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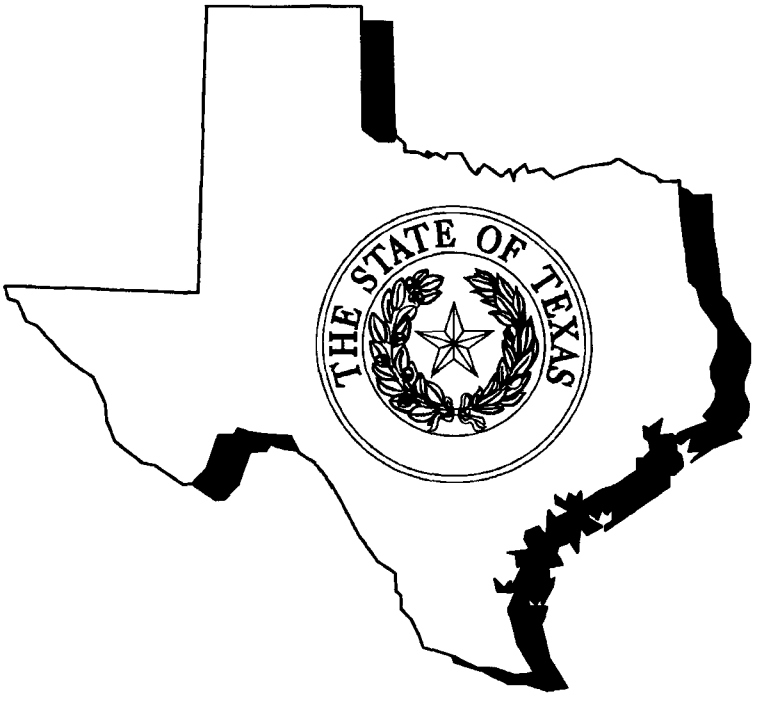
SOAH DOCKET NO. 473-20-2278

PUC DOCKET NO. 50277

APPLICATION OF EL PASO ELECTRIC COMPANY TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR AN ADDITIONAL GENERATING UNIT AT THE NEWMAN GENERATING STATION IN EL PASO COUNTY AND THE CITY OF EL PASO	§	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**



DIRECT TESTIMONY OF

DAVID BAUTISTA P. E.

INFRASTRUCTURE DIVISION

PUBLIC UTILITY COMMISSION OF TEXAS

May 12, 2020

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ATTACHMENTS:

I. QUALIFICATIONS

Q. Please state your name, occupation and business address.

A. My name is David Bautista. I am employed by the Public Utility Commission of Texas (the Commission) as an Engineer in the Infrastructure Division. My business address is 1701 North Congress Avenue, Austin, Texas 78711-3326.

Q. Please outline your educational and professional background.

A. I have a Bachelor of Science in Electrical Engineering from Texas A&M University-Kingsville. I completed my degree in December of 1999 and have been employed at the Commission since April 2018. A more detailed summary of my experience is provided in Attachment DB-1.

Q. Are you a registered professional engineer?

A. Yes, I am a registered Professional Engineer in Texas and my member number is 103418.

Q. Have you filed testimony at the Commission in previous cases?

A. Yes. A list of the dockets in which I have filed testimony is provided as Attachment DB-2.

II. SCOPE OF TESTIMONY

Q. What is the purpose of your testimony in this case?

A. The purpose of my testimony is to present a portion of Commission Staff's recommendations concerning El Paso Electric Company's (EPE) application

(Application) to amend its Certificate of Convenience and Necessity (CCN) for the purposes of adding a 228-megawatt (MW) natural-gas-fired generating unit at the Newman Generating Station in El Paso County and the City of El Paso, Texas.[1]

Q. What are the statutory requirements that a utility must meet to amend its CCN to construct a new generation facility?

A. Section 37.056 of the Public Utility Regulatory Act (PURA)[2] states that the Commission may approve an application or grant a certificate only if the Commission finds that the certificate is necessary for the service, accommodation, convenience, or safety of the public. Further, the Commission shall approve, deny, or modify a request after considering the factors specified in PURA § 37.056(c), which are as follows:

(1) the adequacy of existing service;

(2) the need for additional service;

(3) the effect of granting the certificate on the recipient of the certificate and any electric utility serving the proximate area; and

(4) other factors, such as:

(A) community values;

(B) recreational and park areas;

(C) historical and aesthetic values;

(D) environmental integrity;

[1] *See* Application of El Paso Electric Company to Amend Its Certificate of Convenience and ok Necessity for an Additional Generating Unit at The Newman Generating Station in El Paso County and The City Of El Paso at 1 (Nov. 22, 2019) (Application).

[2] Public Utility Regulatory Act, Tex. Util. Code §§ 11.001–58.303 (West 2016), §§ 59.001–66.017 (West 2007 & Supp. 2016) (PURA).

(E) the probable improvement of service or lowering of cost to consumers in the area if the certificate is granted; and

(F) to the extent applicable, the effect of granting the certificate on the ability of this state to meet the goal established by Section 39.904(a) of this title.

Q. What issues identified by the Commission must be addressed in this docket?

A. In the Preliminary Order filed on February 27, 2020 in this docket, the Commission identified the issues to be addressed in this proceeding.

Q. Which issues in this proceeding have you addressed in your testimony?

A. I have addressed issues 1, 2, 3, 4, 11, 13, 14, 16, 17c, 20, and, 22, of the Preliminary Order and the requirements of the Texas Public Utility Regulatory Act, Tex. Util. Code § 37.056 (West 2016) and 16 Tex. Admin. Code (TAC) § 25.101.

Q. What have you relied upon or considered to reach your conclusions and make your recommendations?

A. I have conducted a thorough review and analysis of the Application and its attachments. I have considered pertinent information contained within the direct testimonies of EPE's witnesses and the intervenors, as well as written responses to Requests for Information (RFIs) provided.

III. RECOMMENDATIONS

Q. What recommendations do you have regarding the Application?

A. I recommend that the Commission approve EPE's Application to amend its CCN in order to construct, own, and operate the addition of a new natural gas-fired generation unit with

the approximate capacity output of 228 MW at EPE's existing Newman Generating Plant in El Paso, Texas.

IV. PROJECT JUSTIFICATION

A. DESCRIPTION OF THE PROJECT

Q. Please briefly describe the proposed project.

A. EPE is seeking authorization to construct, own, and operate a new natural gas-fired generation unit with the approximate capacity output of 228 MW. This unit is needed to meet the load growth, reliability (margin) criteria, and to replace three older units that are due for retirement in the next several years.[3] This unit will be housed in EPE's existing Newman Generating Station in the City of El Paso, Texas and is anticipated to be in service to meet the 2023 summer peak.[4] EPE states that the total cost for this project is approximately $157.6 million, including AFUDC.[5] The additional cost to interconnect at the Newman substation will be $6.2 million.

[3] *See* Application at 3.

[4] Pre-filed Direct Testimony of Omar Gallegos at 2-3 (Nov. 22, 2019) (Gallegos Direct).

[5] Application at 4.

Q. Is the proposed project located within the incorporated boundaries of any municipality?

A. Yes. The project will be located within the incorporated boundaries of the City of El Paso, Texas.

Q. Does any part of this project lie within the Texas Coastal Management Program (TCMP) boundary?

A. No.

Q. From what other regulatory authorities has EPE or an EPE-affiliated company sought approval for this transaction?

A. EPE also provides retail service in New Mexico. EPE is also seeking approval to construct Newman Unit 6 from the New Mexico Public Regulatory Commission.[6]

B. NEED FOR THE PROJECT

Q. As described by EPE what need would be fulfilled by the proposed project?

A. EPE's Application states that the proposed project will add capacity to the electric system that will be necessary to meet their project growth needs. Native system peak demand is projected to increase from 1,929 MW in 2018 to 2,528 MW in 2,038 in EPE's service territory.[7]

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[6] Application at 6.

[7] Pre-filed Direct testimony of George Novela at 4-5 (Nov. 22. 2019)

EPE also states that the project is necessary to replace old less efficient generators that are due for retirement. The Newman Generating Station houses two units (Units 1 and 2) and the Rio Grande Generating Station house one unit (unit 7). Units 1, 2, and 7 will be 62, 59, and 64 years in service, respectively, at the end of the planned retirement date.[8] All three will have reached the end of their 60-year life cycle.[9] Combined, all three are gas-fired generation units that provide a collective capacity of 196 MW. EPE will replace these units with one Simple Cycle 228 MW gas turbine unit (Unit 6) to offset the retirement of the above-mentioned units and provide additional capacity for load growth.

Q. Does the proposed project meet other needs or provide other system benefits, in addition to unit replacement and capacity for load growth?

A. Yes, EPE follows the advice by the North American Electric Reliability Corporation (NERC) to provide a capacity margin for its geographic region. This margin is the difference between available generation and peak demand on the system. EPE's recommended margin is 15.1 percent and represents the percent of capacity available in excess of peak system demand. Additionally, EPE is a member of the Southwest Reserve Sharing Group (SRSG). The SRSG is a subgroup of WECC that works together in sharing power during contingencies in order to comply with NERC reliability standards.[10] In the event of a need within the SRSG or the loss of, or decrease in output from, other

[8] Gallegos Direct at 14.

[9] *Id.* at 12.

[10] Pre-filed Direct testimony of David C. Hawkins at 6-7 (Nov. 22, 2019) (Hawkins Direct).

EPE generation resources, EPE needs to be able to quickly increase its generation at will. Units 1 and 2 that will be retired from operation at the Newman site are conventional, intermediate duty, or load following type, and do not have the capability to be started and shutdown quickly on a daily basis.[11] Therefore, the existing units cannot provide this quick-start capability, and, thus, they have not been able to provide this necessary flexibility to EPE's fleet. The proposed Simple Cycle unit will provide the quick-start capability necessary for EPE to meet and maintain NERC's 15.1 percent margin recommendations.

Q. Does the proposed project provide a reliability benefit to the system?

A. In my opinion, yes. As stated previously in my testimony, EPE needs to replace generators that are old, inefficient, and recommended for retirement. EPE also needs to address the load growth in the system, as well as its margin obligations.

Q. Do you believe that the proposed project is necessary for the service, accommodation, convenience, or safety of the public as required by PURA § 37.056?

A. Yes. EPE needs to add a new generator and help offset the capacity of the soon to be retired units. Additionally, the proposed project will provide the capacity needed to address the growth, as well as the margin requirements as stated previously.

[11] Hawkins Direct at 4.

C. PROJECT ALTERNATIVES

Q. Did EPE consider importing power at the transmission level to meet their capacity needs?

A. Yes. However, EPE is located in the far southeastern corner of the Western Electricity Coordinating Council (WECC). Due to their physical location, EPE has only two transmission paths to their service territory. The electrical characteristics of these two transmission paths impose limits on how much firm power they can import. [12] An outage on any of these lines can impose a serious reliability problem on EPE's electric system. Import capacity outside these two paths is considered by EPE as non-firm and is not considered in a long-term planning solution. EPE states that non-firm transmission capacity is unknown.[13] Because of these constraints, EPE cannot use power importation via transmission lines as a long-term planning answer to meet their needs.

Q. Did EPE consider alternatives to the proposed gas-fired Generating Station?

A. Yes. As stated previously, EPE's geographic location within the WECC limits the import of firm capacity to only two paths into their service territory. EPE also studied solar and wind generation projects as alternatives to gas-fired generation and concluded that, due to resource variability and load characteristics, these types of resources could not fully

[12] Gallegos Direct at 9.

[13] *Ide.*

displace gas generation on the EPE system while providing adequate reliability.[14] This issue is addressed more fully in the testimony of Staff witness Reginald Tuvilla.

Q. Would wind or solar generation resources be able to provide the at will dispatchability you discussed above that EPE needs to maintain its FERC-recommended 15.1 percent margin?

A. No. Solar is considered non-dispatchable in that it is only generated when the sun is shining in the daytime, decreasing significantly in the late afternoon, and none at night. Also, solar energy is intermittent as it can be reduced during substantial cloud cover or other weather-related events. These solar characteristics present a risk of falling below expected output.[15] Wind generation is less consistent, and more variable compared to solar. First, wind generation has its lowest output during the daytime hours when EPE has its highest demand during summer peak months. Second, wind generation projection has its lowest output levels during July and August while EPE has its highest peak hours during June to August.[16] It seems that wind does not offer firm output for meeting peak load that EPE needs.

[14] Gallegos Direct at 33.

[15] Gallegos Direct at 22.

[16] Gallegos Direct at 25.

D. PROJECT COSTS

Q. What are the costs of the Newman Generating Station?

A. As stated previously in this testimony, the estimated cost for this project is approximately $157.6 million. However, the interconnection study required by the Open Access Transmission Tariff (OATT) has not been completed. EPE estimates that this tariff will add an $6.2 million of costs to the project.[17]

Q. Does the cost of the project appear to be reasonable?

A. From the engineering perspective, yes. As stated earlier, EPE will retire three inefficient rotating machines and replace them with one unit that is more efficient. A cost analysis provided by EPE shows that the Newman Unit 6 addition will have a fuel savings of $4.3 million in one year in comparison to the three old units.[18] This addition also allows EPE to re-use existing facilities such as the generating plant, existing transmission lines, and existing gas line to continue to provide power. Re-using existing facilities avoids additional infrastructure costs as well as impact to the ground disturbance and community values.

[17] Application at 4.

[18] El Paso Electric Company Response to Commission Staff Second of Interrogatories and Requests for Production of Documents Question Nos. Staff 2-1 Through Staff 2-2, Response to Staff 2-2(b) at 3 (April 21, 2020).

E. OTHER FACTORS

Q. Has EPE addressed community values, recreational and park areas, historical and aesthetic value, and environmental integrity?

A. Yes. This project is a retrofit type project and will be constructed inside existing facilities. Such facilities currently have available two gas pipelines and an existing transmission grid. New construction outside the premises such as transmission line re-connect and natural gas pipelines will be minimal. Therefore, there will be minimal direct impact on the community.[19]

The closest park is 1.5 miles from the Newman Generating Station boundary.[20]

There are no archaeological sites listed on the National Register of Historic Places within one-half mile of the Newman Generating Station.[21]

There are no residential areas within one-half-mile of the Newman Generating Station[22]

EPE's project will be built inside the existing Newman power plant grounds. Additional environmental impact inside the plant and the surrounding areas should be minimal.[23] The existing site requires no new ground disturbance for either the generating or the

[19] Pre-filed Direct testimony of Jessica Christianson at 9 (Nov. 22, 2019).

[20] *Id.* at 8.

[21] *Id.* at 8.

[22] *Id.* at 9.

[23] *Id.* at 12-13.

supporting infrastructure. Minimizing ground disturbance reduces potential impacts to soils, water resources, vegetation, wildlife, and cultural resources.[24]

V. CONCLUSION

Q. What conclusion within the scope of your evaluation have you made about EPE's Application to add a generating unit at the Newman Generating Station?

1. The proposed project is necessary for the service, accommodation, convenience, or safety of the public within the meaning of PURA § 37.056(a), and takes into account the factors set out in PURA § 37.056(c), and
2. The proposed project is the best option to meet the planning reserve margins, growth demands and the replacement of ageing inefficient units.

Q. Do you have any other comments?

A. Yes. My responsive testimony is limited to the subject matters referenced. The Commission and stakeholders should not infer my agreement with, or support of any subject matter, not covered.

Q. Does this conclude your testimony?

A. Yes

[24] *Id.* at 7.

Qualifications of David Bautista

In December 1999, I received a Bachelor of Science in Electrical Engineering from Texas A&M University-Kingsville. In June of 2009, I passed my professional engineering exam in power engineering and received my professional engineering license (TX License 103418).

I joined the Public Utility Commission in April 2018 as an Engineering Specialist for the Infrastructure and Reliability Division. Prior to that, I worked one year as an engineering teacher for Southwest Independent School District in San Antonio. Prior to being a teacher, I worked in the electric utility business as an engineer for various companies in Texas as well as in North Dakota.

I started my career as an underground distribution engineer for City Public Service in San Antonio. I was responsible for three-phase commercial design of underground distribution circuits. I also served as a project manager for all my designs, which included overhead to underground conversions, system improvements, military bases and commercial applications.

After two short tenures at Austin Energy and Rio Grande Electric Cooperative, I joined Bluebonnet Electric Cooperative (BEC). I started as a System Engineer I and progressed to the System Engineer III level. At BEC, I was responsible for system protection, system planning, power factor correction, and other distribution engineering needs.

In addition to my utility experience, I also worked as an Engineering Consultant for more than two years. As a consultant, I provided engineering solutions to various utility companies throughout the State of Texas. Such solutions included design of 12.5kV to 34.5kV projects, system protection, distribution planning, construction specifications, development of load trees for steel and concrete pole fabrication, development of sag/tension charts, and equipment specifications.

EXIBIT DB-2

List of Previous Testimony

Docket No. 48212
APPLICATION OF GOLDEN SPREAD ELECTRIC COOPERATIVE, INC. TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE CONVERSION OF THE COLORADO RIVER MUNICIPAL WATER DISTRICT'S PRIVATE 69-KV TRASNMISSION LINE TO PUBLIC USE IN CONCHO COUNTY.

Docket No. 48785
JOINT APPLICATION OF ONCOR ELECTRIC DELIVERY COMPANY LLC AND AEP TEXAS INC. TO AMEND CERTIFICATES OF CONVENIENCE AND NECESSITY FOR A DOUBLE-CIRCUIT 345-KV TRANSMISSION LINE IN PECOS, REEVES, AND WARD COUNTIES, TEXAS (SAND LAKE-SOLSTICE CCN).

Docket No. 48668
JOINT APPLICATION OF SHARYLAND UTILITIES, L.P. AND CITY OF LUBBOCK. TO AMEND CERTIFICATES OF CONVENIENCE AND NECESSITY FOR THE ABERNATHY TO WADSWORTH 345-KV TRANSMISSION LINE IN HALE AND LUBBOCK COUNTIES, TEXAS.

Docket No. 48950
APPLICATION OF TEXAS-NEW MEXICO POWER COMPANY TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE PROPOSED FAULKNER TO ALPINE 138-KV FEED PROJECT IN REEVES COUNTY, TEXAS.

Docket No. 49494
APPLICATION OF AEP TEXAS INC. FOR AUTHORITY TO CHANGE RATES.