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PROJECT NO. 57236

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

NRG ENERGY, INC.'S POST-WORKSHOP COMMENTS REGARDING STAFF QUESTIONS ON THE FINAL REPORT OF PATRICK ENGINEERING

NRG Energy, Inc. (NRG) appreciates the opportunity to offer comments on the questions raised by Commission Staff, at and following the March 20, 2025 workshop, regarding the Final Report of Patrick Engineering, Inc. (Final Report) related to the Texas Backup Power Package (TBPP) program.[1]

I. INTRODUCTION

NRG appreciates the work of the TBPP Advisory Committee, Patrick Engineering, and Commission Staff to date in helping to scope the TBPP program and identify the primary issues that will need to be addressed to make the program successful. As it did in earlier comments in this proceeding,[2] NRG continues to urge maximum flexibility in the rule regarding the technical specifications of TBPPs (e.g., with respect to the sizing options for the gensets and the sizing and specifications of the solar/battery portions of the TBPP), as well as the permissible uses for TBPPs (e.g., allowing use outside a grid emergency for peak load shaving and the like) and ownership/operation arrangements for TBPPs (i.e., allowing alternative models that comply with the Public Utility Regulatory Act (PURA)[3]).

The primary focus of the rule should be on ensuring that the program will attract participation by critical loads in the state—i.e., those on which "communities rely for health, safety, and well being"[4]—and will result in quality and affordable TBPP packages that will help to ensure reliable and adequate power for those loads.[5] In NRG's view, that objective can be best

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[1] Project No. 57236, Staff Memo Requesting Comments (Mar. 7, 2025) (setting due date of April 3, 2025 for written comments following the March 20, 2025 workshop). NRG's stand-alone executive summary is attached as Attachment A to these comments.

[2] Project No. 57236, NRG Energy, Inc.'s Comments Regarding Staff Questions and November 13, 2024 Virtual Workshop (Dec. 16, 2024) and NRG Energy, Inc.'s Comments Regarding TBPP Final Patrick Engineering Report (Feb. 14, 2025).

[3] Tex. Util. Code §§ 11.001-66.016 (PURA).

[4] *Id.* § 34.0202.

[5] *Id.* ("The **purpose of this subchapter is to facilitate and provide funding for** the design, procurement, installation, and use of **Texas backup power packages to ensure the reliability or adequacy of an electric power grid** in this state **for facilities on which communities rely** for health, safety, and well-being.") (emphasis added).

met by focusing the rule on the overarching statutory requirements, without attempting to overly prescribe detailed technical specifications and performance requirements, and by allowing a broad range of qualified vendors, with demonstrated experience in ERCOT, to participate in the program. NRG responds to Staff's specific questions below.

II. COMMENTS IN RESPONSE TO STAFF QUESTIONS

Topic 1: Cost Offsets:

A. *How can the specifications be refined to prioritize cost savings, effectiveness, and affordability for TBPPs without compromising backup power and resilience goals?*

B. *How can the features of a TBPP provide added value for a critical facility compared to purchasing and installing a generator set? How can this value be quantified relative to the cost of additional TBPP features?*

These questions rightly focus on prioritizing cost savings, effectiveness, and affordability for TBPPs while also focusing on the resiliency and added value that TBPPs are intended to provide to eligible customers—which, by definition, are those critical facilities on which communities rely for health, safety, and well-being.[6] To meet these objectives, NRG urges that the Commission's rule should allow for customization with respect to design features, while also ensuring that the basic design requirements in the statute are satisfied. Overly prescriptive design requirements, in contrast, may frustrate the statutory intent of facilitating and providing "funding for the design, procurement, installation, and use of [TBPPs] to ensure the reliability or adequacy of an electric power grid in this state" for critical facilities,[7] as such prescriptive requirements may increase costs far above the $500 per kilowatt (kW) cap for grants under the program[8] and discourage broad participation in this program.

As discussed in prior comments, the Final Report recommended certain technical specifications that NRG views as too rigid to achieve this statutory intent. The Final Report's specifications seem to be based on the statutory directive to develop "sets of specifications for standard backup power packages of various sizes that can serve most critical facilities in the state."[9] While NRG understands that the statutory framework envisions standardization for the TBPP program, it also does not preclude the Commission from adopting a rule that allows for

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[6] *Id.*

[7] *Id.*

[8] *Id.* § 34.0205(b). The statute also allows for loans, but overall funding for this program is limited to $1.8 billion and is contingent on additional appropriation to the Texas Energy Fund by the Legislature.

[9] *Id.* § 34.0203(c)(1).

customization to fit the specific needs of a particular critical facility—in other words, the rule need not detail extremely specific or rigid design requirements for TBPPs and instead can require more broad conformance with the overarching statutory requirements.[10] Indeed, the statute requires that the TBPP be engineered in a manner to serve critical load for 48 continuous hours during a grid emergency while minimizing costs,[11] which would be better satisfied if the rule allows for some ability to customize rather than imposing a "one-size-fits-most" framework. The Commission can evaluate specific TBPP applications on a case-by-case basis to ensure that the basic criteria in the statute are satisfied, similar to the process that the Commission has undertaken in the ERCOT loan program of the Texas Energy Fund.

In prior comments,[12] NRG provided more detail on how allowing additional sizes for TBPP packages (up to a 2,500 kW size) and flexibility with respect to the relative proportion of natural gas/propane, solar, and batteries in a TBPP would be more cost-effective (and thus provide more value to critical loads) than adopting the more rigid recommendations on these points in the Final Report. NRG does not repeat those comments here, but incorporates them by reference and continues to urge flexibility as the overarching principle for the rule, in order to best achieve the statutory objectives of serving critical facility loads during a grid emergency in the most cost-effective manner.

C. *How can contracts for alternative ownership models and financing mechanisms be structured to comply with statutory requirements? If these models and mechanisms are considered, what metrics could effectively measure value, performance, and compliance for the TBPP program?*

Under Chapter 34 of PURA, a TBPP cannot be used to generate electricity for sale in the wholesale market as energy or ancillary services, cannot be a "commercial energy system,"[13] and must be available for use as a backup power source in times when the critical facility cannot access electricity from the grid due to an extended grid outage.[14] Thus, by design, TBPPs could not be

[10] *See id.* § 34.0204 (setting out 6 basic criteria that the TBPPs must satisfy).

[11] *Id.* § 34.0204(a)(1), (3), and (4).

[12] *Supra* note 2.

[13] *See, e.g.*, PURA § 34.0204(6) (allowing funding for a TBPP only if it "is not used by the owner or host facility for the sale of energy or ancillary services"); *id.* § 34.0205(e) (prohibiting funding for a "commercial energy system").

[14] *See id.* § 34.0202 (defining the purpose of the TBPP as ensuring "reliability or adequacy of an electric power grid in this state for facilities on which communities rely for health, safety, and well-being"); *id.* § 34.0201 (defining "Texas backup power package" as "a stand-alone, behind-the-meter, multiday backup power source that can be used for islanding"); *id.* § 34.0204 (requiring that a TBPP be capable of "immediate islanding from the power grid and stand-alone operation for the host facility" and be "capable of operating for at least 48 continuous hours without refueling or connecting to a separate power source").

used to sell wholesale power to the grid (or retail power behind-the-meter) and would primarily be used to provide electricity to the critical facility during grid emergencies. If structured properly, a third party could own and/or operate the TBPP on behalf of the critical load facility in these circumstances, consistent with PURA, and could perform maintenance and testing services for a critical load that, for liability, tax, or whatever other reason, cannot or does not want to own the TBPP itself. While PURA has limitations on who can own and operate facilities in the state, for compensation, to transmit and distribute electricity and who can make sales of electricity at wholesale and retail in the areas of the state open to competition,[15] ownership and operation of the TBPP could be done in a way that does not violate these restrictions.[16]

Notably, the relevant statutory limitations on the different permissive providers of generation, transmission, distribution, and sales of electricity in the areas of the state open to competition have been in place since the outset of the competitive retail market in ERCOT in 2002 and are well understood in the industry. The rule need not overly dictate the structures that can be used for alternative ownership models, but could simply clarify that third-party ownership and operation is allowed if done in compliance with any applicable restrictions in PURA.

With respect to the second question, regarding metrics for measuring value, performance, and compliance for the TBPP program if third-party ownership/operation models are used, NRG submits that those issues arguably would be more easily managed if a third-party, who is familiar with operating and maintaining generation and does so as its primary business, were to own and

[15] Following the transition to a competitive retail electric market, pursuant to Senate Bill 7 (1999), in much of the Electric Reliability Council of Texas (ERCOT) region of the state, the following restrictions apply—(1) only a transmission or distribution utility (TDU) can transmit or distribute electricity, for compensation, to the public (with certain exceptions), pursuant to a certificate of convenience and necessity (CCN); (2) ownership and operation of generation for sale in the wholesale market can be done only by a power generation company (PGC); and (3) retail sales of electricity can be made only by a retail electric provider (REP). This framework is primarily accomplished through the unbundling provisions in PURA § 39.051, the definitions of the relevant entities in PURA § 31.002, the CCN requirements for electric utilities in PURA, Chapter 37, and the registration requirements for PGCs and REPs in PURA, Chapter 39, Subchapter H. Electric cooperatives and municipally owned utilities, on the other hand, had the option to transition to competition, and most have not done so. Different considerations thus apply in their service territories, and NRG is not commenting on those issues here.

[16] For example, in areas of the state open to competition, the TBPP owner/operator could register as a self-generator (rather than a PGC), because the TBPP could not be used to make wholesale sales. *See* PURA § 31.002(10) (defining PGC based on intent to make wholesale sales of electricity); 16 Tex. Admin. Code § 25.109 (requiring owners and operators of generation with a capacity of at least 1 MW to register as a self-generator if they do not meet the definition of a PGC). Additionally, the use of electricity behind the meter by the critical load (i.e., directly from the TBPP, during grid emergencies or for load management purposes or the like) could be done in a manner to avoid any sale of electricity at all (retail or wholesale), to comply with the prohibition against use of a TBPP in a "commercial energy system." Any sales of electricity to the critical load from the grid would be a retail sale that would have to be made by a REP. Further, PURA also permits self-service of electricity (including generation and other furnishing of electricity) without any registration requirements, so that would be an option for a critical facility that is able to and willing to own the TBPP itself. PURA § 31.002(6)(J)(i).

operate the TBPP, rather than the critical facility load, which, presumably, does not have experience operating or maintaining generation equipment or meeting associated compliance or performance requirements. With respect to the specific compliance and performance standards, NRG urges the Commission to focus the rule on the basic requirements set out in the statute (e.g., immediate islanding, operation for 48 continuous hours in an emergency), rather than enact additional compliance or performance requirements not set out in the statute (as is discussed more under Topic 2).

In addition to the ownership issue highlighted by this question, it would be helpful if the Commission could clarify, in the upcoming rulemaking, the ability to use TBPPs, in areas of the state open to retail competition, for peak load shaving and similar purposes. While Chapter 34 of PURA prohibits the use of TBPPs for the sale of energy or ancillary services[17] and requires that the TBPP be available to provide continuous power, for 48 hours, during a grid emergency,[18] the statute does not prohibit use of the TBPP outside of a grid emergency, for example to manage the critical facility's consumption during peak periods, so long as the TBPP operator can demonstrate that the TBPP will be available, as required, during a grid outage and will be able to immediately island from the grid in that instance.[19] Notably, using a TBPP to reduce the critical facility's load is <u>not</u> a sale of electricity or ancillary services to the grid (which was suggested at the March 20, 2025 Staff-led workshop). Instead, the use of the TBPP in those circumstances would simply reduce the energy that the critical facility consumes from the grid and purchases under the terms of its contract with its retail electric provider. The only way such an energy reduction would amount to participation in the ERCOT market (and thus potentially conflict with the statute) is if the critical facility was enrolled in and received compensation to participate in an ERCOT-directed program (such as emergency response service). But, the rule can easily avoid that situation by specifying that TBPP fund participants cannot participate in such programs.

<u>Topic 2</u>: <u>Flexibility and Applicability of Technical Specifications</u>

A. How can specifications include performance-based factors for design, installation, or operation without overly burdening a critical facility in installing or maintaining a TBPP?

As NRG has maintained in these and other comments filed in this project,[20] the technical specifications for design should be as flexible as possible (i.e., not overly prescriptive) to allow

[17] PURA § 34.0204(6).

[18] *Id.* § 34.0204(3).

[19] *Id.* § 34.0204(2).

[20] *Supra* note 2.

TBPP owners and operators to provide the best value and optimize the combination of gas/propane, solar, and batteries to provide the most cost efficient and effective backup package for the critical load. With respect to design and performance, the statute requires only that the backup power package (1) be engineered to minimize operation costs; (2) be capable of immediately islanding from the grid in an emergency to allow stand-alone operation; (3) be capable of operating for 48 continuous hours without refueling or connecting to a separate power source; (4) be sized to serve not more than 2.5 MW of load at the host facility; (5) consist of some combination of natural gas/propane, solar, and batteries (or an electric school bus); and (6) avoid participation in the energy or ancillary services market (or operation as a "commercial energy system").[21] In NRG's view, any performance standards in the rule should be based on those primary features and should not be overly rigid or attempt to add extraneous or additional performance standards. In other words, the program should be designed to further the goals of the statute to enhance resiliency and availability of backup power for critical loads in the state during an emergency, without imposing unnecessarily high hurdles for those loads to participate in the program.

B. Should the specifications vary based on the size, type of critical facility, or other criteria? If so, how and for what reasons? How can the specifications be refined to encourage participation from or integration with existing backup facilities?

NRG does not have any comments, at this time, on the first question in this section. With respect to the question about encouraging participation from or integration with existing backup facilities, the rule could clarify that critical facilities with existing backup facilities are still eligible to apply for funding under this program if the TBPP will otherwise comply with the statute and rule. As NRG has commented previously in this project, critical loads with existing backup facilities may be relying on diesel generators, and those units could be aging. Thus, such loads might still be able to benefit from this program by replacing those aging units with cleaner natural gas units and by adding more resiliency through solar panels and batteries. The rule should clarify that such entities are not ineligible from applying for funds.

C. Considering that access to natural gas or propane may be limited in different geographic areas of the state, how, if at all, can specifications be expanded to include alternative technologies and fuels?

The statute requires that the TBPP consist of either a combination of natural gas/propane, solar, and batteries or an electric school bus. NRG does not see how the rule could expand beyond those categories to include other technologies or fuels absent a statutory change (which NRG does not advocate).

[21] PURA §§ 34.0204, 34.0205(e).

Topic 3: Supply Chain & Deployment

A. *Considering vendors that may utilize alternative fuel sources or other components that can meet the performance criteria, how could the Commission consider adapting the specifications to increase the number of vendors eligible to participate in the program and support other business models?*

B. *How might other business models enable TBPP deployment by reducing the potential limitations or constraints that a critical facility may face when installing or maintaining a TBPP? What would the implications be if a critical facility exits the program?*

C. *How can vendors, including those with alternative business models, address supply chain disruptions to ensure timely deployment and adequate preparedness for emergencies?*

NRG does not have responses to each of the questions posed above, but comments more generally on this topic to reiterate its earlier suggestions that the rule should allow for vendors to apply for qualification as part of the application process for TBPP funds and that the qualification requirements should be limited to demonstrating experience with manufacturing, installing, or operating (as applicable) backup generation in ERCOT. Increasing the number of qualified entities that are eligible to manufacture, install, or operate TBPPs will benefit critical loads in terms of increasing the pool of entities that can obtain the necessary parts for the TBPP and effectively operate the TBPPs on their behalf.

The Final Report lists potential vendors, but the list is limited to manufacturers/suppliers and the like. The Final Report indicates that the list is not intended to be exhaustive,[22] and NRG agrees that there should be an opportunity for additional entities to apply for pre-qualification as a TBPP vendor (i.e., as part of the application for TBPP funding). This would be consistent with the statute, which requires all entities associated with the TBPP (from the sale and installation to the operation and ongoing maintenance of TBPPs) to be pre-qualified as vendors.[23] NRG has many years of experience as an operator and maintainer of emergency backup generation facilities for critical facilities, though it does not sell or manufacture the component parts for those facilities. The statute does not require that a single vendor be qualified to perform all the roles associated with a TBPP, but instead requires that any entity performing a role (such as operation and ongoing maintenance) must be pre-qualified and approved by the Commission. As indicated in the Final

[22] Final Report at 37 (Jan. 23, 2025) ("It is noted that the listings are not intended to be all inclusive or prescriptive, and additions to the list may be permitted at the time of individual TBPP selection for any particular site within Texas. Vendor selection would be based on years of experience as a business overall with at least five years' experience in the supply, installation and maintenance of microgrids.").

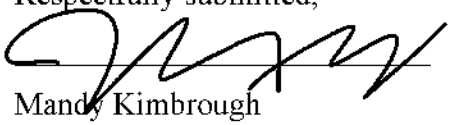
[23] PURA § 34.0205(d) ("The commission shall maintain and publish a list of approved vendors eligible to assist with the sale, installation, operation, and ongoing maintenance of Texas backup power packages.").

Report, the cost estimates from the vendors surveyed to date would far exceed the $500/kW cap on grants under the TBPP program.[24] To ensure that critical facilities have access to the broadest range of qualified and cost-effective vendors, it would be helpful for the Commission's rule to clarify the process and timeline for pre-qualifying additional vendors to participate in the TBPP.

III. CONCLUSION

NRG appreciates the Commission's leadership on the development and implementation of the Texas backup power package program and looks forward to the opportunity to continue working with the Commission and Staff to develop the rules needed to ensure its success.

Respectfully submitted,



Mandy Kimbrough
Senior Counsel, Regulatory Affairs
State Bar No. 24050613
NRG Energy, Inc.
1005 Congress Avenue, Suite 950
Austin, Texas 78701
(512) 691-6156
mandy.kimbrough@nrg.com

[24] *Id.* § 34.0205(b).

ATTACHMENT A – NRG ENERGY, INC.'S EXECUTIVE SUMMARY

- NRG appreciates the work of the Texas Backup Power Package (TBPP) Advisory Committee, Patrick Engineering, Inc., and Commission Staff to date in helping to scope the TBPP program and identify the primary issues that will need to be addressed to make the program successful.
- The rule should allow for maximum flexibility in terms of technical specifications, performance requirements, and ownership models to ensure maximum participation in this program by the intended beneficiaries of the program—critical facilities on which communities rely for health, safety, and well-being.
- The statute sets out only a few requirements for this program—e.g., the fuel/technology combination (natural gas/propane+solar+batteries or electric school bus), the size (up to 2.5 MW), the basic operational requirements (capable of immediate islanding in an emergency and operating continuously for 48 hours without refueling or connecting to another electricity source), the cost (minimize costs), and commercial status of the TBPP owner/operator (no participation in energy or ancillary services markets and no commercial energy systems).
- The rule need not get bogged down in attempting to legislate every aspect of the technical specifications or performance requirements of the TBPPs, but should instead focus on the primary requirements listed above.
- There are ways that third-party entities can structure ownership and operation of the TBPPs to comply with relevant restrictions in the Public Utility Regulatory Act, without requiring ownership/operation by the critical facility loads, who do not own and operate generation facilities as their primary business and may have tax, liability, or other reasons for not being able, or willing, to do so. The third-party entities operating in this space are generally familiar with how to accomplish that, and the rule need not dictate the particulars on this topic.
- The rule should also allow a critical load to maximize the benefit from its TBPP by using the TBPP to reduce or manage its energy consumption from the grid during peak conditions and the like. Such uses would simply reduce the amount of electricity the critical load is consuming from the grid and would not contravene the statutory prohibitions against avoiding energy or ancillary services sales, so long as the critical load is not using the TBPP to participate in, and be compensated for, ERCOT-directed programs.
- The Commission should clarify that entities that operate and maintain, but do not manufacture, supply, or install TBPPs or component parts, can qualify as a vendor for the program as part of the application process for TBPP funds. The more qualified vendors that can participate in the program, the better the availability and quality of TBPPs will be for the critical loads who wish to participate in the program.