

**I MINA'TRENTAI SAIS NA LIHESLATURAN GUÅHAN**  
**2022 (SECOND) Regular Session**  
**VOTING RECORD**

NAME	Aye	Nay	Not Voting/ Abstained	Out During Roll Call	Absent	Excused
<b>Senator V. Anthony Ada</b>	✓					
<b>Senator Frank Blas Jr.</b>	✓					
<b>Senator Joanne Brown</b>	✓					
<b>Senator Christopher M. Dueñas</b>	✓					
<b>Senator James C. Moylan</b>	✓					
<b>Vice Speaker Tina Rose Muña Barnes</b>	✓					
<b>Senator Telen Cruz Nelson</b>	✓					
<b>Senator Sabina Flores Perez</b>	✓					
<b>Senator Clynton E. Ridgell</b>	✓					
<b>Senator Joe S. San Agustin</b>	✓					
<b>Senator Amanda L. Shelton</b>	✓					
<b>Senator Telo T. Taitague</b>	✓					
<b>Senator Jose "Pedo" Terlaje</b>	✓					
<b>Speaker Therese M. Terlaje</b>	✓					
<b>Senator Mary Camacho Torres</b>	✓					

Speaker Antonio R. Unpingco Legislative Session Hall  
Guam Congress Building  
December 16, 2022

**TOTAL**

**15**

**0**

Aye

Nay


Not  
Voting/  
Abstained

Out  
During  
Roll Call

Absent

Excused

CERTIFIED TRUE AND CORRECT:

  
\_\_\_\_\_  
RENNAE V. C. MENO  
Clerk of the Legislature

I = Pass

*I MINA'TRENTAI SAIS NA LIHESLATURAN GUÅHAN*  
**2022 (SECOND) Regular Session**

**Bill No. 351-36 (COR)**

As amended by the Committee on Economic Development,  
Agriculture, Power and Energy Utilities, and the Arts;  
and further amended on the Floor.

\*

Introduced by:

Clynton E. Ridgell  
Joe. S. San Agustin  
Tina Rose Muña Barnes  
Jose “Pedo” Terlaje  
Amanda L. Shelton  
Sabina Flores Perez

**AN ACT TO *ADD* A NEW ARTICLE 6 TO CHAPTER 8 OF  
TITLE 12, GUAM CODE ANNOTATED, RELATIVE TO  
CREATING A VIRTUAL POWER PLANT PROGRAM.**

1 **BE IT ENACTED BY THE PEOPLE OF GUAM:**

2 **Section 1.** A new Article 6 is hereby *added* to Chapter 8 of Title 12, Guam  
3 Code Annotated, to read as follows:

4 **“ARTICLE 6**

5 **VIRTUAL POWER PLANT PROGRAM**

6 **§ 8601. Legislative Findings and Intent.**

7 *I Liheslaturan Guåhan* recognizes that Guam’s reliance on imported fossil  
8 fuels causes the island to be vulnerable to volatile oil prices. On average, nearly  
9 seventy percent (70%) of a ratepayer’s power bill is attributed to the cost of fuel that  
10 is driven by the global oil market.

1            *I Liheslatura* further finds that over the past decade, the prevalence of  
2 renewable energy opportunities (e.g., solar photovoltaic systems) has been helpful  
3 with lowering the cost of utility bills to residents and businesses who could afford  
4 such investment. The Guam Power Authority (GPA) has added over one hundred  
5 twenty-five megawatts (125 MW) of utility-scale renewable energy and energy  
6 storage from solar farms in *Inalåhan* and *Mangilao*, and strategically placed battery  
7 energy storage systems; and GPA’s *2022 Integrated Resource Plan* anticipates over  
8 one hundred eighty megawatts (180+ MW) in additional renewable energy projects.

9            *I Liheslatura* further finds that both the National Renewable Energy  
10 Laboratory and the GPA have asserted that solar energy is currently the most viable  
11 form of renewable energy for Guam. Renewable energy is currently cheaper than  
12 power produced by fossil fuels and its cost is far less volatile than the fossil fuel  
13 industry, despite intermittency concerns. The use of renewable energy reduces the  
14 fuel costs for power production which should in turn reduce the cost of power bills;  
15 and the island’s need for an efficient, affordable and independent fuel supply for  
16 power production can be met with renewable energy.

17            *I Liheslatura* finds that utilizing qualified rooftops on Guam presents  
18 solutions to Guam’s limited land inventory; and rooftop solar systems reduce the  
19 need for land while utilizing spaces that are currently not being utilized.

20            *I Liheslatura* finds that rooftop solar systems provide an opportunity to  
21 develop distributed generation or decentralized power, whereby the power generated  
22 for the energy grid comes from numerous sources distributed across the grid rather  
23 than from centralized power plants or solar farms. Distributed generation may reduce  
24 the costs of transmission and line loss while improving both the efficiency and  
25 resiliency of the energy grid as a whole.

26            *I Liheslatura* finds that the only rooftop solar program currently available  
27 through GPA is the Net Energy Metering (NEM) program. However, GPA and the

1 Consolidated Commission on Utilities (CCU) have asserted that the NEM program  
2 is cost prohibitive for the utility. The NEM program allows homeowners and  
3 businesses to produce energy via rooftop solar systems. Excess energy produced by  
4 NEM customers is fed back into the energy grid. The NEM customer is then credited  
5 on a one-to-one ratio based on the net energy they produce. GPA and the CCU have  
6 asserted that this amounts to the power authority purchasing solar power from  
7 homeowners at the same rate at which they sell power to other customers, while the  
8 cost of energy acquired through current utility-scale solar contracts are significantly  
9 less expensive.

10 *I Liheslatura* finds that a Virtual Power Plant Program provides an alternative  
11 rooftop solar program that addresses the challenges of the NEM program while  
12 promoting more accessible, affordable, and clean renewable energy. In this way,  
13 GPA is able to structure the Virtual Power Plant rooftop solar program in a manner  
14 that generates cheaper and cleaner power for the grid, maintains the stream of  
15 revenues necessary for the operations of the overall energy grid, broadens the access  
16 of renewable energy to ratepayers, lessens its reliance on imported fossil fuels,  
17 lessens the need for land, lowers utility bills, and works toward Guam's overall  
18 renewable energy goal. This program adds renewable energy to the grid through a  
19 distributed generation model with no cost to homeowners and zero upfront cost to  
20 the utility while decreasing the overall cost of fuel thus decreasing rates for all  
21 customers. A Virtual Power Plant Program enables GPA to manage the energy  
22 produced through a network of Solar Hosts with rooftop solar photovoltaic systems  
23 and battery energy storage systems as if the network was itself a power plant.

24 It is, therefore, the intent of *I Liheslatura* to mandate that the GPA establish a  
25 Virtual Power Plant Program for the purpose of providing clean renewable  
26 distributed generation of energy to advance the renewable portfolio standard.

27 Moreover, it is the intent of *I Liheslatura*:

- 1 (a) to create a Virtual Power Plant Program;
- 2 (b) to provide access to qualified homeowners, businesses,  
3 government agencies and non-profit organizations who wish to participate as  
4 Solar Hosts of rooftop solar photovoltaic systems;
- 5 (c) for GPA to achieve its renewable portfolio standards goals  
6 pursuant to § 8311 of Article 3 of this Title;
- 7 (d) to stimulate job growth and economic development in the local  
8 renewable energy industry;
- 9 (e) to reduce Guam's reliance on imported fuel;
- 10 (f) to reduce fuel costs thus creating greater savings to all utility  
11 customers; and
- 12 (g) to add energy security and resiliency to Guam's power grid.

13 **§ 8602. Definitions.**

14 (a) *Virtual Power Plant Program (VPPP)* means a network of distributed  
15 energy resources (DER), such as rooftop solar photovoltaic systems and battery  
16 energy storage systems that are hosted on the rooftops of eligible homeowners,  
17 businesses, government agencies and non-profit organizations, to generate and store  
18 electricity at a local level. This network of Solar Hosts is contracted through a  
19 Developer and managed by GPA through aggregation software that can control the  
20 production, storage, and output of energy from these systems as if this network of  
21 rooftop solar systems and battery energy storage systems were a single power plant.

22 (b) *Solar Host* means a qualified homeowner, business owner, government  
23 of Guam agency or non-profit organization whose house, commercial building, or  
24 government-owned building at which the electricity-generating and energy storage  
25 equipment is installed, owned, operated, and maintained by the Developer and who  
26 is not a current customer-generator under the Net Metering System. The Solar Host  
27 is then compensated for leasing their rooftop space through credits that are awarded

1 to offset or reduce their power bill or direct lease payments from the Developer. The  
2 energy generated by the Developer will be sold to the utility at a negotiated rate  
3 between the utility and the Developer.

4 (c) *Solar Photovoltaic System* means technology and equipment that  
5 converts sunlight into electricity, to include, but not be limited to, panels, inverters,  
6 mounting, and batteries and storage systems.

7 (d) *Developer* means a licensed solar development business that is owned  
8 and operated by a legal resident of Guam.

9 (e) *Utility* means the Guam Power Authority.

10 **§ 8603. Virtual Power Plant Program.**

11 The Guam Power Authority (GPA) shall establish a Virtual Power Plant  
12 Program (VPPP) within nine (9) months of enactment of this Article and approval  
13 by the Guam Public Utilities Commission (PUC), or ninety (90) days after approval  
14 by the Guam Public Utilities Commission (PUC) whichever is earlier, pursuant to §  
15 8311 of Article 3 of this Title, whereby qualified businesses, homeowners,  
16 government of Guam agencies, and non-profit organizations are able to host a solar  
17 photovoltaic system on their rooftop and battery energy storage systems; and  
18 government of Guam-owned buildings shall be the first preference to be Solar Hosts.  
19 Developers must provide battery energy storage system capacity necessary to  
20 address intermittency and power quality issues. The VPPP shall initially be capped  
21 at twenty megawatts (20 MW) of participation, at which time GPA shall assess the  
22 impact on the island-wide power system, ratepayers, reliability, and feasibility for  
23 an expanded VPPP. Additional VPPP phases and the terms of such, including  
24 contract agreement and program capacity ceilings, must be approved by the PUC.  
25 The VPPP shall also include the software and computers necessary to manage the  
26 production, storage, and output of electricity generated by the network of Solar Hosts  
27 in the Virtual Power Plant Program.

1 GPA shall enter into agreement(s) with solar energy developers for the  
2 installation, ownership, maintenance, and/or operation of equipment necessary to  
3 create a Virtual Power Plant Program, as defined in § 8602(a) of this Article,  
4 providing for the use of qualified rooftops for electricity generated and sold to the  
5 utility and to be used by the community.

6 **§ 8604. Eligibility.**

7 The utility and Developers must establish eligibility criteria for Solar Hosts to  
8 include, but not be limited to, assessments on roof types, solar quality, and other  
9 elements required for full implementation of the VPPP for participating Solar Hosts.

10 **§ 8605. Solar Host Credit Rate.**

11 Solar Hosts shall receive a credit on their electricity bill or otherwise  
12 compensated by GPA or the Developer for the use of their rooftops. The exact  
13 amount or rate of this Solar Host credit is to be determined by GPA with approval  
14 by the PUC.”

15 **Section 2. Effective Date.** This Act shall be effective upon enactment.

16 **Section 3. Severability.** If any provision of this Act or its application to any  
17 person or circumstance is held to be invalid, the invalidity shall not affect other  
18 provisions or applications of this Act that can be given effect without the invalid  
19 provision or application, and to this end the provisions of this Act are severable.