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

COMMENTS OF TEXAS ADVANCED ENERGY BUSINESS ALLIANCE

The Texas Advanced Energy Business Alliance (TAEBA) appreciates the opportunity to provide comments on the Texas Backup Power Package (TBPP) Program. TAEBA proudly serves on the TBPP Advisory Committee and represents a wide range of energy technology providers and solution innovators working to enhance Texas's critical infrastructure resilience and ensure energy security across essential services statewide.

TAEBA includes local and national advanced energy companies. Advanced energy technologies include energy efficiency (EE), energy storage, distributed generation, microgrids, demand response (DR), electric vehicles (EV), and generation based on solar, wind, hydro, and nuclear resources. The businesses TAEBA represents are lowering consumer costs, creating thousands of new jobs, and providing the full range of clean, efficient, and reliable energy.

1. Critical Facility Operator Input

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

The TBPP must consider the operational and logistical realities faced by critical facilities in Texas, particularly those with limited technical and financial resources. Many critical facilities, especially in rural or small communities, face challenges in maintaining and operating backup power systems due to staffing limitations, technical capacity, and budget constraints. The responsibility for system maintenance and repair can strain these facilities, as they often lack dedicated personnel for energy equipment upkeep and troubleshooting.

To address these challenges, TAEBA recommends that the TBPP adopt models that minimize maintenance burdens for critical facilities. Resilience-as-a-service and other third-party ownership models would allow facilities to rely on specialized providers for ongoing maintenance and system monitoring, freeing facility operators to focus on their primary functions. Long Term Service Agreements which can include monitoring, maintenance, testing, and system dispatching can also be provided by service companies which may include Original Equipment Manufacturers who have a large and robust service network. These options would further alleviate the need for hands-on maintenance at critical facilities and can help ensure that backup power systems remain operationally ready without requiring extensive on-site intervention.

2. Technology Components and Specifications

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

TAEBA recommends a flexible approach to TBPP specifications to accommodate the diverse needs of Texas's critical facilities. A one-size-fits-all approach is impractical given the wide variation in facility types, sizes, and load profiles. Allowing flexibility in the technologies supported by the program will enable each facility to adopt solutions that match its unique constraints and requirements. For instance, backup power specifications for a nursing home should consider the facility's physical layout, fuel availability, and operational requirements, which may vary significantly from those of a police station, fire station, or a community heating or cooling center.

Maintaining a flexible framework that permits multiple technology types (e.g., traditional generators, solar + battery storage, electric school buses) will ensure that facilities can choose appropriate solutions without being restricted by overly prescriptive specifications. This flexibility will also help accommodate evolving technologies as backup power capabilities advance over time, allowing the TBPP to remain adaptable to future improvements.

What specific challenges or considerations should we keep in mind when finalizing the specifications for the backup power technologies?

The program should be designed to account for site-specific constraints while supporting a range of eligible backup power technologies, including solar, batteries, generators, and electric school buses (ESBs). Critical facilities vary significantly in terms of space, structural compatibility, and access to resources like fuel or grid infrastructure. The TBPP should ensure that its specifications accommodate a diversity of solutions, allowing facilities to select the most appropriate technology—or combination of technologies—based on their unique needs and local conditions.

For electric school buses, the TBPP should include guidelines for minimum battery capacities (e.g., 150 kWh) and recommendations for scaling the number of units required to meet the energy demands of different facility types. This ensures that ESBs can be effectively deployed alongside other technologies to provide reliable backup power for critical infrastructure, such as emergency shelters or fire stations.

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?

Adherence to established national standards, such as IEEE 1547 (in its entirety) for grid interconnection, will help ensure the effectiveness and reliability of TBPP-supported technologies. Standardizing interconnection and performance specifications will provide consistency, facilitate smoother integration into the grid, and prevent operational issues that could arise from a lack of uniform guidelines. Ensuring compatibility with existing infrastructure and interconnection capabilities at critical facilities is vital, especially in areas where grid resources are limited.

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

The TBPP should assess projected demand for different system sizes to better understand how the supply chain can meet these needs. Smaller systems may be in high demand for rural facilities, while urban facilities may require larger-capacity units. Given ongoing supply chain disruptions, TAEBA recommends a flexible approach that allows facilities to select from a range of backup power configurations, which can help mitigate potential supply constraints. By supporting a range of technology options and sizes, the TBPP can improve the likelihood of timely procurement and deployment across diverse facility types.

3. Ownership Models and Financing

What are the considerations for alternate or flexible ownership models?

Flexible ownership models are essential to ensure the TBPP's accessibility to facilities with limited financial resources. TAEBA supports alternate ownership models, such as lease-to-own and resilience-as-a-service, which provide facilities with backup power solutions without incurring full upfront costs. In particular, resilience-as-a-service can reduce financial and operational burdens by shifting ownership and maintenance responsibilities to third-party providers. This arrangement is especially valuable for smaller critical facilities, which may lack the personnel and budget for ongoing equipment management.

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?

When structuring a lease-to-own or resilience-as-a-service model, it is essential to consider the facility's financial stability, capacity for operational oversight, and long-term energy needs. Lease-to-own arrangements can offer facilities an affordable path to ownership, while resilience-as-a-service allows facilities to benefit from guaranteed uptime without direct maintenance obligations. Ensuring flexibility in the length and terms of these contracts will make the TBPP accessible to a wide range of facilities. For example, a shorter lease period with lower monthly payments may suit smaller districts, while a resilience-as-a-service model could appeal to facilities seeking comprehensive support.

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?

The $500/kW cap presents a significant challenge, particularly for larger facilities, but it can be addressed through strategic planning and innovative financial models. Flexible financing structures—such as lease-to-own arrangements or resilience-as-a-service models—can spread costs over time, making advanced technology solutions more accessible to critical facilities and reducing the upfront financial burden.

To further manage costs, the program should explore opportunities to leverage monetization through the ERCOT market. While SB 2627 prohibits ERCOT-dispatched Energy and Ancillary Services, mechanisms like Four Coincident Peak (4CP) or Emergency Response Service (ERS) participation could enable facilities to offset operational costs within the program's statutory framework.

Additionally, bulk purchasing agreements and vendor pre-qualification processes can help drive down costs by securing competitive pricing and streamlining implementation. These measures, combined with flexible financial models and market participation, can ensure that TBPP-supported solutions remain both cost-effective and adaptable to the diverse needs of critical facilities across Texas.

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 backup power reliability, particularly during grid emergencies. Facilities with limited resources may struggle to maintain complex backup systems, highlighting the value of third-party maintenance services. A resilience-as-a-service model, where vendors retain responsibility for operational readiness, would be particularly advantageous for facilities without dedicated technical staff. For other ownership models, incorporating maintenance agreements or remote monitoring services could ensure that systems remain in optimal condition over their operational lifespan. Maintenance programs that include regular testing and inspection protocols will further enhance system reliability.

Conclusion

TAEBA appreciates the PUCT's dedication to enhancing Texas's resilience through the TBPP program. This program holds the potential to save lives, protect vulnerable Texans, and ensure that critical facilities across the state have reliable backup power when it's needed most. With the right balance of flexibility and high standards, the TBPP can become a cornerstone of Texas's emergency preparedness strategy.

Our member companies are ready and equipped to provide these essential technologies, with industry expertise and innovative solutions that align with the TBPP's goals. TAEBA stands by to assist in implementing a successful program that not only meets legislative requirements but also truly serves the people and critical facilities of Texas.

Respectfully submitted,

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