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REVIEW OF ENERGY§PUBLIC UTILITY COMMISSION§§EFFICIENCY PLANNING§OF TEXAS

ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.'S RESPONSE TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION TO ERCOT QUESTION NOS. RFI 1-1 THROUGH 1-8

Electric Reliability Council of Texas, Inc. ("ERCOT") files this Response to Commission Staff's ("Staff") First Request for Information ("RFI") to ERCOT Question Nos. RFI 1-1 through 1-8, filed on March 13, 2025. Commission Staff requested ERCOT's responses by April 3, 2025; therefore, these responses are timely filed.

I. WRITTEN RESPONSES

ERCOT's written responses to Staff's First RFI are attached and incorporated by reference. Each response is stated on or attached to a separate page on which the request has been restated. Pursuant to P.U.C. PROC. R. 22.144(c)(2)(A), each response lists the preparer or person under whose direct supervision the response was prepared and any sponsoring witness. Pursuant to P.U.C. PROC. R. 22.144(c)(2)(F), ERCOT stipulates that its responses may be treated by all parties as if they were made under oath. Respectfully submitted,

/s/ Katherine Gross

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ATTORNEYS FOR ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.

RESPONSES

QUESTION NO. Staff RFI 1-1:

Please provide a comparison of the prices and quantities of capacity procured in ERS to the prices and quantities of capacity procured in the TDU load management programs. The comparison should cover prices and quantities of capacity from January 1, 2015 through January 1, 2025.

RESPONSE:

Note that the typical practice is for the various TDUs to provide ERCOT with the amount of capacity procured prior to a given season, which is described as an "initial report," but ERCOT is not informed regarding the capacity that remains committed in a given load management program once a season starts, which can vary significantly from the numbers in the initial report. Therefore, to respond to this question, ERCOT requested, and each TDU timely responded, with their programs' terms, hours, procured capacity, and program cost (\$/kW) for 2015 through 2025. Using this information, ERCOT was able to do the comparison requested.

For the years 2015 through the summer period of 2021, the four TDU load management programs were only offered during the summer months of June through September, Monday through Friday (excluding federal holidays), from 1-7 pm. After this period, the TDUs started piloting winter versions of the programs, and shortly thereafter, some expanded the terms of their programs, and the various programs continued to diverge. The first table below provides a comparison of the prices and capacity between those programs and ERS during the period when TDUs only offered summer programs. Note that because the load management programs are procured as using a standard offer methodology based on a \$/kW for the entire term and ERS is procured using a \$/MW/hr clearing price for each ERS Time Period, to put the two programs on a comparable basis, the load management capacity is first converted to a \$/MW value, then divided by the number of hours in their term. For ERS, since the load management programs were only available from1-7 pm, M-F, that time is directly comparable to the time both the ERS Time Period 3 (from 1-4pm)(TP3) and ERS Time Period 4 (from 4-7 pm)(TP4), so a time and capacity weighted cost calculated for ERS TP3 & TP4 is provided.

TOSP Summer Programs Only

		AEP	Centerpoint	Oncor	TNMP		ER		ERS		
						TP3	TP4	4	TP3 & TP4 (weighted)		
2015											
	Capacity	29.162	119.442	61.788	4.394	929.24		880.70			
	Cost (\$/MW/hr)	\$45.33	\$69.53	\$83.46	\$77.52	\$ 26.44	\$	26.96	\$26.73		
2016											
	Capacity	23.612	120.248	64.903	7.774	858.50		823.48			
	Cost (\$/MW/hr)	\$53.64	\$64.94	\$83.53	\$96.90	\$ 21.21	\$	22.32	\$21.75		
2017											
	Capacity	27.605	142.752	96.211	6.507	866.85		836.61			
	Cost (\$/MW/hr)	\$49.86	\$56.88	\$73.30	\$78.43	\$ 21.06	\$	21.68	\$21.36		
2018											
	Capacity	28.64	130.107	102.414	7.53	857.70		777.63			
	Cost (\$/MW/hr)	\$52.10	\$72.29	\$75.08	\$78.43	\$ 21.08	\$	21.77	\$21.41		
2019											
	Capacity	20.547	141.487	89.426	6.006	925.97		793.03			
	Cost (\$/MW/hr)	\$57.64	\$63.02	\$82.55	\$79.37	\$ 29.25	\$	33.08	\$30.80		
2020											
	Capacity	29.651	120.045	110	6.966	959.17		794.96			
	Cost (\$/MW/hr)	\$54.01	\$72.31	\$73.73	\$77.52	\$ 29.37	\$	34.23	\$31.57		
2021											
	Capacity	21.647	155.036	118.864	8.33	1,015.80		848.09			
	Cost (\$/MW/hr)	\$51.94	\$56.65	\$68.13	\$78.43	\$ 24.31	\$	28.32	\$26.13		

Once the TDU load management programs began to expand to winter programs, it was necessary to use the number of hours each program was available to perform the conversion from a \$/MW to a \$/MW/hr value. It also required that the ERS costs needed to be converted to a time and capacity weighted comparable to the same terms for each TDU program. For this reason, the ERS comparable prices are listed for each TDU per load management program term.

	AEP	Centerpoint	Oncor	TNMP			ERS	Program	Cost for co	mparision b	y TDU		
							Winter Pr	eriod			Summer F	Period	
					A	ΞP	Centerpoint	Oncor	TNMP	AEP	Centerpoint	Oncor	TNMP
2021/2022 Winter	NUM AEP & C	incur programs Dec-F	als, Caritorpoint & 1	MARP programs Jan	4.247								
Capacity Cost (\$MW/hr)	N/A	102.237 \$25.35	34.722 \$25.25	2.635 \$34.72	5	19.65	\$9.65	\$9.65	\$9.65				
2022 Summer	Note: All progra	anni, 1-7 peri M.F. auch	uting weekends &	Holidays, Jun-Sep									
Capacity Cost (\$/MW/hr)	28.968 \$54.29	163.426 \$56.39	124.067 563.78	7.768 \$78.43						\$32.18	\$32.18	\$32.18	\$32.18
2022/2023 Winter	taxia: Ali progri	em Dec - Feb. 24/7											
Capacity Cost (\$/MWItr)	2.797 \$24.31	12.821 \$23.57	20.573 \$27.78	2.99	5	17.97	\$7.97	\$7.97	\$7.97				
2023 Summer	Note AEP, Ca	nterpoint, TMMP progr	ams, 3-7 pm M-F, 4	ascluding washinds.)	n, Jun-Sep								
-	Note: Oncor pr	oprim, Jun Dep. 24/7											
Capacity	35.115	180.965	99,414	8.521									1.2011.00
Cost (\$/MW/hr)	\$56.51	\$64.89	\$13.66	\$79.37						\$48.45	\$48.45	\$9.89	\$48.45
2023/2024 Winter	NON AEP. TH	MP and Centerpoint pr	rograms Dec - Feb	Oncor program De	all are 24/7								
Capacity	4.281	26.493	51.347	2.22									
Cost (\$/MW/hr)	\$23.91	\$22.89	\$33.22	\$27,32	\$1	11.83	\$11.83	\$8.41	\$11.83				
2024 Summer	Note AEP TH	MP programs 1-7 pm	M-F, ancluding we	mands & Holdays, J	30								
Canacity	35 348	137 210	106 314	0.275									
Cost (\$/MWihr)	\$53.25	\$14.21	\$12.64	\$79.37						\$24.21	\$6.62	\$6.62	\$24.21
2024/2025 Winter	Note AFP 11	MP and Canterport p	tograms Dec - Feb	Oncor program De	all arm 24/7								
Capacity	10.907	N/A	77.013	4.625									
Cost (\$/MWihr)	524.72	N/A	\$25.80	\$28.25	5	\$8.69	\$8.69	\$5.65	\$8.69				

Also note, since it did not seem appropriate to provide a single time weighted capacity value with the table above, a separate table of the ERS procured capacity by ERS Time Period is provided below. In addition, a definition of each ERS Time Period is provided.

ERS Pr	ocured Capacity	y by ERS Tim	e Period (TF) from Octo	ober 2021 th	nrough Nove	mber 2024		
	TP1	TP2	TP3	TP4	TP5	TP6	TP7	TP8	
Oct2021-Nov2021	1064.448	1017.634	1023.84	1098.208	1078 178	956.746	972.021	864.43	
Dec2021-Mar2022	990.982	995.186	1002.417	1008.293	991.697	723.832	754.878	884.451	
Apr2022-May2022	1015.127	1008.379	1022 704	1043.021	1021.644	778.978	799.309	884.363	
Jun2022-Sep2022	937.183	1084.026	1011.038	834.858	927.979	784.52	775.824	819.183	
Oct2022-Nov2022	1016.725	980.395	1006.775	1074.997	1016.157	904.365	919.006	892.439	
Dec2022-Mar2023	1,015.80	1,025.03	1,030.81	1,041.00	995.758	756.474	754.185	898.988	
Apr2023-May2023	1015.626	994.439	989.965	1006.293	974.912	823.621	822 388	913.856	
Jun2023-Sep2023	1057.847	1082.551	1022 362	858.041	1023.97	897.925	867.82	973.279	
Oct2023-Nov2023	976.067	1,004.72	1,025.78	1,003.53	961.304	891 106	897.883	869.181	
Dec2023-Mar2024	1065.8642	1074.4492	1081.0717	1091.0748	1045.5642	1003.7726	809 7886	1007.9819	
Apr2024-May2024	1104.773	1164.531	1164.531	1186.093	1096 157	1003.378	992 564	1082.765	
Jun2024-Sep2024	1299.48	1299.48	1350.236	1185.017	1275 793	1214.579	1216.051	1230.195	
Oct2024-Nov2024	1250.704	1374.579	1356.801	1280.783	1253.149	1202 421	1161.831	1114.611	
		ERS Tim	e Period De	finitions					
Time Period	Time Period Hou	Irs							
Time Period 1	Hours Ending 06	00 - 0900 (5:00	:00 a.m. to 9:00	:00 a.m.) Mone	day through Fri	day except ERC	OT Holidays.		
Time Period 2	Hours Ending 10	00 - 1300 (9:00)	:00 a.m. to 1:00	:00 p.m.) Mon	day through Fri	day except ERC	OT Holidays.		
Time Period 3	Hours Ending 14	00 - 1600 (1:00	00 p.m. to 4:00	:00 p.m.) Mone	day through Fri	day except ERC	OT Holidays.		
Time Period 4	Hours Ending 1700 - 1900 (4:00:00 p.m. to 7:00:00 p.m.) Monday through Friday except ERCOT Holidays.								
Time Period 5	Hours Ending 2000 - 2200 (7:00:00 p.m. to 10:00:00 p.m.) Monday through Friday except ERCOT Holidays.								
Time Period 6	Hours Ending 0600 - 0900 (5:00:00 a.m. to 9:00:00 a.m.) Weekends and ERCOT Holidays.								
Time Period 7	Hours Ending 1600 - 2100 (3:00:00 p.m. to 9:00:00 p.m.) Weekends and ERCOT Holidays.								
Time Period 8	All other hours								

Preparer: Mark Patterson Sponsor: Mark Patterson

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QUESTION NO. Staff RFI 1-2:

Please provide the quantity, in MW, of load management program capacity procured by each TDU from January 1, 2015 through January 1, 2025 for:

- a) The entire year (8760 hours);
- b) The summer season; and
- c) The winter season.

RESPONSE:

Please see the following table:

	Entire Season					Summer S	eason		Winter Season				
	AEP	Centerpoint	Oncor	TNMP	AEP	Centerpoint	Oncor	TNMP	AEP	Centerpoint	Oncor	TNMP	
2015	29.162	119.442	61,788	4.394	29.162	119.442	61,788	4.394	0	0	0	0	
2016	23.612	120.248	64.903	7.774	23.612	120.248	64.903	7.774	0	0	0	0	
2017	27.605	142.752	96.211	6.507	27.605	142.752	96.211	6.507	0	Ô	0	0	
2018	28.64	130,107	102.41	7.53	28.64	130,107	102.41	7.53	0	0	0	0	
2019	20.547	141.487	89.426	6.006	20.547	141.487	89.426	6.006	Ð	0	0	Ð	
2020	29.651	120.045	110	6.966	29.651	120.045	110	6.966	Ð	0	0	Ð	
2021	21.647	155.036	1 18.86	8.33	21.647	155.036	118.86	8.33	0	0	0	0	
2022	28.968	265.663	158.79	10.303	28.968	163.426	124.067	7.768	no reponse	102.237	34.722	2.535	
2023	37.912	193.786	119.99	11.511	35.115	180.965	99.414	8.521	2.797	12.821	20.573	2.99	
2024	39.629	150.031	157.66	11,495	35.348	137,210	106.314	9.275	4.281	12.821	51.347	2.22	
2025	10.907	26.493	77.013	4.625	N/A	N/A	N/A	N/A	10.907	26.493	77.013	4.625	

TDU LM Capacity

Preparer: Mark Patterson Sponsor: Mark Patterson

QUESTION NO. Staff RFI 1-3:

Please provide detailed summaries of ERCOT's deployment practices for: a) TDU load management programs for nonresidential customers; b) TDU load management programs for residential customers; and c) ERS.

RESPONSE:

The TDU load management programs for residential and nonresidential customers are requested to be deployed by the ERCOT operator through an all-TDU Hotline call. Under the Memorandum of Understanding ERCOT currently has with the TDUs, ERCOT may request that TDUs deploy any available capacity from load management programs only if ERCOT has declared, or reasonably expects to declare, a Level 2 Energy Emergency Alert. (See Project 38578, *Energy Efficiency Implementation Project under 16 TAC § 25.181*, filing number 116, December 4, 2023.)

The operator script for that call is as follows:

<u>T#7 EEA2 Media Appeal. Voltage Reduction and LR/ERS:</u>

"This call requires everyone to remain on the line until it is complete. [TO] I will be asking you for the repeat back. This is ERCOT Operator [first and last name], at [xx:xx], ERCOT is declaring EEA 2 due to [Physical Responsive Capability falling below 2000 MW] [the clockminute average system frequency is below 59.91 Hz for 15 consecutive minutes] [steadystate frequency falls below 59.8 Hz] and is issuing an appeal through the public news media for voluntary energy conservation. Reduce customer loads by using distribution voltage reduction measures, if deemed beneficial [and any available capacity from Load Management Programs if available,] [Load Resources and / or ERS have been deployed]. [TO] please repeat this back to me. That is correct, thank you"

ERS, on the other hand, is deployed through use of the MMS Deployment manager which issues an XML instruction. ERS is deployed when Physical Responsive Capability (PRC) falls below 3,000 MW and is not projected to be recovered above 3,000 MW within 30 minutes following the deployment of Non-spin.

Preparer: Mark Patterson Sponsor: Mark Patterson

QUESTION NO. Staff RFI 1-4:

Please provide detailed summaries of ERCOT's processes for verifying compliance with ERCOT's deployment instructions for:

a) TDU load management programs for nonresidential customers;

- b) TDU load management programs for residential customers; and
- c) ERS.

RESPONSE:

a) TDU load management programs for nonresidential customers

As note above in response to RFI 1-3, ERCOT does not issue deployment instructions and instead issues a request through an all-TDU hotline call where ERCOT asks TDUs to deploy any available load management resources. Because the TDU load management programs for nonresidential customers are not ERCOT-run programs, and because the ERCOT request is for a non-specific amount of capacity, ERCOT has not developed a process for quantifying the amount of response following an ERCOT request to a TDU for deployment of their load management capacity, nor for verifying compliance with ERCOT's request to the TDU.

As discussed above in response to RFI 1-1, ERCOT receives projections regarding procured load management capacity prior to a given load management season, which is provided prior to the TDU conducting testing, and does receive periodic updates by the TDUs regarding capacity participating in the programs throughout those seasons/terms.

b) TDU load management programs for residential customers

ERCOT's response to this question is the same as in subsection (a) above.

c) ERS

ERCOT's processes for verifying compliance with ERCOT's deployment instructions for ERS Loads are based on specific measurement of usage data changes during unannounced tests and during actual emergency events. ERCOT Protocol Section 8.1.3.1, *Performance Criteria for Emergency Response Service Resources*, goes into detail on the data and calculations used to quantify those changes in load. A document posted on the ERCOT website titled 'Demand Response Baseline Methodologies' explains in detail the process for determining the various baseline types ERCOT considers and selects from to use in evaluating the performance of ERS Loads. The compliance of an ERS Load will be evaluated by comparing the actual Load on an interval by interval basis to the baseline values. The Protocols lay out a calculation for an ERS Event Performance Factor, or ERSEPF, which reflects the load reduction realized as a percent of the ERS Load's MW obligation.

Preparer: Mark Patterson and Katherine Gross Sponsor: Mark Patterson

QUESTION NO. Staff RFI 1-5:

Between January 1, 2015 and January 1, 2025:

 a) How many times did ERCOT request deployment of TDU load management programs? For each deployment, please specify the utility requested, quantity (in MW) requested, date, time, and duration.

b) How many times did ERCOT deploy ERS? For each deployment, please specify the quantity (in MW) deployed, date, time, and duration.

RESPONSE:

a) How many times did ERCOT request deployment of TDU load management programs? For each deployment, please specify the utility requested, quantity (in MW) requested, date, time, and duration.

There has been only one request to the TDUs to deploy load management programs during this period and that was on September 6, 2023 when ERCOT entered into EEA Level 2. This request goes out as a verbal request through the all-TDU hotline, so all TDUs would have received the request. For requests of the TDUs to deploy their TDU load management programs, ERCOT does not request a specific amount, but rather, requests all available capacity. Therefore, that September 6th request did not request a specific amount of capacity. Note that there were not any winter-season TDU load management programs during Winter Storm Uri, so there was not a request to deploy for those dates.

The ERCOT Operator log for the September 6, 2023 call is as follows.

Operator Log Details

ID: 928742 Entry Time: 9/6/2023 19:27:00 Log Book: Transmission Security Log Type: EEA

Created by Paul Gauntt at 9/6/2023 19:27 Last modified by Paul Gauntt at 9/6/2023 19:27

Notes: T#7 EEA2 Media Appeal and Voltage Reduction:At 1925, ERCOT is declaring EEA 2 and is issuing an appeal through the public news media for voluntary energy conservation. Reduce customer loads by using distribution voltage reduction measures, if deemed beneficial [and any available capacity from Load Management Programs if available,] [Load Resources and / or ERS have been deployed]. ONC provided repeat back.

b) How many times did ERCOT deploy ERS? For each deployment, please specify the quantity (in MW) deployed, date, time, and duration.

Program	Contract Term	Time Period(s) Deployed	Quantity Deployed	Date Start	Deployment Time	Date Stop	Recall Time
ERS-30	JunSep19	трз	833.057	08/13/2019	15:25:24	08/13/2019	16:18:29
ERS-10	JunSep19	трз	92.161	08/13/2019	15:34:12	08/13/2019	15:58:26
ERS-30	JunSep19	трз	833.057	08/15/2019	15;13:24	08/15/2019	16: 55:49
ERS-10, 30, WS	FebMay21	All	927.227- 1111.238	02/15/2021	00:18:02	02/19/2021	10:02:10
ERS-10, ERS-30 & WS	JunSep22	TP3 & TP4	834.858- 927.979	07/13/2022	14:58:29	07/13/2022	18:43:59
ERS-10 & ERS-30	JunSep23	TP4 & TP5	811.841- 1023.97	08/17/2023	19:21:33	08/17/2023	20:12:06
ERS-10 & ERS-30	JunSep23	TP4 & TP5	811.841- 1023 . 97	09/06/2023	19:17:21	09/06/2023	20:46:46

The following table provides the ERS Deployment history for this time period.

Note that "Quantity Deployed" is in MWs.

Preparer: Mark Patterson Sponsor: Mark Patterson

QUESTION NO. Staff RFI 1-6:

Please describe and compare the benefits, if any, to the reliability of the ERCOT power region provided by:

a) TDU load management programs for nonresidential customers;

b) TDU load management programs for residential customers;

c) REP demand response programs (e.g., peak rebates, time of use pricing, free days and hours); and

d) ERS.

RESPONSE:

In general, 1 MW of additional capacity is enough to power 215-250 homes. When ERCOT is in a capacity deficiency, any additional capacity is appreciated, regardless of its origin, as that additional capacity can help avoid load shed for those extra homes. However, there are variances in each of the programs listed above that affect the benefits received by ERCOT from each program. Those variances and benefits are described below.

a) TDU load management programs for nonresidential customers

For this program, ERCOT has no means of verifying compliance, which is discussed above in response to RFI 1-4. Because there is no obligation to meet a specific performance metric by the TDUs, ERCOT operators do not have insight into the amount of MWs that can be expected to be deployed in response to a request for deployment. Because ERCOT has minimal data on deployment in response to an ERCOT-issued load management deployment request, ERCOT cannot give an estimate based on previous events to allow the operators to predict the level of response that can be assumed, and this leads to the operators to need to continue to monitor the system and adjust for any response from a request. Note that under the Memorandum of Understanding (MOU) referenced in Response to RFI 1-3, ERCOT does not have real time knowledge during an event about amounts that have already been deployed and are therefore unavailable, only being required under the MOU of being informed of such deployment by 10:30 AM the day following the deployment.

b) TDU load management programs for residential customers

Please see ERCOT's response above for RFI 1-6(a).

c) REP demand response programs (e.g., peak rebates, time of use pricing, free days and hours)

Similar to the load management programs discussed above, for the REP demand response programs, ERCOT operators do not have insight into the amount of MWs from each REP demand response program that can be expected to be deployed in real time. However, ERCOT does receive data on deployment patterns after the fact through ERCOT's annual demand response survey, which collects data from REPs regarding demand response participation and deployments for the summer months. This is in contrast to the TDU load management programs, for which ERCOT does not have data on actual deployment following the only request for deployment that occurred. Because the deployment of the REP demand response programs is driven by prices, which should be in-line with capacity scarcity, ERCOT generally expects these programs to self-deploy in times where the extra capacity would be helpful to the ERCOT market.

Note that with the implementation of 16 Texas Administrative Code (TAC) § 25.186, starting in May of this year, ERCOT and the PUCT should have additional detailed data regarding REP demand response deployments, as REPs providing a responsive device program within the ERCOT region will be required to track, on a year-round basis, information on each residential customer with smart appliances or devices enrolled in each responsive device program offered by the REP, and the date and time of each deployment by each REP.

d) ERS

In contrast to the load management programs listed above, ERS has a performance metric, as described above in the response to RFI 1-4(c). Because there are performance metric requirements, ERCOT has more certainty about what response to expect when ERS is deployed. From past ERS data, ERCOT can determine that when deployed, ERS response has historically exceeded the obligation.

Preparer: Mark Patterson, Carl Raish, and Katherine Gross Sponsor: Mark Patterson

QUESTION NO. Staff RFI 1-7:

Is ERCOT aware of any program overlap for unique ESI IDs participating in ERS, TDU load management, and REP demand response programs? If yes:

a) Please provide data exhibiting the extent of such program overlap.

b) Please describe how, if at all, such program overlap affects any reliability benefits provided by each program.

c) Please describe how to eliminate or reduce such program overlap.

RESPONSE:

a) Please provide data exhibiting the extent of such program overlap.

The following diagram shows the counts of ESIIDs participating in combinations of one or more of the REP demand/price response programs, ERS, and the TDU load management programs during the summer months of 2024. For example, of the 68,704 total customers in TDU load management programs, 28,401 of those customers were also enrolled in a REP DR program during summer of 2024, according to last year's Annual Demand Response Survey results.



The table below provide ESI ID count detail on the type of REP Program for those ESIIDs that are also participating in ERS.

Indexed Real	Indexed Day	Free	Other Direct	Decir Dehoto	Time of Line
Time	Ahead	Days/Hours	Load Control	Peak Redate	Time-oi-Use
1,453	0	6,849	2,603	4,995	3,357

The table below provide ESI ID count detail on the type of REP Program for those ESIIDs that are also participating in a TDU load management program.

Indexed Real Time	Indexed Day Ahead	Free Days/Hours	Other Direct Load Control	Peak Rebate	Time-of-Use
67	0	3,712	22,758	4,225	3,003

b) Please describe how, if at all, such program overlap affects any reliability benefits provided by each program.

In ERCOT's opinion, overlapping participation in REP Free-Days/Hours or Time-of-Use programs and ERS or TDU load management programs does not have an impact on the reliability benefits of either ERS or the TDU load management programs. ERCOT has not done analysis to quantify load shape modifications associated with participation in those REP programs, but would expect that these two REP programs result in relatively consistent changes to the load shape of specific participants. Since ERS and TDU load management performance during deployment events primarily are estimated using a baseline developed from historical data, and since ERCOT would expect that baseline to reflect the load shape changes caused by participation in those REP programs, actual load reduction amounts realized during deployments of ERS or TDU load management programs would be in addition to the reductions from those REP programs.

In ERCOT's opinion, overlapping participation in all other categories of REP programs and ERS or TDU load management programs does have an impact on the reliability benefits of ERS and the TDU load management programs. ERCOT's analysis of ERS actual emergency events has shown evidence of significant load reduction prior to the issuance of the deployment instruction. Much of this early load reduction of ERS is still treated and paid for as ERS capacity, but more likely is due to participants reducing load in response to one of the other REP programs to avoid high prices. If ERCOT was able to identify Customers participating in these other REP programs that induce real-time price-responsive behavior and exclude them from participating in ERS, the money otherwise paid to QSEs on behalf of these Customers would become available to other participants. The combined reliability benefit of the modified ERS and the continued price response from the excluded participants would be greater. ERCOT expects that this increased reliability benefit would be realized if the exclusion also applied to participation in the TDU load management programs.

c) Please describe how to eliminate or reduce such program overlap.

ERCOT and the TDUs work collaboratively to prevent ESIIDs from having overlapping obligations in both ERS and the TDU load management programs. Inadvertent overlaps have been discovered in the past, but these occurrences have been very rare, involved only a few ESIIDs, and have resulted in improvements in the tracking process to prevent future recurrences.

Currently, ERCOT's ability to identify overlap between REP programs and either ERS or TDU load management is limited. ERCOT obtains after-the-fact evidence of REP demand/price response participation data for summer months with its Annual Demand Response Survey process.

Complete elimination of any overlap between REP programs and either ERS or TDU load management at a minimum would require ERCOT to receive continuously updated ESI ID participation information from REPs. However, note that ERCOT planned implementation of 16 TAC § 25.186, starting in May of this year, should contribute to some reduction in the amount of overlap. However, ERCOT does not expect that effort to eliminate all overlap because it does not address all demand response categories, does not include non-residential ESI IDs, and it is not in real time (i.e. is reporting submitted after the fact).

Preparer: Carl Raish Sponsor: Carl Raish

QUESTION NO. Staff RFI 1-8:

Given the statutory requirements related to TDU load management programs, how, if at all, can the design of such programs be improved?

RESPONSE:

ERCOT has several suggestions:

- Have TDU load management programs be competitively offered instead of using a Standard Offer Price (SOP). This would make the price that is paid per hour for these programs more in-line with scarcity, which would in turn result in the procurement of more MWs at the same cost;
- The Memorandum of Understanding referenced in Response to RFI 1-3 could be revised to give ERCOT operators more flexibility as to when to deploy, rather than waiting for ERCOT to have declared, or reasonably expecting to declare, a Level 2 Energy Emergency Alert(EEA). In some cases, the discretion to deploy during EEA1 would be useful. Note that ERCOT's understanding is that while under PURA § 38.075, TDUs are permitted to design and operate load management programs for nonresidential customers to be deployed when ERCOT has declared an EEA event of Level 2 or higher, and such programs are eligible for recovery in a TDU's base rates, load management programs recovered through a TDU's Energy Efficiency Cost Recovery Factor pursuant to PURA § 39.905, in contrast, have no such EEA level required before deployment. Please see ERCOT's May 23, 2024 comments in PUCT Project No. 56517, *Review of Energy Efficiency Planning*, for more details;
- Add in an obligation to perform such as exists in the ERCOT Protocols for ERS to provide ERCOT operators a better awareness of load capacities available;
- Require that the load management program periods of obligation have multiple, distinct time periods, similar to ERS, which would recognize that a customer's load curtailment capability can vary across the day;
- Require TDUs provide ERCOT specifics regarding the load management deployments and

testing, including ESIIDs deployed, contracted capacity, ramp period, deployment start and stop dates/times. This data would allow ERCOT to perform an analysis to determine how much load reduction was or could be expected to be achieved.

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