BEFORE THE

NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE APPLICATION OF EL PASO ELECTRIC COMPANY FOR APPROVAL TO IMPLEMENT A TIME-VARYING RATE PILOT PROGRAM	)	**CASE NO. 22-00113-UT**
EL PASO ELECTRIC COMPANY,	)	
APPLICANT.	)	

DIRECT TESTIMONY

OF

COURTNEY LANE

ON BEHALF OF
THE NEW MEXICO DEPARTMENT OF JUSTICE

July 12, 2024

Table of Contents

I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name, title, and employer.

A. My name is Courtney Lane. I am a Principal Associate at Synapse Energy Economics ("Synapse"), located at 485 Massachusetts Avenue, Suite 3, Cambridge, MA 02139.

Q. Please describe Synapse Energy Economics.

A. Synapse is a research and consulting firm specializing in electricity and gas industry regulation, planning, and analysis. Our work covers a range of issues, including economic and technical assessments of demand-side and supply-side energy resources; energy efficiency policies and programs; integrated resource planning; electricity market modeling and assessment; renewable resource technologies and policies; and climate change strategies. Synapse works for a wide range of clients, including attorneys general, offices of consumer advocates, public utility commissions, environmental advocates, the U.S. Environmental Protection Agency, the U.S. Department of Energy, the U.S. Department of Justice, the Federal Trade Commission, and the National Association of Regulatory Utility Commissioners. Synapse has over 40 professional staff with extensive experience in the electricity industry.

Q. Please summarize your professional and educational experience.

A. I have 20 years of experience in energy policy and regulation. At Synapse, I work on issues related to performance-based regulation, grid modernization, benefit-cost analysis, rate and bill impacts, and review of distributed energy resource and electric vehicle utility filings. Prior to working at Synapse, I was employed by National Grid as the Growth Management Lead for New England where I oversaw the development of customer

products, services, and business models for Massachusetts and Rhode Island. In previous roles at National Grid, I worked on the deployment of non-wires alternatives and grid modernization efforts and led the development of the Rhode Island electric and natural gas energy efficiency plans. Prior to joining National Grid, I worked on regulatory and state policy issues pertaining to energy conservation, retail competition, net metering, and the Alternative Energy Portfolio Standard for Citizens for Pennsylvania's Future (PennFuture). Before that, I worked for Northeast Energy Efficiency Partnerships, Inc. where I promoted energy efficiency throughout the Northeast.

I hold a Master of Arts in Environmental Policy and Planning from Tufts University and a Bachelor of Arts in Environmental Geography from Colgate University. My resume is attached as Exhibit A.

Q. On whose behalf are you testifying in this case?

A. I am testifying on behalf of the New Mexico Department of Justice ("NMDOJ").[1]

Q. Have you previously testified in regulatory proceedings in New Mexico?

A. Yes. I provided testimony on behalf of NMDOJ in Case No. 21-00269-UT related to El Paso Electric Company's ("EPE" or "Company") Application for an Advanced Metering System Project and in Case No. 21-00178-UT related to Southwestern Public Service Company's Application for Authorization to Implement Grid Modernization

[1] Formally, the New Mexico Office of the Attorney General ("NMAG").

Components, and Case No. 22-00058-UT related to Public Service Company of New Mexico's Authorization to Implement Grid Modernization Components.

Q. Have you previously submitted testimony in proceedings before other state commissions or agencies?

A. Yes. I have testified before the New Hampshire Public Utilities Commission, the Maryland Public Service Commission, the Pennsylvania Public Service Commission, the Public Service Commission of the District of Columbia, and the Rhode Island Public Utilities Commission. A list of my previous testimony is included in Exhibit A.

Q. What is the purpose of your testimony?

A. NMDOJ retained Synapse to review EPE's Application for Approval to Implement a Time-Varying Rate ("TVR") Pilot Program ("TVR Pilot").

Q. What materials did you rely on to develop your testimony?

A. The sources for my testimony and exhibits are the Company's Application and responses to discovery requests, public documents, and my personal knowledge and experience.

Q. Was your testimony prepared by you or under your direction?

A. Yes. My testimony and the accompanying exhibits were prepared by me or under my direct supervision and control.

II. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Q. Please summarize your primary conclusions regarding the Company's proposal for a TVR Pilot.

A. My primary conclusion is that EPE complied with the Stipulation approved by the New Mexico Public Regulation Commission ("Commission") in Case No. 21-00269-UT

related to EPE's application for an Advanced Metering System ("AMS") Project,[2] by proposing a pilot to test new dynamic pricing options and rate design to enable customers to take full advantage of AMS capabilities. I also conclude that the TVRs proposed by the Company are reasonable for a pilot program to test customer acceptance and response, and that the peak periods appear reasonably aligned with system costs as of 2022.

Q. Please summarize your recommendations.

A. I recommend that the Commission approve EPE's proposed TVR Pilot contingent on the following modifications:

1. EPE should increase the TVR pilot enrollment caps to account for an attrition rate of 25 percent to ensure statistically significant results. This recommendation is based on the higher levels of attrition recently seen in the time-of-use ("TOU") pilot in Maryland, ranging from 24 percent to 32 percent at the end of the pilot.[3]

2. I recommend that EPE modify the requirements related to the enabling technology for the 2-period time-of-day ("TOD") rate with a critical peak price ("CPP") treatment group to maximize customer interest and participation. EPE should assess whether the Company can control a customer's smart thermostat during events through either the thermostat alone or in combination with Wi-Fi, to avoid the need for a Home Area Network ("HAN"). With no incentive from EPE, the cost of HAN

[2] Case No. 21-00269-UT. Application of El Paso Electric Company for Approval of a Grid Modernization Project to Implement an Advanced Metering System.

[3] Sergici, S., et. al. (2021*) PC 44 Time of Use Pilots: End-of-Pilot Evaluation.* Prepared by The Brattle Group for the Maryland Public Service Commission, pg. ii.

to customers will likely limit interest in enrollment and therefore reduce the Company's ability to achieve a statistically significant sample size. In addition, EPE should commit to identifying the number of customers that previously received smart thermostat rebates through the energy efficiency program and first target those customers for enrollment.

3. The Company should be required to file a draft process evaluation plan and a draft load impact evaluation with the Commission prior to commencing the TVR Pilot and the parties to this proceeding should be afforded time to review and comment on those plans. The scope of the pilot evaluation plans will determine what type of data is collected during the pilot period, which is a critical component in understanding the effectiveness of the TVRs contained in the pilot and customer response and preference for the different rates.

After the conclusion of the TVR Pilot, I recommend the Commission not approve a permanent TOD rate with a demand charge without the continuation of the customer protections included in the pilot. In addition, EPE should be required to demonstrate the effectiveness of the demand charge, including whether customers understood and could respond to the charge, prior to obtaining approval for a permanent rate with a demand charge.

III. SUMMARY OF EPE'S PROPOSED TVR PILOT

Q. Why has EPE proposed a TVR Pilot in this proceeding?

A. As part of the Commission approved Stipulation in Case No. 21-00269-UT related to EPE's application for an AMS Project,[4] EPE committed to develop new pricing options and programs to customers to take full advantage of AMS capabilities.

Specifically, the Stipulation required EPE to form an Advisory Group with the objective of enabling collaboration on the development, testing, and evaluation of future customer programs and services, including new dynamic pricing options and rate design, to enable full customer use of AMS capabilities. The Company agreed to file an application for a pilot rate program by the fourth quarter of 2023 and implement the approved pilot during the years 2024 to 2025.[5]

Q. Did you participate in Case No. 21-00269-UT?

A. Yes. I represented the NMDOJ in that case and filed testimony in support of the Stipulation.[6]

Q. Please explain why it is important for EPE to provide customers with TVRs that exploit the capabilities of AMS.

A. AMS on its own does not provide sufficient savings opportunities for customers. In order for EPE's customers to access the full benefits of AMS, they need access to sufficient

[4] Case No. 21-00269-UT. Application of El Paso Electric Company for Approval of a Grid Modernization Project to Implement an Advanced Metering System.

[5] Case No. 21-00269-UT. Certification of Stipulation. October 12, 2022. Para. 5.2.

[6] See Testimony in Support of Unopposed Comprehensive Stipulation, submitted by Courtney Lane on behalf of the Office of the Attorney General, May 11, 2022.

education, price signals, tools, and ease-of-use applications to take advantage of this new technology. If designed well, price signals such as TVRs can incentivize customers to shift their energy usage away from peak periods when the electric grid is constrained. The resulting reduction in peak demand can deliver multiple benefits to the utility system including fuel savings, reducing the need for additional peaking generation, avoidance or deferral of transmission and distribution upgrades, and greenhouse gas emissions reductions.[7] These utility system benefits are then passed onto all customers through lower utility rates. In addition, customers directly participating in TVRs can also experience direct cost savings by shifting usage away from higher electricity prices during the peak period to lower-priced off-peak periods.

Q. What is the intended purpose of EPE's TVR Pilot?

A. The Company explains that the purpose of the TVR Pilot is to evaluate how customers respond to price signals and to what extent customers reduce consumption during peak hours or shift usage to off-peak hours in response to those price signals.[8] The Company plans to utilize TVR Pilot data to inform future TVR options for customers that will have the following objectives: fully realizing the benefits of AMS, supporting increased rate options to customers, mitigating peak demand growth, increasing system load factor, and maximizing efficiency and improving utilization of EPE's energy portfolio.[9]

[7] Badtke-Berkow, M., Centore, M., Mohlin, K., and Spiller, B. 2015. *A Primer on Time-Variant Electricity Pricing. Environmental Defense Fund*. Pgs. 6-8. Available at: https://www.edf.org/sites/default/files/a_primer_on_time-variant_pricing.pdf.

[8] Direct Testimony of George Novela ("Novela Direct"), pg. 6, lines 15-17.

[9] *Id.*, at pg. 7, lines 1-4.

Q. What steps did EPE take to develop its TVR Pilot?

A. To help inform the development of the pilot, EPE commissioned The Brattle Group ("Brattle") to design pilot rate options. EPE then formed a jurisdictional AMS Programs Advisory Group ("Advisory Group") that met quarterly from January 2023 to February 2024 and provided the opportunity for interested parties to provide feedback on potential rate options and collaborate on the development of the pilot.[10]

Q. Did you participate in the Advisory Group?

A. Yes. I participated in the Advisory Group on behalf of the NMDOJ.

Q. Please summarize the key recommendations you made during the Advisory Group meetings.

A. I provided high-level recommendations that the pilot should be designed to offer sufficient savings to motivate customers to shift load to off-peak hours or to hours with abundant, low-cost renewable energy; be reflective of the temporal nature of system costs; encourage customer enrollment by avoiding extremely high on-peak prices; not be overly complex; and be easy for customers to understand.

I also provided feedback specific to the rate options presented during the meetings. This included the recommendation that EPE implement CPP instead of peak time rebates ("PTR") to more accurately reflect peak demand periods and that EPE not include a demand charge for any of the pilot rates.

[10] *Id*., at pg. 13.

Q. Did EPE adopt your recommendations?

A. In part. EPE incorporated my feedback by proposing a TOD rate with CPP instead of PTR. However, EPE is still proposing a demand charge for one of its residential and Small General Service ("SGS") treatment groups.

Q. Please describe EPE's proposed TVR Pilot.

A. The Company proposes a TVR Pilot with a total cost of $908,800. The TVR Pilot cost includes $90,000 in cash incentives, equivalent to $50 per residential customer and $75 per small business owner, to encourage enrollment and completion of the pilot.[11]

The Company proposes three different TVRs: (1) a 2-period TOD rate; (2) a 2-period TOD rate with a demand charge; and (3) a 2-period TOD rate with a CPP component. EPE also proposes to offer a TOD rate with CPP that includes HAN for use with a programmable smart thermostat.[12] In order to test the different TVRs, EPE proposes eight treatment groups[13] as summarized in Table 1 below. The Company proposes five treatment groups for the residential customer class, with one of residential low-income customers, and three treatment groups for the SGS class.

[11] EPE Response to NMAG 1-3(c).

[12] Novela Direct, pgs. 17-18.

[13] The Company defines a treatment group as "each individual group that will participate in the pilot, based on the individual customer class it is offered to." Novela Direct, pg. 16, lines 15-16.

Table 1. EPE proposed pilot rates and treatment groups

Customer	2-period TOD	2-period TOD with demand charge	2-period TOD with CPP	2-period TOD with CPP and enabling technology
Residential Low-Income	X			
Residential	X	X	X	X
Small General Service	X	X	X	X

Source: Direct Testimony of George Novela, pg. 17.

Q. How long does EPE plan to run the pilot?

A. The Company proposes to run the pilot for a minimum of one year, beginning in 2025 either before or after the summer period, dependent on the date of Commission approval.[14] However, EPE may extend the pilot for a second year, if results at the end of one year are mixed and unclear and the Company determines the analysis would benefit from the incorporation of more data. The Company explains that extending the pilot period to a second year to capture a longer study period is not expected to impact the proposed cost.[15]

Q. What rates does EPE propose for each type of customer and treatment group?

A. The residential and SGS TVRs are summarized in Table 2 and Table 3 below. All three rates use the same on-peak period, which is weekdays from 2 pm to 7 pm during the summer (June–September). The key differences between the rates are the summer peak to summer off-peak ratios and the additional components such as the CPP (with and without enabling technology) and the demand charge.

[14] *Id.*, at pgs. 8-9.
[15] EPE Response to NMAG 1-1(a)(b).

Table 2. Proposed Residential TVR Rates

Rate	Demand and Energy Charges	Summer (June-Sept)	Non-Summer (Oct-May)	Peak to Off-Peak Ratio
Standard TOD Rate	On-Peak Period	$0.28541	----------	4:1
	Off-Peak Period	$0.07135	----------	
	All Hours	----------	$0.03316	
TOD Rate with CPP[16]	Critical Peak Period	$0.68447	----------	10:1
	On-Peak Period	$0.13689	----------	2:1
	Off-Peak Period	$0.06845	----------	
	All Hours	----------	$0.03428	
TOD with Demand Charge[17]	Demand Charge per Billing kW	$4.41	---	
	Energy Charge per kWh			
	On-Peak Period	$0.23515		4:1
	Off-Peak Period	$0.05879		
	All Hours	---	$0.03200	

Source: EPE Exhibit GN-1 ERRATA, pgs. 4-5.

Table 3. Proposed SGS TVR Rates

Rate	Demand and Energy Charges	Summer (June-Sept)	Non-Summer (Oct-May)	Peak to Off-Peak Ratio
Standard TOD Rate	On-Peak Period	$0.32857	----------	3:1
	Off-Peak Period	$0.10952	----------	
	All Hours	----------	$0.04066	
TOD Rate with CPP	Critical Peak Period	$0.80232	----------	8:1
	On-Peak Period	$0.20058	----------	2:1
	Off-Peak Period	$0.10029	----------	
	All Hours	----------	$0.04189	
TOD with Demand Charge	Demand Charge per Billing kW	$10.42	----------	
	Energy Charge per kWh			
	On-Peak Period	$0.30406		4:1
	Off-Peak Period	$0.07601		
	All Hours	----------	$0.03805	

Source: EPE Exhibit GN-1 ERRATA, pgs. 9-10.

[16] Not offered to low-income customers.

[17] Not offered to low-income customers.

Q. What is your overall assessment of EPE's TVR Pilot proposal?

A. I find that EPE's proposed TVRs are reasonably well designed. The on-peak and off-peak windows and seasonal definitions appear to be well-aligned with system peak hours, based on 2022 data. However, as I will explain in more detail below, I have several recommendations to improve pilot outcomes related to the proposed TVR Pilot enrollment caps, the requirements for participation in the TOD Rate with CPP and enabling technology treatment group, and the evaluation plans.

I. TVR PILOT SHOULD BE APPROVED WITH MODIFICATIONS

A. EPE should increase enrollment caps

Q. Does EPE plan to cap the number of TVR Pilot participants?

A. Yes. The Company proposes to cap customer enrollment in each TVR treatment group at a level that provides statistically significant results at a 95 percent confidence level and from which causal inferences about TVRs can be drawn.[18] In total, the Company proposes an overall sample size of 1,410 for the pilot (870 residential customers and 540 SGS customers).[19]

Q. Do you find the TVR Pilot sample size to be reasonable?

A. No. In developing the sample size targets, EPE assumes an attrition rate of 15 percent.[20] This assumption would mean that 15 percent of the customers that enroll in the pilot may leave the pilot. However, this assumption is likely too low based on a recent evaluation of

[18] EPE Response to NMAG 1-12(b)(c).
[19] EPE Exhibit GN-2, pg. 37.
[20] *Id*., pg. 37.

three TOU pilots in Maryland that found higher levels of attrition. After just the first year of the TOU pilots in Maryland, Baltimore Gas & Electric had an attrition rate of 21 percent, Pepco had an attrition rate of 16 percent, and Delmarva Power & Light experienced a 15 percent attrition rate.[21] At the end of the pilot, the attrition rate ranged from 24 percent to 32 percent.[22]

Q. What is your recommendation for the TVR Pilot enrollment cap?

A. I recommend that EPE increase the enrollment caps across each treatment group to account for a higher level of attrition. Based on the recent evaluation results in Maryland, I recommend EPE assume an attrition rate of 25 percent, which will increase the number of participants by approximately 110 (69 residential customers and 41 SGS customers). Increasing the enrollment caps would provide for protection against non-statistically significant results should attrition be higher than projected. In addition, increasing the enrollment target will lead to broader marketing of the pilot, which in turn may provide a more accurate signal of customer interest in the pilot rates and why customers choose not to participate.

Q. Does your recommendation increase the costs of the TVR Pilot?

A. My recommendation would only increase costs by 1 percent. I assume that most of the incremental cost associated with enrolling additional customers pertains to the cash incentives customers receive for completion of the pilot and the associated pre- and post-

[21] Sergici, S., et. al. (2021*) PC 44 Time of Use Pilots: End-of-Pilot Evaluation.* Prepared by The Brattle Group for the Maryland Public Service Commission, pg. 8.

[22] *Id*., pg. ii.

pilot surveys. Applying EPE's proposed incentive levels of $50 to residential customers and $75 for SGS customers,[23] I calculate the increased cost to be $6,531 for the 110 additional customers, which is a 7 percent increase in customer cash incentives and a 1 percent increase in the total TVR Pilot budget.

B. EPE should assess whether HAN will discourage customer participation

Q. Please describe EPE's proposed 2-period TOD rate with CPP and enabling technology?

A. The Company explains that this rate is the same as the TOD Rate with CPP except it will involve technology enablement through the use of programmable and/or utility-activated smart thermostats.[24] Specifically, EPE proposes to use a programmable smart thermostat that "needs" a HAN.[25] After receiving consent from the customers, EPE plans to control the smart thermostats during critical event days to reduce and shift demand.[26]

Q. Please describe a HAN.

A. A HAN is a local network that connects the radio device within the AMS meter to qualified energy monitoring devices, allowing residential and commercial customers to view their consumption in near real-time. Common HAN-compatible devices include in-home energy displays, programmable communicating thermostats, and gateway devices.

[23] EPE Response to NMAG 1-3(c).
[24] EPE Exhibit GN-2, pg. 12.
[25] Novela Direct, pg. 18, lines 1-3.
[26] EPE Response to NMAG 1-9(f).

Q. Will customers need a programmable smart thermostat to enroll in the TOD with CPP and enabling technology treatment group?

A. Yes. The Company states that customers will need a programmable smart thermostat to enroll in the TOD with CPP and enabling technology treatment group.[27]

Q. Will EPE provide an incentive to pilot participants to offset the cost of a smart thermostat and HAN?

A. Not directly. EPE indicates that participants in the TOD Rate with CPP and enabling technology treatment group are eligible for the same incentive as other pilot participants, which is $50 per residential customer and $75 per small business owner who complete the pilot and associated surveys.[28] This incentive is not specific to supporting the additional costs of the enabling technology.[29] While, EPE does indicate that customers can apply for a rebate on new qualifying smart thermostats through its energy efficiency programs there are no incentives for the HAN.[30]

Q. Have you identified any issues with EPE's TOD Rate with CPP and enabling technology proposal?

A. Yes. It is unclear how EPE will recruit customers for this treatment group when it is not providing an incentive for a HAN device. These devices can cost upwards of over $100, which is a significant investment and therefore a likely deterrent for a customer to participate in a one-year pilot.[31]

---

[27] EPE Response to NMAG 1-9(d).
[28] EPE Response to NMAG 1-3(c).
[29] EPE Response to NMAG 1-9(c).
[30] *Ibid*.
[31] See for example, Ceiva Homeview at $149.99 https://www.ceiva.com/homeview/shop.jsp and the EAGLE: Smart Meter Energy Gateway at $99 https://rainforestautomation.com/us-retail-store/.

In addition, the Company did not explain why a customer HAN device is required to enable utility control of the smart thermostat. Other utility direct control programs do not require HAN and instead utilize smart thermostats with mesh radios that can communicate directly with the AMS network or by communicating with Wi-Fi. For example, Pacific Gas and Electric Company ("PG&E") ran a study in which it recruited residential customers who had already installed a smart thermostat to control central air conditioning. As part of this study, smart thermostats were used to automate daily TOU load-shifting, and participants permitted PG&E to reduce or shift the use of electricity for predetermined events.[32] In addition, Southern California Edison ("SCE") provides a $75 rebate to customers that enroll a qualifying smart thermostat in CPP. During a CPP event, SCE provides a signal to a thermostat provider to temporarily adjust the temperature setting.[33]

While EPE indicates that customers can receive a rebate for a smart thermostat through the Company's energy efficiency program, it is unclear whether EPE will seek to recruit customers that previously received smart thermostat rebates or if the Company will encourage customers to apply for those rebates as part of its marketing for the TVR pilot. It is more cost-effective for the Company to leverage customers with existing smart thermostats. In addition, understanding the current number of customers with smart

[32] Demand Side Analytics, LLC, *Smart Thermostat Time-of-Use Automation Study*, prepared for Pacific Gas and Electric, August 9, 2022. ET Project Number: ET21PGE7320.

[33] Southern California Edison Critical Peak Pricing webpage: https://www.sce.com/business/rates/cpp.

thermostats will inform whether the target outreach numbers and resulting sample size are realistic.

Q. What are your recommendations for the TOD Rate with CPP and enabling technology proposal?

A. I recommend that EPE modify the requirements related to the enabling technology to maximize customer interest and participation in this treatment group. The Company should assess whether EPE can control a customer's smart thermostat during events through either the thermostat alone or in combination with Wi-Fi, to avoid the need for a HAN. If it is not possible to conduct the pilot for this treatment group without HAN, the Company should provide an incentive to customers to help offset the cost of HAN. In addition, EPE should commit to identifying the number of customers that previously received smart thermostat rebates and first target those customers for enrollment.

C. EPE should be required to submit draft evaluation plans with the Commission for public comment

Q. Does EPE provide an evaluation plan as part of its application?

A. No. The Brattle report included as Exhibit GN-2 EPE provides an overview of what is typically included in a pilot process evaluation plan and a load impact evaluation plan, but EPE has not yet developed those plans. Instead EPE indicates that once the pilot is approved by the Commission, EPE will develop the process and load impact evaluation plans.[34] Since the evaluation plans are not finalized, the associated costs are unknown and are not included in the proposed pilot cost of $908,800.[35] The Company indicates

[34] Novela Direct, pgs. 10-11.
[35] EPE Response to NMAG 1-6(f).

that it can provide the evaluation plans to the Commission as compliance documents in this case.[36]

Q. Does EPE plan to solicit stakeholder feedback on the load impact evaluation plan?

A. It is unclear. When asked through interrogatories whether EPE plans to solicit stakeholder feedback, and how that feedback would be incorporated into the load impact evaluation plan, the Company did not directly answer the question. Instead, the Company responded that "the plan will feature EPE's vision for stakeholder engagement much like the way EPE engaged stakeholders through the pilot rate design phases with a series of meetings and ongoing incorporation of feedback from the stakeholder group before finalizing the proposed rate designs."[37]

Q. Does EPE identify the metrics it plans to evaluate in the load impact evaluation?

A. No. The Company has yet to determine specific metrics but expects "that the load impact evaluation plan will describe the methodology to calculate, at a minimum, the impact on average consumption during peak hours, average daily consumption, price elasticity of demand and statistics related to pilot enrollment and attrition."[38] In addition, EPE does not yet know if it will evaluate both the reduction in load for the on-peak period on average across all summer months as well as the load reduction during the annual peak hour.[39]

[36] EPE Response to Staff 2-6(d).
[37] EPE Response to NMAG 1-6(g).
[38] EPE Response to NMAG 1-6(a).
[39] EPE Response to NMAG 1-6(b).

Q. Why is it important that EPE evaluate the reduction on the actual annual peak in addition to the on-peak period on average?

A. System capacity needs are primarily driven by the highest peak load on the system, rather than average load during on-peak hours. Customers may not necessarily respond the same during the annual peak as they do on an average summer day. For example, if the annual peak occurs during an exceptionally hot week in July, customers may decide not to turn down their air conditioning as much as they might on cooler summer days. Thus, it is important to understand how much load is reduced by customers on the actual system peak day, rather than during all summer days on average.

Q. What is your recommendation regarding the TVR Pilot evaluation plans?

A. I recommend the Commission require EPE to file a draft process evaluation plan and a draft load impact evaluation proposal with the Commission prior to commencing the TVR Pilot. This requirement should not simply be a compliance filing, but rather an opportunity for the parties to this case to review and provide comments on the draft plans. As noted by the Company, the development of a load impact evaluation plan prior to the start of the pilot "informs the type of data to be collected, and greatly improves the success of the load impact evaluation."[40] Given the importance of the evaluation plan in the success of the overall evaluation, it is appropriate to provide the parties with the opportunity to review and comment on the plan. EPE should then file its modified evaluation plans for Commission review and approval. Stakeholders should also be permitted to provide final comments for Commission consideration prior to the

[40] Novela Direct, pg. 22, lines 16-17.

Commission's ruling approving the plans, rejecting the plans, or approving the plans with modifications.

II. DEMAND CHARGES SHOULD BE TREATED WITH CAUTION

Q. Please summarize EPE's proposed TVR with a demand charge.

A. EPE proposes a 2-period TOD rate with a demand charge for residential (excluding low-income) and SGS customers. This rate shifts a portion of the volumetric kWh TOD energy charge to be recovered through a demand charge. The demand charge is designed to recover a portion of EPE's generation demand and transmission costs during the summer peak period.[41]

Q. What is the justification for including a TOD rate with a demand charge?

A. Brattle explains that demand-related costs may make up a significant majority of a utility's costs and it is therefore more efficient to recover demand-related costs through a dedicated demand-based charge based on a measure of a customer's highest consumption as opposed to a variable energy (kWh) charge. Brattle states that the demand charge is not impacted by reductions in energy consumption and thus aids EPE's recovery of its fixed costs. While Brattle acknowledges that demand-based rates are not common among residential and SGS customers, it seeks to assess customer response to and experience with a demand charge over the course of the pilot. [42]

[41] EPE Exhibit GN-2, pg. 23-24.
[42] *Id*., pg. 11.

Q. What are your primary concerns related to the demand charge?

A. I have two general concerns with demand charges, which I will explain in more detail below. The first relates to the disconnect between a customer's peak demand for a month (upon which the demand charge is assessed) and the actual peak demand on EPE's system. My second concern pertains to the complexity of demand charges and the ability for residential customers to understand and respond to the rate.

Q. Please explain why residential demand charges are poorly reflective of the incremental costs to the electric system.

A. Brattle designs the demand charge to capture the maximum customer usage during an assumed peak period: weekdays from 2 pm to 7 pm during the summer (June–September). However, "[r]esidential consumers have much more diversity in their usage, with individual customer maximum demands seldom coinciding with the system peak."[43] Due to the fact that a customer's monthly peak demand may not occur at the same time as the system peak, a demand charge does not accurately capture the customer's incremental contribution to the utility's system costs. While it is true that peak demand is a significant driver of utility production, transmission, and distribution system costs, it is not an individual residential customer's peak demand that drives system costs. Rather, it is the customer's demand during the peak hour.[44] For example, a customer's billing demand for the month might be 7 kW, but they might only have a demand of 1 kW during the system

[43] Jim Lazar, "Use Great Caution in Design of Residential Demand Charges," Natural Gas & Electricity, February 2016, pg. 15. Available at https://www.raponline.org/knowledge-center/use-great-caution-in-design-of-residential-demand-charges/.

[44] For example, see *Id*., at pg. 19: "NCP [Non-Coincident Peak] demand is not relevant to any system design or investment criteria above the final line transformer, and only there if the transformer serves just a single customer."

peak hour because they were not home at that time. EPE's proposed demand charge of $4.41/kW would result in the customer facing a demand charge of approximately $31 for the month, even though they consumed very little during the actual peak hour. Because demand charges can cause large variations in customer bills that are not related to the customer's actual contribution to peak demand, they should be treated cautiously. In general, I tend to favor volumetric TVRs over demand charges, due to the bill volatility that demand charges can cause.

Q. Please explain why it may be difficult for residential customers to understand demand charges.

A. Demand charges represent a significantly more complex rate design than those currently in place for residential and small commercial customers. Surveys and focus groups have found that the concept of demand charges is not well understood and frequently raises concerns from customers.[45] Another issue is that residential customers are generally not aware of how much demand is imposed by an individual appliance or device. Absent investments to provide customers with monitoring technologies and apps, residential customers have little ability to monitor or adjust their demand levels.

[45] For example, a 2016 survey found that approximately 50 percent of residential customers do not understand the terms "kW" and "kWh". *See* Bill LeBlanc, *Do Customers Understand Their* Power Bill? Do They Care? What Utilities Need to Know (Jan. 21, 2016). Available at: https://www.esource.com/email/ENEWS/2016/Billing. In addition, focus groups in Ontario found that the concept of maximum use during peak hours "is difficult for people to understand and raised concern among a few. *See* The Gandalf Group, *Ontario Energy Board: Distribution Charge Focus Groups Final Report*, at pg. 9 (Oct. 2013). Available at: https://www.oeb.ca/oeb/_Documents/EB-2012-0410/Appendix%20B%20-%20Gandalf%20Distribution%20Focus%20Groups.pdf.

Q. What steps is EPE taking to address challenges related to customers' understanding of its rates?

A. The Company plans to provide customers with educational materials on TVRs and the specific rate offerings, which will include information about typical home appliances that account for higher demand and steps customer can take to meaningfully shift load.[46]

Q. Does EPE propose to implement any customer protections in case customers do not understand how to respond to the demand charge?

A. Yes. Instead of having a customer's maximum demand in a given month trigger the demand charge, EPE will take the average of a customer's three highest 15 minutes of usage (kW) during the on-peak period for a given month.[47] The Company also states that if the billing demand exceeds a certain threshold in one of the four summer months, the billing demand can be set at that threshold.[48] While EPE has yet to determine the threshold for the billing demand, the Company indicates that it will be set to a high level so that only a true outlier would be excluded from billing.[49]

Q. Does EPE plan to continue these customer protections should the pilot rate become a permanent rate?

A. The Company indicates it has not yet made that determination.[50]

[46] EPE Response to NMAG 1-11(a).
[47] EPE Exhibit GN-1 ERRATA, pg. 6.
[48] EPE Exhibit GN-2, pg. 24.
[49] EPE Response to NMAG 1-10(a)(b).
[50] EPE Response to NMAG 1-10(c).

Q. How does EPE propose to evaluate this rate?

A. As part of the post-pilot evaluation, EPE indicates that it will follow up with participants in the TOD rate with a demand charge to assess their understanding of the demand charge.[51]

Q. What is your recommendation for the TOD Rate with the demand charge?

A. While I do not support demand charges for the reasons stated above, the customer protections proposed by EPE will likely limit bill hikes should customers not understand the demand charge component of the rate. Therefore, I find it reasonable to allow EPE to study this rate design as part of the TVR Pilot. However, it is critical that EPE adequately evaluate both the effectiveness of this rate and customer understanding of the rate prior to seeking approval for a permanent rate with a demand charge. EPE has not yet finalized a load impact or process evaluation plan for the TVR Pilot so it is not possible to assess whether the planned follow-up with pilot participants will be sufficient.

In addition, I do not support approval of a permanent TOD rate with a demand charge without the continuation of the customer protections included in the TVR Pilot. Customer experience with this rate absent these protections will likely be much different than that evaluated through the pilot. EPE would need to evaluate this rate without the customer protections to propose such a rate. The Company itself notes the importance of evaluating a pilot rate without a hold harmless provision, stating that a "hold harmless provision could influence customer response to the price signals because they know of the

[51] EPE Response to NMAG 1-11(b).

provision."[52] While the customer protections for the TOD Rate with a demand charge do not hold a customer completely harmless for failing to shift consumption to off-peak periods, it nonetheless reduces the bill impacts of that consumption during peak.

Q. Does this conclude your testimony?

A. Yes, it does.

[52] Novela Direct, pg. 20, lines 18-20.

Attachment B - Referenced Responses to Interrogatories

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL TO IMPLEMENT A TIME-VARYING RATE PILOT PROGRAM EL PASO ELECTRIC COMPANY, Applicant.	)	Case No. 24-00113-UT

EL PASO ELECTRIC COMPANY'S RESPONSE TO
NEW MEXICO ATTORNEY GENERAL'S FIRST SET OF DISCOVERY REQUESTS
QUESTION NOS. NMAG 1-1 THROUGH NMAG 1-22

INTERROGATORY/REQUEST FOR PRODUCTION NMAG 1-1:

Refer to the Direct Testimony of George Novela at page 9, lines 2-3.

a. What would cause EPE to extend the pilot to two years?

b. If the pilot is extended for a second year, how will this impact the total costs? In your response, please list the categories of costs that would be impacted and provide an estimate of the magnitude of any additional costs.

RESPONSE:

a. EPE may extend to two years to capture a longer period to observe customers interaction with and response to time varying rates. A longer period may also be useful and needed if results at the end of one year are mixed and unclear and the analysis would benefit from the incorporation of more data.

b. Extending the pilot period to a second year to capture a longer study period is not expected to impact the proposed cost. However, there could be additional costs if the extension includes more than one evaluation, measurement, and verification process (EM&V), for example if an EM&V is done at the end of each year instead of one EM&V process at the conclusion of the Pilot study.

Preparer: George Novela Title: Director- Regulatory Policy and Rates

Sponsor: George Novela Title: Director- Regulatory Policy and Rates

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL TO IMPLEMENT A TIME-VARYING RATE PILOT PROGRAM EL PASO ELECTRIC COMPANY, Applicant.	)	Case No. 24-00113-UT

EL PASO ELECTRIC COMPANY'S RESPONSE TO
NEW MEXICO ATTORNEY GENERAL'S FIRST SET OF DISCOVERY REQUESTS
QUESTION NOS. NMAG 1-1 THROUGH NMAG 1-22

INTERROGATORY/REQUEST FOR PRODUCTION NMAG 1-3:

Refer to the Direct Testimony of George Novela at page 26, Table GN-1.

a. What questions will be asked in the interviews prior to recruitment?

b. How will the questions differ between small business and residential customers?

c. What is the amount of the cash incentive per customer (for residential and commercial customers separately)?

d. What is the purpose of the cash incentive?

e. Please explain why the cost of text messages is nearly three times the cost of recruitment emails.

f. What percentage of residential customers does EPE have mobile phone numbers for?

g. What percentage of residential customers does EPE have email addresses for?

h. Please provide all example research, marketing, and recruitment materials from the Hahn Agency that were provided to EPE.

i. Do the research, marketing, and recruitment costs include a customer education plan? If yes, please provide a copy of the plan (if developed). If not, please explain why not.

RESPONSE:

a. Final questions have not yet been determined because this project has not been approved and part(s) may change. However, we expect questions will be focused on obtaining the following information:

- Customer opinion about time varying rates
- Test understanding of potential language used to describe the pilot program
- Perceived challenges with time varying rates
- Perceived benefits of time varying rates
- Key messages and incentives that motivate customers to participate in the pilot
- Key methods of communication for program participants
- Questions about the pilot program

b. The questions will be similar but worded in a way that differentiates between residential and business customers. Residential customers tend to be more emotional in their decision making and are likely to consider what's in it for them. Business owners tend to make decisions that positively impact the bottom line of their businesses. Their risk may be more calculated than those of residential customers. Because of this, we anticipate the follow up questions and discussions will be different for each subset of customers.

c. Cash incentives will total $90,000. This is equivalent to $50 per residential customer and $75 per small business owner who complete the pilot. Residential and small business customers will receive $25 for signing up and completing the pre-pilot survey. Residential customers will receive another $25 after completing the post-pilot survey while small business customers will receive another $50 after completing the post-pilot survey.

d. The cash incentives are designed to motivate customers to join the pilot program.

e. Text messaging is a very effective way to reach customers but EPE does not currently offer this service, so we must hire a vendor to facilitate the distribution of text messages. EPE has determined that EPE can send emails internally and will not incur an additional cost to hire a vendor for that service.

f. 99.14%

g. 74.61%

h. Hahn is currently working with EPE on its smart meter project and energy efficiency programs. Both include a full suite of marketing and advertising materials.

Here are links to some of Hahns prior research work:

- EPE focus groups discussion guide
- ONE Gas survey
- ONE Gas interviews
- Brownsville Public Utilities Board survey
- Brownsville Public Utilities Board interviews discussion guide

i. Yes. The marketing and recruitment materials will include customer education. The materials will be developed following approval of this proposed TVRPP. In general, EPE plans to produce a comprehensive FAQ, talking points for Customer Service Representatives, and digital and/or printed flyers for each rate option. Recruitment and marketing pieces will be produced in English and Spanish. The proposed scope of work includes direct mail, email, and one-on-one phone calls.

In addition, EPE will launch a website landing page for program participants described in EPE's response to NMAG 1-2. One week prior to the pilot launch, EPE will also host a webinar for each of the eight treatment groups. These will be virtual briefings with EPE experts to educate participants on their respective rate plans and offer ways to use energy more efficiently. EPE will also mail a letter from EPE's CEO Kelly Tomblin thanking customers for their participation and explaining the importance of this program. Email updates will be sent to participants throughout the process.

Preparer:	George Novela Leslie Sopko Clarissa Cervantes	Title:	Director- Regulatory Policy and Rates Vice President- Hahn Agency Marketing Specialist
Sponsor:	George Novela	Title:	Director- Regulatory Policy and Rates

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL TO IMPLEMENT A TIME-VARYING RATE PILOT PROGRAM	)	Case No. 24-00113-UT
EL PASO ELECTRIC COMPANY, Applicant.	)	

EL PASO ELECTRIC COMPANY'S RESPONSE TO
NEW MEXICO ATTORNEY GENERAL'S FIRST SET OF DISCOVERY REQUESTS
QUESTION NOS. NMAG 1-1 THROUGH NMAG 1-22

INTERROGATORY/REQUEST FOR PRODUCTION NMAG 1-6:

Refer to the Direct Testimony of George Novela at page 22, related to the load impact evaluation plan.

a. What specific metrics will be evaluated in the load impact evaluation plan?

b. Will EPE evaluate both the reduction in load for the on-peak period on average as well as the load reduction on the peak day? If not, please explain why not.

c. Has EPE or its consultants developed a draft or final load impact evaluation plan? If yes, please provide the plan. If not, please explain how EPE knows that the data collected during the pilot will be sufficient to fully evaluate the pilot results.

d. If EPE does not yet have a draft load impact evaluation plan, please describe the timeline for the development and release of the load impact evaluation plan.

e. Does EPE plan to contract with the Brattle Group to conduct the load impact evaluation? Please explain.

f. Are the costs to conduct the load impact evaluation included in the total pilot program costs of $908,800? If not, please explain why not and include an estimate of the load impact evaluation costs.

g. Does EPE plan to solicit stakeholder feedback regarding its proposed load impact evaluation plan? If yes, please explain how and when EPE will do so, and how it plans to incorporate any feedback into the load impact evaluation plan.

RESPONSE:

a. It is yet to be determined. EPE hasn't started this process yet. However, we expect that the load impact evaluation plan will describe the methodology to calculate, at a minimum, the impact on average consumption during peak hours, average daily consumption, price elasticity of demand and statistics related to pilot enrollment and attrition.

b. Please see the response to part (a) above.

c. No. Once the pilot has been approved by the Commission, EPE will work with Brattle to finalize a pilot load impact evaluation plan. The most important data that will be required for the load impact evaluation is hourly load data at the customer level. Given that pilot participation will be limited to customers with AMI meters and that recruitment targets are set such that EPE will be analyze impacts in a statistically significant manner, EPE is confident that the pilot data will be of sufficient quality and granularity to evaluate pilot results.

d. Given Brattle's experience in conducting load impact evaluations, they will be able to produce a comprehensive load impact evaluation plan in 2-3 weeks if and when the pilot is approved and when EPE deems it appropriate to compile one.

e. It is yet to be determined. EPE will evaluate the scope of the work needed after it gets approval and see if it can do the work internally or if all or a portion of it needs to be worked on by a consultant. At that point EPE will be able to get a price estimate for any help it may need in the development of such an analysis.

f. No. Please see response to subpart (e) above.

g. If the pilot gets approved, EPE will draft a load impact evaluation plan, either internally or through a consultant. The plan will feature EPE's vision for stakeholder engagement much like the way EPE engaged stakeholders through the pilot rate design phases with a series of meetings and ongoing incorporation of feedback from the stakeholder group before finalizing the proposed rate designs.

Preparer: George Novela Title: Director- Regulatory Policy and Rates

Sponsor: George Novela Title: Director- Regulatory Policy and Rates

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL TO IMPLEMENT A TIME-VARYING RATE PILOT PROGRAM EL PASO ELECTRIC COMPANY, Applicant.	)	Case No. 24-00113-UT

EL PASO ELECTRIC COMPANY'S RESPONSE TO
NEW MEXICO ATTORNEY GENERAL'S FIRST SET OF DISCOVERY REQUESTS
QUESTION NOS. NMAG 1-1 THROUGH NMAG 1-22

INTERROGATORY/REQUEST FOR PRODUCTION NMAG 1-9:

Refer to Exhibit GN-2 on page 12, which states "The only difference between the TOD Rate + CPP + enabling technology and TOD Rate + CPP variants in Figure 3 is that the former will have some type of technology enablement accompanied with it through the use of programmable and/or utility activated smart thermostats."

a. Please confirm that the "type of technology enablement" is a home area network ("HAN"). If not confirmed, please explain.

b. Please explain whether a HAN generally requires the purchase of additional equipment for the customer's home, and, if so, how much that equipment costs.

c. Will participants in the TOD Rate + CPP + enabling technology pilot receive an incentive for the purchase of a HAN or other form of "technology enablement"? If yes, please provide the incentive per participant, total cost for all participants, and indicate if that cost is included in the Pilot Program cost of $908,800. If not, please explain why not.

d. Will EPE only enroll customers that have an existing programmable or smart thermostat? Please explain why or why not.

e. Will EPE provide an incentive to customers enrolling in the TOD Rate + CPP + enabling technology pilot for the purchase of a programable or smart thermostat? If yes, please provide the total incentive per participant, total cost for all participants, and indicate if that cost is included in the Pilot Program cost of $908,800.

f. Will EPE control the customer's smart thermostat? Please explain.

RESPONSE:

a. Please see question 28 in the Direct Testimony of George Novela. That response states the following:

The treatment labeled as TOD + CPP + enabling technology in Figure GN-1 above is a home area network ("HAN") enabled treatment. The technology aspect refers to a programmable smart thermostat that needs a HAN.

b. As described above, the technology aspect refers to a programmable smart thermostat that needs a HAN. HAN and thermostat costs will vary for a variety of reasons and in many cases homes are already equipped with internet via a home router and modem.

c. As described in EPE's response to NMAG 1-3, EPE is proposing to provide a cash incentive to participants, but it is not specifically for the purchase of a HAN or other form of "technology enablement". EPE also has a separate program through its Energy Efficiency Department that includes a rebate on new qualifying smart thermostats. For more information on the energy efficiency program, please see https://www.epeenergywisesavings.com/

d. Customers will need a programmable smart thermostat to enroll in the TOD + CPP + enabling technology pilot treatment.

e. Please see response to part (c) above.

f. Yes. EPE will be able to control thermostats, with customer approval, for critical event days.

Preparer: George Novela Title: Director- Regulatory Policy and Rates

Sponsor: George Novela Title: Director- Regulatory Policy and Rates

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL TO IMPLEMENT A TIME-VARYING RATE PILOT PROGRAM EL PASO ELECTRIC COMPANY, Applicant.	)	Case No. 24-00113-UT

EL PASO ELECTRIC COMPANY'S RESPONSE TO
NEW MEXICO ATTORNEY GENERAL'S FIRST SET OF DISCOVERY REQUESTS
QUESTION NOS. NMAG 1-1 THROUGH NMAG 1-22

INTERROGATORY/REQUEST FOR PRODUCTION NMAG 1-10:

Refer to Exhibit GN-2 on page 24 related to the forgiveness elements of the demand charge.

a. The proposal indicates that if the billing demand exceeds a certain threshold in one of the four summer months, the billing demand can be set at that threshold. Has EPE determined the threshold? If yes, please provide that threshold and how it was determined. If not, please explain why not.

b. Will providing forgiveness elements for the demand charge limit the ability for EPE to understand how customers react to the demand charge price signal? Please explain why or why not.
c. Will EPE continue to provide these forgiveness elements if the pilot rate becomes a permanent rate? Please explain.

RESPONSE:

a. EPE has not determined the threshold at this point and will do so when the TVR pilot is approved.

b. EPE does not believe so. The threshold for the billing demand will be set to a high level so that only true outlier observations for customers would be excluded for the purpose of billing. Furthermore, the forgiveness element would apply to only one of the four summer months. Therefore, customers summer usage patterns would largely be unaffected by this feature. On the flip side, this forgiveness element may increase customer's interest in this rate option.

c. EPE has not made this determination at this time.

Preparer: George Novela Title: Director- Regulatory Policy and Rates

Sponsor: George Novela Title: Director- Regulatory Policy and Rates

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL TO IMPLEMENT A TIME-VARYING RATE PILOT PROGRAM	)	Case No. 24-00113-UT
EL PASO ELECTRIC COMPANY, Applicant.	)	

EL PASO ELECTRIC COMPANY'S RESPONSE TO
NEW MEXICO ATTORNEY GENERAL'S FIRST SET OF DISCOVERY REQUESTS
QUESTION NOS. NMAG 1-1 THROUGH NMAG 1-22

INTERROGATORY/REQUEST FOR PRODUCTION NMAG 1-11:

Refer generally to the proposed 2-period TOD rate with a demand charge.

a. Will EPE provide any educational or outreach materials that explain which end-uses are likely to trigger the demand charge (e.g., charging an EV or running a washing machine)? Please explain.

b. As part of the post-pilot evaluation, will EPE follow-up with participants in the TOD rate with a demand charge to assess their understanding of how the demand charge works? Please explain why or why not.

RESPONSE:

a. During recruitment phase, customers will receive educational materials on TVRs and the specific rate offerings. These materials will also include information about typical home appliances that account for higher demand and potential ways customers could meaningfully shift load.

b. Yes. The post-pilot survey will include questions on customers understanding of all the TVRs. These insights would be helpful if EPE decides to extend similar rates on a permanent basis.

Preparer: George Novela Title: Director- Regulatory Policy and Rates

Sponsor: George Novela Title: Director- Regulatory Policy and Rates

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL TO IMPLEMENT A TIME-VARYING RATE PILOT PROGRAM EL PASO ELECTRIC COMPANY, Applicant.	)	Case No. 24-00113-UT

EL PASO ELECTRIC COMPANY'S RESPONSE TO
NEW MEXICO ATTORNEY GENERAL'S FIRST SET OF DISCOVERY REQUESTS
QUESTION NOS. NMAG 1-1 THROUGH NMAG 1-22

INTERROGATORY/REQUEST FOR PRODUCTION NMAG 1-12:

Refer to the TVR Pilot Design Approach and Pilot Sample Size Determination on pages 32-38 of Exhibit GN-2.

a. Please confirm that the sample size and outreach targets listed under the heading "Assuming 15% attrition" in Figure 29 represent the minimum enrollment levels to obtain results at the 95% confidence level, assuming 15% attrition rates. If not confirmed, please explain what these represent.

b. Please confirm that higher enrollment rates would likely result in higher confidence levels for the pilot results. If not confirmed, please explain.

c. If higher enrollment rates are likely to result in results with greater statistical significance, please explain why EPE proposes to implement enrollment caps that would limit enrollment to the target enrollment levels in Figure 29, rather than allowing additional customers to enroll in the pilot if they desire to do so.

RESPONSE:

a. Confirmed.

b. Theoretically, that is correct. However, the sample targets have been set so as to provide statistically significant results at a 95% confidence level, which represents a reasonably high level of statistical confidence to draw causal inferences, per the econometric literature.

c. One of the goals of the pilot at this point is to analyze customer response to TVRs. As explained in part (b) above, the recruitment targets have been set to provide a reasonably high level of statistical confidence at which causal inferences about TVRs may be drawn.

The pilot may certainly attract more interest than the targets that have been set. However, these targets have been set such that outcomes may be studied while managing EPE's resources most effectively.

Preparer:	George Novela	Title:	Director- Regulatory Policy and Rates
Sponsor:	George Novela	Title:	Director- Regulatory Policy and Rates

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL TO IMPLEMENT A TIME-VARYING RATE PILOT PROGRAM	)	Case No. 24-00113-UT
EL PASO ELECTRIC COMPANY, Applicant.	)	

EL PASO ELECTRIC COMPANY'S RESPONSE TO
COMMISSION STAFF'S SECOND SET OF DISCOVERY REQUESTS
QUESTION NOS. STAFF 2-1 THROUGH STAFF 2-6

INTERROGATORY/REQUEST FOR PRODUCTION STAFF 2-6:

EPE's Application states that, "In Case No. 21-00269-UT, involving EPE's request for approval of a grid modernization project to implement an Advanced Metering System ("AMS"), EPE explained that deployment of AMS will make possible several new and expanded rate *options that will provide direct benefits to customers* who can respond to requests for load curtailment during times of high prices or respond to high prices by shifting their usage." [emphasis added]

a. Please discuss the direct benefits provided to customers that would result from EPE's proposed pilot program.

b. If the direct benefits that will accrue to customers are limited only to potential bill savings resulting from shifting customer usage, please discuss how EPE determined that the relative bill savings are adequate?

c. Discuss EPE's evaluation of any direct benefits relative to customer bill increases (direct costs) that are associated with EPE's AMI deployment.

d. How does EPE believe that the Commission should evaluate the relative costs and benefits to customers, particularly direct costs and benefits, in the absence of a cost benefit analysis prepared by EPE and filed with its Application in this case?

RESPONSE:

EPE's proposed pilot program is intended to provide statistical information regarding the potential expansion of rate options in the future rate cases. Some of the piloted TVRs may be viewed favorably by participants while others may not.

a. Direct benefits provided to participants in EPE's proposed pilot program primarily consist of the potential bill savings resulting from shifting or reducing usage.

b. The pilot program results will provide the information to evaluate whether bill savings are adequate, relative to the expected load responses discussed in the Brattle report.

c. Please refer to documents filed in Case No. 21-00269-UT which discuss the direct costs associated with EPE's AMI deployment and the subsequent compliance advice notices filed in that case.

d. Brattle's report discusses a Process Evaluation Plan that includes surveying recruited customers at the end of the pilot to understand their experience with the rates tested in the pilot, what worked and what did not work for them. Additionally, a Load Impact Evaluation Plan will be developed to estimate the customer response to the price signals and its associated impact on peak and off-peak system loads. These evaluation plans can be provided to the Commission as compliance documents in this case.

Preparer: Manuel Carrasco Title: Manager – Rate Research

Sponsor: Manuel Carrasco Title: Manager – Rate Research

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE APPLICATION OF EL PASO ELECTRIC COMPANY FOR APPROVAL TO IMPLEMENT A TIME-VARYING RATE PILOT PROGRAM	)	**CASE NO. 22-00113-UT**
EL PASO ELECTRIC COMPANY,	)	
APPLICANT.	)	

AFFIRMATION (IN LIEU OF AFFIDAVIT)
OF COURTNEY LANE

In compliance with the *Temporary NMPRC Electronic Filing Policy of March 20, 2020,* and under Rule 1-011(B) NMRA of the New Mexico Rules of Procedures for the District Courts, I, Courtney Lane, hereby file this testimony on behalf of the New Mexico Department of Justice and state as follows:

I hereby affirm in writing under penalty of perjury under the laws of the State of New Mexico that the statements contained in the foregoing *Direct Testimony of Courtney Lane on Behalf of the New Mexico Department of Justice* are true and correct to the best of my knowledge, information, and belief.

I further declare under penalty of perjury that the foregoing is true and correct.

Executed on July 12, 2024.
/s/ Courtney Lane
Courtney Lane (electronically signed)
Expert Witness on Behalf of the New Mexico Department of Justice
485 Massachusetts Avenue, Suite 3
Cambridge, MA 02139

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE APPLICATION OF EL PASO ELECTRIC COMPANY FOR APPROVAL TO IMPLEMENT A TIME- VARYING RATE PILOT PROGRAM	)	**Case No. 24-00113-UT**
EL PASO ELECTRIC COMPANY,	)	
Applicant	)	

CERTIFICATE OF SERVICE

I CERTIFY that on this date I sent, via email, to the parties listed here a true and correct copy of the ***Direct Testimony of Courtney Lane on Behalf of the NMDOJ.***

EL PASO ELECTRIC	
Nancy Burns	Nancy.Burns@epelectric.com;
Samantha Lamas	Samantha.Lamas@epelectric.com;
Jeffrey Wechsler	jwechsler@montand.com;
Tania Reichsfeld	tania.reichsfeld@epelectric.com;
EPE Management	EPE_Reg_Mgmt@epelectric.com;
Kari Olson	kolson@montand.com;
Yolanda Sandoval	ysandoval@montand.com;
Teresa Pacheco	tpacheco@montand.com;
CCAE	
Charles de Saillan	Desaillan.ccae@gmail.com;
Cara Lynch	lynch.cara.nm@gmail.com;
Michael Kenney	Michael.Kenney@westernresources.org;
Deborah Kapiloff	Deborah.Kapiloff@westernresources.org;
Don Hancock	Sricdon@earthlink.net;
NM DEPARTMENT OF JUSTICE	
Gideon Elliot	GElliot@nmdoj.gov;
Courtney Lane	Clane@synapse-energy.com;
Maria Oropeza	MOropeza@nmdoj.gov;
Doug Gegax	DGegax@nmsu.edu;
NMPRC UTILITY STAFF	
Ryan Friedman	Ryan.Friedman@prc.nm.gov;
John Bogatko	John.Bogatko@prc.nm.gov;
Elisha Leyba-Tercero	Elisha.Leyba-Tercero@prc.nm.gov;

Ed Rilkoff	Ed.Rilkoff@prc.nm.gov;
Elizabeth Ramirez	Elizabeth.Ramirez@prc.nm.gov;
Christopher Dunn	Christopher.Dunn@prc.nm.gov;
Peggy Martinez-Rael	Peggy.Martinez-Rael@prc.nm.gov;
NMPRC – GENERAL COUNSEL	
Russell Fisk	Russell.fisk@prc.nm.gov;
Scott Cameron	Scott.Cameron@prc.nm.gov;
LorieAnn Santillanes, Law Clerk	LaurieAnn.Santillanes@prc.nm.gov;
OFFICE OF HEARING EXAMINERS	
Christopher Ryan, Hearing Examiner	Christopher.Ryan@prc.nm.gov;
John Kreienkamp, Hearing Examiner	John.Kreienkamp@prc.nm.gov;
Ana Kippenbrock, Law Clerk	Ana.Kippenbrock@prc.nm.gov;

DATED July 12, 2024.

/s/ Maria Oropeza
Maria Oropeza
Paralegal