398	14.573113	-0.0611978
calib05_MC100	2	Kahului2	2005	3	2.3	3.12	3.94	4.76	0	0	0	0	10000	1	6.235066	10.528724	0.7470525
calib05_MC100	2	Kahului2	2005	6	2.3	3.12	3.94	4.76	0	0	0	0	10000	1	2.1859366	14.938468	-0.0777557
calib05_MC100	2	Kahului2	2005	9	2.3	3.12	3.94	4.76	0	0	0	0	10000	1	9.2656694	11.766666	0.3187445
calib05_MC100	2	Kahului2	2005	11	2.3	3.12	3.94	4.76	0	0	0	0	10000	1	11.125857	10.310765	0.6353342
calib05_MC100	3	Kahului3	2005	1	6.6	8.06	9.52	10.98	0	0	0	0	10000	1	0.1996375	14.191142	-0.0780268
calib05_MC100	3	Kahului3	2005	2	6.6	8.06	9.52	10.98	0	0	0	0	10000	1	18.774362	14.191142	-0.0780268
calib05_MC100	3	Kahului3	2005	6	6.6	8.06	9.52	10.98	0	0	0	0	10000	1	27.554932	9.2222918	0.2144951
calib05_MC100	3	Kahului3	2005	7	6.6	8.06	9.52	10.98	0	0	0	0	10000	1	47.201455	4.5168726	0.4461785
calib05_MC100	3	Kahului3	2005	12	6.6	8.06	9.52	10.98	0	0	0	0	10000	1	31.660461	7.0343192	0.2586395
calib05_MC100	4	Kahului4	2005	1	7.5	8.96	10.42	11.88	0	0	0	0	10000	1	31.703701	7.6426849	0.3327794
calib05_MC100	4	Kahului4	2005	2	7.5	8.96	10.42	11.88	0	0	0	0	10000	1	65.309955	2.1830022	0.5697333
calib05_MC100	4	Kahului4	2005	4	7.5	8.96	10.42	11.88	0	0	0	0	10000	1	12.84716	11.891221	0.168183
calib05_MC100	4	Kahului4	2005	6	7.5	8.96	10.42	11.88	0	0	0	0	10000	1	17.174791	10.869402	0.0825552
calib05_MC100	4	Kahului4	2005	8	7.5	8.96	10.42	11.88	0	0	0	0	10000	1	41.333056	10.558529	-0.0547589
calib05_MC100	7	MaalaeX1	2005	1	2.5	2.5	2.5	2.5	0	0	0	0	10000	1	1.605E-13	10.261785	8.06E-15
calib05_MC100	7	MaalaeX1	2005	3	2.5	2.5	2.5	2.5	0	0	0	0	10000	1	1.494E-14	10.157393	4.07E-14
calib05_MC100	8	MaalaeX2	2005	1	2.5	2.5	2.5	2.5	0	0	0	0	10000	1	1.605E-13	10.261785	8.06E-15
calib05_MC100	8	MaalaeX2	2005	3	2.5	2.5	2.5	2.5	0	0	0	0	10000	1	1.494E-14	10.157393	4.07E-14
calib05_MC100	9	Maalaea1	2005	1	2.5	2.5	2.5	2.5	0	0	0	0	10000	1	1.605E-13	10.261785	8.06E-15
calib05_MC100	9	Maalaea1	2005	3	2.5	2.5	2.5	2.5	0	0	0	0	10000	1	1.494E-14	10.157393	4.07E-14
calib05_MC100	10	Maalaea2	2005	1	2.5	2.5	2.5	2.5	0	0	0	0	10000	1	1.605E-13	10.261785	8.06E-15
calib05_MC100	10	Maalaea2	2005	3	2.5	2.5	2.5	2.5	0	0	0	0	10000	1	1.494E-14	10.157393	4.07E-14
calib05_MC100	11	Maalaea3	2005	1	2.5	2.5	2.5	2.5	0	0	0	0	10000	1	1.605E-13	10.261785	8.06E-15
calib05_MC100	11	Maalaea3	2005	3	2.5	2.5	2.5	2.5	0	0	0	0	10000	1	1.494E-14	10.157393	4.07E-14
calib05_MC100	12	Maalaea4	2005	1	2.5	3.503333	4.506667	5.51	0	0	0	0	10000	1	3.1049547	9.9095841	-0.1473758
calib05_MC100	12	Maalaea4	2005	4	2.5	3.503333	4.506667	5.51	0	0	0	0	10000	1	47.107826	-15.37787	3.2820347
calib05_MC100	12	Maalaea4	2005	9	2.5	3.339345	4.17869	5.018036	0	0	0	0	10000	1	47.107826	-15.37787	3.2820347

Thermal Performance Summary (continued)

SetID	ID	NAME	YR	PRD	HR4	HR5	HR6	HR7	HR8	Avail1	Avail2	Avail3	Avail4	Avail5	Avail6	Avail7	Avail8	FOR	MOR
calib05_MC100	1	Kahului1	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.1521	1.2768
calib05_MC100	1	Kahului1	2005	3	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.1521	1.2768
calib05_MC100	1	Kahului1	2005	4	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.1521	1.2768
calib05_MC100	1	Kahului1	2005	6	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.1521	1.2768
calib05_MC100	1	Kahului1	2005	8	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.1521	1.2768
calib05_MC100	1	Kahului1	2005	11	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.1521	1.2768
calib05_MC100	2	Kahului2	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.2683	1.2846
calib05_MC100	2	Kahului2	2005	3	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.2683	1.2846
calib05_MC100	2	Kahului2	2005	6	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.2683	1.2846
calib05_MC100	2	Kahului2	2005	9	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.2683	1.2846
calib05_MC100	2	Kahului2	2005	11	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.2683	1.2846
calib05_MC100	3	Kahului3	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.146	0.9258
calib05_MC100	3	Kahului3	2005	2	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.146	0.9258
calib05_MC100	3	Kahului3	2005	6	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.146	0.9258
calib05_MC100	3	Kahului3	2005	7	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.146	0.9258
calib05_MC100	3	Kahului3	2005	12	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.146	0.9258
calib05_MC100	4	Kahului4	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.3745	1.1385
calib05_MC100	4	Kahului4	2005	2	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.3745	1.1385
calib05_MC100	4	Kahului4	2005	4	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.3745	1.1385
calib05_MC100	4	Kahului4	2005	6	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.3745	1.1385
calib05_MC100	4	Kahului4	2005	8	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.3745	1.1385
calib05_MC100	7	MaalaeX1	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.1713	2.0217
calib05_MC100	7	MaalaeX1	2005	3	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.1713	2.0217
calib05_MC100	8	MaalaeX2	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	2.4721	1.8312
calib05_MC100	8	MaalaeX2	2005	3	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	2.4721	1.8312
calib05_MC100	9	Maalaea1	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0	2.042
calib05_MC100	9	Maalaea1	2005	3	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0	2.042
calib05_MC100	10	Maalaea2	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.8105	1.1783
calib05_MC100	10	Maalaea2	2005	3	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.8105	1.1783
calib05_MC100	11	Maalaea3	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0	1.1233
calib05_MC100	11	Maalaea3	2005	3	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0	1.1233
calib05_MC100	12	Maalaea4	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	4.7406	0.665
calib05_MC100	12	Maalaea4	2005	4	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	4.7406	0.665
calib05_MC100	12	Maalaea4	2005	9	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	4.7406	0.665

Thermal Performance Summary (continued)

SetID	ID	NAME	YR	PRD	Cap1	Cap2	Cap3	Cap4	Cap5	Cap6	Cap7	Cap8	MinLdHR	HR Option	HR1	HR2	HR3
calib05_MC100	12	Maalaea4	2005	10	2.5	3.462336	4.424673	5.387009	0	0	0	0	10000	1	47.107826	-15.37787	3.2820347
calib05_MC100	12	Maalaea4	2005	11	2.5	3.503333	4.506667	5.51	0	0	0	0	10000	1	47.107826	-15.37787	3.2820347
calib05_MC100	13	Maalaea5	2005	1	2.5	3.503333	4.506667	5.51	0	0	0	0	10000	1	32.612342	-3.670708	1.4308549
calib05_MC100	13	Maalaea5	2005	3	2.5	3.398381	4.296762	5.195143	0	0	0	0	10000	1	32.612342	-3.670708	1.4308549
calib05_MC100	13	Maalaea5	2005	4	2.5	2.978571	3.457143	3.935714	0	0	0	0	10000	1	32.612342	-3.670708	1.4308549
calib05_MC100	13	Maalaea5	2005	5	2.5	3.503333	4.506667	5.51	0	0	0	0	10000	1	32.612342	-3.670708	1.4308549
calib05_MC100	13	Maalaea5	2005	11	2.5	3.503333	4.506667	5.51	0	0	0	0	10000	1	38.254378	-6.200043	1.6844569
calib05_MC100	14	Maalaea6	2005	1	2.5	3.503333	4.506667	5.51	0	0	0	0	10000	1	17.314315	1.8161727	0.8958112
calib05_MC100	14	Maalaea6	2005	3	2.5	3.503333	4.506667	5.51	0	0	0	0	10000	1	29.540665	-2.034224	1.1744235
calib05_MC100	14	Maalaea6	2005	10	2.5	3.41314	4.32628	5.23942	0	0	0	0	10000	1	29.540665	-2.034224	1.1744235
calib05_MC100	14	Maalaea6	2005	11	2.5	3.503333	4.506667	5.51	0	0	0	0	10000	1	29.540665	-2.034224	1.1744235
calib05_MC100	15	Maalaea7	2005	1	2.5	3.503333	4.506667	5.51	0	0	0	0	10000	1	28.52096	-4.130708	1.6163797
calib05_MC100	15	Maalaea7	2005	12	2.5	3.503333	4.506667	5.51	0	0	0	0	10000	1	15.819532	3.731629	0.656444
calib05_MC100	16	Maalaea8	2005	1	2.5	3.503333	4.506667	5.51	0	0	0	0	10000	1	35.960573	-8.15637	2.0850615
calib05_MC100	16	Maalaea8	2005	8	2.5	3.286869	4.073738	4.860607	0	0	0	0	10000	1	35.960573	-8.15637	2.0850615
calib05_MC100	16	Maalaea8	2005	12	2.5	3.503333	4.506667	5.51	0	0	0	0	10000	1	22.339426	-2.26862	1.5513224
calib05_MC100	17	Maalaea9	2005	1	2.5	3.503333	4.506667	5.51	0	0	0	0	10000	1	12.082377	6.4343273	0.1960495
calib05_MC100	17	Maalaea9	2005	3	2.5	3.503333	4.506667	5.51	0	0	0	0	10000	1	23.411564	-1.109948	1.1134515
calib05_MC100	17	Maalaea9	2005	8	2.5	3.181917	3.863833	4.54575	0	0	0	0	10000	1	23.411564	-1.109948	1.1134515
calib05_MC100	17	Maalaea9	2005	9	2.5	2.85558	3.211161	3.566741	0	0	0	0	10000	1	23.411564	-1.109948	1.1134515
calib05_MC100	17	Maalaea9	2005	10	2.5	2.978571	3.457143	3.935714	0	0	0	0	10000	1	23.411564	-1.109948	1.1134515
calib05_MC100	17	Maalaea9	2005	11	2.5	2.683393	2.866786	3.050179	0	0	0	0	10000	1	23.411564	-1.109948	1.1134515
calib05_MC100	18	Maalae10	2005	1	6.4	8.366369	10.33274	12.29911	0	0	0	0	10000	1	4.6659511	8.2035288	0.0265128
calib05_MC100	19	Maalae11	2005	1	6.4	8.366369	10.33274	12.29911	0	0	0	0	10000	1	14.236783	6.2897877	0.1088145
calib05_MC100	20	Maalae12	2005	1	6.4	8.366369	10.33274	12.29911	0	0	0	0	10000	1	5.4998241	7.7974427	0.0889437
calib05_MC100	20	Maalae12	2005	5	6.4	8.366369	10.33274	12.29911	0	0	0	0	10000	1	54.725811	-1.113777	0.4862605
calib05_MC100	21	Maalae13	2005	1	6.4	8.366369	10.33274	12.29911	0	0	0	0	10000	1	6.4435162	8.2028653	0.0401867
calib05_MC100	21	Maalae13	2005	9	6.4	8.366369	10.33274	12.29911	0	0	0	0	10000	1	18.694987	6.0615399	0.123688
calib05_MC100	24	M14&15	2005	1	17.6	20.605	23.61	26.615	0	0	0	0	10000	1	50.643086	7.00729	0.006839
calib05_MC100	25	M15&16	2005	1	17.6	20.605	23.61	26.615	0	0	0	0	10000	1	50.643086	7.00729	0.006839
calib05_MC100	26	M17	2005	1	8.1	12.23333	16.36667	20.5	0	0	0	0	10000	1	58.036251	6.3445914	0.0724069
calib05_MC100	27	M19	2005	1	8.1	12.23333	16.36667	20.5	0	0	0	0	10000	1	59.832801	6.5831718	0.0592318

Thermal Performance Summary (continued)

SetID	ID	NAME	YR	PRD	HR4	HR5	HR6	HR7	HR8	Avail1	Avail2	Avail3	Avail4	Avail5	Avail6	Avail7	Avail8	FOR	MOR
calib05_MC100	12	Maalaea4	2005	10	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	4.7406	0.665
calib05_MC100	12	Maalaea4	2005	11	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	4.7406	0.665
calib05_MC100	13	Maalaea5	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.2898	0.839
calib05_MC100	13	Maalaea5	2005	3	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.2898	0.839
calib05_MC100	13	Maalaea5	2005	4	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.2898	0.839
calib05_MC100	13	Maalaea5	2005	5	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.2898	0.839
calib05_MC100	13	Maalaea5	2005	11	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.2898	0.839
calib05_MC100	14	Maalaea6	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0	1.3004
calib05_MC100	14	Maalaea6	2005	3	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0	1.3004
calib05_MC100	14	Maalaea6	2005	10	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0	1.3004
calib05_MC100	14	Maalaea6	2005	11	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0	1.3004
calib05_MC100	15	Maalaea7	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0	0.1979
calib05_MC100	15	Maalaea7	2005	12	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0	0.1979
calib05_MC100	16	Maalaea8	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.005	2.3683
calib05_MC100	16	Maalaea8	2005	8	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.005	2.3683
calib05_MC100	16	Maalaea8	2005	12	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.005	2.3683
calib05_MC100	17	Maalaea9	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.1446	1.469
calib05_MC100	17	Maalaea9	2005	3	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.1446	1.469
calib05_MC100	17	Maalaea9	2005	8	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.1446	1.469
calib05_MC100	17	Maalaea9	2005	9	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.1446	1.469
calib05_MC100	17	Maalaea9	2005	10	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.1446	1.469
calib05_MC100	17	Maalaea9	2005	11	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.1446	1.469
calib05_MC100	18	Maalae10	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0	1.8689
calib05_MC100	19	Maalae11	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.0598	1.0148
calib05_MC100	20	Maalae12	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.068	1.8177
calib05_MC100	20	Maalae12	2005	5	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.068	1.8177
calib05_MC100	21	Maalae13	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0	2.0634
calib05_MC100	21	Maalae13	2005	9	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0	2.0634
calib05_MC100	24	M14&15	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.076	1.059
calib05_MC100	25	M15&16	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.076	1.059
calib05_MC100	26	M17	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.2875	0.6621
calib05_MC100	27	M19	2005	1	0	0	10000	10000	10000	0	0	0	0	0	0	0	0	0.0506	1.2597

Thermal Maintenance Summary

SetID	ID	NAME	YR	PRD	StartDay	Days
calib05_MC100	1	Kahului1	2005	2	14	7
calib05_MC100	1	Kahului1	2005	2	14	40
calib05_MC100	2	Kahului2	2005	5	30	7
calib05_MC100	2	Kahului2	2005	8	25	30
calib05_MC100	3	Kahului3	2005	10	11	31
calib05_MC100	4	Kahului4	2005	4	25	25
calib05_MC100	4	Kahului4	2005	12	5	7
calib05_MC100	7	MaalaeX1	2005	5	23	7
calib05_MC100	7	MaalaeX1	2005	6	3	4
calib05_MC100	7	MaalaeX1	2005	9	2	11
calib05_MC100	8	MaalaeX2	2005	2	24	9
calib05_MC100	8	MaalaeX2	2005	6	20	7
calib05_MC100	8	MaalaeX2	2005	7	29	8
calib05_MC100	8	MaalaeX2	2005	7	25	4
calib05_MC100	9	Maalaea1	2005	1	3	7
calib05_MC100	10	Maalaea2	2005	3	28	7
calib05_MC100	11	Maalaea3	2005	4	12	14
calib05_MC100	11	Maalaea3	2005	5	7	15
calib05_MC100	11	Maalaea3	2005	9	19	12
calib05_MC100	11	Maalaea3	2005	11	28	7
calib05_MC100	12	Maalaea4	2005	5	2	123
calib05_MC100	12	Maalaea4	2005	12	1	31
calib05_MC100	14	Maalaea6	2005	2	2	10
calib05_MC100	14	Maalaea6	2005	5	23	7
calib05_MC100	16	Maalaea8	2005	4	25	7
calib05_MC100	17	Maalaea9	2005	2	25	3
calib05_MC100	17	Maalaea9	2005	9	19	7
calib05_MC100	18	Maalae10	2005	1	1	5
calib05_MC100	18	Maalae10	2005	9	26	7
calib05_MC100	19	Maalae11	2005	4	4	7
calib05_MC100	19	Maalae11	2005	11	11	4
calib05_MC100	20	Maalae12	2005	1	17	7
calib05_MC100	20	Maalae12	2005	2	15	60
calib05_MC100	20	Maalae12	2005	6	6	16
calib05_MC100	20	Maalae12	2005	10	3	8
calib05_MC100	21	Maalae13	2005	1	21	26
calib05_MC100	21	Maalae13	2005	6	22	63
calib05_MC100	21	Maalae13	2005	11	14	7
calib05_MC100	21	Maalae13	2005	12	9	23
calib05_MC100	24	M14&15	2005	1	10	7
calib05_MC100	24	M14&15	2005	5	29	4
calib05_MC100	24	M14&15	2005	9	29	5
calib05_MC100	25	M15&16	2005	4	18	7
calib05_MC100	27	M19	2005	3	14	7

Fixed Energy Transaction Summary

SetID	ID	NAME	YR	PRD	Area ID	Type	PeakDef	Firm	Min Cap	MaxCap	Energy	Eng Cost	Cap Cost	EngCost Esc	CapCost Esc	Wk Days	WD PkHr1	WD PkHrn	WE PkHr1	WE PkHrn
calib05_MC100	3	HCS_ON	2005	1	1	4	1	0	8	8.88	3.855	0	0	0	0	7	8	21	8	21
calib05_MC100	3	HCS_ON	2005	2	1	4	1	0	8	10.71	4.198	0	0	0	0	7	8	21	8	21
calib05_MC100	3	HCS_ON	2005	3	1	4	1	0	8	12.53	5.44	0	0	0	0	7	8	21	8	21
calib05_MC100	3	HCS_ON	2005	4	1	4	1	0	8	12.72	5.342	0	0	0	0	7	8	21	8	21
calib05_MC100	3	HCS_ON	2005	5	1	4	1	0	8	12.83	5.567	0	0	0	0	7	8	21	8	21
calib05_MC100	3	HCS_ON	2005	6	1	4	1	0	8	11.82	4.964	0	0	0	0	7	8	21	8	21
calib05_MC100	3	HCS_ON	2005	7	1	4	1	0	8	12.26	5.321	0	0	0	0	7	8	21	8	21
calib05_MC100	3	HCS_ON	2005	8	1	4	1	0	8	12.36	5.362	0	0	0	0	7	8	21	8	21
calib05_MC100	3	HCS_ON	2005	9	1	4	1	0	8	12.03	5.054	0	0	0	0	7	8	21	8	21
calib05_MC100	3	HCS_ON	2005	10	1	4	1	0	8	14.16	6.143	0	0	0	0	7	8	21	8	21
calib05_MC100	3	HCS_ON	2005	11	1	4	1	0	8	13.74	5.769	0	0	0	0	7	8	21	8	21
calib05_MC100	3	HCS_ON	2005	12	1	4	1	0	8	14.02	6.086	0	0	0	0	7	8	21	8	21
calib05_MC100	4	HCS_OFF	2005	1	1	5	1	0	6	8.14	2.525	0	0	0	0	7	8	21	8	21
calib05_MC100	4	HCS_OFF	2005	2	1	5	1	0	6	8.63	2.416	0	0	0	0	7	8	21	8	21
calib05_MC100	4	HCS_OFF	2005	3	1	5	1	0	6	9.1	2.822	0	0	0	0	7	8	21	8	21
calib05_MC100	4	HCS_OFF	2005	4	1	5	1	0	6	8.89	2.666	0	0	0	0	7	8	21	8	21
calib05_MC100	4	HCS_OFF	2005	5	1	5	1	0	6	9.81	3.04	0	0	0	0	7	8	21	8	21
calib05_MC100	4	HCS_OFF	2005	6	1	5	1	0	6	9.15	2.745	0	0	0	0	7	8	21	8	21
calib05_MC100	4	HCS_OFF	2005	7	1	5	1	0	6	9.36	2.902	0	0	0	0	7	8	21	8	21
calib05_MC100	4	HCS_OFF	2005	8	1	5	1	0	6	9.41	2.916	0	0	0	0	7	8	21	8	21
calib05_MC100	4	HCS_OFF	2005	9	1	5	1	0	6	8.87	2.66	0	0	0	0	7	8	21	8	21
calib05_MC100	4	HCS_OFF	2005	10	1	5	1	0	6	10.12	3.137	0	0	0	0	7	8	21	8	21
calib05_MC100	4	HCS_OFF	2005	11	1	5	1	0	6	9.59	2.876	0	0	0	0	7	8	21	8	21
calib05_MC100	4	HCS_OFF	2005	12	1	5	1	0	6	10.57	3.276	0	0	0	0	7	8	21	8	21

Load Summary

YR	MW1	MW2	MW3	MW4	MW5	MW6	MW7	MW8	MW9	MW10	MW11	MW12
2005	198	196	197	190	195	196	199	207	201	202	206	205

	GWH1	GWH2	GWH3	GWH4	GWH5	GWH6	GWH7	GWH8	GWH9	GWH10	GWH11	GWH12
	102.82	91.11	101.14	99.14	108.08	107.00	112.46	113.80	108.50	108.73	103.66	105.80

Regulating Reserve Requirement Input File

SetID	Year	Month	Day	Hour	SpinReq
calib05HCS4MW	2005	1	1	1	4
calib05HCS4MW	2005	1	2	1	4
calib05HCS4MW	2005	1	3	1	4
calib05HCS4MW	2005	1	4	1	4
calib05HCS4MW	2005	1	5	1	4
calib05HCS4MW	2005	1	6	1	4
calib05HCS4MW	2005	1	7	1	4

Pattern 18

SetID	Yr	Prd	StartDay	Hr	Cap Multiplier	OM Multiplier
PTN18	2005	1	1	1	0	1
PTN18	2005	1	1	5	1	1
PTN18	2005	1	1	22	0	1
PTN18	2005	1	2	5	1	1
PTN18	2005	1	2	22	0	1
PTN18	2005	1	3	5	1	1
PTN18	2005	1	3	22	0	1
PTN18	2005	1	4	5	1	1
PTN18	2005	1	4	22	0	1
PTN18	2005	1	5	5	1	1
PTN18	2005	1	5	22	0	1
PTN18	2005	1	6	5	1	1
PTN18	2005	1	6	22	0	1
PTN18	2005	1	7	5	1	1
PTN18	2005	1	7	22	0	1

Maui Electric Company, Limited
Direct Testimony

MECO
2007 OVERHAUL SCHEDULE
Test Year - Normalized
(Maui Division)

UNIT	DATE	DURATION (Days)	DESCRIPTION
Kahului Power Plant			
K1	Sep 3 - 30	28	Annual maintenenace, Boiler Inspection
K2	Jan 1 - 28	28	Annual maintenenace, Boiler Inspection
K3	Nov 5 - Dec 2	28	Annual maintenenace, Boiler Inspection
K4	Apr 2 - 29	28	Annual maintenenace, Boiler Inspection
Steam Turbines	Sep 3 - 11	9	6-yr. Overhaul (In addition to annual maintenance)
Maalaea Power Plant			
M3 (EMD)	Aug 6	1	8,000 hr. Overhaul
M4 (Cooper-Bessemer)	Jul 9 - Jul 12	4	20,000 hr. Overhaul
M8 (Colt-Pielstick)	Jul 23	1	18,000 hr. Overhaul
M10	Oct 1 - Oct 6	4	12,000 hr. Overhaul
M12 (Mitsubishi)	Feb 5 - Apr 1	56	12,000 hr. Overhaul
M14 & M16 (HRSG)	Jun 4 - Jul 1	28	Annual Maintenance. Boiler Inspection
M17 & M19 (OTSG)	May 7 - Jun 3	28	Annual Maintenance. Boiler Inspection
M17 (CT Hot Section)	Mar 2 - 4	3	16,000 hr. Replacement
M19 (CT Hot Section)	Jul 13 - 14	3	16,000 hr. Replacement
M16 (CT 50,000 hr Overhaul)	Feb 2	1	50,000 hr. Overhaul
M15 (CT Steam Turbine)	May 7 - 20	14	6-yr. Overhaul

Maui Electric Company, Limited

MECO Unit Ratings (Net)
TEST YEAR 2007
Direct Testimony

(Maui Division)

Unit ID	Reserve Rating (MW)	NTL Rating (MW)
Kahului Power Plant		
K1	5.62	4.71
K2	5.77	4.76
K3	12.15	10.98
K4	12.38	11.88
Maalaea Power Plant		
M1	2.50	2.50
M2	2.50	2.50
M3	2.50	2.50
X1	2.50	2.50
X2	2.50	2.50
M4	5.51	5.51
M5	5.51	5.51
M6	5.51	5.51
M7	5.51	5.51
M8	5.48	5.48
M9	5.48	5.48
M10	12.34	12.34
M11	12.34	12.34
M12	12.50	12.34
M13	12.50	12.34
M14/15/16	56.78	53.50
M17/18/19	56.78	53.50
Hana Substation		
H1	1.00	1.00
H2	1.00	1.00
MECO Total	246.66	236.19
HC&S	16.00	12.00
KWP	30.00	30.00
Makila Hydro	0.50	0.50
IPP Total	46.50	42.50
System Total	**293.16**	**278.69**

Maui Electric Company, Limited

MECO Unit Ratings (Gross)
TEST YEAR 2007
Direct Testimony

(Lanai Division)

Unit ID	Reserve Rating (KW)	NTL Rating (KW)
Miki Basin Power Plant		
LL-1	1,000	1,000
LL-2	1,000	1,000
LL-3	1,000	1,000
LL-4	1,000	1,000
LL-5	1,000	1,000
LL-6	1,000	1,000
LL-7	2,200	2,200
LL-8	2,200	2,200
System Total	**10,400**	**10,400**

Maui Electric Company, Limited

MECO Unit Ratings (Gross)
TEST YEAR 2007
Direct Testimony

(Molokai Division)

Unit ID	Reserve Rating (KW)	NTL Rating (KW)
Palaau Power Plant		
P-1	1,250	1,250
P-2	1,250	1,250
P-3	970	970
P-4	970	970
P-5	970	970
P-6	970	970
Solar CT	2,220	2,220
P-7	2,200	2,200
P-8	2,200	2,200
P-9	2,200	2,200
System Total	**15,200**	**15,200**

Maui Electric Company, Limited

MECO Commitment Penalty Factors
TEST YEAR 2007
Direct Testimony

(Maui Division)

Unit ID	Commitment Penalty Factors
Kahului Power Plant	
K1	2.000000
K2	2.000000
K3	1.000000
K4	1.000000
Maalaea Power Plant	
M1	2.000000
M2	1.500000
M3	1.000000
X1	2.500000
X2	3.000000
M4	3.500000
M5	4.500000
M6	3.000000
M7	4.000000
M8	3.000000
M9	2.500000
M10	2.500000
M11	2.000000
M12	1.500000
M13	1.000000
M14/15	1.000000
M15/16	1.000000
M17/18	1.500000
M18/19	1.000000

Maui Electric Company, Limited

MECO Heat Rate Constants
TEST YEAR 2007
Direct Testimony

(Maui Division)

Unit ID	A	B	C	Minimum (MW Net)	Maximum (MW Net)
Kahului Power Plant					
K1	14.0467	9.4630	0.8208	2.30	4.71
K2	7.7579	12.9351	0.3343	2.30	4.76
K3	21.1064	9.6550	0.1402	6.60	10.98
K4	39.0151	7.0081	0.3212	7.50	11.88
Maalaea Power Plant					
M1	0.0000	10.2878	0.0000	2.50	2.50
M2	0.0000	10.2878	0.0000	2.50	2.50
M3	0.0000	10.2878	0.0000	2.50	2.50
X1	0.0000	10.2878	0.0000	2.50	2.50
X2	0.0000	10.2878	0.0000	2.50	2.50
M4	23.3926	-0.9545	1.2846	2.50	5.51
M5	23.3926	-0.9545	1.2846	2.50	5.51
M6	23.3926	-0.9545	1.2846	2.50	5.51
M7	23.3926	-0.9545	1.2846	2.50	5.51
M8	18.1852	1.1548	0.9634	2.50	5.48
M9	18.1852	1.1548	0.9634	2.50	5.48
M10	26.6557	3.5697	0.2749	6.40	12.34
M11	26.6557	3.5697	0.2749	6.40	12.34
M12	26.6557	3.5697	0.2749	6.40	12.34
M13	26.6557	3.5697	0.2749	6.40	12.34
M14/15	2.1124	9.4713	-0.0384	17.60	26.75
M15/16	2.1124	9.4713	-0.0384	17.60	26.75
M17/18	2.1124	9.4713	-0.0384	20.40	26.75
M18/19	2.1124	9.4713	-0.0384	8.10	26.75
Hana Substation					
H1	0.0000	9.7503	0.0000	1.00	1.00
H2	0.0000	9.7503	0.0000	1.00	1.00

Maui Electric Company, Limited

MECO Operations & Maintenance Costs (2007$)
TEST YEAR 2007
Direct Testimony

(Maui Division)

Unit ID	Variable O&M ($/MWH net)	Variable O&M ($/hour)
Kahului Power Plant		
K1	1.412292	0.139220
K2	1.426930	0.139220
K3	1.253263	0.139220
K4	1.346897	0.139220
Maalaea Power Plant		
M1	0.507019	28.485018
M2	0.507019	28.485018
M3	0.507019	28.485018
X1	0.507019	28.485018
X2	0.507019	28.485018
M4	1.574695	21.592138
M5	1.574695	21.592138
M6	1.574695	21.592138
M7	1.574695	21.592138
M8	0.843635	36.573798
M9	0.843635	36.573798
M10	0.508783	85.274423
M11	0.508783	85.274423
M12	0.508783	85.274423
M13	0.508783	85.274423
M14/15/16	0.347158	116.464557
M17/18/19	0.347158	106.881458

Maui Electric Company, Limited

MECO Historical Forced Outage Rates
TEST YEAR 2007
Direct Testimony

(Maui Division)

Unit ID	2001	2002	2003	2004	2005	TY2007 2001-05 Ave by Type
Kahului Power Plant						
K1	0.03%	0.72%	0.09%	0.00%	0.15%	
K2	0.05%	0.00%	0.00%	0.06%	0.27%	**0.14%**
K3	0.16%	0.00%	0.02%	0.52%	0.15%	
K4	0.01%	0.00%	0.00%	0.39%	0.37%	**0.16%**
Maalaea Power Plant						
M1	0.13%	0.05%	0.68%	0.01%	0.00%	
M2	0.45%	0.00%	1.04%	0.00%	0.81%	
M3	0.24%	4.03%	0.00%	0.00%	0.00%	EMD
X1	0.02%	0.80%	1.11%	0.00%	0.17%	(M1-M3, X1, X2)
X2	0.00%	0.18%	1.01%	0.01%	2.47%	**0.53%**
M4	0.00%	0.00%	0.01%	0.08%	4.74%	Cooper-
M5	0.00%	0.06%	0.13%	0.01%	0.29%	Bessemer
M6	0.00%	0.73%	0.09%	0.00%	0.00%	(M4-M7)
M7	0.11%	4.75%	0.18%	0.00%	0.00%	**0.56%**
M8	0.03%	11.59%	0.06%	0.25%	0.00%	Colt (M8, M9)
M9	0.02%	0.81%	0.00%	0.00%	0.14%	**1.29%**
M10	0.08%	0.40%	0.65%	0.00%	0.00%	
M11	0.09%	0.09%	0.89%	3.51%	0.06%	Mitsubishi
M12	0.00%	0.00%	0.05%	0.01%	0.07%	(M10-M13)
M13	0.00%	0.00%	0.12%	0.00%	0.00%	**0.30%**
M14	0.04%	0.01%	0.00%	0.01%	0.00%	
M15	0.18%	0.05%	0.01%	0.50%	0.12%	
M16	0.05%	0.02%	0.05%	0.08%	0.02%	**0.08%**
M17	0.02%	0.02%	0.00%	0.13%	0.29%	
M18						
M19	0.59%	0.03%	0.30%	0.06%	0.05%	**0.15%**

Maui Electric Company, Limited

MECO Historical Maintenance Outage Rates
TEST YEAR 2007
Direct Testimony

(Maui Division)

Unit ID	2001	2002	2003	2004	2005	TY2007 2001-2005 Ave Adjusted by Type
Kahului Power Plant						
K1	0.60%	1.32%	0.50%	2.13%	1.28%	
K2	1.50%	0.48%	0.58%	1.33%	1.28%	**1.10%**
K3	0.10%	0.52%	0.52%	0.74%	0.93%	
K4	0.19%	0.23%	0.54%	0.27%	1.14%	**0.52%**
Maalaea Power Plant						
M1	2.59%	2.99%	0.76%	1.68%	2.04%	
M2	1.61%	0.81%	0.58%	0.88%	1.18%	
M3	0.88%	0.84%	1.05%	0.32%	1.12%	
X1	1.16%	1.12%	1.82%	1.07%	2.02%	
X2	1.18%	1.55%	1.53%	0.65%	1.83%	**1.33%**
M4	1.34%	1.83%	2.46%	2.63%	0.66%	
M5	1.51%	2.13%	4.79%	1.32%	0.84%	
M6	1.43%	3.10%	1.84%	2.26%	1.30%	
M7	3.50%	2.27%	1.56%	1.61%	0.20%	**1.93%**
M8	3.10%	1.44%	2.17%	1.06%	2.37%	
M9	2.18%	3.51%	1.02%	0.99%	1.47%	**1.93%**
M10	1.41%	1.60%	1.03%	1.53%	1.87%	
M11	1.53%	1.43%	1.25%	2.74%	1.01%	
M12	1.69%	1.40%	0.92%	0.63%	1.82%	
M13	1.44%	2.20%	1.83%	1.26%	2.06%	**1.53%**
M14	1.64%	1.61%	1.60%	0.80%	0.47%	
M15	0.56%	0.39%	0.51%	0.35%	0.47%	
M16	1.59%	1.36%	1.20%	0.84%	0.69%	**0.94%**
M17	0.76%	1.30%	0.45%	1.17%	0.66%	
M18						
M19	0.93%	0.95%	1.65%	0.49%	1.26%	**0.96%**

Maui Electric Company, Limited

Generation and Purchased Power
TEST YEAR 2007

Direct Testimony

(Lanai Division)

Line		2007 Test Year (MWh)
1	Unadjusted Sales	29,779.9
2	- Future DSM Impact	0.0
3	Test Year Sales	29,779.9
4	+ No Charge (0.026% of sales)	7.6
5	Sales - DSM + No Charge	29,787.5
6	+ Losses (5.11%)	1,604.7
7	Net-To-System	31,392.2
8	- Purchased Energy	0.0
9	Net Company Generation	31,392.2
10	+ Station Power (Gross/Net Ratio = 1.0322)	1,011.5
11	Gross Company Generation	32,403.7

Reference:
Line 1: MECO-WP-404, page 94
Line 4: MECO-WP-404, page 95
Line 5: Line 3 - Line 2 + Line 4
Line 6: MECO-WP-404, page 95
Line 7: Line 5 + Line 6
Line 10: MECO-WP-404, page 95

Maui Electric Company, Limited
Test Year Fuel Forecast
TEST YEAR 2007
Direct Testimony

(Lanai Division)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Sales	2,446.3	2,182.8	2,447.3	2,399.8	2,551.0	2,497.6	2,572.3	2,675.8	2,523.7	2,590.2	2,418.8	2,474.3	29,779.9
DSM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales - DSM	2,446.3	2,182.8	2,447.3	2,399.8	2,551.0	2,497.6	2,572.3	2,675.8	2,523.7	2,590.2	2,418.8	2,474.3	29,779.9
NC [1]	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.6	0.7	0.6	0.6	7.6
Sales - DSM + NC	2,446.9	2,183.4	2,447.9	2,400.4	2,551.7	2,498.2	2,573.0	2,676.5	2,524.3	2,590.9	2,419.4	2,474.9	29,787.5
Losses [2]	131.8	117.6	131.9	129.3	137.5	134.6	138.6	144.2	136.0	139.6	130.3	133.3	1,604.7
Net-to-Syst	2,578.7	2,301.0	2,579.8	2,529.7	2,689.2	2,632.8	2,711.6	2,820.7	2,660.3	2,730.5	2,549.7	2,608.2	31,392.2
Gross/Net [3]	1.0322	1.0322	1.0322	1.0322	1.0322	1.0322	1.0322	1.0322	1.0322	1.0322	1.0322	1.0322	1.0322
Gross Gen	2,661.8	2,375.1	2,662.9	2,611.2	2,775.8	2,717.6	2,799.0	2,911.6	2,746.0	2,818.5	2,631.9	2,692.2	32,403.7
Grs HR Btu/KWH [4]	9,721	9,721	9,721	9,721	9,721	9,721	9,721	9,721	9,721	9,721	9,721	9,721	9,721
MBTUs	25,875	23,089	25,886	25,384	26,984	26,418	27,209	28,304	26,694	27,398	25,584	26,171	314,996
BBLs of Fuel	4,416	3,940	4,417	4,332	4,605	4,508	4,643	4,830	4,555	4,676	4,366	4,466	53,754
BBLs/Day	142	141	142	144	149	150	150	156	152	151	146	144	147
Cost Per BBL ($)	114.8311	114.8311	114.8311	114.8311	114.8311	114.8311	114.8311	114.8311	114.8311	114.8311	114.8311	114.8311	114.8311
Fuel Exp ($000)	507.0	452.4	507.3	497.4	528.8	517.7	533.2	554.6	523.1	536.9	501.3	512.8	6,172.6

[1] No Charge %: 0.026% (5-year 2001-2005 average NC as % of Sales)

[2] Losses %: 5.11% (5-year 2001-2005 average NC as % of Sales)

[3] 5-year 2001-2005 average, MECO-WP-404, page 95

Note: Fuel prices effective September 1, 2006

Maui Electric Company, Limited

Historical Generation Statistics
TEST YEAR 2007
Direct Testimony

(Lanai Division)

Miki Basin Power Plant

Year	Gross KWH	Mbtu	Gross Heat Rate	Sales	NC	Net Gen	Loss
2001	29,401,770	287,082	9,764	26,905,207	3,601	28,465,782	1,556,974
	Gross/Net Ratio	1.03288116		NC %	0.013%	Loss %	5.47%
2002	29,553,250	283,025	9,577	27,036,103	5,829	28,597,172	1,555,240
	Gross/Net Ratio	1.03343261		NC %	0.022%	Loss %	5.44%
2003	30,571,310	292,360	9,563	28,135,764	6,659	29,609,568	1,467,145
	Gross/Net Ratio	1.03248078		NC %	0.024%	Loss %	4.95%
2004	30,100,080	292,756	9,726	27,801,594	8,170	29,203,754	1,393,990
	Gross/Net Ratio	1.03069215		NC %	0.029%	Loss %	4.77%
2005	30,337,390	302,541	9,973	27,942,015	10,925	29,406,327	1,453,387
	Gross/Net Ratio	1.031662		NC %	0.039%	Loss %	4.94%
5-year Average (2001-2005)							
	149,963,800	1,457,764	9,721	137,820,683	35,184	145,282,603	7,426,736
	Gross/Net Ratio	1.03222132		NC %	0.026%	Loss %	5.11%

Maui Electric Company, Limited

Generation and Purchased Power
TEST YEAR 2007

Direct Testimony
(Molokai Division)

Line		2007 Test Year MWh
1	Unadjusted Sales	36,547.8
2	- Future DSM Impact	0.0
3	Test Year Sales	36,547.8
4	+ No Charge (0.36% of sales)	131.6
5	Sales - DSM + No Charge	36,679.4
6	+ Losses (8.75%)	3,518.7
7	Net-To-System	40,198.1
8	- Purchased Energy	0.0
9	Net Company Generation	40,198.1
10	+ Station Power (Gross/Net Ratio = 1.0329)	1,322.4
11	Gross Company Generation	41,520.5

Reference:
Line 1: MECO-WP-404, page 97
Line 4: MECO-WP-404, page 98
Line 5: Line 3 - Line 2 + Line 4
Line 6: MECO-WP-404, page 98

Maui Electric Company, Limited
Test Year Fuel Forecast
TEST YEAR 2007
Direct Testimony

(Molokai Division)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Sales	2,890.4	2,697.6	3,010.6	2,861.7	3,163.9	3,004.6	3,226.0	3,298.7	3,182.9	3,138.0	3,034.8	3,038.6	36,547.8
DSM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales - DSM	2,890.4	2,697.6	3,010.6	2,861.7	3,163.9	3,004.6	3,226.0	3,298.7	3,182.9	3,138.0	3,034.8	3,038.6	36,547.8
NC [1]	10.4	9.7	10.8	10.3	11.4	10.8	11.6	11.9	11.5	11.3	10.9	11.0	131.6
Sales - DSM + NC	2,900.8	2,707.3	3,021.4	2,872.0	3,175.3	3,015.4	3,237.6	3,310.6	3,194.4	3,149.3	3,045.7	3,049.6	36,679.4
Losses [2]	278.3	259.7	289.8	275.5	304.6	289.3	310.6	317.6	306.4	302.1	292.2	292.6	3,518.7
Net-to-Syst	3,179.1	2,967.0	3,311.2	3,147.5	3,479.9	3,304.7	3,548.2	3,628.2	3,500.8	3,451.4	3,337.9	3,342.2	40,198.1
Gross/Net [3]	1.0329	1.0329	1.0329	1.0329	1.0329	1.0329	1.0329	1.0329	1.0329	1.0329	1.0329	1.0329	1.0329
Gross Gen	3,283.7	3,064.6	3,420.1	3,251.0	3,594.4	3,413.4	3,664.9	3,747.6	3,616.0	3,564.9	3,447.7	3,452.1	41,520.4
Grs HR Btu/KWH [4]	9,527	9,527	9,527	9,527	9,527	9,527	9,527	9,527	9,527	9,527	9,527	9,527	9,527
MBTUs	31,284	29,196	32,583	30,972	34,244	32,519	34,916	35,703	34,450	33,963	32,846	32,888	395,565
BBLs of Fuel	5,339	4,982	5,560	5,285	5,844	5,549	5,958	6,093	5,879	5,796	5,605	5,612	67,503
BBLs/Day	172	178	179	176	189	185	192	197	196	187	187	181	185
Cost Per BBL ($)	107.3613	107.3613	107.3613	107.3613	107.3613	107.3613	107.3613	107.3613	107.3613	107.3613	107.3613	107.3613	107.3613
Fuel Exp ($000)	573.2	534.9	597.0	567.4	627.4	595.8	639.7	654.1	631.2	622.2	601.8	602.5	7,247.2

[1] No Charge %: 0.360% (5-year average NC as % of Sales)

[2] Losses %: 8.75% (5-year 2001-2005 average)

[3] 5-year 2001-2005 averages, MECO-WP-404, page 98

[4] 5-year 2001-2005 averages, MECO-WP-404, page 98

Note: Fuel prices effective September 1, 2006

Maui Electric Company, Limited

Historical Generation Statistics
TEST YEAR 2007
Direct Testimony

(Molokai Division)

Palaau Power Plant

Year	Gross KWH	Mbtu	Gross Heat Rate	Sales	NC	Net Gen	Loss
2001	40,408,820	380,652	9,420	35,680,888	134,985	39,091,743	3,275,870
	Gross/Net Ratio	1.03369195		NC %	0.378%	Loss %	8.38%
2002	39,739,740	372,947	9,385	34,941,950	128,884	38,510,646	3,439,812
	Gross/Net Ratio	1.03191569		NC %	0.369%	Loss %	8.93%
2003	40,895,520	388,659	9,504	35,893,930	132,549	39,648,390	3,621,911
	Gross/Net Ratio	1.03145475		NC %	0.369%	Loss %	9.14%
2004	40,206,740	389,100	9,677	35,343,543	122,537	38,895,085	3,429,005
	Gross/Net Ratio	1.0337229		NC %	0.347%	Loss %	8.82%
2005	40,716,420	392,844	9,648	35,917,571	121,727	39,388,785	3,349,487
	Gross/Net Ratio	1.03370591		NC %	0.339%	Loss %	8.50%
5-year Average (2001-2005)							
	201,967,240	1,924,201	9,527	177,777,882	640,682	195,534,649	17,116,085
	Gross/Net Ratio	1.03289745		NC %	0.360%	Loss %	8.75%

Maui Electric Company, Limited

HC&S PURCHASED ENERGY (MWh)
TEST YEAR 2007

Direct Testimony

(Maui Division)

	No. of	Regular [1]		Optional Additional [2]		Supplemental [3]		Total		
	Days	On-Peak	Off-Peak	On-Peak	Off-Peak	On-Peak	Off-Peak	On-Peak	Off-Peak	Total
Jan [4]	20	3,328	1,600	27	0	0	0	3,355	1,600	4,955
Feb [5]	28	4,536	2,240	0	0	0	0	4,536	2,240	6,776
Mar	31	5,208	2,480	210	0	0	0	5,418	2,480	7,898
Apr	30	5,040	2,400	461	0	0	0	5,501	2,400	7,901
May	31	5,208	2,480	340	0	56	0	5,604	2,480	8,084
Jun	30	5,040	2,400	261	0	0	0	5,301	2,400	7,701
Jul	31	5,208	2,480	0	0	0	0	5,208	2,480	7,688
Aug	31	5,208	2,480	0	0	16	0	5,224	2,480	7,704
Sep	30	5,040	2,400	70	0	9	0	5,119	2,400	7,519
Oct	31	5,208	2,480	359	0	60	0	5,627	2,480	8,107
Nov	30	5,040	2,400	520	0	0	0	5,560	2,400	7,960
Dec	31	5,208	2,480	427	0	7	0	5,642	2,480	8,122
TOTAL		59,272	28,320	2,675	0	148	0	62,095	28,320	90,415

[1] Regular energy assumes 12 mw on-peak (14 hours/day) and 8 mw off-peak (10 hours/day).

[2] Optional Additional energy estimated using Jan 2004 through December 2005 actuals.

[3] Supplemental energy estimated using Jan 2004 through December 2005 actuals.

[4] HC&S is scheduled to take their allowed 262 hour annual maintenance shutdown period during January 6 thru January 16, 2007. In addition, HC&S is schedule to reduce their On Peak capacity from 12 MW to 8 MW on (1 day) January 30, 2007.

[5] HC&S is scheduled to reduce their On Peak capacity from 12 MW to 8 MW on (3 days) February 21 thru 23, 2006

Maui Electric Company, Limited

**TEST YEAR 2007 DERIVATION OF
NON FIRM PURCHASED POWER ENERGY (MWh)**

Direct Testimony

(Maui Division)

Kaheawa Wind Power

Month	TY2007 [1]
January	7,163
February	6,802
March	9,381
April	10,139
May	10,892
June	13,057
July	13,975
August	10,550
September	10,654
October	10,441
November	10,261
December	9,567
Annual Total	122,882

[1] Based on Kaheawa Wind Power forecasted

Maui Electric Company, Limited

**TEST YEAR 2007 DERIVATION OF
NON FIRM PURCHASED POWER ENERGY (MWh)**

Direct Testimony

(Maui Division)

Makila Hydro

Month	TY2007 [1]
January	74
February	67
March	74
April	72
May	74
June	72
July	74
August	74
September	72
October	74
November	72
December	74
Annual Total	876

Maui Electric Company, Limited

IGNITION START-UP AND FUEL HANDLING COSTS
Total Dollars ($)
Direct Testimony

(Maui Division)

Line	Plant	2001	2002	2003	2004	2005	**TY2007**
1	Kahului	19,174	26,044	34,798	25,183	25,118	**26,063**
2	Total						**26,063**

Reference:
Line 1: Test Year estimate based on 5-yr average (2001-2005).

Maui Electric Company, Limited

FUEL ADDITIVE AND PETROLEUM INSPECTION EXPENSE
Total Dollars ($)
Direct Testimony

(Maui Division)

Line	Description	2001	2002	2003	2004	2005	**TY2007**
1	Petroleum Inspection Expense	113,891	105,417	111,985	114,369	128,099	**134,293**
2	Fuel Additives	99,558	130,636	129,468	150,544	148,511	**155,692**

Reference:
Line 1: Based on actual 2005 costs escalated to 2007$ by
Gross Domestic Product Implicit Price Deflator (GDPIPD).
2.79% for 2006, 1.99% for 2007
Total of diesel and industrial fuel oil inspection costs

Historical GDPIPD data from: www.eia.doe.gov/emeu/aer/txt/stb1601.xls
Projected GDPIPD data from: www.eia.doe.gov/oiaf/aeo/excel/aeotab_19.xls

Line 2: Based on actual 2005 costs escalated to 2007$ by GDPIPD.

Maui Electric Company, Limited

TEST YEAR 2007 OCEAN CARGO INSURANCE
Direct Testimony

(Maui Division)

Plant	(1) Fuel Expense ($)	(2) Ocean Cargo Insurance Rate	(3) = (1) x (2) Total ($)
Kahului	29,767,657	0.1175%	34,977
Maalaea	136,500,321	0.1175%	160,388
Total	166,267,978		195,365

Reference
Column 1: MECO-WP-404, page 4

Maui Electric Company, Limited

HISTORICAL OCEAN CARGO INSURANCE COSTS
Total Dollars ($)
Direct Testimony

(Maui Division)

Line	Description	2001	2002	2003	2004	2005	**TY2007**
1	Insurance	58,299	50,074	98,384	133,704	186,059	**195,365**

Reference:
Line 1: MECO-WP-405, page 3

Maui Electric Company, Limited

PETROLEUM INSPECTION EXPENSE
Total Dollars ($)
Direct Testimony

(Lanai Division)

Line	Description	2001	2002	2003	2004	2005	**TY2007**
1	PETROLEUM INSPECTION EXPENSE	1,969	1,914	1,859	2,406	2,542	**2,664**

Reference:
Line 1: Based on actual 2005 costs escalated to 2007$ by
Gross Domestic Product Implicit Price Deflator (GDPIPD).
2.79% for 2006, 1.99% for 2007
Total of diesel and industrial fuel oil inspection costs

Historical GDPIPD data from: www.eia.doe.gov/emeu/aer/txt/stb1601.xls
Projected GDPIPD data from: www.eia.doe.gov/oiaf/aeo/excel/aeotab_19.xls

Maui Electric Company, Limited

PETROLEUM INSPECTION EXPENSE
Total Dollars ($)
Direct Testimony

(Molokai Division)

Line	Description	2001	2002	2003	2004	2005	**TY2007**
1	PETROLEUM INSPECTION EXPENSE	6,544	6,507	6,317	5,753	5,246	**5,500**

Reference:
Line 1: Based on actual 2005 costs escalated to 2007$ by
Gross Domestic Product Implicit Price Deflator (GDPIPD).
2.79% for 2006, 1.99% for 2007
Total of diesel and industrial fuel oil inspection costs

Historical GDPIPD data from: www.eia.doe.gov/emeu/aer/txt/stb1601.xls
Projected GDPIPD data from: www.eia.doe.gov/oiaf/aeo/excel/aeotab_19.xls

Maui Electric Company, Limited

TEST YEAR 2007 SALES FUEL EFFICIENCY
Direct Testimony

(Maui Division)

	Net Gen (MWH)	Fuel (BBL)	Fuel (MBTU)	Net Heat Rate (BTU/KWH)
IFO	218,688	499,157	3,144,689	14,380
Diesel - Maalea	858,531	1,301,713	7,628,038	8,885
Diesel - Hana	80	154	902	11,275
Total MECO	1,077,299	1,801,024	10,773,629	

SALES PROVIDED BY COMPANY GENERATION

1,212.9	GWH Sales				
83.42%	1,077.299	/	1,291.431	=	net gen / net system input
1,011.8	GWH Sales Provided by Company Generation				

SALES PROVIDED BY IFO GENERATION

1,212.9	GWH Sales				
16.93%	218.688	/	1,291.431	=	net gen / net system input
205.4	GWH Sales Provided by Steam Generation				

SALES FUEL EFFICIENCY for IFO GENERATION

=	MBTU	÷	(GWH Steam Generated Sales	x	1,000,000)
=	3,144,689	÷	205,394,582		
=	0.015310	MBTU / KWH Sales			

Maui Electric Company, Limited

TEST YEAR 2007 SALES FUEL EFFICIENCY
Direct Testimony

(Maui Division - MAALAEA)

	Net Gen (MWH)	Fuel (BBL)	Fuel (MBTU)	Net Heat Rate (BTU/KWH)
IFO	218,688	499,157	3,144,689	14,380
Diesel - Maalea	858,531	1,301,713	7,628,038	8,885
Diesel - Hana	80	154	902	11,275
Total MECO	1,077,299	1,801,024	10,773,629	

SALES PROVIDED BY DIESEL GENERATION

1,212.9	GWH Sales				
66.48%	858.531	/	1,291.431	= net gen / net system input	
806.3	GWH Sales Provided by Diesel Generation				

SALES FUEL EFFICIENCY for DIESEL GENERATION

=	MBTU	÷	(GWH Diesel Generated Sales	x 1,000,000)
=	7,628,038	÷	806,343,358	
=	0.009460	MBTU / KWH Sales		

Maui Electric Company, Limited

TEST YEAR 2007 HANA SALES FUEL EFFICIENCY
Direct Testimony

(Maui Division - HANA)

	Net Gen (MWH)	Fuel (BBL)	Fuel (MBTU)	Net Heat Rate (BTU/KWH)
IFO	218,688	499,157	3,144,689	14,380
Diesel - Maalea	858,531	1,301,713	7,628,038	8,885
Diesel - Hana	80	154	902	11,275
Total MECO	1,077,299	1,801,024	10,773,629	

SALES PROVIDED BY DIESEL GENERATION

1,212.9	GWH Sales				
0.01%	0.080	/	1,291.431	=	net gen / net system input
0.1	GWH Sales Provided by Diesel Generation				

SALES FUEL EFFICIENCY for DIESEL GENERATION

=	MBTU	÷	(GWH Diesel Generated Sales	x	1,000,000)
=	902	÷	75,137		
=	0.012005	MBTU / KWH Sales			

Maui Electric Company, Limited

TEST YEAR 2007 SALES FUEL EFFICIENCY
Direct Testimony

(Lanai Division)

	Net Gen (MWH)	Fuel (BBL)	Fuel (MBTU)	Net Heat Rate (BTU/KWH)
Diesel	31,392	53,754	314,996	10,034

SALES PROVIDED BY COMPANY GENERATION

	29.8	GWH Sales			
	100.00%	31.392	/	31.392	= net gen / net system input
	29.8	MWH Sales Provided by Company Generation			

SALES FUEL EFFICIENCY

=	MBTU	÷	(GWH Diesel Generated Sales	x	1,000,000)
=	314,996	÷	29,779,900		
=	0.010577	MBTU / KWH Sales			

Maui Electric Company, Limited

TEST YEAR 2007 SALES FUEL EFFICIENCY
Direct Testimony

(Molokai Division)

	Net Gen (MWH)	Fuel (BBL)	Fuel (MBTU)	Net Heat Rate (BTU/KWH)
Diesel	40,198	67,503	395,565	9,840

SALES PROVIDED BY COMPANY GENERATION

	36.5	GWH Sales			
	100.00%	40,198.100	/	40,198.100	= net gen / net system input
	36.5	GWH Sales Provided by Company Generation			

SALES FUEL EFFICIENCY

=	MBTU	÷	(GWH Diesel Generated Sales	x	1,000,000)
=	395,565	÷	36,547,800		
=	0.010823	MBTU / KWH Sales			

Maui Electric Company, Limited

HISTORICAL NET HEAT RATE
Direct Testimony

(Maui Division)

Line		2001	2002	2003 [1]	2004 [1]	2005 [1]
	Total Fuel Consumed (MBtu)					
1	IFO	3,197,202	3,322,761	3,251,924	3,305,085	3,271,532
2	Diesel	8,263,509	7,907,975	8,572,858	8,885,416	8,981,017
3	Total	11,460,712	11,230,737	11,824,782	12,190,500	12,252,549
	Net Energy Generated (MWh)					
4	IFO	222,058	236,347	225,199	227,322	224,104
5	Diesel	861,350	843,126	908,063	940,215	941,054
6	Total	1,083,408	1,079,473	1,133,262	1,167,537	1,165,158
	System Heat Rate (Btu/Net kWh)					
7	IFO	14,398	14,059	14,440	14,539	14,598
8	Diesel	9,594	9,379	9,441	9,450	9,544
9	Total	10,578	10,404	10,434	10,441	10,516

[1] Maui Division totals for 2003-2005 include Hana Substation generating units

Maui Electric Company, Limited

HISTORICAL NET HEAT RATE
Direct Testimony

(Lanai and Molokai Divisions)

Line		2001	2002	2003	2004	2005	5-Year Average
1	Total Fuel Consumed (MBtu)						
2	Lanai	287,082	283,025	292,360	292,756	302,541	
3	Molokai	380,652	372,947	388,659	389,100	392,844	
4	Net Energy Generated (MWh)						
5	Lanai	28,466	28,597	29,610	29,204	29,406	
6	Molokai	39,092	38,511	39,648	38,895	39,389	
7	System Heat Rate (Btu/Net kWh)						
8	Lanai	10,085	9,897	9,874	10,025	10,288	10,034
9	Molokai	9,737	9,684	9,803	10,004	9,974	9,840

Maui Electric Company, Limited

FUEL OIL TANK CAPACITIES
Direct Testimony

(Maui Division)

INDUSTRIAL FUEL OIL	TANK SIZE	NOMINAL CAPACITY (BBL)	MAXIMUM CAPACITY (BBL)	Heel or Unusable (BBL)	Usable Capacity (BBL)	TYPE
KAHULUI						
Tank No. 1	60' D X 56' H	28,000	27,972	883	27,089	Cone Roof; Welded Shell
Tank No. 2	60' D X 56' H	28,000	27,972	883	27,089	Cone Roof; Welded Shell
Tank No. 4	60' D X 56' H	28,000	27,972	883	27,089	Cone Roof; Welded Shell
Subtotal			83,916	2,649	81,267	
DIESEL						
KAHULUI						
Blackstart Diesel Tank		12	11	0	11	
Subtotal			11	0	11	
MAALAEA						
Tank 1A	40' D X 36' H	8,000	8,000	196	7,804	Cone Roof; Welded Shell
Tank 2A	40' D X 36' H	8,000	8,000	130	7,870	Cone Roof; Welded Shell
Tank 3A	70' D X 36' H	24,680	24,680	193	24,487	Cone Roof; Welded Shell
Tank 4A	80' D X 36' H	32,200	32,200	621	31,579	Cone Roof; Welded Shell
Tank A	50' D X 36' H	11,900	11,553	481	11,072	Cone Roof; Welded Shell
Tank B	50' D X 36' H	11,900	11,553	473	11,080	Cone Roof; Welded Shell
Subtotal			95,986	2,094	93,892	
HANA						
Hana Fuel Tank	95 1/4" D X 203" L	143	147	0	147	Horizontal Double Cylinder
Subtotal			147	0	147	
GRAND TOTAL			**180,060**	**4,743**	**175,317**	

1. Off-Site Tank at Chevron USA is limited to 10,000 bbls.
2. Off-Site Tank at Shell Oil Co. is limited to 55,000 bbls (approx. working space).
2. Heel or Unusable is the dead storage portion of the tank's contents that cannot be withdrawn from the tank.

Maui Electric Company, Limited

FUEL OIL TANK CAPACITIES
Direct Testimony

(Lanai Division)

DIESEL	TANK SIZE	NOMINAL CAPACITY (BBL)	MAXIMUM CAPACITY (BBL)	Heel or Unusable (BBL)	Usable Capacity (BBL)	TYPE
MIKI BASIN						
Tank No. 1	30' D X 23'-3" H	2,962	2,959	189	2,770	Vertical Cylinder
Tank No. 2	30' D X 23'-3" H	2,962	2,959	182	2,778	Vertical Cylinder
TOTAL			**5,919**	**371**	**5,548**	

1. Off-Site Tank capacity at Lanai Oil Company is 11,698 bbls.
2. Heel or Unusable is the dead storage portion of the tank's contents that cannot be withdrawn from the tank

Maui Electric Company, Limited

FUEL OIL TANK CAPACITIES
Direct Testimony

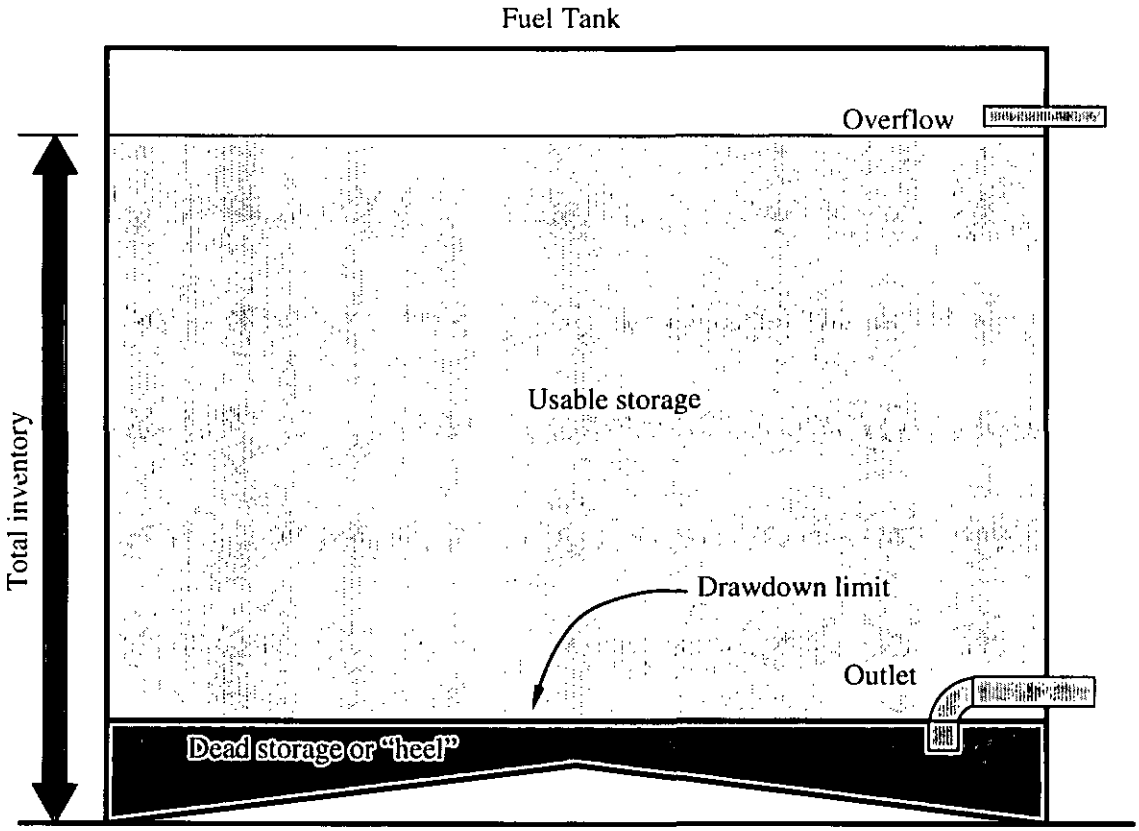
(Molokai Division)

DIESEL	TANK SIZE	NOMINAL CAPACITY (BBL)	MAXIMUM CAPACITY (BBL)	Heel or Unusable (BBL)	Usable Capacity (BBL)	TYPE
PAALAU						
Tank No. 1	30' D X 23'-3" H	2,962	2,959	170	2,789	Vertical Cylinder
Tank No. 2	30' D X 23'-3" H	2,962	2,959	171	2,788	Vertical Cylinder
TOTAL			**5,919**	**342**	**5,577**	

1. Off-Site Tank Capacity at Island Petroleum is 9,200 bbls.
2. Heel or Unusable is the dead storage portion of the tank's contents that cannot be withdrawn from the tan

Maui Electric Company, Limited

TYPICAL FUEL TANK DIAGRAM
Direct Testimony



Maui Electric Company, Limited

TEST YEAR 2007 AVERAGE BURN RATE FOR FUEL INVENTORY

Direct Testimony

(Maui Division)

Line		Industrial Fuel Oil (Barrels)	Diesel (Barrels)	TOTAL (Barrels)
1	Total Test Year Fuel Consumption	499,157	1,301,867	1,801,024
2	Days per year	365	365	
3	Test Year Burn Rate	1,368	3,567	4,934

Reference:
Line 1: MECO-WP-404, page 4
Line 3: Line 1 ÷ Line 2

Maui Electric Company, Limited

TEST YEAR 2007 BIODIESEL FUEL CONSUMPTION
Direct Testimony

Line		(A)	(B)	(A+B) = (C)	
1	Unit	Maalaea M12	Maalaea M13		
2	Number of Starts	301	313	614	
3	Fuel Consumption Per Start	150	150		gallons
4	Total Consumption	45,150	46,950	92,100	gallons
5	Fuel Price	$2.60	$2.60	$2.60	/ gallon
6	Total	$117,390.00	$122,070.00	$239,460.00	

Reference:
Line 2: MECO-WP-404, page 7
Line 4: Line 2 x Line 3
Line 5: MECO-WP-402, page 1
Line 6: Line 4 x Line 5

Maui Electric Company, Limited

HISTORICAL BIODIESEL FUEL CONSUMPTION
Direct Testimony

Total Fuel Consumed (BBLs)	2001	2002	2003 [1]	2004	2005	**TY2007**
Maalaea			69	154	240	**2,193**

1. Bio-Diesel consumption in units M12 and M13 started in October 2003

Maui Electric Company, Limited

HANA FUEL OIL INVENTORY BARRELS - 2001-2005
Direct Testimony

(Maui Division)

Diesel Fuel Oil

Year	Receipts (barrels)	Average End Of Month Inventory (barrels)
2001	257	116
2002	38	106
2003	38	113
2004	122	119
2005	56	117
5-year Avg End of Month Inventory		114

Maui Electric Company, Limited

TEST YEAR 2007 AVERAGE BURN RATE FOR FUEL INVENTORY

Direct Testimony

(Lanai Division)

Line		Diesel (Barrels)
1	Total Test Year Fuel Consumption	53,754
2	Days per year	365
3	Test Year Burn Rate	147

Reference:
Line 1: MECO-WP-404, page 94
Line 3: Line 1 ÷ Line 2

Maui Electric Company, Limited

TEST YEAR 2007 AVERAGE BURN RATE FOR FUEL INVENTORY

Direct Testimony

(Molokai Division)

Line		Diesel (Barrels)
1	Total Test Year Fuel Consumption	67,503
2	Days per year	365
3	Test Year Burn Rate	185

Reference:
Line 1: MECO-WP-404, page 97
Line 3: Line 1 ÷ Line 2