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REPORTS OF THE ELECTRIC § PUBLIC UTILITY COMMISSION
RELIABILITY COUNCIL OF TEXAS § OF TEXAS

ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.’S
UPDATE REGARDING RELIABILITY MUST-RUN- AND MUST-RUN
ALTERNATIVE-RELATED ACTIVITIES

Electric Reliability Council of Texas, Inc. (“ERCOT”) provides an update regarding the process of potentially entering into one or more agreements for Reliability Must-Run (“RMR”) or Must-Run Alternative (“MRA”) service as a result of CPS Energy’s planned retirement of three Generation Resources: BRAUNIG_VHB 1 (217 MW), BRAUNIG_VHB2 (230 MW), and BRAUNIG_VHB3 (412 MW) (hereinafter, “the Braunig Resources”) on March 31, 2025. The total Summer Seasonal Net Maximum Sustainable Capacity of the Braunig Resources represents 859 MW of dispatchable capacity to the Texas power grid. As discussed in more detail in prior filings with the Public Utility Commission of Texas (“the Commission”) and an April 22, 2024 Market Notice, the Braunig Resources have been identified as needed to support ERCOT System reliability beyond their proposed retirement date (March 31, 2025).¹ In summary, without the Braunig Resources, there is a material impact on transmission facilities in and around the San Antonio area and South Texas region that are critical to ERCOT System reliability.

As required under the Protocols, ERCOT has begun negotiations with CPS Energy regarding the potential provision of RMR service by one or more of the Braunig Resources; simultaneously, a Request for Proposal (“RFP”) seeking Must-Run Alternative (“MRA”) resources as lower-cost alternatives has been issued and is under process. This RFP was issued on July 25, 2024.² In the RFP, ERCOT notes the operational characteristics required to eliminate the identified performance deficiencies on overloading the transmission facilities. Further, the RFP identifies the need for capacity across all Seasons, starting from Spring 2025 through at least Spring 2027 – thus, two years of need across certain hours of the day. MRA proposals are due to

¹ See e.g. PUC Project No. 55999, Item No. 30, Electric Reliability Council of Texas, Inc.’s Notice of Reliability Analysis Determination and Request for Good Cause Exception (Apr. 23, 2024); ERCOT Market Notice M-C031324-03, Reliability Analysis Determination for CPS Energy (BRAUNIG_VHB1 BRAUNIG_VHB2, and BRAUNIG_VHB3), available at https://www.ercot.com/services/comm/mkt_notices/M-C031324-03.

² The MRA RFP, including its attachments are available at <https://www.ercot.com/about/procurement/rfp> under the “Request for Proposal for Must-Run Alternative for Braunig Must-Run Reliability Agreement” heading.

ERCOT on September 9, 2024. Additional reliability analysis details will be provided when ERCOT amends the RFP later this month.

One issue currently under discussion with CPS Energy that ERCOT brings to the Commission's attention is the need for inspection and repair of the Braunig Resources if they were to continue to operate beyond the proposed retirement date of March 31, 2025. Attached is a letter from CPS Energy's Vice President of General Operations, Richard Urriata, Jr., explaining CPS Energy's perspective on the safety and operational reliability concerns associated with the Braunig Resources (Attachment A). The proposed retirement date (March 31, 2025), in late spring 2025, raises a significant timing issue regarding any such inspections or potential repairs to address the safety and operational reliability concerns. As CPS Energy notes in its letter, an inspection of each Braunig Resource will take approximately 60 days to determine the condition and potential next steps for any repairs. An additional pressure point is contracting with an inspector in time to do the inspection in the fall. CPS Energy has informed ERCOT that an inspector would need to be engaged by the end of the month (August 31, 2024) in order to start preparing for a fall outage.

ERCOT is discussing with CPS Energy whether all three of the Braunig Resources – or at a minimum unit BRAUNIG_VHB3 (412 MW) (hereinafter, “unit 3”) which is the newest and has the largest MW capacity of the three units proposed for retirement – should be placed on outage, inspected, and potentially repaired before the proposed retirement date (March 31, 2025). Again, such discussions are informed by CPS Energy's explanations that the outage and repair of each unit must be staged, each taking approximately 60 days for just the inspection, and additional time may be required, depending on the results of the inspections to repair the units. From ERCOT's perspective, waiting until April 2025 to begin such inspections (and associated repairs) would be too late and may create an unacceptable reliability risk because doing so risks one or more of the Braunig Resources being unavailable during summer 2025. (Summers 2025 and 2026 are projected to be the Seasons during which the Braunig Resources or MRAs are most needed to address risks of overloading the transmission facilities that are subject to the South Texas Export Interconnection Reliability Operating Limits.) Inspection of unit 3 as early as this fall has the added benefit of providing additional cost information to the ERCOT Board of Directors (“ERCOT Board”) when it will consider whether to approve one or more agreements for RMR service with CPS Energy or MRA service with Qualified Scheduling Entities (“QSEs”) representing MRA resources. For example, inspection of a unit could reveal the need for replacements that are cost-

prohibitive and therefore no need to further consider an RMR agreement. The ERCOT Board is expected to consider the matter of procuring one or more RMR and/or MRA agreements at its October 9 and 10, 2024 meetings, and may potentially defer a final decision until its December 2 and 3, 2024 meetings to allow more information to come forward for their final decision.

ERCOT's and CPS Energy's discussions have also, necessarily, addressed compensation to CPS Energy for the costs of such outages, inspections, and potential repairs that would occur prior to any RMR agreement. CPS Energy's estimates include costs for the outages (including opportunity cost of not operating during periods in which the Braunig Resources were otherwise scheduled to be available to run, general funds transfers, and an incentive factor), inspections, and anticipated repairs, including those required for unit-life extensions. Attached to the CPS Energy letter (Exhibit A) is additional information regarding CPS Energy's estimated total outage, life extension, and opportunity costs for each of the Braunig Resources. The methodology and amounts for opportunity costs discussed by CPS Energy could change as ERCOT and CPS Energy continue negotiations on those topics. To that point, ERCOT expects to make a future filing updating the Commission before its August 29, 2024 Open Meeting.

The ERCOT Protocols contemplate the Eligible Costs recoverable under an RMR agreement which does include the costs of maintenance outages.³ However, such outages are presumed to take place during the contracted RMR service period, not as a precondition for the provision of RMR service. Additionally, the ERCOT Protocols recognize a need to provide for recovery of opportunity costs under limited, specific circumstances, but has not been traditionally associated with RMR costs.⁴ ERCOT is considering settlement methods that would compensate CPS Energy for its estimated costs, soon after such costs are incurred and subject to reconciliation and resettlement, after CPS Energy demonstrates their actual costs. All such costs would be borne by Load Serving Entities, allocated on a load-ratio-share basis.

Because these costs could be incurred before an ERCOT Board decision in October or December, and delay of the Braunig Resource outages until April 2025 and later would pose increased risk of outages or unavailability during the summer of 2025, ERCOT appreciates an opportunity to get Commission feedback on this potential approach before it is taken. As

³ See ERCOT Protocols Sections 3.14.1.10(1)(a)(v) and 3.14.1.11(4)(c)(ii).

⁴ See e.g. ERCOT Protocols Sections 5.6.5.2(1)(c), providing the formula for calculating a Resource's Outage Schedule Adjustment Make Whole Cost.

previously noted, whether to place one or more of the Braunig Resources on outage for inspection and potential repair before the proposed retirement date (March 31, 2025) is based on a reliability risk assessment and ensuring that some dispatchable capacity is potentially available starting in April 2025.

There are no easy paths to making this decision, but ERCOT, as the Texas grid operator and reliability coordinator for the ERCOT Region, wants to ensure that the Commission has all available information as ERCOT starts to make decisions on the path forward to address the regional deficiencies. ERCOT appreciates the Commission's consideration of this update and will attend the Commission's August 15 and 29 Open Meetings to address any Commissioner comments or questions.

August 8, 2024

Respectfully submitted,

/s/ Chad Seely

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ATTORNEYS FOR ELECTRIC RELIABILITY
COUNCIL OF TEXAS, INC.



August 8, 2024

Mr. Chad V. Seely
Senior VP, General Counsel & Corporate Secretary
Electric Reliability Council of Texas
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Austin, Texas 78744

Re: CPS Energy Pre-RMR Work

Dear Chad:

CPS Energy is providing this information at ERCOT's request in support of the terms that are being discussed regarding the need for inspection and maintenance for CPS Energy's three Braunig generation units prior to the execution of a Reliability Must Run (RMR) contract with ERCOT. Given that the units are at end of life, without conducting pre-RMR outages to open the units and determine the condition of internal equipment components, it will be difficult to provide ERCOT a reliable budget of proposed repairs and equipment replacements for each unit. This information is critical to negotiate an RMR contract as well as to provide ERCOT with reliable budgetary information for consideration of a potential Must-Run-Alternative (MRA) agreement that might provide a more cost-effective generation resource alternative than the RMR contract for the Braunig units. Over the last two decades, the three Braunig units have required significant steam turbine rotor repairs, and boiler tube leaks have caused frequent unplanned outages. In 2019, CPS Energy undertook work to extend the life of the units for an additional five years. The proposed pre-RMR maintenance outages and associated work represent a similar investment to further extend the life of the units per the RMR process. Without conducting these pre-RMR outages and the associated maintenance work, the Braunig units cannot be safely operated beyond their retirement date. The pre-RMR expenses also include lost revenues that CPS Energy would experience from being unable to sell wholesale power from the three Braunig units during the proposed outage period of October 2024 thru March 2025. We have provided ERCOT a calculation for recovery of this lost opportunity cost. *To facilitate public discussion of these competitively sensitive calculations, we have prepared Exhibit A (attached) to provide an estimate of the total pre-RMR outage costs, pre-RMR life extension costs and pre-RMR lost opportunity costs for each of the Braunig units. The exhibit also includes the methodology used to derive the lost opportunity costs and an explanation of the life extension costs.*

CPS Energy is very experienced with the operational characteristics of its Braunig units, having operated them for over 50 years. For decades, CPS Energy has maintained, repaired, and upgraded the units to be assured that it can continue to operate them safely through the proposed retirement date of March 31, 2025. Beyond the retirement date, CPS Energy does not currently have engineering confidence to continue to operate the Braunig units safely and reliably.

The March 31, 2025, retirement date for the Braunig units has been a long-term plan and ERCOT was notified of this timeline on March 13, 2024, over a year before the retirement date.



We are running the units this year and completed all necessary repairs and maintenance to ensure the safe and reliable short-term functioning of the units through retirement. However, because these units have been scheduled to be removed from service, CPS Energy has not prepared to conduct additional equipment and system inspections (and repairs) that are required for extended safe and reliable unit operation. The inspections are required by good utility practice before committing to operate the units for any additional amount of time beyond the currently planned shut-down date. Our best assessment from an engineering perspective is that it would not be prudent to commit to an extended period of continued operation without inspecting each unit for potential safety and operational issues.

This conclusion by CPS Energy engineers has been confirmed by an independent engineering review. CPS Energy engaged Sargent & Lundy to conduct an engineering extension of life assessment for each Braunig unit to determine the inspection and/or maintenance activities needed to continue operation safely and reliably for any additional amount of time beyond their planned retirement date. Sargent & Lundy's preliminary engineering assessment recommends taking maintenance outages to disassemble and inspect major power plant equipment to determine the extent to which each unit requires major component repairs and/or replacements. Sargent & Lundy is working diligently to complete the analysis, which will be provided to ERCOT as confidential and competitively sensitive information once it is complete.

The safety of employees operating its generating units is always a top priority of CPS Energy, as it is with any responsible utility. Preliminary analysis has already identified certain issues indicating that some repair and maintenance work will be required. Operating units with known operational issues increases safety and reliability risks. Properly identifying and conducting whatever correctional work is shown to be required by an appropriate inspection is a threshold requirement for continued operation of these units during the RMR period. Some examples of maintenance that is due to be performed at Braunig 1, 2, and 3 units based on Original Equipment Manufacturer recommendations as well as industry best practices include: (1) steam turbine rotor and valve inspection and maintenance; (2) large pump and 4160V motor inspection and maintenance including circulating water pumps; (3) boiler and auxiliary equipment inspections and repairs including boiler tube systems, ignitors, forced draft fans and air preheaters; (4) high energy pipe inspections; and (5) critical electrical cable testing.

CPS Energy has developed an appropriate standard cadence to perform these inspections and to perform repairs to mitigate risks of failures to equipment which could result in safety incidents and/or lost generation. If planned maintenance outages are not performed prior to the summer of 2025, these normal inspection intervals would be exceeded. Preventive maintenance is critical to the safe and reliable operation of power plants. We know from our operational expertise that equipment will eventually fail if maintenance is not performed, and we have experience with equipment failure due to deferred maintenance.

The inspection of each unit as recommended by CPS Energy and Sargent & Lundy will require an outage for each unit of approximately 60 days with the understanding that each outage may require more time based on inspection results. Furthermore, these inspections could result in findings that may categorize the units as unsafe to operate without substantial equipment repairs



or replacements, and availability of replacement parts could present challenges in executing repairs or replacements. The outages will be sequenced and will focus on the units in order of size and value to ERCOT for RMR purposes. This will enable CPS Energy and ERCOT to identify any repair and/or replacement of parts needed in a prioritized manner. In addition, power plant design constraints prevent the outages from being executed concurrently.

To undertake this outage inspection process, compensation for pre-RMR contract inspection, maintenance and repairs is necessary because the work that will be performed is not work that CPS Energy would do for units scheduled for closing. Working with outside engineering support, we have calculated outage cost estimates and submitted them to ERCOT. The cost estimates submitted include inspection and some minor repairs (e.g., gasket replacements, cleaning, etc.). Also included is the lost opportunity cost resulting from the inability to run these units as they are currently scheduled during the time-period from October 2024 through March 2025. We believe these costs are reasonably recoverable because the outages each unit will take for the pre-RMR inspection process are not currently planned and the down time will result in an economic loss caused directly by the RMR request. We have provided details of our calculation of lost opportunity cost to ERCOT for review separately as confidential and competitively sensitive information. *Of course, the lost opportunity costs may be avoided if outages for the Braunig units are taken starting April 1, 2025.*

ERCOT has determined the Braunig generation units are needed for the continued reliability of the ERCOT system. Conducting unplanned pre-RMR maintenance outages for the Braunig units is a necessary first step in the RMR process to ensure the safe and reliable operation of the power plants for any additional amount of time beyond their planned retirement date.

We will be happy to provide any further information ERCOT needs in order to evaluate these issues.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. J. Urrutia Jr.", written over a white background.

Richard J. Urrutia Jr.
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Exhibit A

Estimated Pre-RMR Outage, Pre-RMR Life Extension, and Lost Opportunity Costs

Braunig Unit	Estimated Pre-RMR Outage Cost	Estimated Pre-RMR Life Extension Cost*	Estimated Pre-RMR Lost Opportunity Cost
Unit 1	\$9,695,000	\$4,515,000	\$3,105,111
Unit 2	\$9,065,000	\$6,574,000	\$2,400,007
Unit 3	\$10,950,000	\$4,515,000	\$6,533,392
Total Unit Costs	\$29,710,000	\$15,604,000	\$12,038,510

Methodology for Calculating Lost Opportunity Cost

The Lost Opportunity Cost is expressed by the following formula:

$$\text{Lost Opportunity Cost} = \text{Estimated Gross Revenues} - \text{Estimated Total Production Cost}$$

The individual calculations for each component of the formula are as follows:

- **Estimated Gross Revenues** – Forward power market prices for 5x16 On-Peak product delivered to HB_SOUTH were marked on 6/18/2024 for the months associated with the proposed outage dates for each Braunig unit. The unit capacity was multiplied by the PeakWD Time-of-Use (TOU) hours and then multiplied by the forward power market prices described above. The Estimated Gross Revenue values have been provided to ERCOT.
- **Estimated Total Production Cost** – This cost includes estimated startup, fuel, and Variable O&M costs of each Braunig unit to supply 100% of the MWh quantities associated with the respective power sales. An estimated forward Houston Ship Channel (HSC) index fuel price, marked on 6/20/2024, was used for calculating the estimated production fuel cost. The Estimated Total Production Cost values have been provided to ERCOT.

*Life Extension Costs will be more precisely identified when the units are opened for inspection. Although this may be considered RMR contract work, some of the Life Extension work can be performed during the pre-RMR outage. The estimates for this work are shown in the third column above. Due to long lead time parts and material availability, the remainder of the Life Extension work will need to be performed later during the RMR contract period. Performing as much Life Extension work as possible during the pre-RMR outage should reduce expense and reduce outage time during the RMR contract period.

