Filing Receipt

Filing Date - 2024-11-27 02:31:40 PM

Control Number - 57236

Item Number - 9

PROJECT NO. 57236

PROJECT TO DEVELOP THE TEXAS BACKUP POWER PACKAGE PROGRAM	§ § §	**BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS**

GRID RESILIENCE IN TEXAS' COMMENTS IN RESPONSE TO COMMISSION STAFF'S QUESTIONS
ON DEVELOPMENT OF THE TEXAS BACKUP POWER PACKAGE PROGRAM

Grid Resilience in Texas ("GRIT") appreciates the opportunity to provide comments in response to the questions included in the Public Utility Commission ("Commission") Staff's October 31, 2024, questions regarding development and implementation of the Texas Backup Power Package Program ("BPP"). GRIT is comprised of a group of leading flexible generation and microgrid companies, including Base Power Company, Cummins Inc., Enchanted Rock, Mainspring Energy, PowerSecure Inc., and Sunnova Energy. These companies represent projects that encompass a spectrum of sizes, from small-scale behind-the-meter ("BTM") assets to large generation facilities utilizing various technologies and fuel types. GRIT is improving energy reliability, resiliency, and affordability for Texans by leveraging innovative solutions and stacking value streams for services to the grid and to customers.

1. CRITICAL FACILITY OPERATOR INPUT

A. *What are the key challenges you face in maintaining and operating backup power systems, and how can the TBPP program better address those challenges?*

GRIT does not have a response to this question.

2. TECHNOLOGY COMPONENTS AND SPECIFICATIONS

A. *What are the feasibility considerations for the specifications of the range of technologies supported by the program?*

GRIT asserts that the BPP Program must account for the diverse needs and constraints of critical facilities. Many facilities face site-specific challenges, such as different load profiles, land and space constraints, sizing requirements, and operational needs. A flexible approach to designing backup power packages is essential to ensure alignment with customer-specific demands. Overly prescriptive implementation could hinder participation and innovation. Pre-qualifying vendors, instead of prescribing specific technology constraints, can streamline deployment and ensure high-quality solutions with a proven track record. While greater flexibility in technology selection could enhance program adoption, current statutory language may limit these options, necessitating careful consideration of permissible solutions.

B. *What specific challenges or considerations should we keep in mind when finalizing the specifications for the backup power technologies (e.g., traditional generators, solar + storage, electric school buses)?*

Facilities may encounter physical constraints, such as space limitations or unsuitable rooftop conditions, as well as economic challenges that make certain technologies more or less viable. Balancing resiliency, cost-effectiveness, and site conditions will require flexible standards that permit a range of solutions.

C. *Are there any technical specifications or interconnection standards that need to be addressed to ensure that the prescribed technologies are effective for different types of critical facilities?*

Some critical facilities, such as hospitals and emergency response centers, require stricter operational resilience standards to maintain continuity of operations during outages. Specifications should consider N+1 design standards, ensuring backup systems can provide uninterrupted service even if one component fails.

D. *What is the volume of units of the various size ranges, and can the supply chain support it?*

GRIT member companies' existing supply chain capabilities are sufficient to support a wide range of unit sizes required by the program. The program should maintain flexibility in the sizing and configuration of technology components to align the diverse needs of critical facilities with the range of products that are commercially available.

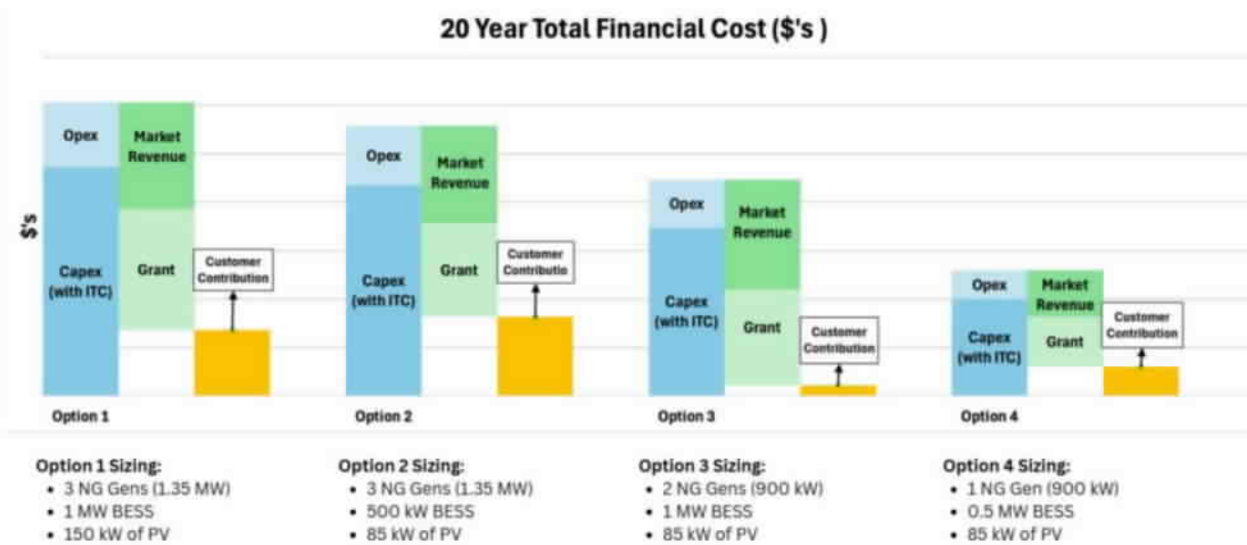

Figure 1: Natural Gas Generator (NG Gens), Solar, and Battery System Sizing Options

This chart illustrates the financial breakdown of various system sizing options for the BPP program over a 20-year period using representative technology options that are available on the market. Options 1–3 are tailored for facilities with an average facility load of 600 kW and a peak load of 800 kW. Option 4 is designed for smaller facilities, such as nursing homes, with an average facility load of 300 kW and a peak load of 500 kW. The **Capex** (capital expenditure) bar represents the upfront cost of the system, which includes the application of the Investment Tax Credit (ITC) for solar and other eligible components. The **Opex** (operational expenditure) bar reflects the ongoing costs to maintain and operate the system over its lifespan. The **Market Revenue** (dark green section) demonstrates the revenues generated from displacing site load through a combination of generators, photovoltaic (PV) systems, and battery energy storage systems (BESS), effectively lowering the customer contribution. The **Grant** section represents the BPP grants of $500/kW, which further reduces the Capex and makes the solutions more affordable for the customer.

As illustrated in the chart, different system sizing options—ranging from configurations with multiple generators, BESS, and PV components—highlight the importance of flexibility in package design. For example, Option 1 includes three natural gas generators, a 1 MW BESS, and 150 kW of PV to meet higher load requirements, while Option 4 utilizes a smaller configuration with one natural gas generator, 0.5 MW BESS, and 85 kW of PV for facilities with lower load demands. These options accommodate a variety of facility sizes and load profiles, ensuring cost optimization for customers while maintaining compliance with statutory requirements.

Flexibility in system design not only allows facilities to address their specific resiliency needs but also ensures project economics remain favorable, i.e., lower cost for the customer than status quo backup power options that are not eligible for subsidization. For instance, reducing the number of generators can significantly improve project affordability for customers if they are willing to accept less built-in redundancy. This adaptability will ensure the program can deliver resilient and cost-effective solutions at scale.

3. OWNERSHIP MODELS AND FINANCING

A. *What are the considerations for alternate or flexible ownership models?*

Flexible ownership models, such as Resilience-as-a-Service (RaaS), are essential to enable widespread participation, particularly for facilities with limited budgets. RaaS alleviates upfront costs and ensures operational control remains with experienced providers, enhancing system reliability and customer satisfaction. Requiring that ownership transition to facilities within a few years, as recommended by the Advisory Committee, is unnecessary and could discourage participation by resource-constrained facilities.

B. *What would you take into consideration when structuring a lease-to-own or resilience-as-a-service model? If you focus on the ability of the critical facility to implement or adopt that alternate ownership model, would that change the way you consider structuring the model?*

Structuring a lease-to-own or RaaS model requires careful consideration of a facility's financial and operational capacity. Structuring models around customer-specific needs, such as payment flexibility and professional operation and maintenance (O&M) services, will improve adoption rates and program effectiveness.

C. *Do you anticipate costs exceeding the $500/kW cap for grants? If so, what strategies might keep costs below the cap on grants while still ensuring quality and reliability?*

Project costs *will* exceed the $500/kW cap due to the technology combination specified by statute. It is GRIT's understanding that the grant was intended to subsidize the premium backup power package solution to a cost level below traditional backup power solutions. A key strategy for achieving cost reductions for customers who take advantage of the grant will be monetization of systems for services beyond backup power operations. Monetization opportunities could include leveraging services such as demand response, peak shaving, and load displacement.

Under PURA Section 34.0204(6), the Commission may provide grants or loans for the design, procurement, installation, and use of Texas Backup Power Packages, provided that the packages are not used by the owner or host facility for the "sale of energy or ancillary services." The Commission should clarify that the prohibition on Backup Power Packages being used for the "sale of energy or ancillary services" is specifically related to Energy & Ancillary Services as defined in the ERCOT protocols. Services that Backup Power Packages can provide outside the ERCOT markets are crucial for the economics of the PUCT's program to be workable for developers and customers alike. All the sizing scenarios shown in Figure 1 assume that these non-Energy and Ancillary Service revenue opportunities are being captured to lower the ultimate cost to the customer.

D. *What factors should be considered to support long-term maintenance and operational readiness for backup power systems?*

Long-term maintenance and operational readiness are critical for ensuring the success of the BPP Program. For facilities with limited technical resources, a RaaS model provides a reliable solution by outsourcing O&M to experienced providers.

CONCLUSION

GRIT appreciates the opportunity to submit these responses to Commission Staff's questions for comment on the development of the Texas Backup Power Package Program. As the Commission continues to move forward with Project No. 57236 and related efforts, GRIT is committed to supporting the effort to ensure improved grid reliability, resiliency, and stability.

Respectfully submitted,

By GRIT Member Companies:

Base Power Company: */s/ Tori Villarreal*
Tori Villarreal
Head of Public Policy and Government
Affairs Base Power Company
tori@basepowercompany.com

Enchanted Rock: /s/ *Joel Yu*
Joel Yu
VP of Policy
Enchanted Rock, LLC.
jyu@enchantedrock.com

Sunnova Energy: */s/ Meghan Nutting*
Meghan Nutting
Executive Vice President of Government &
Regulatory Affairs
Sunnova Energy
meghan.nutting@sunnova.com

Mainspring Energy: */s/ Brian Kauffman*
Brian Kauffman
Director, Wholesale Market Development
Mainspring Energy
brian.kauffman@mainspringenergy.com

PowerSecure: */s/ Thomas Wells*
Thomas Wells
Federal & State Policy Manager
PowerSecure
twells@southernco.com