

I Mina'trentai Sais Na Liheslaturan Guåhan
BILL STATUS

BILL NO.	SPONSOR	TITLE	DATE INTRODUCED	DATE REFERRED	CMTE REFERRED	PUBLIC HEARING DATE	DATE COMMITTEE REPORT FILED	FISCAL NOTES	NOTES
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.	Clynton E. Ridgell Joe S. San Agustin Tina Rose Muña Barnes Jose "Pedro" 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.	11/1/22 11:17 a.m.	11/1/22	Committee on Economic Development, Agriculture, Power and Energy Utilities, and the Arts	11/18/22 9:00 a.m.	12/6/22 3:51 p.m. As amended by the Committee on Economic Development, Agriculture, Power and	Request: 11/3/22 11/9/22	
	SESSION DATE	TITLE	DATE PASSED	TRANSMITTED	DUE DATE	NOTES			
	12/2/22	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.	12/16/22	12/16/22	12/28/22				



COPY

I MINA'TRENTAI SAIS NA LIHESLATURAN GUÅHAN
Thirty-Sixth Guam Legislature

December 16, 2022

The Honorable Lourdes A. Leon Guerrero
I Maga'hågan Guåhan
Ufisinan I Maga'håga
Hagåtña, Guam 96910

Dear *Maga'håga* Leon Guerrero:

Transmitted herewith are **Bill Nos. 291-36 (LS), 298-36 (LS), 299-36 (LS), 306-36 (COR), 312-36 (COR), 313-36 (COR), 314-36 (COR), 327-36 (COR), 332-36 (LS), 334-36 (COR), 346-36 (LS), 348-36 (LS), 351-36 (COR), 354-36 (COR), 355-36 (COR), 356-36 (COR), 357-36 (COR), 358-36 (COR), 360-36 (COR);** and **Substitute Bill No. 361-36 (COR)** which were passed by *I Mina'trentai Sais Na Liheslaturan Guåhan* on December 16, 2022.

Sincerely,

AMANDA L. SHELTON
Legislative Secretary

Enclosure (20)

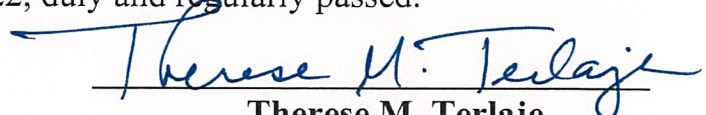
FOS CC Chong 562
12/16/22 10:06 p.m.



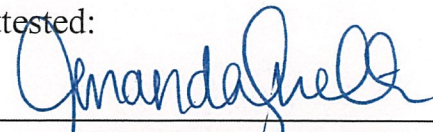
I MINA'TRENTAI SAIS NA LIHESLATURAN GUÅHAN
2022 (SECOND) Regular Session

CERTIFICATION OF PASSAGE OF AN ACT TO I MAGA'HÅGAN GUÅHAN

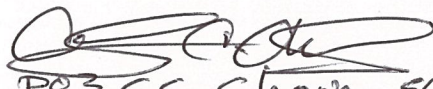
This is to certify that **Bill No. 351-36 (COR)**, "AN ACT TO **ADD A NEW ARTICLE 6 TO CHAPTER 8 OF TITLE 12, GUAM CODE ANNOTATED, RELATIVE TO CREATING A VIRTUAL POWER PLANT PROGRAM,**" was on the 16th day of December 2022, duly and regularly passed.


Therese M. Terlaje
Speaker

Attested:


Amanda L. Shelton
Legislative Secretary

This Act was received by *I Maga'hågan Guåhan* this 16TH day of Dec, 2022, at 10:06 o'clock P.M.


PO3 CC Chong 562
Assistant Staff Officer
Maga'håga's Office

APPROVED:

Lourdes A. Leon Guerrero
I Maga'hågan Guåhan

Date: _____

Public Law No. _____

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 “Pedro” Terlaje
Amanda L. Shelton
Sabina Flores Perez
V. Anthony Ada
Frank Blas Jr.
Joanne Brown
Christopher M. Dueñas
James C. Moylan
Telena Cruz Nelson
Telo T. Taitague
Therese M. Terlaje
Mary Camacho Torres

**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.**

BE IT ENACTED BY THE PEOPLE OF GUAM:

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

“ARTICLE 6

VIRTUAL POWER PLANT PROGRAM

§ 8601. Legislative Findings and Intent.

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

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

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

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

24 *I Liheslatura* finds that rooftop solar systems provide an opportunity to
25 develop distributed generation or decentralized power, whereby the power generated
26 for the energy grid comes from numerous sources distributed across the grid rather
27 than from centralized power plants or solar farms. Distributed generation may reduce

1 the costs of transmission and line loss while improving both the efficiency and
2 resiliency of the energy grid as a whole.

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

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

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

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

5 (a) to create a Virtual Power Plant Program;

6 (b) to provide access to qualified homeowners, businesses,
7 government agencies and non-profit organizations who wish to participate as
8 Solar Hosts of rooftop solar photovoltaic systems;

9 (c) for GPA to achieve its renewable portfolio standards goals
10 pursuant to § 8311 of Article 3 of this Title;

11 (d) to stimulate job growth and economic development in the local
12 renewable energy industry;

13 (e) to reduce Guam's reliance on imported fuel;

14 (f) to reduce fuel costs thus creating greater savings to all utility
15 customers; and

16 (g) to add energy security and resiliency to Guam's power grid.

17 **§ 8602. Definitions.**

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

26 (b) *Solar Host* means a qualified homeowner, business owner, government
27 of Guam agency or non-profit organization whose house, commercial building, or

1 government-owned building at which the electricity-generating and energy storage
2 equipment is installed, owned, operated, and maintained by the Developer and who
3 is not a current customer-generator under the Net Metering System. The Solar Host
4 is then compensated for leasing their rooftop space through credits that are awarded
5 to offset or reduce their power bill or direct lease payments from the Developer. The
6 energy generated by the Developer will be sold to the utility at a negotiated rate
7 between the utility and the Developer.

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

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

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

14 **§ 8603. Virtual Power Plant Program.**

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

1 contract agreement and program capacity ceilings, must be approved by the PUC.
2 The VPPP shall also include the software and computers necessary to manage the
3 production, storage, and output of electricity generated by the network of Solar Hosts
4 in the Virtual Power Plant Program.

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

10 **§ 8604. Eligibility.**

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

14 **§ 8605. Solar Host Credit Rate.**

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

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

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