Filing Receipt

Filing Date - 2025-02-14 12:42:56 PM

Control Number - 57236

Item Number - 20

METCO ENGINEERING

Project No. 57236 Texas Backup Power Package Program Research Entity Final Report: Questions for Comment:

February 14, 2025

To: PUCT
Fr: Metco Engineering, Inc.

Herein are comments to your questions, followed by an Executive Summary of recommendations. An in-person presentation by Metco, accompanied with leadership of NAESCO (National Associated Of Energy Service Companies) and ESC (Energy Services Coalition) may be helpful to engage in dialogue with the TxBPP committee in vetting details as we work toward guidance for successful TxBPP deployment. Thank you for the opportunity to contribute.

1. The Final Report outlines specifications for TBPPs of various sizes to serve critical facilities.
A. How, if at all, could these specifications affect the ability of critical facilities to apply for, install, or utilize TBPPs?

The specifications make multiple assumptions that are not certain:

1) Assumption: The CF host has a clear understanding of the CF's kW demand and load characteristics. Such understanding is necessary for choosing the appropriate mix of package kW capacities.
Actual: Most owners of CF have no idea of their peak kW and load profile and would need an energy engineer to assess.
2) Assumption: The CF host has physical space to accommodate the recommended PV capacity (i.e. enough capacity to charge the battery during a typical 6-hour solar day, and the battery is sized to pick up peak kW demand for 1 hour).
Actual: Some CF owners may desire to install solar PV capacity that exceeds the minimum requirements, while other CF owners may have no ability to install any solar, such as a medical facility within a high rise building or strip center with landlord restrictions. An energy engineer could be added to the TxBPP team to consult with CF owner to assess accommodations for solar kW capacity and may need to request that TxBPP be allowed with no solar, if the BESS kWh capacity is expanded to 200% or more of the TxBPP program requirements, and BESS will be "charged" with grid power.
3) Assumption: TDU's will openly accommodate the interconnection of TxBPP to their grid.
Actual: Every TDU will carefully evaluate the solar PV interconnection as well as the associated BESS and generator. Depending upon the kW of the TxBPP, multiple evaluations and approvals may be required, and the TDU may impose a requirement for multiple monitoring and switching devices, switchgear control schemes and other SCADA requirements. The costs of these studies can be thousands of dollars and require weeks of turnaround time. In some scenarios the TDU may reject the addition of kW capacity to their feeder thereby requiring that the TxBPP be a 100% microgrid and not connect to the grid. An energy engineering technical assessment can address this vetting early in the process.
4) Assumption: The kW peaks and load profiles of potential CF's is normal and should be used to size the TxBPP. Actual: Unless the CF has recently completed an energy efficiency project, the existing kW peak and kWh consumption is higher than needed for a successful TxBPP. If the CF deploys energy efficiency upgrades prior to TxBPP design, then the TxBPP can be smaller and less costly than assumed.

5) Assumption: The $500 TxBPP incentive is to transform a CF that currently has no PV, no BESS and no generator. Actual: Some potential CF's already have solar, or generator. Will the full incentive be provided or pro-rated?
6) Assumption: The investment in TxBPP is justified due to benefits and the $500 incentive. Actual: The costs of the TxBPP reflected in the final report ignores the 5% to 15% added costs for CF staff and TxBPP provider to supply energy engineering resources to address multiple questions that must be successfully addressed before finalizing a TxBPP project. Almost no CF will proceed with TxBPP given the dismal ROI so additional financial incentive needs to be added. The TxBPP should be coupled with other initiatives that could enable financial success, such as participation in ERCOT or TDU demand response programs, participate in utility sponsored kW demand curtailment programs, become an eligible Utility Cost Reduction Measure (UCRM) per SECO ESPC and PACE Energy efficiency programs, participate in utility green energy buyback programs (such as Austin Energy commercial solar purchase program for 2025).

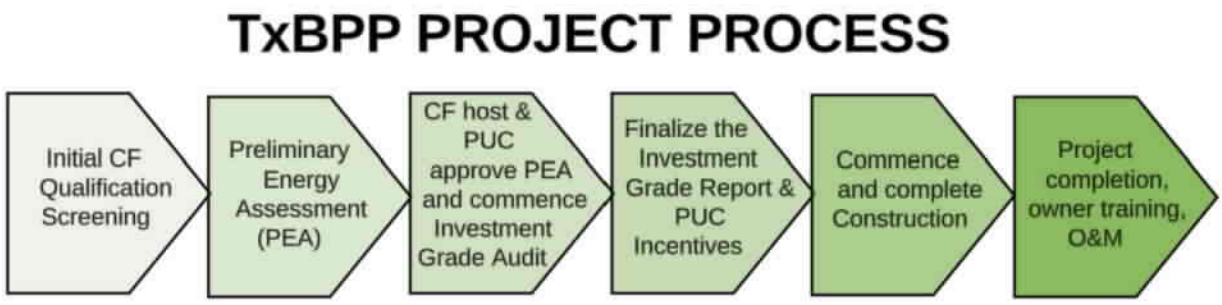
B. How, if at all, should the outlined specifications for TBPP packages be modified to ensure that the packages can serve most critical facilities in Texas?
The specifications could be modified to allow the following:

The $500/kW incentive can be coupled with a flat fee grant or other funding mechanism by the TEF to allow for the CF to hire an energy engineer to assist the CF owner in developing their application and request for funding their TxBPP. The energy engineer will determine: a) Potential energy efficiency measures b) Assess the "right sizing" for the TxBPP equipment, c) Assess and perform TDU interconnection process and identify potential hurdles in securing TDU interconnection; d) Assess options for funding the TxBPP including provisions for tax incentives, e) Assist CF owner in development of appropriate business models for successful deployment of TxBPP, f) Assist CF with procurement and installation and subsequent O&M of the TxBPP. The energy engineering could be a representative of a potential TxBPP provider.

By providing the funding of the soft cost of the energy engineer will reduce costs to the CF for choosing a TxBPP thereby making the TxBPP more financially palatable.

2. The Final Report provides a list of potential vendors for the TBPP program.
A. What factors, if any, could affect the ability of such vendors to assist with the sale, installation, operation, and ongoing maintenance of TBPPs?

Providers of the TxBPP are happy to assist CF owners advance TxBPP at the CF locations if the TxBPP program has a logical and coherent process to implement and the process provides reasonable financial rewards for the invested risks. The TxBPP program should adopt an implementation process that looks a lot like the successful ESPC process (Energy Savings Performance Contracting) that has been successfully deployed for decades in Texas (see SECO, NAESCO and ESC for references and details). Here is a typical ESPC process adapted for TxBPP:



B. How should the TBPP program be designed to maximize the ability of vendors to assist with the sale, installation, operation, and ongoing maintenance of TBPPs?

Create a process like ESPC industry uses including the certification of providers that are adept and experienced in delivering guaranteed performance solutions and not finger pointing.

3. In Sections 2-4 and 2-5, the Final Report outlines design requirements and assumptions; technology specifications; operating sequences; and installation requirements.
A. How, if at all, could the specifications described in these sections affect implementation of the TBPP program?

While the TxBPP is intended to be off-grid, the solar component is interconnected to the grid and will therefore require review and approval of the TDU. Such a review by the TDU will also include an evaluation of the BESS and generator. This TDU review is an opportunity for new issues to arise as prompted by the TDU's requirements.

B. How, if at all, should the specifications be modified to ensure effective implementation of the TBPP program?

A qualified energy engineer should be engaged to prepare preliminary assessments as well as an investment grade final report for each site that successfully addresses the technical, financial and business model challenges for each CT owner.

4. How should the TBPP be designed to mitigate or remedy any other factors that could negatively affect program implementation or participation, while ensuring compliance with statutory requirements? Please limit this response to factors not previously mentioned in responses to questions one through three above

The TxBPP should make additional financial allowances for the CF owner to pay for technical consulting services to address technical, financial and business risk issues that must be satisfactorily resolved for each CF owner to proceed.
All ERCOT TDUs should be requested to provide an expedited interconnection approval process for TxBPP.
Many permitting authorities across the major Texas metropolitan areas should be appraised of TxBPP and offer comments and concerns regarding the installation of TxBPP at CF's. What should a provider of TxBPP be concerned with insofar as working with a CF from a Code enforcement perspective?
Some vetting of insurance firms should be done regarding the installation of TxBPP at CF's. What concerns does an insurance firm have with the installation of an energy resiliency improvement at the facility?
Make available a provision to pay the CF owner an allowance of $0.10 per SF for a CF that seeks a TXBPP to perform technical and financial feasibility assessment: Evaluate electrical demand histories that may require IDR data to determine kW peak demand and sizing of the TXBPP, evaluate feasibility of parsing out the critical loads of the CF in order to reduce sizing of BPP, and 3rd party engineer will also prepare and submit interconnection agreements to the appropriate utility. For CF's that have no access to locate solar PV, allow the BESS option only to be charged with grid power.

METCO ENGINEERING

February 14, 2025

Central Records
Public Utility Commission of Texas
1701 North Congress Avf.
P.O. Box 13326
Austin, Texas 78711-3326

RE: Executive Summary: Project No. 56236

Here are the recommendations:

A. Create a process for deployment of TxBPP that mimics the success of ESPC industry – that includes at a minimum: Initial screening for CF compliant facility, Preliminary Energy Assessment to prove feasibility, provide a checkpoint where PUC, CF and TxBPP provider or energy engineer are in agreement that a TxBPP can successfully be deployed subject to completion of a detailed Investment Grade Audit report, complete the IGA, finalize agreements for construction, training and O&M.

   To fully understand this recommendation, we request in person presentations from NAESCO (National Association Of Energy Service Companies) and ESC (Energy Services Coalition) (and also invite SECO) to further explain the process and how the TxBPP provider and CF owner successfully collaborate through the process.

B. To allow for mitigation of technical and financial and business model risks, add to the $500 incentive an allowance of $0.10 per SF (or some minimum $$) for the CF to engage an energy engineer to prepare PEA/IGA and assist CF owner in proceeding forward. The energy engineer will also assess energy efficiency and kW demand reduction techniques that allow for reduced sizing of the TxBPP.

C. Successful deployment of TxBPP requires acceptance of TDU's (for interconnection), Code enforcement (for mechanical and electrical and structural modifications), and insurance companies. We suggest that a representative sampling of each of these groups be asked to contribute their concerns and desired outcomes for successful deployment.

D. Flexibility in the sizing of the TxBPP components needs to be provided so that facilities that are space constrained for solar PV are not excluded. Also, TxBPP suppliers need flexibility to assemble their own sizes to mee the CF demand in the most cost advantageous manner.

E. Add rule that eligible TxBPP CF's have completed an energy efficiency audit in EPA Portfolio Manager that assures the PUC that the $500/kW is not funding a CF that is in the worst quartile of energy efficiency of like facilities. This vetting could be a part of item A above.

Thank you.

Metco Engineering, Inc.

METCO Engineering, Inc.
11120 Petal Street, Suite B300
Dallas, Texas 75314

972-740-0361
www.metcoengineering.com