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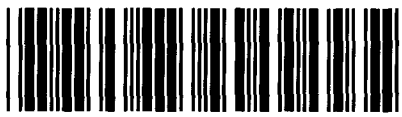

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PUBLIC UTILITY COMMISSION OF TEXAS
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SOAH DOCKET NO. 473-20-0259
DOCKET NO. 49916

APPLICATION OF ENTERGY TEXAS, INC. TO RECONCILE FUEL AND PURCHASED POWER COSTS	§ § § §	**PUBLIC UTILITY COMMISSION OF TEXAS**

RESPONSE OF ENTERGY TEXAS, INC.
TO OPUC's SEVENTH REQUEST FOR INFORMATION:
OPUC 7: 1-24

Entergy Texas, Inc. ("Entergy Texas" or "the Company") files its Response to OPUC's Seventh Request for Information. The response to such request is attached and is numbered as in the request. An additional copy is available for inspection at the Company's office in Austin, Texas.

Entergy Texas believes the foregoing response is correct and complete as of the time of the response, but the Company will supplement, correct or complete the response if it becomes aware that the response is no longer true and complete, and the circumstance is such that failure to amend the answer is in substance misleading. The parties may treat this response as if it were filed under oath.

Respectfully submitted,

George G. Hoyt
George G. Hoyt
Entergy Services, LLC
919 Congress Avenue, Suite 701
Austin, Texas 78701
(512) 487-3945 telephone
(512) 487-3958 facsimile

OPUC 7: 1-24

CERTIFICATE OF SERVICE

I certify that a copy of the foregoing Response of Entergy Texas, Inc. to OPUC's Seventh Request for Information has been sent by either hand delivery, email, facsimile, overnight delivery, or U.S. Mail to the party that initiated this request in this docket on this the 4th day of May 2020.

George G. Hoyt
George G. Hoyt

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Jeff Knighten
to the Seventh Set of Data Requests	Sponsoring Witness: Scott Celino
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. WG425
	Ending Sequence No. WG425

Question No.: OPUC 7-1 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Mr. Scott M. Celino, page 2. Please indicate whether the referenced allocation of the Rough Production Cost Equalization ("RCPE") bandwidth credits related to prior periods in Docket No. 43998 among customer classes was a contested issue, and if so, identify the ETI witness(es) that addressed this issue and the specific finding(s) in the Commission's Final Order dealing with the issue.

Response:

The Rebuttal Testimony of Scott Celino contained an error in that it referenced the RPCE adjustment in Docket No. 43998 as an example of an instance in which an RPCE adjustment amount was allocated based on usage during the month in which the adjustment was booked to eligible fuel expense. Instead, this adjustment was allocated among classes based on usage during the 2005 historical test period. This allocation was not a contested issue in Docket No. 43998.

As detailed in ETI's response to OPUC 7-2, certain RPCE adjustments have been allocated based on usage in the historical test period while other adjustments have been allocated based on usage in the month in which the adjustment was booked to eligible fuel expense.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Scott Celino
to the Seventh Set of Data Requests	Sponsoring Witness: Scott Celino
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. WG426
	Ending Sequence No. WG426

Question No.: OPUC 7-2 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Mr. Scott M. Celino, page 2. Please provide workpapers supporting the class allocation of RCPE bandwidth credits and charges recovered in past ETI fuel refunds and explain the extent to which the class allocations reflected class usage during the historical periods in which the RCPE over-or under-charges occurred.

Response:

Please see attached document named "Data for OPUC 7-2" which shows RPCE related charges and credits, resettlements, and adjustments included in several recent ETI fuel refund/surcharge filings and the usage used in the class allocation of those costs/credits. Also attached are the exhibits from those various refund/surcharge filings, which support the allocation of costs/credits used in the rate calculations.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: J. Andrew Lewis, Jr.
to the Seventh Set of Data Requests	Sponsoring Witness: Scott Celino
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. WG405
	Ending Sequence No. WG405

Question No.: OPUC 7-3 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Mr. Scott M. Celino, page 3. Please indicate whether ETI normally allocates reconcilable fuel disallowances due to imprudently incurred fuel costs during the reconciliation period to rate classes based on usage of those customers in the months during which the imprudently incurred costs were incurred, or based on usage in months in which the disallowance was ordered by the Commission and/or booked by the Company.

Response:

Mr. Celino's rebuttal testimony at page 3 explains ETI's proposed allocation of a credit resulting from a FERC Order related to activities occurring well before the reconciliation period. By contrast, ETI allocated the stipulated disallowance in its most recent fuel reconciliation proceeding, Docket No. 46076, which related to reconciliation period costs "based on Texas retail kilowatt-hour sales subject to Entergy's fuel factor over the reconciliation period." Order at Finding of Fact No. 13. Ultimately, ETI will allocate a fuel expense disallowance as directed by the Public Utility Commission of Texas.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: J. Andrew Lewis, Jr.
to the Seventh Set of Data Requests	Sponsoring Witness: Scott Celino
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. WG406
	Ending Sequence No. WG406

Question No.: OPUC 7-4 Part No.: Addendum:

Question:

Please indicate whether ETI normally allocates adjustments to correct for errors in reconcilable fuel billings that occur during the reconciliation period to rate classes based on usage of those customers in the months during which the billing errors actually occurred, or in months in which the adjustment for such errors was ordered by the Commission and/or booked by the Company.

Response:

ETI corrects billing errors in the month that the error is identified. Accordingly, the correction of any billing error would appear during that correction month from an accounting perspective. For fuel refund or surcharge calculations, this information is reorganized such that any corrections of billing errors are included in the month that the billing should have taken place as opposed to the month the error was corrected.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Jennifer Lundeen
to the Seventh Set of Data Requests	Sponsoring Witness: Christopher K. Burke
of Requesting Party: Office of Public Utility	Beginning Sequence No. WG407
Counsel	Ending Sequence No. WG407

Question No.: OPUC 7-5 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Mr. Christopher K. Burke, page 3, lines 17-18. Please confirm that ETI did not provide Apparent Cause Analysis Reports for any of the four lengthy Sabine 3 forced outages addressed by OPUC witness Mr. Scott Norwood's recommended $2.01 million disallowance.

Response:

As explained in Mr. Burke's rebuttal testimony, beginning on page 3, ETI provided Apparent Cause Analysis ("ACA") Reports where they were warranted, which was not the case for any of the four outages addressed by Mr. Norwood's proposed disallowance.

It is neither practical nor necessary to conduct the time- and resource-intensive investigation associated with a formal outage report for every forced outage. ETI provided ACA Reports when the duration of the event was appreciable *and* the cause of the event was not readily apparent so that steps could be taken to identify and mitigate against potential recurring problems. As Mr. Burke explained on pages 6-9 of his rebuttal testimony, the cause of each of the four outages addressed by Mr. Norwood's proposed disallowance was readily apparent based on observation of unit operations or review of operating data. Where that is the case, Mr. Burke explains, the Company's resources are better utilized and customers are better served when personnel focus on repair work as opposed to investigating something that is already known. Thus, it is appropriate and reasonable that the more extensive reports were prepared for only certain outages.

In addition to this explanation, and the information already provided in response to OPUC 1-21, Mr. Burke provided an additional detailed explanation for each of the outages addressed by Mr. Norwood's proposed disallowance. See Exhibit CKB-R-2 and the answer to Q16 in Mr. Burke's rebuttal testimony.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Jennifer Lundeen
to the Seventh Set of Data Requests	Sponsoring Witness: Christopher K. Burke
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. WG412
	Ending Sequence No. WG422

Question No.: OPUC 7-6 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Mr. Christopher K. Burke, page 6, lines 19-23. Please provide any documentation supporting Mr. Burke's testimony that each Sabine 3 forced outage addressed in the Direct Testimony of OPUC witness Mr. Scott Norwood was associated with the effects of normal wear and tear, along with any other evidence that the cause of the outage events was apparent from visual inspection, and therefore, it was unnecessary to prepare outage reports for those events, including contemporaneous notes of the outages, photos, etc.

Response:

Outages Resulted from Normal Wear and Tear: For the three outages dated, 6/14/17, 7/22/17, and 6/6/18, see page 7, line 5 through page 8, line 7 of Mr. Burke's rebuttal testimony, in which he explains the basic composition of the Sabine 3 steam generator and how boiler hotspots develop over time due to deterioration of refractory lining, which becomes more common as a unit (such as the 54-year old Sabine 3) ages. See also Exhibit CKB-R-2. For the outage dated 4/24/17, see page 8, line 9 through page 9, line 11 of Mr. Burke's rebuttal testimony, in which he explains the overheating condition resulted from Thermo Acoustic Resonance, a condition that occurs with a mutual heat transfer between fluid and pipe wall due to cyclic fluid compression and expansion. As with the development of boiler hotspots, this is a condition that develops over time with normal operation of a steam unit of the type and vintage of Sabine 3. The fact that these conditions are associated with the effects of normal operation over time (i.e., normal wear and tear) is common knowledge and well known to utilities and operators of similar units across the industry.

Cause Apparent from Visual Inspection: See the attached materials, which include Maintenance Work Requests describing the observed condition of the unit at the time of the outages at issue, as well as pictures of damage apparent from visual inspection.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc. to the Seventh Set of Data Requests of Requesting Party: Office of Public Utility Counsel	Prepared By: Jennifer Lundeen Sponsoring Witness: Christopher Burke Beginning Sequence No. WG424 Ending Sequence No. WG424

Question No.: OPUC 7-7 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of Mr. Christopher K. Burke, page 6, lines 19-23. Please indicate whether Mr. Burke's assertions regarding the Sabine 3 boiler hot spot forced outages are based on his direct observation and knowledge of the outage events, or based on information provided by other ETI employees that observed the outage events directly and participated in repair of the damage that contributed to the outage. Please provide all notes and other information that Mr. Burke prepared or relied upon for the conclusions expressed in his Rebuttal Testimony. Please provide the dates these materials were prepared and first reviewed by Mr. Burke.

Response:

See page 6, lines 8 through 13 of Mr. Burke's rebuttal testimony in which he explains that he reviewed the NERC GADS data for the outages at issue, interviewed Sabine Plant personnel, and reviewed information regarding the scope of repair work for each of those outages. This review was conducted between March 11, 2020 and April 15, 2020 while preparing his rebuttal testimony. See also ETI's response to OPUC 7-6, which includes documentation reviewed by Mr. Burke that was developed contemporaneous with the outages at issue by personnel in positions that reported up to Mr. Burke when serving in his role as Vice President, Texas Power Plant Operations. As explained on page 3, lines 7-9 of his direct testimony, in that role, Mr. Burke was responsible for the safe, reliable, and efficient operations of the ETI fleet of power plants and the personnel resources who operate them on behalf of ETI.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Jennifer Lundeen
to the Seventh Set of Data Requests	Sponsoring Witness: Christopher K. Burke
of Requesting Party: Office of Public Utility	Beginning Sequence No. WG408
Counsel	Ending Sequence No. WG408

Question No.: OPUC 7-8 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Mr. Christopher K. Burke, pages 8-9. Please indicate whether Mr. Burke's assertions regarding the fourth Sabine 3 forced outage addressed in the Direct Testimony of OPUC witness Mr. Scott Norwood are based on Mr. Burke's observation and knowledge of the outage events, or based on information provided by other ETI employees that observed the outage effects directly and participated in repair of the damage that contributed to the outage. Please provide all notes and other information that Mr. Burke relied upon for the conclusions expressed in his Rebuttal Testimony regarding this outage. Please provide the dates these materials were prepared and first reviewed by Mr. Burke.

Response:

See the Company's response to OPUC 7-7.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Jennifer Lundeen
to the Seventh Set of Data Requests	Sponsoring Witness: Christopher K. Burke
of Requesting Party: Office of Public Utility	Beginning Sequence No.WG409
Counsel	Ending Sequence No. WG409

Question No.: OPUC 7-9 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Mr. Christopher K. Burke, page 12, lines 1-7. Please indicate whether Mr. Burke's assertions regarding the reasonableness of ETI's actions with regard to managing the four Sabine 3 forced outages addressed in the Direct Testimony of OPUC witness Mr. Scott Norwood are based on Mr. Burke's direct observation and knowledge of the outage events, or based on information provided by other ETI employees. Please provide all notes and other information that Mr. Burke prepared or relied upon for the conclusions expressed in Mr. Burke's Rebuttal Testimony, page 12, lines 1-7. Please provide the dates these materials were prepared and first reviewed by Mr. Burke.

Response:

See the Company's response to OPUC 7-7.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Jeff Knighten
to the Seventh Set of Data Requests	Sponsoring Witness: Devon Jaycox
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. WG410
	Ending Sequence No. WG410

Question No.: OPUC 7-10 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Mr. Devon S. Jaycox, page 3, lines 2-5. Please provide a citation to the Direct Testimony of OPUC witness Mr. Scott Norwood for the proposition that the Spindletop gas storage facility provides no value in supply reliability or hourly and daily swing flexibility.

Response:

As described in the section of Devon Jaycox's testimony cited in the question, Mr. Norwood proposes a disallowance of the full cost of the Spindletop gas storage facility, which implies that he ascribes no value to the services provided by the gas storage facility to ETI's customers. See the Direct Testimony of Scott Norwood on page 6, lines 8-12, and page 16, lines 1-5, where Mr. Norwood argues that the full operating cost of the Spindletop gas storage facility should be disallowed. Mr. Norwood acknowledges that the acquisition and operating costs of the Spindletop gas storage facility have previously been deemed prudent by the Commission but goes on to question the facility's value in light of various changes in market conditions on page 12, line 9, through page 14, line 4 of his Direct Testimony. However, Mr. Norwood does not quantify any change in value of the Spindletop facility to ETI's customers.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Harrell Wise
to the Seventh Set of Data Requests	Sponsoring Witness: Devon Jaycox
of Requesting Party: Office of Public Utility	Beginning Sequence No. WG411
Counsel	Ending Sequence No. WG411

Question No.: OPUC 7-11 Part No.: Addendum:

Question:

Please identify other Entergy Operating Companies that own gas storage facilities.

Response:

See Entergy Texas, Inc's response to OPUC 6-15.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Harrell Wise
to the Seventh Set of Data Requests	Sponsoring Witness: Devon Jaycox
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. WG423
	Ending Sequence No. WG423

Question No.: OPUC 7-12 Part No.: Addendum:

Question:

Please identify other regional utilities known to ETI that own gas storage facilities.

Response:

ETI construes "regional utilities" to mean public utilities that provide electricity service.

Most gas storage facilities are owned by interstate and intrastate pipeline companies, local distribution companies (LDCs), and independent storage service providers. ETI has not performed an exhaustive search and is not currently aware of whether other electric utilities in the region own gas storage facilities. However, the Company notes that utility ownership of a gas storage facility is not indicative of whether utilities and other entities rely on and benefit from the services provided by such facilities. For example, in order to ensure reliable service to its customers during the peak winter period, Entergy New Orleans' LDC leases storage capacity from a pipeline company to store gas that can be withdrawn during the winter months to serve its customers. In addition, electric utilities that may neither own nor lease storage capacity nevertheless may benefit indirectly from the services provided by storage facilities in terms of both reliability and flexibility. For example, firm supply or transportation contracts, call option contracts, and no-notice service contracts are typically backed by natural gas storage that is owned or leased by the supplier, who passes the storage costs to the customer.

The following links provide information on the types, locations and usage of natural gas storage facilities and substantiate that natural gas storage facilities are utilized across the nation as an economic solution to support flexibility and reliability of gas supply for all natural gas consumers.

https://energyinfrastructure.org/energy-101/natural-gas-storage

https://www.eia.gov/naturalgas/monthly/pdf/table_13.pdf

https://www.eia.gov/naturalgas/storage/basics/

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Harrell Wise/Jeff Knighten
to the Seventh Set of Data Requests	Sponsoring Witness: Devon Jaycox
of Requesting Party: Office of Public Utility	Beginning Sequence No. . TH422
Counsel	Ending Sequence No. . TH422

Question No.: OPUC 7-13 Part No.: Addendum:

Question:

Please explain why Entergy Gulf States Louisiana ("EGSL") opted not to continue its participation in the Spindletop gas storage facility and provide documentation and analysis supporting Entergy management's decision on that issue.

Response:

See Company's response to OPUC 6-8.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Harrell Wise/Jeff Knighten
to the Seventh Set of Data Requests	Sponsoring Witness: Devon Jaycox
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. TH423
	Ending Sequence No. TH423

Question No.: OPUC 7-14 Part No.: Addendum:

Question:

Please explain how ETI's cost of ownership and operation of the Spindletop gas storage facility were impacted by EGSL's decision not to continue its participation in the Spindletop gas storage facility.

Response:

See the Company's response to OPUC 6-8 for a description of the circumstances that resulted in EGSL no longer utilizing the Spindletop gas storage facility. With respect to changes in ETI's Spindletop costs, see the Company's response to OPUC 6-7. With respect to operations, there have been no changes to Spindletop operations as a result of EGSL no longer utilizing the Spindletop gas storage facility. ETI continues to operate the Spindletop gas storage facility to support the needs of the Sabine station, which is now wholly used by ETI. See also pages 5-8 of the Rebuttal Testimony of Devon Jaycox.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Harrell Wise
to the Seventh Set of Data Requests	Sponsoring Witness: Devon Jaycox
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. TH429
	Ending Sequence No. TH431

Question No.: OPUC 7-15 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Devon S. Jaycox, page 10, and Exhibit DSJ-R-1. Please provide workpapers, including underlying assumptions and calculations supporting the results summarized in the two presentations presented in Exhibit DSJ-R-1, along with alternatives to continued operations of the Spindletop gas storage facility that were evaluated in each analysis.

Response:

Information included in the response contains highly sensitive protected ("highly sensitive") materials. Specifically, the responsive materials are protected pursuant to Texas Government Code Sections 552.101, 552.104 and/or 552.110. Highly sensitive materials will be provided pursuant to the terms of the Protective Order in this docket.

In the 2015 presentation, the historical flexibility requirements on page 10 were constructed with the minimum and maximum generation each day using data obtained from the Company's process information database. The natural gas flexibility requirement on page 11is the change in rate of gas flow needed to accommodate the flexibility on page 10 assuming a 10.5 heat rate. The charts on pages 12 and 13 show the flexibility requirements in different ways using the same data from page 11. See the highly sensitive attachment.

The 2015 presentation included the data that could be used to calculate the cost of replacing EGSL's portion of the Spindletop facility. The pricing information on page 15 of the presentation was based on market offers for services for Sabine. Mr. Jaycox explains in his rebuttal testimony on page 11, lines 5-21, how the information provided in the 2015 presentation can be used to calculate the estimated total annual cost of market-based alternatives to replace EGSL's 57.5% share of Spindletop flexibility. The calculation and results are as follows:

Cost of Day Ahead Call Options:		
Description	**Amount**	**Reference**
a) Daily flow rate required (MMBtu/day)	50,000	Exhibit DSJ-R-1, page 14

b) Number of days / year	365	
c) Pct of year that daily swing is expected to exceed ETI's portion of Spindletop delivery capability	38%	Exhibit DSJ-R-1, page 11
d) Commodity fee ($/MMBtu)	$0.13	Exhibit DSJ-R-1, page 15
e) Total Day Ahead Call Option Commodity Cost	$901,550	Product of rows a, b, c, d
f) Annual Reservation fee	$2,190,000	Exhibit DSJ-R-1, page 15
g) Total Annual Cost	$3,091,550	Sum of rows e, f

Cost of No-Notice Options:		
Description	**Amount**	**Reference**
h) Daily flow rate required (MMBtu/day)	50,000	Exhibit DSJ-R-1, page 14
i) Number of days / year	365	
j) Pct of year that daily swing is expected to exceed ETI's portion of Spindletop delivery capability	38%	Exhibit DSJ-R-1, page 11
k) Commodity fee ($/MMBtu)	$0.50	Exhibit DSJ-R-1, page 15
l) Total No-Notice Commodity Cost	$3,467,500	Product of rows h, i, j, k
m) Annual Reservation fee	$1,278,000	Exhibit DSJ-R-1, page 15
n) Total Annual Cost	$4,745,500	Sum of rows l, m

Based on the above calculations, the estimated total annual cost to replace the 57.5% portion of the Spindletop facility that was being paid by EGSL with Day Ahead Call Options and No-Notice Call Options is $7,837,050.

With regard to the 2019 presentation, the Annual Cost for each Product/Service (page 3 of the presentation) is simply the product of the Estimated Price ($/MMBtu), Volume (MMBtu), and number of days/year (365).

DESIGNATION OF PROTECTED MATERIALS PURSUANT TO PARAGRAPH 4 OF DOCKET NO. 49916 PROTECTIVE ORDER

The Response to this Request for Information includes Protected Materials within the meaning of the Protective Order in force in this Docket. Public Information Act exemptions applicable to this information include Tex. Gov't Code Sections 552.101, 552.104 and/or 552.110. ETI asserts that this information is exempt from public disclosure under the Public Information Act and subject to treatment as Protected Materials because it concerns competitively sensitive commercial and/or financial information and/or information designated confidential by law.

Counsel for ETI has reviewed this information sufficiently to state in good faith that the information is exempt from public disclosure under the Public Information Act and merits the Protected Materials Designation.

George Hoyt
Entergy Services, Inc.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Harrell Wise
to the Seventh Set of Data Requests	Sponsoring Witness: Devon Jaycox
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. TH421
	Ending Sequence No. TH421

Question No.: OPUC 7-16 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Mr. Devon S. Jaycox, page 11, lines 12-21. Please provide documentation supporting the levels of estimated reservation fees and premiums for call options on gas supply, along with the workpapers, assumptions and underlying calculations for the annual cost to replace EGSL's 57.5% share of the Spindletop gas storage facility.

Response:

See Company's response to OPUC 7-15.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Harrell Wise
to the Seventh Set of Data Requests	Sponsoring Witness: Devon Jaycox
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. TH428
	Ending Sequence No. TH428

Question No.: OPUC 7-17 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Mr. Devon S. Jaycox, page 12, lines 1-11. Please provide documentation supporting the referenced annual volume and cost of flexibility service delivered from the Spindletop gas storage facility, along with the workpapers, assumptions, and underlying calculations.

Response:

The volume associated with the referenced testimony is based on approximately 50% of the gas requirement for Sabine plant at full load for four units, or 200,000 mmBtu. The 50% assumption was based on the average amount of firm transportation in place for other legacy generation across the Entergy fleet. The price of the options was based on offers from counterparties for similar services to Lewis Creek.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Harrell Wise
to the Seventh Set of Data Requests	Sponsoring Witness: Devon Jaycox
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. TH422
	Ending Sequence No. TH422

Question No.: OPUC 7-18 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Mr. Devon S. Jaycox, page 12, lines 1-11. Please provide any analysis of the annual volume and cost of flexibility service delivered from the Spindletop gas storage facility during the reconciliation period, along with the workpapers, assumptions, and underlying calculations.

Response:

See response to OPUC 7-17.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Harrell Wise
to the Seventh Set of Data Requests	Sponsoring Witness: Devon Jaycox
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. TH427
	Ending Sequence No. TH427

Question No.: OPUC 7-19 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Mr. Devon S. Jaycox, page 13. Please provide ETI's share of the Operating and Maintenance ("O&M") expenses associated with Mechanical Integrity Test and well inspections for the Spindletop gas storage facility for each of the last four calendar years and as budgeted for 2020, 2021, and 2022.

Response:

	Total Payments	Inspection Related	Payments Excluding Inspection Related
2015	5,456,861	131,599	5,325,262
2016	8,915,611	1,576,601	7,339,010
2017	8,914,594	2,171,225	6,743,369
2018	6,197,663	-	6,197,663

The "Inspection Related" costs in this table include all O&M payments to the operator that were directly related to the Mechanical Integrity Test ("MIT") and wellhead inspections.

The next MIT inspections are expected to occur in 2021, but no wellhead inspection is planned for that year. The expected cost of the MIT inspections is $65,000 for each of the two wells, for a total budgeted amount of $130,000. ETI does not currently expect MIT or wellhead inspections to be performed in 2020 or 2022; thus, the amounts budgeted for those years is $0.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Harrell Wise
to the Seventh Set of Data Requests	Sponsoring Witness: Devon Jaycox
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. TH424
	Ending Sequence No. TH424

Question No.: OPUC 7-20 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Mr. Devon S. Jaycox, page 13. Please provide ETI's share of the total O&M expenses for the Spindletop gas storage facility for each of the last four calendar years and as budgeted for 2020, 2021, and 2022, excluding ETI's share of O&M costs for Spindletop Mechanical Integrity Test and well inspections.

Response:

See Company's response to OPUC 7-19.

The 2020 budgeted amount for Spindletop O&M is $6.7 million. ETI does not have amounts budgeted for 2021 or 2022, but reasonably expects that the O&M budgets for these years will approximate the 2020 budget.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Harrell Wise
to the Seventh Set of Data Requests	Sponsoring Witness: Devon Jaycox
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. LC701
	Ending Sequence No. LC701

Question No.: OPUC 7-21 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Mr. Devon S. Jaycox, page 16. Please provide any analysis conducted by ETI comparing the cost of swing service as provided from the Spindletop gas storage facility to the alternative of Midcontinent Independent System Operator ("MISO") market energy purchases.

Response:

No such analysis has been performed because a purchase of energy from the MISO market is not at all equivalent to and would not replace the operational capabilities of the Spindletop facility, as explained in detail by Mr. Jaycox. Thus, such a comparison would not inform whether Spindletop is a valuable or economic resource for ETI customers. As Mr. Jaycox explained on page 16 of his rebuttal testimony, "[t]he cost of Spindletop is not incurred as a direct alternative to another source of generation."

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Harrell Wise
to the Seventh Set of Data Requests	Sponsoring Witness: Devon Jaycox
of Requesting Party: Office of Public Utility Counsel	Beginning Sequence No. LC702
	Ending Sequence No. LC702

Question No.: OPUC 7-22 Part No.: Addendum:

Question:

Please provide any analysis conducted by ETI comparing the reliability value provided from the Spindletop gas storage facility with due consideration to the Company's ability to purchase energy from the MISO market.

Response:

No such analysis has been performed. The Sabine and Lewis Creek units operate in transmission-constrained areas. The Spindletop facility provides additional assurance those units will be able to operate when needed to support system reliability. Simply purchasing energy from the MISO market would not provide the in-region reliability benefits of being able to operate these generating units. Thus, such a comparison would not inform whether Spindletop is a valuable or economic resource for ETI customers. In addition, if the Spindletop facility is being called on for its reliability function, it is likely because there is a disruption of gas supply that would affect the region, which would thereby affect the ability of other natural gas-fired generation to sell energy into the MISO markets.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc. to the Seventh Set of Data Requests of Requesting Party: Office of Public Utility Counsel	Prepared By: Anastasia R. Meyer/Phong Nguyen/Heather Naeher/Charles DeGeorge Sponsoring Witness: Anastasia R. Meyer Beginning Sequence No. LC703 Ending Sequence No. LC710

Question No.: OPUC 7-23 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Ms. Anastasia R. Meyer, page 3. Please provide the referenced study supporting early retirement of Sabine Unit 2, along with supporting workpapers, assumptions, and calculations in an electronic, machine- readable format, and explain the primary factors leading to the early retirement decision.

Response:

Information included in the response contains highly sensitive protected ("highly sensitive") materials. Specifically, the responsive materials are protected pursuant to Texas Government Code Sections 552.101, 552.104 and/or 552.110. Highly sensitive materials will be provided pursuant to the terms of the Protective Order in this docket.

Please see attached excerpt from Ms. Meyer's Direct Testimony pages seven to ten in Docket No. 48371 for an explanation of the Sabine 2 early deactivation decision, subsequent retirement decision, and the primary factors leading to those decisions.

The presentations summarizing the results of the deactivation analysis for Sabine Unit 2 are provided as an HSPM attachment, and were previously filed as HSPM Exhibit ARM-3 to Ms. Meyer's Direct Testimony in Docket No. 48371.

The analysis presented to the ETI Operating Committee that formed the basis for the retirement decision is provided as an HSPM attachment, and was HSPM Exhibit ARM-4 to Ms. Meyer's Direct Testimony in Docket No. 48371.

In addition, please find attached the HSPM workpapers, assumptions, and calculations that support the referenced analyses.

DOCKET NO. _____

APPLICATION OF ENTERGY TEXAS, INC. FOR AUTHORITY TO CHANGE RATES	**§ § §**	**PUBLIC UTILITY COMMISSION OF TEXAS**

DIRECT TESTIMONY

AND EXHIBITS

OF

ANASTASIA R. MEYER

ON BEHALF OF

ENTERGY TEXAS, INC.

May 2018

DOCKET NO. ____

APPLICATION OF ENTERGY TEXAS, INC. FOR AUTHORITY TO CHANGE RATES	§ § §	**PUBLIC UTILITY COMMISSION OF TEXAS**

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my testimony complies with that requirement and provides a detailed discussion of the deactivation decision and subsequent retirement decision.

A. The Deactivation Decision

Q20. PLEASE EXPLAIN HOW A DECISION IS MADE TO DEACTIVATE AN ETI UNIT.

A. At ETI's direction, SPO will prepare a detailed deactivation analysis to support a formal decision to change the status of a unit. Reasons that trigger such an analysis generally include one or a combination of the following:

- An approaching deactivation date assumption for a particular unit;
- Estimated spending commitments required to keep a particular unit compliant with reliability, safety or environmental requirements;
- A component failure, weather event, or other occurrence at a unit that would require a significant incremental investment to enable the unit to continue operating;
- An opportunity to obtain more economic capacity arises (e.g., through an RFP, an unsolicited offer, or developments in the capacity market); or
- A change in the criticality of a unit to the reliable operation of the transmission system.

As necessary, ESI's Power Generation organization will develop an estimated projected spend for unit-specific projects necessary to safely, reliably, and economically sustain the useful life of a given unit. The projected spend reflects the operating history and characteristics of the unit, maintenance intervals, and condition of unit components, all of which are based on first-hand observation of unit operations by operators and other subject matter experts. In conjunction with the unit assessment, ESI's Transmission Planning organization analyzes what, if any, transmission upgrades or other mitigation measures are expected to be necessary if the unit is deactivated. SPO will, as appropriate, use the information provided by Power Generation and Transmission Planning to conduct a cost/benefit analysis of keeping the unit operational compared to deactivation and reliance on alternative resources. When the economics favor deactivation, the cost/benefit

analysis will be presented for a formal decision whether to deactivate. Prior to termination of the System Agreement, such decisions were made by the Entergy Operating Committee. As of September 1, 2016, the ETI Operating Committee reviews the analysis prepared by SPO and makes a recommendation to the ETI Chief Executive Officer, who will make the ultimate decision whether to deactivate a unit.

If the decision is made to deactivate a unit, the next step in the process is, with certain exceptions, the submission of an Attachment Y Notification to MISO. Under the MISO tariff, MISO will conduct a study (Attachment Y Reliability Study) to determine whether all or a portion of the unit's capacity is necessary to maintain system reliability, such that System Support Resource ("SSR") status is justified. If so, and if MISO cannot identify an alternative to the SSR that can be implemented prior to the deactivation date, then the unit must continue to be available until any identified issues are resolved by a transmission system upgrade or other alternative solution.

Q21. PLEASE SPECIFICALLY DISCUSS THE DECISION TO DEACTIVATE ETI'S SABINE UNIT 2.

A. At the direction of ETI, SPO began a deactivation analysis for Sabine Unit 2 in 2015 to determine whether it would be economic to incur significant projected capital and O&M spending to achieve safe, reliable operation of the unit after 2017. The preliminary results of that analysis indicated that it could be more economic to rely on the market to satisfy that portion of ETI's capacity needs and that doing so would not pose any undue reliability risk. However, before that analysis was presented for a decision, Sabine Unit 2 went into forced outage on February 1, 2016 due to multiple tube leaks in various sections of the boiler. Repairs were estimated to take 8-10 weeks to complete.

Because Sabine Unit 2 had been only a modest energy producer since joining MISO, the Entergy Operating Committee made the decision at that point in time to use the then-upcoming MISO capacity auction to test whether it would be

more economic to have ETI commit to the necessary repairs or rely on the market to help satisfy the System's annual resource adequacy requirement for the 2016/2017 MISO planning year. The Sabine Unit 2 capacity was offered into the MISO capacity auction at a price that would have supported making the necessary repairs, but that offer price ultimately exceeded the auction clearing price and Sabine Unit 2 did not clear the MISO capacity auction. As a result, there was no obligation to repair the unit and have it available to the MISO market by June 1, 2016 for the 2016/2017 MISO planning year.

SPO's preliminary cost/benefit analysis was finalized following that experience in the MISO capacity auction, including identification of expenditures that would be avoided in a 2016 deactivation scenario, and presented to the Entergy Operating Committee for decision in May 2016. That analysis indicated that it would not be economic to make the necessary capital and O&M expenditures to extend the operations of the unit beyond 2016 when compared to market alternatives. The analysis also concluded that deactivating the unit in 2016 would not pose undue reliability risk. Based on that analysis and the recent experience of the MISO capacity auction, the Entergy Operating Committee approved deactivation of Sabine Unit 2 effective June 1, 2016. The presentations summarizing the results of the deactivation analysis for Sabine Unit 2 are provided as Exhibit ARM-3. There was no need to submit an Attachment Y Notification to MISO in this instance because the unit was already out of service due to the forced outage. MISO was notified, however, that the unit would not be repaired.

The effect of the decision to deactivate Sabine Unit 2 was to remove the unit from active service and place it into what is called "mothballed" status, which designation allows for the possibility that the unit could be returned to service after some amount of repairs.

B. The Retirement Decision

Q22. WAS THERE A SEPARATE DECISION MADE TO RETIRE SABINE UNIT 2?

A. Yes. Following termination of the System Agreement, the ETI Operating Committee made the decision that Sabine Unit 2 should be "retired" effective October 1, 2016. This change in designation indicated that the unit is not expected to return to service in the future. The analysis presented to the ETI Operating Committee that formed the basis for the retirement decision is provided as Exhibit ARM-4. The analysis shows that the unit could not be preserved to support a return to service initiative without significant repairs to the boiler. These repairs were determined to be uneconomic and unreasonable given the condition of the unit. In addition, the analysis reflects the unnecessary continued degradation of Sabine Unit 2's component parts that could be used as spares. Based on these circumstances, the decision was made to retire Sabine Unit 2 and start the process of salvaging and preserving some of its component parts.

Q23. HAS ETI IDENTIFIED THE COMPONENT PARTS THAT WILL BE USED AS SPARES?

A. Yes. One forced draft fan motor and two circulating water pump motors were pulled and placed in inventory in a controlled environment to preserve their use as spare parts. In addition, following the retirement of Sabine Unit 2, several component parts have been removed from Sabine Unit 2 and used as replacement component parts at other Sabine units. These components include:

- Boiler water forced circulation pumps;
- Burner buckets;
- Condenser air removal pumps; and
- Chemical feed pumps.

In addition, there are several other pieces of major equipment at Sabine Unit 2 that can be removed and used in the future as replacement parts at other units, such as:

DESIGNATION OF PROTECTED MATERIALS PURSUANT TO PARAGRAPH 4 OF DOCKET NO. 49916 PROTECTIVE ORDER

The Response to this Request for Information includes Protected Materials within the meaning of the Protective Order in force in this Docket. Public Information Act exemptions applicable to this information include Tex. Gov't Code Sections 552.101, 552.104 and/or 552.110. ETI asserts that this information is exempt from public disclosure under the Public Information Act and subject to treatment as Protected Materials because it concerns competitively sensitive commercial and/or financial information and/or information designated confidential by law.

Counsel for ETI has reviewed this information sufficiently to state in good faith that the information is exempt from public disclosure under the Public Information Act and merits the Protected Materials Designation.

George Hoyt
Entergy Services, Inc.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 49916

Response of: Entergy Texas, Inc.	Prepared By: Anastasia R. Meyer / Phong Nguyen / Charles DeGeorge / Heather Naeher
to the Seventh Set of Data Requests of Requesting Party: Office of Public Utility Counsel	Sponsoring Witness: Anastasia R. Meyer Beginning Sequence No. TH432 Ending Sequence No. TH434

Question No.: OPUC 7-24 Part No.: Addendum:

Question:

Please reference the Rebuttal Testimony of ETI witness Ms. Anastasia R. Meyer, page 3. Please provide the date, purpose, and study period addressed by each of the unit-specific analyses provided in response to OPUC RFI No. 5-17, along with the workpapers, assumptions, and calculations underlying the results provided in the summary documents provided in response to OPUC RFI No. 5-17.

Response:

Information included in the response contains highly sensitive protected ("highly sensitive") materials. Specifically, the responsive materials are protected pursuant to Texas Government Code Sections 552.101, 552.104 and/or 552.110. Highly sensitive materials will be provided pursuant to the terms of the Protective Order in this docket.

ETI does not agree with the premise that ETI provided "summary documents" as it relates to the disposition of its resources. However, please see the following response.

- 2020 ETI Portfolio Evaluation
  - This analysis was conducted and completed in 2019. The results were presented at the January 2020 ETI Operating Committee meeting.
  - The purpose was to assess ETI's long-term supply plan needs by evaluating multiple portfolios of resources.
  - The study period was 2019 through 2038.
- 2016 Sabine Early Deactivation
  - This analysis was conducted in 2015 and 2016.
  - The purpose of the analysis was to evaluate the potential for an economic deactivation of the Sabine 1 and 3 units earlier than the assumed deactivation date based on a 60-year life assumption.
  - The study period was 2017 through 2026.
- 2009 Western Region
  - This analysis was conducted in 2009 and was part of several years of discussions on how to best prepare the region for meeting customers' needs.

  - The purpose of the analysis was to evaluate the reliability of the Western Region and understand the operational usage of the Lewis Creek units to meet those needs. The review also analyzed what upgrades would need to be completed for those units to continue to provide the reliability and operations needed.
  - The study period was 2009 through 2014.
- 2007 Lewis Creek Analysis
  - This analysis was conducted in 2006 and 2007.
  - The purpose of the analysis was to: (1) evaluate the WOTAB generating units' capacity, age and reliability criteria projections; (2) understand the long-term need for the resources in the Western WOTAB region; and (3) determine the expenditures required to keep the units performing in a reliable manner to continue to provide service to ETI's customers.
  - The study period was 2007 through 2011.
- 2007 WOTAB/Western WOTAB Generation Status and Supply Roles
  - This analysis was conducted in 2006 and 2007.
  - The purpose of the analysis was to evaluate the Western WOTAB generating units and options to meet ETI's customers' needs.
  - The study period was 2009 through 2010.
- 2006 Long Term Resource Requirements for Western WOTAB
  - This analysis was conducted in 2005 and 2006.
  - The purpose of the analysis was to evaluate the long-term resource requirements for the Western WOTAB region, the options available, and the sustainability of the Lewis Creek generating units.
  - The study period was 2006 through 2010.

In addition, please find attached the HSPM workpapers, assumptions, and calculations underlying the results provided in the Company's response to OPUC 5-17. Attachment TP-49916-00OPC007-X024-0001 lists the workpapers associated with a particular analysis. Some of the data in the presentations provided reflects information queried directly from the Company's system such as there is no workpaper.

DESIGNATION OF PROTECTED MATERIALS PURSUANT TO PARAGRAPH 4 OF DOCKET NO. 49916 PROTECTIVE ORDER

The Response to this Request for Information includes Protected Materials within the meaning of the Protective Order in force in this Docket. Public Information Act exemptions applicable to this information include Tex. Gov't Code Sections 552.101, 552.104 and/or 552.110. ETI asserts that this information is exempt from public disclosure under the Public Information Act and subject to treatment as Protected Materials because it concerns competitively sensitive commercial and/or financial information and/or information designated confidential by law.

Counsel for ETI has reviewed this information sufficiently to state in good faith that the information is exempt from public disclosure under the Public Information Act and merits the Protected Materials Designation.

George Hoyt
Entergy Services, Inc.