BEFORE THE GUAM PUBLIC UTILITIES COMMISSION

IN THE MATTER OF:	)	GPA Docket 20-05
	)	
GPA Demand Side Management	)	**ORDER**
	)	
	)	

I. INTRODUCTION

This matter comes before the Guam Public Utilities Commission ["PUC"] upon the Petition of the Guam Power Authority ["GPA"] for approval of the use of Levelized Energy Adjustment Clause ["LEAC"] funds to pay for the costs of the GPA Demand Side Management ["DSM"] Programs.[1] The purpose of GPA's Petition is to create a permanent funding source for the DSM Program through LEAC. GPA's present intent is to fund the amount of $1.5M for DSM in every 6-month LEAC period. GPA proposes to fund the DSM Program at an annual amount of $3M. GPA seeks to include the sum of $1.5M for DSM in each LEAC 6-month factor going forward into the future.[2] To initially fund DSM, GPA would add to the ratepayers' utility bills a charge of $.0021/kWh.[3]

II. BACKGROUND

The Administrative Law Judge [ALJ] submitted his Report to the PUC on this Docket on May 2, 2020. The PUC adopts the Background Section of the ALJ Report and the findings and conclusions of the Report. In 2014, the Demand Side Management Program was created as a result of concerns of the PUC Chairman and Commission Staff that GPA, in an environment of high fuel costs, had virtually no programs in place to provide incentives to its ratepayers to conserve energy

However, due to the growth of the initial DSM residential rebate programs, particularly for residential split level air conditioning, GPA has not had sufficient funding to accommodate the growth of the program or to roll out the expanded DSM rebate program.[4] Without additional funding, and an additional funding source, GPA

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[1] GPA Petition for PUC Approval of the Execution of the GPA Demand Side Management ["DSM"] Programs using LEAC Funds, GPA Docket 20-05, filed December 5, 2019.
[2] GPA Responses to Requests for Information of the Administrative Law Judge, GPA Docket 20-05, dated March 13, 2020, at GPA Responses to RFIs Nos. 8 & 9.
[3] GPA Petition, p. 1.
[4] DEMAND-SIDE MANAGEMENT PROGRAM UPDATE, dated March 12, 2020, prepared by SPORD/Engineering & Technical Services, at p. 2. (Attachment to GPA's Response to ALJ RFIs, filed March 3, 2020.)

will be unable to further proceed with its Demand Side Management Program. It is evident that the PUC must determine a more stable, long-term funding source if the DSM Program is to continue to expand and strengthen.

III. DETERMINATIONS

A. Both the PUC and the CCU have previously determined that DSM Programs are beneficial to the Ratepayers of Guam.

1. In a series of Orders, PUC authorized GPA to undertake a DSM program. The objective of such program was to reduce energy consumption sourced from high cost fuel or diesel oil.[5] GPA was approved to move forward with implementing the four DSM and EE programs (Central AC, Ductless AC, Washer, and Dryer) that were analyzed and found to be cost-effective in the Initial Implementation Plan (Initial DSM ad EE Programs).[6] PUC subsequently determined that it is in the interest of GPA and the ratepayers of Guam to implement the additional DSM initiatives. DSM Programs should foster energy conservation and hopefully reduce the need in the long term for as much additional generation capacity.[7]

2. As the justification for a DSM Program, the CCU has stated that "the DSM Program is predicated on the avoidance of fuel costs, and it also defers the need for capacity additions."[8] GPA estimates that there are fuel savings of \$21.3M resulting from residential AC rebate applications to date; total kW reduction is estimated at 3,108. Annual kWh avoided is 15,519,193. Annual savings is projected as \$3,046,418. The total fuel cost savings previously cited is based upon an assumption of seven years for the A/C equipment life.[9] DSM Programs are further justified as a means of reducing the need for generation capacity: "utilities benefit from reducing energy consumption

[5] PUC Order, GPA Docket 13-14, dated July 31, 2014.
[6] PUC Order, GPA Docket 13-14, dated February 26, 2015, at p. 4.
[7] PUC Order, GPA Docket 13-14, May 25, 2017. At p. 3.
[8] CCU Resolution No. 2019-18, Authorizing Management of the Guam Power Authority to File Recommendations for Placing the Demand-Side Management (DSM) Program Expenses under LEAC, adopted November 26, 2019, at p. 1.
[9] GPA Responses to Requests for Information of the Administrative Law Judge, GPA Docket 20-05, dated March 13, 2020, at GPA Response to RFI No. 12.

demand at peak times because there is less need to add additional capacity through costly construction programs."[10]

B. The Cost of the DSM Programs should be Borne by the Ratepayers.

1. **Utility-Sponsored DSM programs are typically funded by ratepayers either explicitly in the form of a surcharge on electricity consumption or implicitly through higher electricity prices.**[11] (emphasis added). Numerous justifications for use of ratepayer funds to support energy efficiency can be offered, such as legal requirements, fairness, practicality, and consistency with other social objectives. A pragmatic basis is that there should be support and acceptance for policies that rely on voluntary participation by customers.[12]

2. DSM and energy efficiency programs can be funded through many different sources, including public funds, grants, loans, and various types of utility charges. Certain state and federal programs can fund DSM investments.[13] For the most part, utilities appear to fund DSM and Energy Efficiency Programs through surcharges, non-bypassable surcharge on electricity bills, public benefits or goods charges, and other cost adjustment rate mechanisms.[14] An article on "Customer Energy Efficiency Programs" contains a comprehensive description of different funding mechanisms for DSM and energy efficiency programs in the states.[15]

3. Nearly all of the states include some type of ratepayer charge, included on utility bills, which is utilized to fund DSM and Energy Efficiency Programs. Therefore, it is appropriate for the Guam Public Utilities Commission to develop a charge, to be paid by GPA ratepayers, which will be used to fund the DSM Program. With regard to the rebate programs, the ratepayers are the primary beneficiaries and thus should legitimately assist in the funding of the program.

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[10] U.S. Department of Energy, Federal Energy Management Program, Utility Rebates and Incentive Programs, July 2009.
[11] David S. Loughran and Jonathan Kulick, The Energy Journal Vol. 25, No. 1 (2004), pp. 19-43.
[12] Eto, Goldman, and Kito, Ratepayer-Funded Energy-Efficiency Programs in a Restructured Electricity Industry: Issues, Options, and Unanswered questions, (Environmental Energy Technologies Division, Earnest Orlando Lawrence Berkeley National Laboratory, University of California, August 1996), at pgs. 2-3, https://eetd.lbl.gov/Sites/All/Files/Publications/Lbnl-40026.pdf.
[13] Meal, Monsen, Selting, Morse, Richard, Weisenmiller & Associates, Inc., Financing Options for Demand-Side Management Programs: Risk-Reward Trade-offs for Ratepayers. https://www.aceee.org/files/proceedings/1996/data/papers/SS96_Panel7_Paper11.pdf.
[14] Customer Energy Efficiency Programs, ACEEE. https://database.aceee.org/state/customer-energy-efficiency-programs.
[15] Id.

Incentive programs within DSM, such as the A/C rebate program, "are funded either explicitly or implicitly by ratepayers."[16]

C. <u>The Most Appropriate Funding Mechanism available to the PUC for the DSM Program is LEAC.</u>

1. The ALJ, PUC Consultants, and GPA have, over the past few years engaged in discussions concerning the most appropriate funding mechanism for the DSM Program. The program cannot continue to be funded on the *ad hoc* basis that has existed to date, which is a hodge-podge of reallocation of bond funds, the working capital fund, and bond refinancing savings. There are few viable alternatives even to consider. One possible mechanism would be through base rates. However, this would involve a new rate case and the inclusion of additional amounts for DSM in the base rate. The problem with this mechanism is that any increase in costs for DSM could ultimately require a new base rate case to be undertaken before readjustments could be made.

2. The PUC and GPA have often created separate surcharges which appear on the customer bill to fund specific items. These include the working capital fund surcharge, the water well surcharge, the self-insurance surcharge and others. The purpose of these surcharges was to fund certain matters by including a charge on the ratepayer's bill. The separate surcharge approach could be used to fund the DSM Program. There are numerous disadvantages with such an approach. Such surcharges have cluttered customer bills and sometimes create customer confusion as to exactly what is being charged. Surcharges are not popular with ratepayers; in recent years the PUC has sought to avoid adding new surcharges to customer bills whenever possible. Another problem is the rigid nature of such surcharges. They are generally for a fixed amount and are difficult to alter; such alteration could also require public hearings. With regard to the DSM Program, funding amounts may need to increase in the future. It is far easier to make such adjustments in an "adjustment" clause such as LEAC than in a fixed surcharge.

3. The option of including DSM funding in LEAC appears to be the best available solution. Inclusion of such funding in LEAC will increase the amount that ratepayers pay for the LEAC charge. However, regardless of how DSM is funded, it is the ratepayers that will ultimately bear the cost. GPA points out

[16] Stephane De La Rue Du Can, Greg Leventis, Amol Phadke, Annand Gopal, Design of Incentive Programs for accelerating penetration of Energy-Efficient appliances, Energy Policy Volume 72, September 2014. https://www.sciencedirect.com/Science/Article/Pii/S0301421514002705.

that the justification for including both renewable energy charges and DSM charges in LEAC is predicated on the avoidance of fuel costs. Previously, the PUC has allowed GPA to recover its Utility Scale Renewable Energy costs through LEAC.[17]

4. From the inception of GPA's Utility Scale Renewable Energy Program, PUC has allowed GPA to include the cost per mWh for renewable energy for solar power from the Dandan Solar Plant in the LEAC calculation. For the Dandan plant, average energy costs, based upon the contract price per mWh, has ranged in the vicinity of approximately $5M per 6-month period.[18] The theory for inclusion of the energy cost for the renewables is that reliance upon such renewable energy reduces fuel costs and thereby benefits ratepayers.

5. Inclusion of the cost for solar power within LEAC is reasonable, as renewable energy is less expensive than fossil fuel. It is well recognized that renewable energy is "an effective hedge against rising fuel oil prices."[19] DSM Programs are also designed to reduce fuel costs.

D. <u>The PUC should adopt the DSM Program requested by GPA with the Addition of Certain Requirements.</u>

1. GPA has requested that it be authorized to use LEAC funds to implement additional DSM programs in accordance with its DEMAND-SIDE MANAGEMENT PROGRAM Update.[20] GPA has set forth in detail the elements of the existing DSM rebate program and its plans for expansion with regard to the 10 new DSM projects approved by the PUC. In terms of an annual budget, GPA is proposing $3M. Utilizing a ratepayer charge through LEAC of $0.002 per kWh, GPA seeks to recover $1.5M per 6-month LEAC period. It is requesting that $1.5M be charged to ratepayers every LEAC period to support the DSM Program.

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[17] CCU Resolution No. 2019-18, Authorizing Management of the Guam Power Authority to File Recommendations for Placing the Demand-Side Management (DSM) Program Expenses under LEAC, adopted November 26, 2019, at pgs. 1-2.
[18] LEAC filing, GPA Docket 20-03, dated December 12, 2019, Schedule 12.
[19] See PUC Order, GPA Docket 18-06, dated February 22, 2018; and PUC Counsel Report, GPA Docket 18-08, dated March 23, 2018.
[20] GPA Responses to Requests for Information of the Administrative Law Judge, GPA Docket 20-05, dated March 13, 2020, at p.13.

2. The $3M budget estimate per year is reasonable to fund a broader program and to allow for the continued development of DSM. The proposed annual budget would provide $1.6M for the residential rebates program alone. Rebates for that program totaled nearly $1.5M in 2019. With the projected growth of the A/C rebate program, the amount requested for residential rebates does not appear to be unreasonable. In addition, a number of the proposed commercial programs involve new types of commercial A/C, including Solar Thermal Assisted, High Efficiency Split, and ducted A/C systems. The annual budget indicated for commercial rebates is $950,000. This additional amount for rebates will allow GPA to expand the commercial rebate program, as was approved by the PUC previously.

3. In addition to the rebate amounts, there are numerous other expenses GPA must bear to support the program. Those include: Marketing, Outreach, and non-labor expenses; Meter Monitoring & Verification (to measure efficiency results of the rebate programs); and residential/commercial customer Energy Audits. The total annual estimated amount for such audits is $50,000. The audits will be performed by GPA or third-party companies. These audits will advise customers on energy efficient improvements that they can make. The new programs approved by PUC for the DSM program will not be able to succeed unless the funding levels are raised.

4. GPA should be authorized to recover $1.5M by GPA through the imposition of a per kilowatt charge of $0.003 on all meters read on or after June 1, 2020. GPA has indicated that the funding of the $1.5M can be trued up for each successive LEAC period. Each "true-up" can determine whether the established factor is appropriate, or should be altered to produce the required funding.[21] GPA has requested that that the initially approved factor should remain in effect for one year until further review by the PUC.[22] The ALJ suggests that the first true-up review be conducted in its consideration of the LEAC factor in January of 2021 (for the next 6-month period commencing February 1, 2021). The PUC can at that time further evaluate whether the amount of the funding and the per kWh charge for DSM are appropriate and should be continued for the next LEAC period.

[21] Email from GPA GM John Benavente to GPA Counsel Graham Botha, dated January 8, 2020.
[22] GPA Responses to Requests for Information of the Administrative Law Judge, GPA Docket 20-05, dated March 13, 2020, at p.13.

5. GPA should be required to submit, along with its normal LEAC filing, a "true-up" of the amount collected in the prior LEAC period and whether the amount collected was more or less than the anticipated \$1.5M. GPA's report will include a statement of the total amount of funds collected for DSM through LEAC, a complete accounting of all amounts expended by GPA during the prior LEAC period for DSM, including rebates, program costs, and every expenditure of every nature. The report will include estimated fuel savings during the prior LEAC period resulting from the program. The Report will also state the projected price per kWh to arrive at the funding amount of \$1.5M. A more detailed protocol must be developed between GPA and the ALJ as to the specific reporting and other requirements.

6. GPA should be required to place all funds obtained by GPA for DSM from LEAC in a separate account, which is the Energy Sense Account. All funding related to DSM, in terms of accounting, should be deposited in the Energy Sense/DSM Fund Account and maintained separate and apart from all other GPA accounts. Said funds shall only be used for funding the specific DSM rebate programs and marketing plans approved by the PUC for DSM. PUC understands that GPA has a separate Utility Energy Services Contracting (UESC) Program, which also promotes various energy sufficiency improvements with the assistance of Johnson Controls Inc. and Siemens Industry, Inc. GPA has assisted commercial businesses, and has funded this program through federal grants and customer funding. However, no DSM funds from LEAC may be used for any project relating to the USEC Program. This restriction also applies to GPA's "Bringing Energy Savings To (BEST) Schools Program.[23]

7. GPA has agreed that, for the time being, it will focus on two areas of the 10 new DSM programs: commercial lighting and residential/commercial air conditioning. GPA has determined that these programs have the greatest likelihood of impact upon fuel efficiency. GPA will also undertake steps to quantify and improve its evaluation process for the DSM Program. This process includes improved metering and verification. GPA will continue to develop methods and protocols to assess the efficiency of the DSM programs. It will consider evaluation processes similar to those followed in California and other states to determine whether the rebate program is effective to incentivize customers to utilize energy efficient appliances. For example, there remains a legitimate question as to whether ratepayers who buy new A/Cs are

[23] See Id., at pages 11-18, where the UESC and BEST programs are described in detail.

incentivized to do so by virtue of the rebates offered, or whether they had already decided to purchase new A/Cs and are merely taking advantage of the available rebate benefit.

IV. ORDERING PROVISIONS

After carefully reviewing the record in this proceeding, having considered the Petition of the Guam Power Authority ["GPA"] for approval of the use of Levelized Energy Adjustment Clause ["LEAC"] funds to pay for the costs of the GPA Demand Side Management ["DSM"] Programs, GPA Responses to Requests for Information of the Administrative Law Judge, the GPA DEMAND-SIDE MANAGEMENT PROGRAM UPDATE, and the PUC Administrative Law Judge Report, and after discussion at a duly noticed regular meeting held on May 28, 2020, for good cause shown and on motion duly made, seconded and carried by affirmative vote of the undersigned Commissioners, the Guam Public Utilities Commission hereby **ORDERS** that:

1. The PUC approves GPA's request for authorization to use LEAC funds for DSM, in accordance with the requirements and restrictions set forth herein.

2. GPA shall initially be authorized to charge ratepayers $0.003 per kWh to fund the DSM program, effective on all meters read on or after June 1, 2020. Such charge shall be a component of the LEAC factor which the PUC determines every 6 months.

3. The first "true-up" review by the PUC of the per kWh charge for DSM shall be in January 2021 during its consideration of the LEAC factor effective on February 1, 2021. GPA shall provide a Report to PUC, in accordance with the determinations of this Order, on or before December 15, 2020, and thereafter at the same time it files each successive LEAC petition for each successive LEAC period in the future.

4. GPA's "true-up" report will indicate the total amount of funds collected in the prior LEAC period for DSM, and the extent to which such amount was an over or under recovery of the $1.5M. Each GPA report for each LEAC period will include a complete accounting of all amounts expended by GPA during the prior LEAC period for DSM, including rebates, program costs, and every expenditure of every nature. The report will include estimated fuel savings during the prior LEAC period resulting from the program. The Report will also state the projected price per kWh to arrive at the funding amount of $1.5M for the LEAC period.

5. The authorized funding for DSM in every six-month LEAC period shall be $1.5M. For each LEAC period, GPA shall provide, in its Petition, the appropriate per kWh charge required to provide $1.5M for DSM during that period. PUC shall review and approve the appropriate charge per kWh for such LEAC period. PUC may adjust the per kWh charge for DSM, or the level of funding for the DSM program, as it deems appropriate.

6. GPA is required to place all funds obtained by GPA for DSM from LEAC in a separate account, which is the Energy Sense /DSM Fund Account. All funding related to DSM, in terms of accounting, shall be deposited in the Energy Sense//DSM Fund Account and maintained separate and apart from all other GPA accounts. Said funds shall only be used for funding the specific DSM programs approved by the PUC.

7. Of the ten new DSM programs approved by the PUC for implementation, GPA shall initially focus on the following two areas: commercial lighting and residential/commercial air conditioning

8. Within 90 days from the date of this Order, GPA and the ALJ shall develop a protocol which describes in detail the process for determining the DSM charge and the procedure by which PUC shall determine such charge for each LEAC period. The protocol shall also include the process by which GPA will determine the efficiency and effectiveness of the DSM program. This process includes improved metering and verification. The process will set forth GPA's plan to improve its assessment of the efficiency of the DSM programs. GPA will consider evaluation processes similar to those followed in California and other states to determine whether the rebate program is effective to incentivize customers to utilize energy efficient appliances.

9. GPA is ordered to pay the Commission's regulatory fees and expenses, including, without limitation, consulting and counsel fees and the fees and expenses of conducting the hearing proceedings. Assessment of PUC's regulatory fees and expenses is authorized pursuant to 12 GCA §§12103(b) and 12125(b), and Rule 40 of the Rules of Practice and Procedure before the Public Utilities Commission.

[SIGNATURES TO FOLLOW ON NEXT PAGE]

Dated this 28th day of May, 2020.

Jeffrey C. Johnson
Chairman

Rowena E. Perez-Camacho
Commissioner

Joseph M. McDonald
Commissioner

Michael A. Pangelinan
Commissioner

Peter Montinola
Commissioner

Doris Flores Brooks
Commissioner

Pedro S.N. Guerrero
Commissioner