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**BEFORE THE COMMONWEALTH PUBLIC UTILITIES COMMISSION**

# INVESTIGATION OF THE COMMONWEALTH UTILITIES CORPORATION'S LEVELIZED ENERGY COST CLAUSE

**October 1, 2009-March 30, 2010**

**DOCKET 09-1**

**August 10, 2009**
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**BEFORE THE COMMONWEALTH PUBLIC UTILITIES COMMISSION**
**LEVELIZED ENERGY COST CLAUSE**

In its December 19, 2008 Order in Docket 09-01 the Commonwealth Public Utilities Commission (CPUC or Commission) instituted a new fuel adjustment rate protocol for use by the Commonwealth Utilities Corporation (CUC). The existing CUC fuel adjustment rate protocol was restructured into a levelized energy adjustment clause (LEAC) rate tariff, in a form recommended by CUC and the Georgetown Consulting Group, Inc. (GCG) pursuant to a Fuel Adjustment Clause Stipulation. One of the principal objectives of the LEAC tariff was to create a transparent process by which just and reasonable fuel rates are established by the CPUC and by which CUC is allowed to recover its prudent fuel and related expenses under regulatory oversight. The initial LEAC rate was put into place on January 1, 2009 and covered an interim three-month period of January 1 to March 30, 2009.

Subsequently, the parties collaboratively developed and filed with CPUC the first semi-annual LEAC rate which became effective April 1, 2009. That first semi-annual LEAC rate initiated a process that has allowed greater transparency and further put in place a more stable LEAC rate for the purpose of ratepayer planning and budgeting. That first semi-annual LEAC rate covers the period April 1 to September 30, 2009.

This report presents GCG's rationale and supporting documentation for our recommendation for an appropriate level of the LEAC rate for the next six-month (October 1, 2009 through March 30, 2010).

## Background

The December 12, 2008 LEAC stipulation provides CUC ratepayers with an assurance that future LEAC rate proceedings and resulting tariffs will be determined on the basis of a transparent regulatory process. Such process allows CPUC the opportunity to regulate CUC fuel expenses and eliminate unreasonable expenses. In addition, it provides CUC ratepayers with a greater understanding of the fuel and related expenses and CUC efficiencies that directly impact the LEAC rate.

The largest single cost for CUC is the cost of fuel oil required to produce the energy for the Commonwealth. According to CUC's fiscal year 2008 Financial Statement, fuel expense reached $80.9 million, representing approximately 81 percent of the total operating and maintenance (O&M) expense for CUC. Unlike CUC's other O&M costs the variability of the "price" paid for fuel oil is not within CUC control and can be very dramatic and certainly has been volatile over the course of the past 24-months.

The LEAC rate mechanism for the recovery of CUC's prudently incurred fuel related expenses was enacted by the CPUC to accomplish a number of objectives. Principal among these objectives are the following:
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- Ease of understanding
- Simplicity to implement—billing changes are made every six months
- Consumer bills are predictable—the factor is stable for six months
- Reduction in number of inquiries and complaints to CUC and CPUC
- Allows CPUC to investigate causes of variances from projected data
- Any disparity between forecast and actual fuel costs is captured and the difference refunded to the ratepayer ("over-recovery") in the next LEAC rate period or recovered by CUC ("under-recovery") in the next LEAC rate period

Both the initial and first semi-annual LEAC rates were based upon a basic approach to the approved protocol and focused primarily on certain key variables such as: projected kWh sales, estimated fuel use and fuel pricing, regulatory costs, and capital for efficiency improvements. Not specifically included in these two earlier LEAC rates were issues such as: line losses, CUC station uses, generation unit availability and efficiency, forward fuel oil pricing, and a true-up mechanism. These enhancements have been made to the proposed LEAC rate protocol including a true-up mechanism through the period March 30, 2009.

Proposed LEAC Rate

GCG is recommending that the LEAC rate be increased from the current factor of $0.20147 per kWh to $0.22618 per kWh effective October 1, 2009, an increase of approximately 12 percent in the current LEAC charge to reflect the increase in oil prices that have occurred[1]. For a residential ratepayer this would result in an overall increase in a typical month's overall electric bill (base and LEAC) of approximately 11 percent—$12.35 per month.

Two primary factors contribute to this increase—the price of fuel oil and the continued relatively high line loss levels associated with CUC's electric system operations. We have estimated the price of fuel oil for the upcoming six-month period based upon the average of NYMEX forward pricing contracts for No. 2 oil over the forthcoming LEAC period. The current estimate is approximately $0.53/Gallon (approximately 38 percent) higher than the fuel price forecast used in the development of the April 1- September 30, 2009 LEAC rate. Offsetting the price of fuel oil, the LEAC uses a projection of generation efficiency which is higher than the efficiency levels used in past LEAC rates. This is a result of CUC continuing to complete the rehabilitation of Power Plant # 1 on Saipan—improving overall power plant operations as a result of more efficient generating engines.

[1] See subsequent discussion in paragraph 5 of an alternative to mitigate this increase with amounts previously billed customers for the efficiency enhancement reserve that have not been used by CUC or put into a lockbox as required by CPUC Order.

The recommended LEAC rate of $0.22618 per kWh should be established effective October 1, 2009 for the period October 1, 2009 through March 30, 2010. The recommended LEAC rate is comprised of the following elements:

1. Fuel and Lube Oil—A $0.21278 per kWh element for the purpose of funding CUC costs of fuel oil, generation lubricating oil, transportation and handling costs, taxes and other associated costs billed by suppliers;

2. Fuel Oil Inventory—In the past we have recommended a specific LEAC rate element to fund over an 18-month period the build-up of a 30-day fuel inventory. For the upcoming LEAC period—October 1, 2009-March 30, 2010—we are not recommending a fuel inventory allowance in the LEAC rate. We call to your attention to the fact that CUC has failed to provide the CPUC the past two quarterly reports required pursuant to your prior Orders. We are unaware of the status of the LEAC funds previously authorized since January 1, 2009 to date that were for the purpose of building up the 30-day inventory. Finally, we have not been provided any monthly fuel oil inventory values for the period January 1 to June 30, 2009 and have no way to verify whether CUC has made any progress increasing its fuel oil inventory levels. CUC should be prepared to discuss this matter during the upcoming regulatory conference.

3. Price Volatility—A fuel oil pricing volatility element of $0.01064 per kWh to provide for variations from the projected fuel prices which may result in unrecovered costs.

4. Technical and Regulatory Support—A $0.00276 per kWh element to fund out-of-pocket CUC expenses for financial and technical expertise to develop the information, analysis and reports reasonably necessary for continuing implementation of LEAC tariffs and CPUC directives, and CPUC invoices for regulatory fees and expenses.

5. Efficiency Enhancement Projects—We do not recommend continuing at this time the previous LEAC rate element for funding a reserve to support CPUC approved power generation efficiency measures. Under previous CPUC Order these funds were designed to be used by CUC, upon petition to and approval of the CPUC, for projects to increase the availability, efficiency and reliability of its generating units, and otherwise reduce fuel costs. For the LEAC period January 1 to March 30, 2009 it is estimated that CUC billed for this LEAC element approximately $1,766,000 and for the period April 1-September 30, 2009 this element is estimated to contribute an additional $3,450,000 for a total of $5,216,000. We call to the CPUC's attention the fact that CUC has not deposited any funds into the required lock-box, nor has it provided the CPUC with two now over-due quarterly reports required by CPUC Order in Docket 09-01. Accordingly, we are unaware of the status of the LEAC rate element authorized and billed CUC ratepayers for the purpose of funding this reserve to support CPUC approved power generation efficiency measures. To CUC's credit it has successfully been able to undertake its rehabilitation efforts at Power Plant # 1 through the use of third-party funding (CNMI and DOI);

however, such alternative funding does not relieve CUC from the requirements of the prior CPUC Order. CUC should be prepared to discuss this matter during the upcoming regulatory conference. As we noted in footnote 1, we would point out that some portion of this efficiency enhancement reserve could be used to moderate the LEAC rate proposed. Keeping the LEAC rate at its current level would require approximately $2.9 million of the reserve to be used. This reprogramming of the reserve could be used to moderate the proposed increase in the LEAC rate to a lower level while maintaining a portion of the reserve for its original purpose.

Attachment A to this report is a copy of the Excel workbook used to derive the recommended LEAC rate.

True-up reconciliation

The recommended LEAC rate takes into consideration the reconciliation of prior period balances (December 31, 2008 and March 30, 2009) associated with CUC's costs incurred for fuel and lube oil, fuel oil inventory build-up, CUC's financial and regulatory expense, and power generation efficiency CIP's. As part of the true-up process related to the operation of past CUC fuel adjustment clauses, we have credited back to ratepayers the overpayments which are shown below by rate element. The reconciliation covers all past periods through March 30, 2009:

Prior Period Reconciliation (Jan 1-Mar 30, 2009)
Over/(Under) Balances

LEAC Element	True-Up Amounts
Fuel and Lube Oil	$716,632
Fuel Oil Inventory	$530,620
Fuel Oil Volatility	$502,707
Regulatory and Financial	$158,202
Efficiency Enhancement Projects	$0
Total	$1,908,161

It is recommended that the prior period reconciliation of $1,908,161—reflecting an over-collection through the March 30, 2009 LEAC rate period—be amortized in six (6) equal installments over the October 1, 2009-March 30, 2010 LEAC period. This over-collection is composed of four (4) principle elements which are further described below.

The fuel and lube oil element is the result of a slow-down in the world demand for oil and the resultant impact on CUC fuel oil pricing. Specifically, in the last LEAC period the fuel oil pricing element was based upon an average fuel oil price of $1.40/gallon (Singapore posting) while actual fuel purchased by CUC during this period averaged less than $1.28/gallon. In addition, for the period ending December 31, 2008 CUC had a fuel oil over-collection associated with its prior fuel

adjustment mechanism of $238,092. As a result the cost of CUC's fuel oil requirements through March 30, 2009 were approximately $716,000 less than the amount included in CUC's prior fuel adjustment clause and in the January 1-March 30, 2009 LEAC rate.

In addition to our recommendation to suspend the fuel oil inventory LEAC rate element, we have credited back to CUC ratepayers the over-collection associated with the LEAC rate element designed to fund the build-up in CUC's fuel oil inventory to a 30-day supply over an 18-month period. The over-collection associated with this LEAC element for the period through March 30, 2009 was approximately $530,000.

The fuel oil volatility LEAC rate element was not required during the January 1-March 30, 2009 LEAC period since during this period the cost of fuel oil purchased by CUC averaged about $0.12/gallon less than the fuel price used in the development of the LEAC rate. Accordingly, the entire $502,000 represents an over-billing of CUC ratepayers during this period and should be credited back to ratepayers during the October 1, 2009-March 30, 2010 period.

CUC did utilize the regulatory and financial LEAC rate element included in the January 1-March 30, 2009 LEAC rate; however, there existed an over-billing in the LEAC rate of approximately $158,000 during this period. Adequate funding has been included as part of the April 1-September 30, 2009 LEAC period and there is no need to carry-forward the amount from the prior LEAC period. Accordingly, the approximate $158,000 should be credited to ratepayers during the October 1, 2009-March 30, 2010 period.

Finally, even though CUC has not yet used any of the amounts billed ratepayers associated with the LEAC rate element for generation efficiency enhancement projects we do not recommended that any of the amounts billed be credited back to ratepayers at this time[2]. Instead it is critical that CUC deposit and maintain in a lock-box the amounts previously approved by the CPUC for the funding of CPUC approved power generation efficiency projects. It is clear that although CUC has not yet petitioned the CPUC for use of these funds that critical efficiency projects exists that if funded would result in a lowering of future LEAC rates. It is estimated that for the period January 1--September 30, 2009 this element will produce approximately $5,216,000 for the funding of efficiency enhancements capable of lowering future LEAC rates.

CUC's Current Operating Environment

CUC's operating environment has a direct impact on the LEAC rate proposed and is worthy of consideration by the CPUC. Principal among these operating issues are CUC's current financial situation and the status of its power plant rehabilitation efforts.

CUC's Current Financial Situation. CUC's cash position has improved over the course of the past six-months. As a result, CUC has moved from an extraordinarily weak financial and

[2] See footnote 1.

operational position, where every aspect of its day-to-day operations was a crisis, to a position of having the capability to manage its cash position while paying down past period payables. However, even now CUC's cash position is greatly impacted by CNMI government receivables. Without prompt payment by the CNMI government CUC is forced back into a day-to-day crisis mode. It is also worth nothing that some of CUC reporting systems have improved; however, much work is needed to bring CUC financial reporting to an actionable status that can be used by CUC line managers to direct the day-to-day activities of the utility. In addition, it is critical that the existing intra-utility subsidies between the electric and the water and wastewater departments be brought to an end. While recent water and wastewater rate increases have partially mitigated these subsidies much more is required to bring these subsidies to an end. As a consequence CUC has limited ability to finance capital related projects and has had to ration cash for the most meager of capital purchases. Finally, full cost accounting and expense responsibility properly tied to each utility is critical if CUC is going to become financially independent.

Power Plant Rehabilitation and Availability. In the past few months substantial positive steps and improvements have been made to CUC's Saipan power production facilities. Several of their larger diesel engines have either been rehabilitated or in the final stages of rehabilitation putting CUC in a position that it will once again be capable of fully supplying customer demand. CUC has launched a two-year rehabilitation plan to bring all of CUC's power production facilities into compliance with their maintenance schedules and to keep them in compliance. CUC is to be applauded for these actions.

Power Plant 1 is the workhorse and has an installed capacity rating of 81 mW—ample to meet the entire Saipan demand for electric power, which is approximately 40 mW, when working properly. Engines 7 and 3 have recently been overhauled and are currently delivering reliable power. Engines 1 & 2 are currently in the last stages of rehabilitation and should be on capable of providing reliable service within days. Engine 5 is also currently being rehabilitated and is expected to be in service by the late fall and Engine 6 is scheduled to be rehabilitated by the end of the year. When completed these actions will put CUC into a position it has not seen in years—eliminate the needless exposure of customers to endless outages, poor availability, and the high cost of the inefficiencies introduced by operating the electric system sub-optimally.

Meanwhile, CUC has also turned attention to its Power Plant 2 engines—which should be considered reserve facilities given their poor design efficiency—and its Rota engines, and is making sure they are capable of reliably providing service to customers. CUC power production personnel have made sure that the previous contract work at Power Plant # 2 has been completed and the plant brought into compliance so that it is capable of supplying at least 8 mW of capacity. It is hopeful that the plant will be capable of supplying at least 10 mW of reserve capacity.

A lack of commonly available reporting statistics for CUC power plant operations continues to hamper our work. These records are vital for any LEAC rate protocol to work successfully and as designed. Past CUC record-keeping of key operational statistics such as engine availability, fuel use, fuel inventory, outage causes, reliability, efficiency, power production, or production costs

was deficient. A lack of these common reports can severely limit the ability to compile trends and reach definitive conclusions about performance. We are pleased to report that observable improvements have been made in power plant record-keeping which has allowed GCG in this LEAC rate filing to more fully examine power plant records for the purpose of finalizing its LEAC rate recommendation. Further improvements are needed, but CUC's efforts to date are a very positive step forward.

While these recent activities represent improvements it is clear that recommended maintenance schedules for CUC's engines were ignored with major maintenance allowed to lapse for years—in some cases by 4 to 5 years. The result of this failure to properly maintain CUC's diesel engines is well known—prolonged outages leading to economic loss to Saipan businesses, generating unit unavailability, and higher rates due to poor unit efficiencies. In addition, the failure to properly maintain CUC's large engines has shortened the expected life of these assets. CUC's diesel engines require maintenance in accordance with OEM recommendations and any failure to purchase spare parts or defer maintenance does not eliminate the need for maintenance—it only subjects ratepayers to outages, higher costs, and puts at jeopardy the integrity of CUC's diesel engines.

CUC is fully aware of the systemic issues which in the past have caused poor engine availability and performance. It has taken corrective actions to restore its diesel engines to service, but still not in place is a sustainable program that will instill a new culture of performance and accountability—where no longer will ratepayers be expected to accept excuses such as a lack of spare parts, money, or human resources. It is incumbent that CUC create a culture where maintenance is an ongoing responsibility and not an exception; otherwise it will not be capable of meeting a strategic objective of financial independence if it is unable to simply "keep the lights on."

Factors Directly Impacting the LEAC Rate

In addition to CUC's operating environment there are a number of other factors which impact the proposed LEAC rate. Some of these are within CUC's control and others are outside of CUC's direct control. Principal are the factors which are directly used in LEAC rate development. In the simplest terms this begins with estimating the cost of fuel for a six month period and dividing that dollar amount by the expected kWh sales for that same period. However, to actually make this calculation it is necessary to develop a comprehensive estimate of CUC's fuel cost taking into consideration essentially three variables: power production requirements (this is comprised of customer sales, internal uses, and unaccounted for energy), power production dispatch and efficiency, and estimated per unit fuel price.

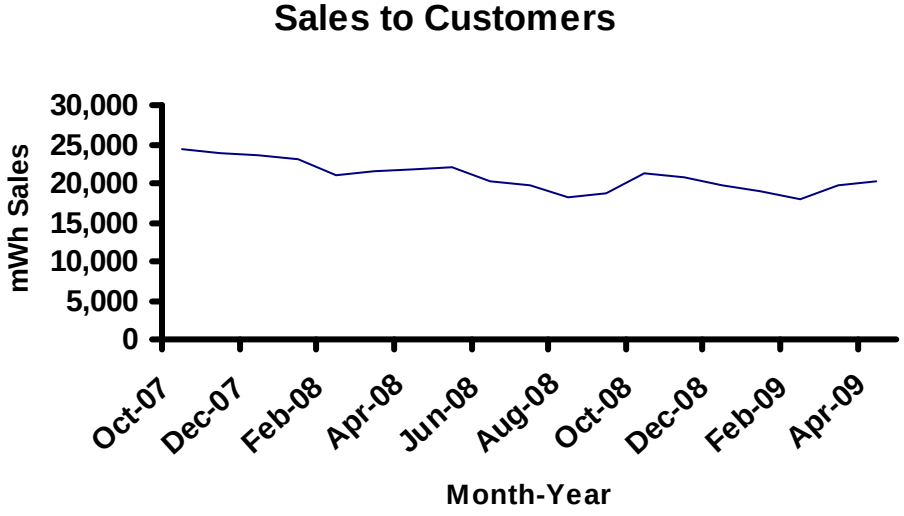
Power Production Requirements. CUC's power production requirements are comprised of three variables—kWh sales to its ultimate customers, system use, and unaccounted for energy.

- The first variable is the projection of kWh sales to its ultimate customers for the six-month period. It is from this initial projection that the total amount of energy CUC must produce

to meet the sales demand of its customers is determined. This variable is estimated based upon recent trends in metered sales and estimates of un-metered sales (i.e., street-lights) to customers.

- The second variable is CUC's internal or "plant" use. It is necessary to estimate the amount of energy used at each of CUC's power plants and other facilities to operating machinery (fans, heaters, transfer pumps, water pumps, etc), to light the plant and adjacent grounds and to power electronic monitoring systems. Collectively this usage is referred to as "plant use." This plant use is usually metered and represents the difference between the amount of energy produced at a generator's terminals ("gross generation") and the amount of energy leaving the plant ("net plant output").
- The third variable is associated with "unaccounted for energy." Once the net plant output is measured (or projected) it is possible to determine or project the amount of energy produced by CUC's various power plants that does not result in a sale to CUC ultimate customers. This difference is collectively referred to as unaccounted for energy. There are several reasons why sales and net plant output are not the same. A more detailed discussion of "unaccounted for energy" follows later in the text of this report.

CUC sales data indicates that kWh sales to customers having been decreasing over the course of the last 36-month period (May 06-Apr 09) and have decreased during the past twelve-months by 10.8 percent over a comparable period. Sales over the 36-month period are down in excess of 30 percent. On the positive side kWh sales to CUC customers seem to have reached a low point—at 18,000 mWh per month for February 2009—and have rebounded slightly from that low point. Principal factors contributing to this decline in sales are: (i.) unprecedented fuel price volatility causing consumers to conserve and simply use less electricity, (ii.) continued fallout from the loss of garment industry, and (iii.) the impact of the failure of CUC to supply reliable power forced some customers to self-generate and going off-system—some of these customers have come back to CUC.



This decline in sales is a significant issue since electric revenues are only derived from electricity (kWh) purchased by customers. Since most of CUC non-fuel costs are fixed in the short-term

such loss of base rate revenues has had a negative effect on CUC earnings and cash flow. While it has little impact on LEAC rates, this loss of a customer base (kWh sales) is having a significant impact on CUC which will be brought to the forefront when CUC's base electric rates are reviewed by the CPUC. This is a matter that should be more fully explored in the development of CUC's Business Plan.

Plant use at CUC's power plants is both metered and estimated. To a limited degree the expense of plant use is a controllable. For the purpose of this LEAC rate we have used an estimate of use and have not relied on metered values. The estimates in GCG's opinion are conservative and should be refined in future LEAC rate proceedings. For instance, we have used values of six and seven-percent for the Tinian and Rota plants and four-percent for the Saipan plants. We believe these values to be on the upper-end of a reasonable range for a diesel facility and will investigate the power consumption associated with plant use more thoroughly in future LEAC proceedings.

There is also a use of energy by the utility (referred to as "company use"). This is power used at CUC facilities (motors, pumps, heaters, lights, air conditioning, computers, alarms, etc,). In the case of CUC, this is often metered and therefore eliminated from the computation of loss.

Unaccounted for energy (often referred to as line losses) is a significant issue that during the course of our investigation has been identified as a major problem at CUC. This is a serious matter, but, is greatly within CUC's control—at the present time losses are totally out of control by any measure. The term "unaccounted for energy" is as simple as the name implies—energy for which there is no accurate accounting. It is the energy that is produced by CUC power plants that does not show us as an energy sale to its customers. All utilities experience a certain level of unaccounted for energy. Typically, a utility such as CUC will have about six (6) to seven (7) percent of its power production "unaccounted for." This level would be considered normal for a relatively compact, non-transmission utility; however, at CUC in spite of programs successfully implemented in 2008 to reduce unaccounted for energy CUC still has unaccounted for energy levels in the 20 plus percent range. GCG has been able to determine that CUC's unaccounted for energy levels are this high by comparing power plant production values to energy accounted for as a result of electricity sales and power plant use. We examined over 24-months of data and determined that unaccounted for energy is averaging about 20 percent. This means that all customers are paying through their LEAC rate a premium of approximately 13 percent (the 20 percent currently experienced at CUC minus a more typical 7 percent allowance for unaccounted for energy). By any standard of measure this level of unaccounted for energy is totally unacceptable.

Given the significance of the problem at CUC it is worth expanding on the problem. In simple terms losses consist of the energy that is thermally consumed in the power delivery process (sometime referred to as technical losses), energy unaccounted for somewhere in the metering, meter reading and billing process, or energy that is illegally diverted by unscrupulous individuals and businesses (the latter two are sometimes referred to as commercial or administrative losses).

Methods exist to control unaccounted for energy to a manageable level (6-7 percent) which can be implemented by CUC.

This matter should be just as high on CPUC agenda as the ongoing plant rehabilitation program given that left uncorrected this inefficiency is directly passed to customers through the LEAC rate mechanism. All electric power systems experience technical losses due to the physical characteristics associated with the movement of electric power over primary and secondary conductors (overhead and underground wires) and the transformation of electric power from transmission and distribution voltage levels to secondary voltage (user) levels. These losses are normal in any electric power system and cannot be cost-effectively controlled below a certain level (which is a function of the overall cost of power). There are other forms of technical losses that increase the overall loss level. These are by-and-large totally controllable by the utility. These additional technical losses can result from operating the power delivery system in a manner that:

- Exceeds the capacity rating of primary and secondary conductors and cables,
- Exceeds the capacity rating of system transformers,
- Uses high loss transformers (low front-end costs),
- Possesses poor power factor practices (i.e., inadequate application of static capacitors),
- Practices poor vegetation management (i.e., trees in contact with conductors), and
- Practices poor conductor and transformer maintenance.

Managing a utility's technical loss level requires an investment in the utility's infrastructure. The use of larger conductors, low-loss transformers, addition of static capacitors, and vegetation management all require capital, but typically such expenditures are cost-effective. Utilities exercising good design and maintenance practices can contain technical losses to a level of four to six-percent. While it is possible to reduce technical losses below these levels, the benefits achieved may not offset the corresponding capital investment required. It is not possible to reduce technical losses to zero since physical systems do not permit electricity to be transformed or delivered without incurring some inefficiency.

A second category of losses, known as commercial or administrative losses, can have many sources. They are not related to the laws of physics and therefore unlike technical losses can be effectively reduced to zero. In fact, most utilities essentially operate without any significant commercial loss contribution to their overall loss level. Commercial losses result in a loss of revenue arising from the fact that the energy associated with commercial losses is actually consumed by a customer, but not paid for. Hence the reason commercial losses are very important. To the extent they are minimized, overall revenue requirements and customer rates can be decreased. The most common causes for commercial losses are:

- Faulty metering as the result of poor testing and maintenance practices,
- Administrative errors associated with primary and multiplier-type meters,
- Legal metered connections not found in the billing system,

- Meter reading errors (i.e., metered accounts that are not read),
- Customer accounting errors, and
- Shortcomings in the customer information system.

Managing a utility's commercial losses is much more cost-effective than managing a utility's technical losses. Generally, commercial losses have low-cost remedies (in some cases no-cost remedies) and should be considered a priority. The correction of commercial losses generally results in improved base rate revenue collection and also allows the utility to properly recover fuel costs. For this reason, utilities consider the minimization of commercial losses a high priority.

One final component of administrative loss is theft of service ("diversion") associated with tampered meters or illegal connections. While energy is being consumed by non-paying customer, the usage is not metered and sales are not recorded. This theft of service cannot be totally eliminated, but can be controlled to less than one-half percent with effective monitoring of energy and field investigations. Control is achieved by discontinuing the illegal connection and penalizing the party or parties with rate penalties or in severe cases pursuing civil or criminal remedies.

Given what we consider to be the severity of this matter we have included in Appendix B a broad outline of a plan resolving CUC's high level of unaccounted for energy.

Power production dispatch and efficiency. The second variable in determining a LEAC rate is generation dispatch and unit efficiency with unit efficiency being critically important. It is a variable that is controllable by CUC up to a point—the efficiency parameter associated with the design of the engine. In simple terms, the efficiency of an engine is the ability of the engine to generate electric energy and the amount of fuel required for that energy. The more fuel-efficient the unit is the less fuel consumed to generate that energy. The measurement of this efficiency is usually provided in energy units (mmBTU) or kWh per gallon and is called the heat rate of the unit.

Maintenance is critical if an engine is going to operate at its peak performance and efficiency. Just as an automobile does not get peak gas mileage performance if it is not properly maintained neither will CUC's diesel engines perform at their designed efficiency levels if they are not properly maintained. CUC's current operating engine efficiencies are for the most part not at their design levels; however, recent unit rehabilitation projects are improving this situation. In the near-term, while CUC operates its engines at suboptimal efficiency levels, they require more fuel oil to produce the same number of kWh—meaning that the fuel cost passed paid by customers is higher than it would be otherwise.

We previously suggested that this matter (engine efficiency) be addressed as part of the business planning process. It is critical that as the current crisis diminishes that CUC prioritize the importance of efficiency and unit dispatching. This will require all units to be properly maintained and their availability consistent with industry standards. CUC should also require

strict performance requirements, not only for the private contractors operating Power Plant # 4 and Tinian power resources, but also of itself in the operations of those power plants CUC operates directly. There is no reason that with proper maintenance and training that CUC cannot further improve the performance of its existing power plant facilities.

Fuel Oil Price. Fuel is the single largest expense at CUC and is an area where CUC has the least ability to control. For that reason the cost of fuel oil is critically important to CUC and its customers. Since 2004, the price of No. 2 fuel oil (diesel) has risen from approximately $1.00 per gallon to a peak of over $4.00 per gallon in 2008 and fell to the $1.40 per gallon range in early 2009 and today is projected to be approximately $2.00 per gallon during the October 1, 2009-March 30, 2010 period. The price to CUC as burned is even higher reflecting transportation and handling costs. As can be seen, considerable volatility exists in the price of fuel as is demonstrated below.

The cause of this price volatility can be traced to recent increases in the world-wide demand (while production levels remained relatively flat) followed by the global financial crisis and consumer reaction to the earlier price increases and now increasing inventory levels. These latter events have caused the price of oil (the primary feedstock for diesel fuel) to collapse sharply. Today, oil is in the range of $70 per barrel compared with a peak price a last year of $147 per barrel.

The price of fuel oil typically represents somewhere between 65 to 75 percent of the cost of CUC electricity (FY 2008 was a bit of an anomaly with fuel oil representing 80 percent of CUC costs). The relationship between the price of fuel oil and the cost paid by CUC customers is a direct one—for a 5 percent change in the price of fuel oil CUC customers will see their electric bill change by approximately 3.5 percent. While no one has a crystal ball or is capable of accurately predicting future oil prices with certainty, industry experts predict that the price of oil will increase modestly thru 2015. While these predications may sound positive, we only have to look

at recent volatility to recognize the global market conditions can change the price of fuel significantly in a short period of time. For the purpose of the October 1, 2009-March 30, 2010 LEAC rate we have used a surrogate of the NYMEX future contracts to estimate the Singapore spot price for No. 2 oil.

Recommendations

GCG recommends that the CPUC consider the following:

1. Approval of a LEAC rate for the period October 1, 2009 through March 30, 2010 of $0.22618 per kWh. The recommended LEAC rate is comprised of the following elements:

    - $0.21278 per kWh fuel and lube oil element;
    - Zero contribution and suspension of the fuel oil inventory build-up element until it can be determined whether the build-up is actually operating as intended;
    - $0.01064 per kWh fuel oil pricing volatility element;
    - $0.00276 per kWh technical and regulatory support element; and,
    - Zero contribution and suspension of the efficiency enhancement element recognizing that for the LEAC period ending September 30, 2009 CUC will have billed customers a total of $5,216,000. For the time-being this is a sufficient reserve for efficiency projects[3].

2. Approval of a prior period reconciliation of $1,908,161—reflecting an over-collection through the March 30, 2009 LEAC rate period inclusive of the amounts over-collected prior to the new LEAC rate protocol being implemented by the CPUC. This amount shall be amortized in six (6) equal installments over the October 1, 2009-March 30, 2010 LEAC period. This prior period reconciliation amount has been included in the LEAC rate recommended in our first recommendation.

3. Direct CUC in collaboration with GCG, under the oversight of the Hearing Examiner, to prepare a loss mitigation strategy that can be implemented at the earliest possible date. In connection, with this recommendation authorize, subject to subsequent CPUC approval, the expenditure of up to $1.5 million of the $5.3 million efficiency enhancement LEAC element for the purpose of making investments which result in reducing power production associated with current high loss levels. The CPUC has a requirement that CUC deposit in a lockbox amounts billed and collected through the LEAC efficiency enhancement rate element for the purpose of funding this previously CPUC approved reserve. The amounts have not been deposited as required and GCG requests that it be allowed to file a supplemental report on this issue and potentially other issues by August 14, 2009.

[3] See discussion in footnote 1.

4. Approval of a collaborative process whereby CUC continues to work with GCG to develop and a finalize Minimum Filing Requirements that can be used in all future LEAC proceedings. This protocol will enhance transparency by providing a consistent set of data and analytical approach to all future LEAC rates.

This concludes our report.

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ATTACHMENT A
COMMONWEALTH UTILITIES CORPORATION
LEAC Rate--October 1, 2009 thru March 30, 2010

	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
Fuel Oil Price Forecast-Delivered ($/Gal)						
Saipan	$2.2250	$2.2250	$2.2250	$2.2250	$2.2250	$2.2250
Tinian	$2.6404	$2.6404	$2.6404	$2.6404	$2.6404	$2.6404
Rota	$2.7338	$2.7338	$2.7338	$2.7338	$2.7338	$2.7338
Lube Oil Price Forecast-Delivered ($/Gal)						
Saipan	$7.97	$7.97	$7.97	$7.97	$7.97	$7.97
Tinian	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Rota	$8.03	$8.03	$8.03	$8.03	$8.03	$8.03
kWh Sold Forecast						
Saipan	16,333,333	16,333,333	16,333,333	16,333,333	16,333,333	16,333,333
Tinian	2,583,333	2,583,333	2,583,333	2,583,333	2,583,333	2,583,333
Rota	700,000	700,000	700,000	700,000	700,000	700,000
Total kWh Sold	19,616,667	19,616,667	19,616,667	19,616,667	19,616,667	19,616,667
Power Generation Efficiency-Gross Heat Rate (kWh's/Gal)						
Saipan (includes efficiency improvement from overhauls)	13.54	13.54	13.82	13.82	13.96	13.96
Tinian	13.46	13.46	13.46	13.46	13.46	13.46
Rota	12.50	12.50	12.50	12.50	12.50	12.50
Fuel Oil Requirement in Gals (@135,000 BTU's/Gal)						
Saipan	1,577,524	1,577,524	1,545,551	1,545,551	1,530,011	1,530,011
Tinian	259,205	259,205	259,205	259,205	259,205	259,205
Rota	74,809	74,809	74,809	74,809	74,809	74,809
Total Fuel Oil Requirement	1,911,538	1,911,538	1,879,565	1,879,565	1,864,025	1,864,025
CUC Fuel Oil Costs						
Saipan	$3,509,922	$3,509,922	$3,438,783	$3,438,783	$3,404,207	$3,404,207
Tinian	684,396	684,396	684,396	684,396	684,396	684,396
Rota	204,516	204,516	204,516	204,516	204,516	204,516
Total Fuel Oil Cost	$4,398,834	$4,398,834	$4,327,695	$4,327,695	$4,293,119	$4,293,119
Lube Oil Efficiency-(kWh's/Gal)						
Saipan	1,167	1,167	1,168	1,168	1,168	1,168
Tinian	0	0	0	0	0	0
Rota	1,200	1,200	1,200	1,200	1,200	1,200

Page 2	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
Lube Oil Requirement in Gals						
Saipan	18,306	18,306	18,290	18,290	18,290	18,290
Tinian	0	0	0	0	0	0
Rota	779	779	779	779	779	779
Total Lube Oil Requirement	19,085	19,085	19,069	19,069	19,069	19,069
CUC Lube Oil Costs						
Saipan	$145,936	$145,936	$145,813	$145,813	$145,813	$145,813
Tinian	0	0	0	0	0	0
Rota	6,261	6,261	6,261	6,261	6,261	6,261
Total Lube Oil Cost	$152,197	$152,197	$152,074	$152,074	$152,074	$152,074
Total CUC Fuel & Lube Oil Requirement ($)						
Saipan	$3,655,858	$3,655,858	$3,584,596	$3,584,596	$3,550,020	$3,550,020
Tinian	684,396	684,396	684,396	684,396	684,396	684,396
Rota	210,777	210,777	210,777	210,777	210,777	210,777
Total Requirement	$4,551,031	$4,551,031	$4,479,769	$4,479,769	$4,445,193	$4,445,193
Over/(Under) LEAC Recovery (6-Month Amort)	$318,027	$318,027	$318,027	$318,027	$318,027	$318,027
Projected LEAC Expense-Fuel & Lube Oil Recovery	$4,233,004	$4,233,004	$4,161,742	$4,161,742	$4,127,166	$4,127,166
6-Month Fuel & Lube Oil Element of LEAC Rate						
Fuel & Lube Oil Expense		$25,043,825				
kWh Sales		117,700,000				
LEAC Fuel & Lube Oil Rate Element		$0.21278				
30-Day Inventory Element (18-month amortization)		$0.00000				
Volatility Element (@ 5% of Fuel/Lube Oil Requirement)		$0.01064				
Regulatory and Technical Support Element (see Note 1)		$0.00276				
Generation Efficiency Element (see Note 2)		$0.00000				
6-Month LEAC Rate		**$0.22618**				

Note 1:	6-Month Costs
CUC Accounting & Regulatory Support	$80,000
CPUC Regulatory Expense	$190,000
Contingencies	$55,000
Total	$325,000

Note 2:		6-Month Costs
Efficiency Improvements		$0
	Total	$0

COMMONWEALTH UTILITIES CORPORATION
LEVELIZED ENERGY ADJUSTMENT CLAUSE
MWH SALES AND PRODUCTION FORECAST

ASSUMPTIONS/ADD'L INFORMATION:								Total CUC	
LEAC Period		Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	6-Month	Annual
	Key Assumptions								
Total LEAC Sales-mWh									
Saipan	98,000	16,333	16,333	16,333	16,333	16,333	16,333	98,000	196,000
Tinian	15,500	2,583	2,583	2,583	2,583	2,583	2,583	15,500	31,000
Rota	4,200	700	700	700	700	700	700	4,200	8,400
CUC Total-mWh	117,700	19,617	19,617	19,617	19,617	19,617	19,617	117,700	235,400
Distribution Losses-mWh									
Saipan	20.06%	4,115	4,115	4,115	4,115	4,115	4,115	24,688	49,376
Tinian	20.06%	651	651	651	651	651	651	3,905	7,809
Rota	20.06%	176	176	176	176	176	176	1,058	2,116
Total CUC Distribution Losses-mWh		4,942	4,942	4,942	4,942	4,942	4,942	29,651	59,302
Company Uses-mWh									
Saipan	0.30%	62	62	62	62	62	62	369	738
Tinian	0.30%	10	10	10	10	10	10	58	117
Rota	0.30%	3	3	3	3	3	3	16	32
Total CUC Company Uses-mWh		74	74	74	74	74	74	443	887
LEAC Period Production-net mWh									
Saipan		20,510	20,510	20,510	20,510	20,510	20,510	123,057	246,114
Tinian		3,244	3,244	3,244	3,244	3,244	3,244	19,463	38,926
Rota		879	879	879	879	879	879	5,274	10,548
Total LEAC Period Production-net mWh		24,632	24,632	24,632	24,632	24,632	24,632	147,794	295,588
Plant Use-mWh									
Saipan	4.00%	855	855	855	855	855	855	5,127	10,255
Tinian	7.00%	244	244	244	244	244	244	1,465	2,930
Rota	6.00%	56	56	56	56	56	56	337	673
Total CUC Plant Use-mWh		1,155	1,155	1,155	1,155	1,155	1,155	6,929	13,858
LEAC Period Production-gross mWh									
Saipan		21,364	21,364	21,364	21,364	21,364	21,364	128,185	256,369
Tinian		3,488	3,488	3,488	3,488	3,488	3,488	20,928	41,856
Rota		935	935	935	935	935	935	5,611	11,221
Total LEAC Period Production-gross mWh		25,787	25,787	25,787	25,787	25,787	25,787	154,723	309,446

GENERATION PARAMETERS

Saipan Plants	Installed Capacity	Lube Oil Consumption	Average Operating Efficiency	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
				Dispatch--Projected Unit Capacity Factor					
Plant # 1	**MW's**	**kWh/Gal**	**kWh/Gal**						
Engine # 1	7.3	1,200.0	13.5	0.70	0.70	0.33	0.33	0.15	0.15
Engine # 2	7.3	1,200.0	13.5	0.70	0.70	0.34	0.34	0.15	0.15
Engine # 3	7.3	1,200.0	13.5	0.69	0.69	0.34	0.34	0.15	0.15
Engine # 4	7.3	1,200.0	13.5	0.00	0.00	0.00	0.00	0.00	0.00
Engine # 5	13.0	1,200.0	14.5	0.00	0.00	0.67	0.67	0.55	0.55
Engine # 6	13.0	1,200.0	14.5	0.00	0.00	0.00	0.00	0.55	0.55
Engine # 7	13.0	1,200.0	14.5	0.72	0.72	0.67	0.67	0.55	0.55
Engine # 8	13.0	1,200.0	14.5	0.00	0.00	0.00	0.00	0.00	0.00
Engine # 1	0.0	1,000.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00
Engine # 2	2.5	1,000.0	11.0	0.30	0.30	0.25	0.25	0.25	0.25
Engine # 3	2.5	1,000.0	11.0	0.25	0.25	0.25	0.25	0.25	0.25
Engine # 4	2.5	1,000.0	12.0	0.25	0.25	0.25	0.25	0.25	0.25
Engine # 5	2.5	1,000.0	12.0	0.25	0.25	0.25	0.25	0.25	0.25
Engine # 6	1.0	1,000.0	13.3	0.20	0.20	0.20	0.20	0.20	0.20
Engine # 7	1.0	1,000.0	13.3	0.20	0.20	0.20	0.20	0.20	0.20
Engine # 8	1.0	1,000.0	13.3	0.20	0.20	0.20	0.20	0.20	0.20
Engine # 9	1.0	1,000.0	13.3	0.20	0.20	0.20	0.20	0.20	0.20
Engine # 10	2.5	1,000.0	12.0	0.25	0.25	0.25	0.25	0.25	0.25
	112.7								Check value
Saipan Total							**Projected Requirement-Saipan**		
Tinian Plant									
Engine # 1	2.5	0.0	13.3	0.00	0.00	0.00	0.00	0.00	0.00
Engine # 2	2.5	0.0	13.3	0.00	0.00	0.00	0.00	0.00	0.00
Engine # 3	2.5	0.0	13.3	0.00	0.00	0.00	0.00	0.00	0.00
Engine # 4	2.5	0.0	13.3	0.34	0.34	0.34	0.34	0.34	0.34
Engine # 5	5.5	0.0	13.5	0.35	0.35	0.35	0.35	0.35	0.35
Engine # 6	5.5	0.0	13.5	0.35	0.35	0.35	0.35	0.35	0.35
	21.0								Check value
Tinian Total							**Projected Requirement-Tinian**		
Rota Plant									
Engine # 1	2.5	1,200.0	12.5	0.25	0.25	0.25	0.25	0.25	0.25
Engine # 2	2.5	1,200.0	12.5	0.25	0.25	0.25	0.25	0.25	0.25
Engine # 3	1.6	1,200.0	11.0	0.00	0.00	0.00	0.00	0.00	0.00
Engine # 4	1.5	1,200.0	14.0	0.00	0.00	0.00	0.00	0.00	0.00
	8.1								Check value
Rotal Total							**Projected Requirement-Rota**		

FORECAST OF PRODUCTION

	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Oct-Mar 10
Saipan Plants	31.0	30.0	31.0	31.0	28.0	31.0	182.0
Plant # 1							
Engine # 1	3,801.8	3,801.8	1,793.4	1,793.4	814.7	814.7	12,819.9
Engine # 2	3,801.8	3,801.8	1,846.6	1,846.6	814.7	814.7	12,926.3
Engine # 3	3,740.5	3,740.5	1,843.3	1,843.3	812.2	812.2	12,792.1
Engine # 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Engine # 5	0.0	0.0	6,480.2	6,480.2	5,319.6	5,319.6	23,599.7
Engine # 6	0.0	0.0	0.0	0.0	5,319.6	5,319.6	10,639.2
Engine # 7	7,007.5	7,007.5	6,480.2	6,480.2	5,363.1	5,363.1	37,701.6
Engine # 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Engine # 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Engine # 2	558.0	558.0	465.0	465.0	465.0	465.0	2,976.0
Engine # 3	465.0	465.0	465.0	465.0	465.0	465.0	2,790.0
Engine # 4	465.0	465.0	465.0	465.0	465.0	465.0	2,790.0
Engine # 5	465.0	465.0	465.0	465.0	465.0	465.0	2,790.0
Engine # 6	148.8	148.8	148.8	148.8	148.8	148.8	892.8
Engine # 7	148.8	148.8	148.8	148.8	148.8	148.8	892.8
Engine # 8	148.8	148.8	148.8	148.8	148.8	148.8	892.8
Engine # 9	148.8	148.8	148.8	148.8	148.8	148.8	892.8
Engine # 10	464.3	464.3	465.0	465.0	465.0	465.0	2,788.5
	21,364.1	21,364.1	21,364.1	21,364.1	21,364.1	21,364.1	
Saipan Total	21,364.1	21,364.1	21,364.1	21,364.1	21,364.1	21,364.1	128,184.5
	0.0	0.0	0.0	0.0	0.0	0.0	
Tinian Plant							
Engine # 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Engine # 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Engine # 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Engine # 4	632.4	632.4	632.4	632.4	632.4	632.4	3,794.4
Engine # 5	1,432.2	1,432.2	1,432.2	1,432.2	1,432.2	1,432.2	8,593.2
Engine # 6	1,423.4	1,423.4	1,423.4	1,423.4	1,423.4	1,423.4	8,540.4
	3,488.0	3,488.0	3,488.0	3,488.0	3,488.0	3,488.0	
Tinian Total	3,488.0	3,488.0	3,488.0	3,488.0	3,488.0	3,488.0	20,928.1
	0.0	0.0	0.0	0.0	0.0	0.0	
Rota Plant							
Engine # 1	465.0	465.0	465.0	465.0	465.0	465.0	2,790.0
Engine # 2	470.1	470.1	470.1	470.1	470.1	470.1	2,820.7
Engine # 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Engine # 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	935.1	935.1	935.1	935.1	935.1	935.1	
Rotal Total	935.1	935.1	935.1	935.1	935.1	935.1	5,610.5
	0.0	0.0	0.0	0.0	0.0	0.0	
						Total-CUC	154,723.1

COMMONWEALTH UTILITIES CORPORATION
LEVELIZED ENERGY ADJUSTMENT CLAUSE
FUEL AND LUBE OIL PRICING FORECAST

	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
	Six-Month Forward Pricing ($/gal)					
Singapore Forward Pricing	$1.9839	$1.9839	$1.9839	$1.9839	$1.9839	$1.9839
Shipment Costs:						
Saipan	$0.0708	$0.0708	$0.0708	$0.0708	$0.0708	$0.0708
Tinian	$0.2417	$0.2417	$0.2417	$0.2417	$0.2417	$0.2417
Rota	$0.3183	$0.3183	$0.3183	$0.3183	$0.3183	$0.3183
Fixed Add-on Costs:						
Saipan	$0.0608	$0.0608	$0.0608	$0.0608	$0.0608	$0.0608
Tinian	$0.2888	$0.2888	$0.2888	$0.2888	$0.2888	$0.2888
Rota	$0.3218	$0.3218	$0.3218	$0.3218	$0.3218	$0.3218
Price Excluding Taxes						
Saipan	$2.1155	$2.1155	$2.1155	$2.1155	$2.1155	$2.1155
Tinian	$2.5144	$2.5144	$2.5144	$2.5144	$2.5144	$2.5144
Rota	$2.6240	$2.6240	$2.6240	$2.6240	$2.6240	$2.6240
Taxes						
Saipan	$0.1095	$0.1095	$0.1095	$0.1095	$0.1095	$0.1095
Tinian	$0.1260	$0.1260	$0.1260	$0.1260	$0.1260	$0.1260
Rota	$0.1099	$0.1099	$0.1099	$0.1099	$0.1099	$0.1099
Projected Fuel Pricing-Delivered						
Saipan	$2.2250	$2.2250	$2.2250	$2.2250	$2.2250	$2.2250
Tinian	$2.6404	$2.6404	$2.6404	$2.6404	$2.6404	$2.6404
Rota	$2.7338	$2.7338	$2.7338	$2.7338	$2.7338	$2.7338
Lube Oil Price Forecast-Delivered						
Saipan	$7.9723	$7.9723	$7.9723	$7.9723	$7.9723	$7.9723
Tinian	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
Rota	$8.0342	$8.0342	$8.0342	$8.0342	$8.0342	$8.032

COMMONWEALTH UTILITIES CORPORATION
LEVELIZED ENERGY ADJUSTMENT CLAUSE
CUC-OWNED UNIT PRODUCTION AND FUEL COSTS

	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Total
TOTAL CUC OWNED GENERATION							
Power Plant 1--Saipan							
Engine #1							
Generation (mWh)	3,802	3,802	1,793	1,793	815	815	12,820
Kwh/Gallon	13.50	13.50	13.50	13.50	13.50	13.50	13.50
Gallons	281,618	281,618	132,847	132,847	60,347	60,347	949,623
Mmbtu/Kwh (Heat Rate)	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Engine #2							
Generation (mWh)	3,802	3,802	1,847	1,847	815	815	12,926
Kwh/Gallon	13.50	13.50	13.50	13.50	13.50	13.50	13.50
Gallons	281,618	281,618	136,786	136,786	60,347	60,347	957,500
Mmbtu/Kwh (Heat Rate)	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Engine #3							
Generation (mWh)	3,741	3,741	1,843	1,843	812	812	12,792
Kwh/Gallon	13.50	13.50	13.50	13.50	13.50	13.50	13.50
Gallons	277,076	277,076	136,544	136,544	60,162	60,162	947,563
Mmbtu/Kwh (Heat Rate)	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Engine #4							
Generation (mWh)	0	0	0	0	0	0	0
Kwh/Gallon	13.50	13.50	13.50	13.50	13.50	13.50	0
Gallons	0	0	0	0	0	0	0
Mmbtu/Kwh (Heat Rate)	0	0	0	0	0	0	0
Engine #5							
Generation (mWh)	0	0	6,480	6,480	5,320	5,320	23,600
Kwh/Gallon	14.50	14.50	14.50	14.50	14.50	14.50	14.50
Gallons	0	0	446,913	446,913	366,869	366,869	1,627,564
Mmbtu/Kwh (Heat Rate)	0	0	9,310	9,310	9,310	9,310	9,310
Engine #6							
Generation (mWh)	0	0	0	0	5,320	5,320	10,639
Kwh/Gallon	14.50	14.50	14.50	14.50	14.50	14.50	14.50
Gallons	0	0	0	0	366,869	366,869	733,738
Mmbtu/Kwh (Heat Rate)	0	0	0	0	9,310	9,310	9,310
Engine #7							
Generation (mWh)	7,007	7,007	6,480	6,480	5,363	5,363	37,702
Kwh/Gallon	14.50	14.50	14.50	14.50	14.50	14.50	14.50
Gallons	483,273	483,273	446,913	446,913	369,871	369,871	2,600,114
Mmbtu/Kwh (Heat Rate)	9,310	9,310	9,310	9,310	9,310	9,310	9,310
Engine #8							
Generation (mWh)	0	0	0	0	0	0	0
Kwh/Gallon	14.50	14.50	14.50	14.50	14.50	14.50	0
Gallons	0	0	0	0	0	0	0
Mmbtu/Kwh (Heat Rate)	0	0	0	0	0	0	0
Power Plant # 1 Fuel & Lube Oil							
Total Generation (mWh)	18,352	18,352	18,444	18,444	18,444	18,444	110,479
Total Fuel--Gallons	1,323,584	1,323,584	1,300,004	1,300,004	1,284,463	1,284,463	7,816,103
Fuel-Price/Gallon	$2.22	$2.22	$2.22	$2.22	$2.22	$2.22	$2.22
Total Fuel Cost	$2,944,917	$2,944,917	$2,892,451	$2,892,451	$2,857,875	$2,857,875	$17,390,485
Total Lube Oil--Gallons	15,293	15,293	15,370	15,370	15,370	15,370	92,066
Lube Oil--Price/Gallon	$7.97	$7.97	$7.97	$7.97	$7.97	$7.97	$7.97
Total Lube Oil Cost	$121,920	$121,920	$122,533	$122,533	$122,533	$122,533	$733,972
Total Fuel & Lube Oil Cost	$3,066,837	$3,066,837	$3,014,984	$3,014,984	$2,980,408	$2,980,408	$18,124,457
Power Generation Efficiency-Saipan Plant # 1							
Gross Heat Rate (kWh's/Gal)	13.87	13.87	14.19	14.19	14.36	14.36	14.13
Lube Oil Consumption (kWh's/Gal)	1,200	1,200	1,200	1,200	1,200	1,200	1,200

COMMONWEALTH UTILITIES CORPORATION
LEVELIZED ENERGY ADJUSTMENT CLAUSE
CUC-OWNED UNIT PRODUCTION AND FUEL COSTS

Power Plant 2--Saipan							
Engine #1							
Generation (mWh)	0	0	0	0	0	0	0
Kwh/Gallon	11.00	11.00	11.00	11.00	11.00	11.00	0
Gallons	0	0	0	0	0	0	0
Mmbtu/Kwh (Heat Rate)	0	0	0	0	0	0	0
Engine #2							
Generation (mWh)	0	0	0	0	0	0	0
Kwh/Gallon	11.00	11.00	11.00	11.00	11.00	11.00	0
Gallons	0	0	0	0	0	0	0
Mmbtu/Kwh (Heat Rate)	0	0	0	0	0	0	0
Engine #3							
Generation (mWh)	0	0	0	0	0	0	0
Kwh/Gallon	11.00	11.00	11.00	11.00	11.00	11.00	0
Gallons	0	0	0	0	0	0	0
Mmbtu/Kwh (Heat Rate)	0	0	0	0	0	0	0
Engine #4							
Generation (mWh)	0	0	0	0	0	0	0
Kwh/Gallon	11.00	11.00	11.00	11.00	11.00	11.00	0
Gallons	0	0	0	0	0	0	0
Mmbtu/Kwh (Heat Rate)	0	0	0	0	0	0	0
Engine #5							
Generation (mWh)	0	0	0	0	0	0	0
Kwh/Gallon	11.00	11.00	11.00	11.00	11.00	11.00	0
Gallons	0	0	0	0	0	0	0
Mmbtu/Kwh (Heat Rate)	0	0	0	0	0	0	0
Engine #6							
Generation (mWh)	0	0	0	0	0	0	0
Kwh/Gallon	11.00	11.00	11.00	11.00	11.00	11.00	0
Gallons	0	0	0	0	0	0	0
Mmbtu/Kwh (Heat Rate)	0	0	0	0	0	0	0
Power Plant # 2 Fuel & Lube Oil							
Total Generation (mWh)	0	0	0	0	0	0	0
Total Fuel--Gallons	0	0	0	0	0	0	0
Fuel-Price/Gallon	$2.22	$2.22	$2.22	$2.22	$2.22	$2.22	0
Total Fuel Cost	$0	$0	$0	$0	$0	$0	$0
Total Lube Oil--Gallons	0	0	0	0	0	0	0
Lube Oil--Price/Gallon	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	0
Total Lube Oil Cost	$0	$0	$0	$0	$0	$0	$0
Total Fuel & Lube Oil Cost	$0	$0	$0	$0	$0	$0	$0
Power Generation Efficiency-Saipan Plant # 2							
Gross Heat Rate (kWh's/Gal)	0	0	0	0	0	0	0
Lube Oil Consumption (kWh's/Ga	0	0	0	0	0	0	0

COMMONWEALTH UTILITIES CORPORATION
LEVELIZED ENERGY ADJUSTMENT CLAUSE
CUC-OWNED UNIT PRODUCTION AND FUEL COSTS

Rota Power Plant							
Engine #1							
Generation (mWh)	465	465	465	465	465	465	2,790
Kwh/Gallon	12.50	12.50	12.50	12.50	12.50	12.50	12.50
Gallons	37,200	37,200	37,200	37,200	37,200	37,200	223,200
Mmbtu/Kwh (Heat Rate)	10,800	10,800	10,800	10,800	10,800	10,800	10,800
Engine #2							
Generation (mWh)	470	470	470	470	470	470	2,821
Kwh/Gallon	12.50	12.50	12.50	12.50	12.50	12.50	12.50
Gallons	37,609	37,609	37,609	37,609	37,609	37,609	225,655
Mmbtu/Kwh (Heat Rate)	10,800	10,800	10,800	10,800	10,800	10,800	10,800
Engine #3							
Generation (mWh)	0	0	0	0	0	0	0
Kwh/Gallon	11.00	11.00	11.00	11.00	11.00	11.00	0
Gallons	0	0	0	0	0	0	0
Mmbtu/Kwh (Heat Rate)	0	0	0	0	0	0	0
Engine #4							
Generation (mWh)	0	0	0	0	0	0	0
Kwh/Gallon	14.00	14.00	14.00	14.00	14.00	14.00	0
Gallons	0	0	0	0	0	0	0
Mmbtu/Kwh (Heat Rate)	0	0	0	0	0	0	0
Rota Fuel & Lube Oil							
Generation (mWh)	935	935	935	935	935	935	5,611
Total Fuel--Gallons	74,809	74,809	74,809	74,809	74,809	74,809	448,855
Fuel-Price/Gallon	$2.73	$2.73	$2.73	$2.73	$2.73	$2.73	$2.73
Total Fuel Cost	$204,516	$204,516	$204,516	$204,516	$204,516	$204,516	$1,227,095
Total Lube Oil--Gallons	779	779	779	779	779	779	4,676
Lube Oil--Price/Gallon	$8.03	$8.03	$8.03	$8.03	$8.03	$8.03	$8.03
Total Lube Oil Cost	$6,261	$6,261	$6,261	$6,261	$6,261	$6,261	$37,564
Total Fuel & Lube Oil Cost	$210,777	$210,777	$210,777	$210,777	$210,777	$210,777	$1,264,660
Power Generation Efficiency-Rota Plant							
Gross Heat Rate (kWh's/Gal)	12.50	12.50	12.50	12.50	12.50	12.50	12.50
Lube Oil Consumption (kWh's/Ga	1,200	1,200	1,200	1,200	1,200	1,200	1,200

COMMONWEALTH UTILITIES CORPORATION
LEVELIZED ENERGY ADJUSTMENT CLAUSE
IPP-OWNED UNIT PRODUCTION AND FUEL COSTS

	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Total
IPP--Saipan Power Plant # 4							
Engine # 2							
Generation (Mwh)	558	558	465	465	465	465	2,976
Kwh/Gallon	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Gallons	50,727	50,727	42,273	42,273	42,273	42,273	270,545
Mmbtu/Kwh (Heat Rate)	12,273	12,273	12,273	12,273	12,273	12,273	12,273
Engine # 3							
Generation (Mwh)	465	465	465	465	465	465	2,790
Kwh/Gallon	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Gallons	42,273	42,273	42,273	42,273	42,273	42,273	253,636
Mmbtu/Kwh (Heat Rate)	12,273	12,273	12,273	12,273	12,273	12,273	12,273
Engine # 4							
Generation (Mwh)	465	465	465	465	465	465	2,790
Kwh/Gallon	12.00	12.00	12.00	12.00	12.00	12.00	12.00
Gallons	38,750	38,750	38,750	38,750	38,750	38,750	232,500
Mmbtu/Kwh (Heat Rate)	11,250	11,250	11,250	11,250	11,250	11,250	11,250
Engine # 5							
Generation (Mwh)	465	465	465	465	465	465	2,790
Kwh/Gallon	12.00	12.00	12.00	12.00	12.00	12.00	12.00
Gallons	38,750	38,750	38,750	38,750	38,750	38,750	232,500
Mmbtu/Kwh (Heat Rate)	11,250	11,250	11,250	11,250	11,250	11,250	11,250
Engine # 6							
Generation (Mwh)	149	149	149	149	149	149	893
Kwh/Gallon	13.30	13.30	13.30	13.30	13.30	13.30	13.30
Gallons	11,188	11,188	11,188	11,188	11,188	11,188	67,128
Mmbtu/Kwh (Heat Rate)	10,150	10,150	10,150	10,150	10,150	10,150	10,150
Engine # 7							
Generation (Mwh)	149	149	149	149	149	149	893
Kwh/Gallon	13.30	13.30	13.30	13.30	13.30	13.30	13.30
Gallons	11,188	11,188	11,188	11,188	11,188	11,188	67,128
Mmbtu/Kwh (Heat Rate)	10,150	10,150	10,150	10,150	10,150	10,150	10,150
Engine # 8							
Generation (Mwh)	149	149	149	149	149	149	893
Kwh/Gallon	13.30	13.30	13.30	13.30	13.30	13.30	13.30
Gallons	11,188	11,188	11,188	11,188	11,188	11,188	67,128
Mmbtu/Kwh (Heat Rate)	10,150	10,150	10,150	10,150	10,150	10,150	10,150
Engine # 9							
Generation (Mwh)	149	149	149	149	149	149	893
Kwh/Gallon	13.30	13.30	13.30	13.30	13.30	13.30	13.30
Gallons	11,188	11,188	11,188	11,188	11,188	11,188	67,128
Mmbtu/Kwh (Heat Rate)	10,150	10,150	10,150	10,150	10,150	10,150	10,150
Engine # 10							
Generation (Mwh)	464	464	465	465	465	465	2,789
Kwh/Gallon	12.00	12.00	12.00	12.00	12.00	12.00	12.00
Gallons	38,688	38,688	38,750	38,750	38,750	38,750	232,376
Mmbtu/Kwh (Heat Rate)	11,250	11,250	11,250	11,250	11,250	11,250	11,250
IPP--Saipan Power Plant # 4 Fuel and Lube Oil							
Total Generation (Mwh)	3,012	3,012	2,920	2,920	2,920	2,920	17,706
Total Fuel--Gallons	253,940	253,940	245,547	245,547	245,547	245,547	1,490,069
Fuel-Price/Gallon	$2.22	$2.22	$2.22	$2.22	$2.22	$2.22	$2.22
Total Fuel Cost	$565,005	$565,005	$546,332	$546,332	$546,332	$546,332	$3,315,338
Total Lube Oil--Gallons	3,012	3,012	2,920	2,920	2,920	2,920	17,706
Lube Oil--Price/Gallon	$7.97	$7.97	$7.97	$7.97	$7.97	$7.97	$7.97
Total Lube Oil Cost	$24,016	$24,016	$23,281	$23,281	$23,281	$23,281	$141,155
Total Fuel & Lube Oil Cost	$589,021	$589,021	$569,613	$569,613	$569,613	$569,613	$3,456,493

COMMONWEALTH UTILITIES CORPORATION
LEVELIZED ENERGY ADJUSTMENT CLAUSE
IPP-OWNED UNIT PRODUCTION AND FUEL COSTS

	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Total
IPP--Tinian Power Plant							
Engine #1							
Generation (Mwh)	0	0	0	0	0	0	0
Kwh/Gallon	13.30	13.30	13.30	13.30	13.30	13.30	0
Gallons	0	0	0	0	0	0	0
Mmbtu/Kwh (Heat Rate)	0	0	0	0	0	0	0
Engine #2							
Generation (Mwh)	0	0	0	0	0	0	0
Kwh/Gallon	13.30	13.30	13.30	13.30	13.30	13.30	0
Gallons	0	0	0	0	0	0	0
Mmbtu/Kwh (Heat Rate)	0	0	0	0	0	0	0
Engine #3							
Generation (Mwh)	0	0	0	0	0	0	0
Kwh/Gallon	13.30	13.30	13.30	13.30	13.30	13.30	0
Gallons	0	0	0	0	0	0	0
Mmbtu/Kwh (Heat Rate)	0	0	0	0	0	0	0
Engine #4							
Generation (Mwh)	632	632	632	632	632	632	3,794
Kwh/Gallon	13.30	13.30	13.30	13.30	13.30	13.30	13.30
Gallons	47,549	47,549	47,549	47,549	47,549	47,549	285,293
Mmbtu/Kwh (Heat Rate)	10,150	10,150	10,150	10,150	10,150	10,150	10,150
Engine #5							
Generation (Mwh)	1,432	1,432	1,432	1,432	1,432	1,432	8,593
Kwh/Gallon	13.50	13.50	13.50	13.50	13.50	13.50	13.50
Gallons	106,089	106,089	106,089	106,089	106,089	106,089	636,533
Mmbtu/Kwh (Heat Rate)	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Engine #6							
Generation (Mwh)	1,423	1,423	1,423	1,423	1,423	1,423	8,540
Kwh/Gallon	13.50	13.50	13.50	13.50	13.50	13.50	13.50
Gallons	105,437	105,437	105,437	105,437	105,437	105,437	632,623
Mmbtu/Kwh (Heat Rate)	10,000	10,000	10,000	10,000	10,000	10,000	10,000
IPP--Tinian Power Plant Fuel and Lube Oil							
Total Generation (Mwh)	3,488	3,488	3,488	3,488	3,488	3,488	20,928
Total Fuel--Gallons	259,205	259,205	259,205	259,205	259,205	259,205	1,555,230
Fuel-Price/Gallon	$2.64	$2.64	$2.64	$2.64	$2.64	$2.64	$2.64
Total Fuel Cost	$684,396	$684,396	$684,396	$684,396	$684,396	$684,396	$4,106,376
Total Lube Oil--Gallons	0	0	0	0	0	0	0
Lube Oil--Price/Gallon	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	0
Total Lube Oil Cost	$0	$0	$0	$0	$0	$0	$0
Total Fuel & Lube Oil Cost	$684,396	$684,396	$684,396	$684,396	$684,396	$684,396	$4,106,376
Power Generation Efficiency-Tinian Plant							
Gross Heat Rate (kWh's/Gal)	13.46	13.46	13.46	13.46	13.46	13.46	13.46
Lube Oil Consumption (kWh's/Gal)	0	0	0	0	0	0	0
Total IPP Controlled Generation Fuel and Lube Oil							
Total Generation (Mwh)	6,500	6,500	6,408	6,408	6,408	6,408	38,634
Total Fuel--Gallons	513,145	513,145	504,752	504,752	504,752	504,752	3,045,299
Fuel-Price/Gallon	$2.43	$2.43	$2.44	$2.44	$2.44	$2.44	$2.44
Total Fuel Cost	$1,249,401	$1,249,401	$1,230,728	$1,230,728	$1,230,728	$1,230,728	$7,421,714
Total Lube Oil--Gallons	3,012	3,012	2,920	2,920	2,920	2,920	17,706
Lube Oil--Price/Gallon	$0	$0	$0	$0	$0	$0	$0
Total Lube Oil Cost	$24,016	$24,016	$23,281	$23,281	$23,281	$23,281	$141,155
Total Fuel & Lube Oil Cost	$1,273,417	$1,273,417	$1,254,009	$1,254,009	$1,254,009	$1,254,009	$7,562,869
Power Generation Efficiency-Total IPP Controlled							
Gross Heat Rate (kWh's/Gal)	12.67	12.67	12.70	12.70	12.70	12.70	12.69
Lube Oil Consumption (kWh's/Gal)	2,158	2,158	2,194	2,194	2,194	2,194	2,182

COMMONWEALTH UTILITIES CORPORATION
OVER AND (UNDER) RECONCILIATION

	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09
Over and (Under) Recovery Reconciliation							
Fuel and Lube Oil:							
Fuel Revenue (Inclusive of Non-Fuel Elements)	$7,395,894	$6,015,692	$6,723,205	$5,810,086	$4,555,137	$4,200,195	$4,215,450
Equivalent EFC or LEAC rate collected	$0.42058	$0.37143	$0.34098	$0.28288	$0.24357	$0.22122	$0.23201
Approved EFC or LEAC rate					$0.22989	$0.22989	$0.22989
Difference Over/(Under)	$0.42058	$0.37143	$0.34098	$0.28288	$0.01367	($0.00867)	$0.00211
Authorized Fuel Related LEAC Revenue	**Prior Period Over/(Under) Recovery of EFC**				$3,344,548	$3,193,109	$3,516,484
Actual Fuel Related LEAC Costs					$3,230,798	$3,037,013	$3,307,791
Over/(Under) Fuel Recovery	($642,119)	$1,033,058	($268,731)	$115,884	$113,750	$156,096	$208,693
Cumulative Over/(Under) Fuel/Lube Oil Only Balance:	($642,119)	$390,939	$122,208	$238,092	$351,842	$507,939	$716,632
Authorized Non-Fuel LEAC Elements:							
Inventory Build up					$176,513	$168,520	$185,587
Volatility Element (@ 5% of Fuel/Lube Oil)					$167,227	$159,655	$175,824
Regulatory and Technical Support					$117,489	$112,169	$123,529
Generation Efficiency CIP's					$587,447	$560,847	$617,646
Total Authorized Non-Fuel LEAC Revenues					$1,048,676	$1,001,193	$1,102,586
Cumulative Total					$1,048,676	$2,049,869	$3,152,455
Actual Non-Fuel LEAC Costs:							
Inventory Build up					$0	$0	$0
Volatility Element (@ 5% of Fuel/Lube Oil)					$0	$0	$0
Regulatory and Technical Support					$0	$15,000	$179,986
Generation Efficiency					$0	$0	$0
Total Non-Fuel LEAC Cost					$0	$15,000	$179,986
Cumulative Total Non-Fuel LEAC Costs					$0	$15,000	$194,986
Over/(Under) Non-Fuel LEAC Elements:							
Inventory Build up					$176,513	$168,520	$185,587
Volatility Element (@ 5% of Fuel/Lube Oil)					$167,227	$159,655	$175,824
Regulatory and Technical Support					$117,489	$97,169	($56,457)
Generation Efficiency CIP's					$587,447	$560,847	$617,646
Total Non-Fuel Over/(Under) LEAC Elements					$1,048,676	$986,193	$922,600
Cumulative Total Over/(Under) Non-Fuel Elements					$1,048,676	$2,034,869	$2,957,469
Total Over/(Under) Balance:							
Fuel and Lube Oil	($642,119)	$390,939	$122,208	$238,092	$351,842	$507,939	$716,632
Non-Fuel LEAC Elements	$0	$0	$0	$0	$1,048,676	$2,034,869	$2,957,469
Total Over/(Under) Recovery	($642,119)	$390,939	$122,208	$238,092	$1,400,519	$2,542,807	$3,674,101
Allowable Reserve-Gen Efficiency CIPs (Lock Box)							$1,765,940
							$1,908,161
Over/(Under) LEAC Recovery--Amortization (6-Months)							$318,027

COMMONWEALTH UTILITIES CORPORATION
LEVELIZED ENERGY ADJUSTMENT CLAUSE
BILL COMPARISONS

BILLING COMPARISON

Residential Customers	Current Bill	Proposed Bill	Increase/(Decrease) $	Increase/(Decrease) %
500 kWh	$ 104.23	$ 116.59	$ 12.35	11.9%
1000kWh	$ 204.97	$ 229.68	$ 24.71	12.1%
1500 kWh	$ 371.70	$ 408.77	$ 37.06	10.0%
Commercial Customers				
1500 kWh	$ 438.87	$ 475.94	$ 37.06	8.4%
10,000 kWh	$ 2,882.35	$ 3,129.44	$ 247.09	8.6%
20,000 kWh	$ 5,757.03	$ 6,251.21	$ 494.17	8.6%
Government Customers				
5000 kWh	$ 1,470.01	$ 1,593.55	$ 123.54	8.4%
20,000 kWh	$ 5,857.03	$ 6,351.21	$ 494.17	8.4%
100,000 kWh	$ 29,254.49	$ 31,725.36	$ 2,470.87	8.4%

Appendix B
Loss Mitigation Activities

GCG proposes that a Loss Mitigation Task force be established including member of CUC and GCG. To help move the process along it is proposed that a meeting/conference be held to determine a check list of activities that should be undertaken and funding sources identified. To help focus on the areas to be addressed in the upcoming meeting/conference call we propose the following discussion topics.

Proposed Loss Mitigation Discussion Topics

1. Define what are believed to be the principle factors contributing to the high level of losses. CUC should provide an estimate of the amount of loss it believes is associated with each of the following categories:
   - Distribution primary conductor, transformation and secondary losses
   - Illegal service connections and meter tampering
   - Single phase meters defective or out of calibration
   - Faulty primary metering installation or recording of multipliers
   - Errors in the customer information system (CIS) leading to non-billed accounts or miss-billed accounts

2. Verification of authorized, but unmetered services. What actions have been undertaken to identify each of these applications and develop estimates for (i.) actual billing and (ii.) energy accounting purposes.
   - Street lighting. The current count of street lights and consumption is based upon a 1993 inventory.
   - Signal lighting and CATV applications. Are they all metered and if not are they estimated.
   - Water system uses that are unmetered.
   - Wastewater treatment plants consumption.
   - Station service at each power plant. What is metered? How is consumption treated? Are there unmetered station service uses? How can these be quantified?

3. Distribution feeder loss levels. Have loss levels been confirmed based upon network analysis? CUC to provide the technical loss level of each distribution feeder as determined from the results of the latest network analysis summarized in a copy of the actual output data. Provide a description of the network analysis software used by CUC including how often analysis are prepared and the persons responsible for preparation.

4. Power factor and line capacitors. For each distribution feeder provide the operating power factor for the last month in which readings were conducted. What is the installed capacity of capacitor banks installed on the Saipan, Tinian, and Rota electric distribution system? Please indicate the capacity in terms of fixed and switched capacitors.

5. Substation, distribution feeder and conductor inspections. Describe ongoing practices and results of :
   - Pole top surveys
   - Infrared surveys of substations and distribution feeders
   - Vegetation inspections
   - Pole inspections and treatment

6. Meter management and maintenance practices. Describe practices including pre-installation testing, inventory control practices, post-installation testing, primary meter testing, and quality control checks on meter accuracy, multipliers, and CIS system.

7. Large power meter testing and verification. When did CUC last complete a comprehensive investigation of its primary, CT, and single-phase meters with multipliers? What were the results of this investigation? How many primary, CT, and single-phase meters with multipliers exist on Saipan, Tinian, and Rota?

8. Verification of meter data used by the CIS. What steps does CUC take to verify that the metering and billing data contained in the customer information system for each primary, CT, and multiplier metered customer is correct. When was the last comprehensive investigation conducted? What were the results of this investigation?

9. Feeder sub-metering. Does CUC have any metering data taken at strategic points (i.e. points where energy is used) other than power plants? If so, describe. Does CUC have portable load-loggers? If so, are they used to isolate pockets of high losses? Have the load-loggers been an effective tool for such purpose?

10. Meter readers and loss mitigation.
    - Do meter readers on a monthly basis visually inspect all metering installations including meter seals?
    - Do they immediately reseal meters with broken or questionable seals or do they report missing or broken meter seals to someone who is responsible for resealing? Who is this person?
    - Is the information concerning meter seals maintained in a database? Who maintains this database?
    - Do meter readers read the same routes every month or are their routes rotated each month.
    - Do existing personnel policies require meter readers and other sensitive personnel to annually sign a statement of compliance with all established policies personnel policies (i.e., theft, failure to read, falsification of data).
    - Can employees be immediately terminated for theft and falsification of records?

11. History of theft, meter tampering and current diversion. Please summarize how many incidents of meter tampering, current diversion, or illegal connection were:
    - Detected by CUC in FY 2008 and 2009 year to date?
    - Transferred by CUC to law enforcement?
    - Handled administratively by CUC in FY 2008 and 2009 year to date?
    - Impact on base and LEAC revenues from tampering, current diversion and illegal connection incidents handled during FY 2008 and 2009 year to date?

12. What role, if any, does the CNMI attorney general have concerning CUC current diversion or theft?

13. CUC's loss performance objective for Saipan, Tinian, and Rota. When does CUC propose to meet this objective?