Q9. ARE THE ACCOUNTING PRACTICES AND PROCEDURES OF THE COMPANY SUBJECTED TO PERIODIC REVIEW?

A. Yes. Deloitte & Touche, LPP, independent public accountants, performs regular, comprehensive annual audits. The individual Operating Companies also employ their own internal audit staff to conduct audits and reviews of internal controls and operations management. Company records are also periodically reviewed by the staffs or consultants of the FERC, the Commission, the Internal Revenue Service, and state taxing authorities, as well as various other federal and state agencies.

Q10. WHAT DATA ARE YOU PROVIDING IN THIS FILING?

A. I have provided the required accounting information related to the Company's fuel and purchased power expenses and fuel-related revenues for the Reconciliation Period. The data has been segregated to identify: (1) eligible fuel expenses, consisting of those fuel and purchased power costs (net of off-System sales revenues) that are recovered through the Company's fixed fuel factor as defined by 16 TAC § 25.236(a); and (2) ineligible fuel expenses, consisting of those fuel and purchased power costs (net of off-System sales revenues) recovered through base rates.

III. DESCRIPTION OF FUEL AND PURCHASED POWER COSTS

Q11. WHAT FUEL COSTS ARE TREATED AS ELIGIBLE AND INELIGIBLE IN THIS FILING?

A. With respect to coal, gas, and fuel oil, all costs other than those classified as handling costs (costs incurred for handling fuel after it is delivered to the generating plant) and brokerage fees have been treated as eligible. Eligible costs include the invoiced cost of coal, gas, and fuel oil, transportation, and boiler fuel taxes.

For purchased power costs, the cost of energy has been treated as eligible fuel expense. All other non-energy charges have been treated as ineligible expense.

Costs associated with ETI's participation in the Midcontinent Independent System Operator ("MISO") markets are recorded in seven categories for purposes of allocating those costs among the Operating Companies participating in the Entergy System Agreement (prior to September 1, 2016), as explained in the testimony of Company witness Andrew Dornier. On and after September 1, 2016, these costs for ETI were charged directly to the Company by MISO, but they continue to be booked in the same categories to facilitate record keeping. The seven cost categories are Energy, Congestion, Losses, Uplift, Ancillary, Capacity, and Administration. The amounts in these categories are recorded to accounts 555 and 575 for expenses, and account 447 and 457.1 for revenues. The MISO charges for Administration are booked to account 575, which is an account not

eligible for fuel cost recovery. Capacity charges are also considered ineligible for fuel cost recovery. The remaining charges associated with participation in MISO's markets are, as explained by Mr. Dornier, assessed by MISO on an energy basis, which means they are eligible fuel expense.

Finally, emissions allowance costs and related gains from disposition of allowances are treated as eligible fuel costs consistent with the Commission's Order in Docket No. 34800 and 16 TAC § 25.236(a)(4).

Cost data for the Company's fuel and purchased power can be found on Schedules FR-4.3 a-g, FR-4.4 b-e, and FR-16. Additional detail on coal inventory costs is provided below.

Q12. ARE THE FUEL AND PURCHASED POWER COSTS IDENTIFIED IN YOUR TESTIMONY AND IN THE SCHEDULES AND EXHIBITS SPONSORED BY YOU PROPERLY RECORDED PURSUANT TO COMMISSION SUBSTANTIVE RULES?

A. Yes. As stated earlier in my testimony, the accounting records of the Company are maintained in compliance with the Uniform System of Accounts as prescribed by the FERC and 16 TAC § 25.72(c). 16 TAC § 25.236(a) states, in part, that "[e]ligible fuel expenses include expenses properly recorded in the Federal Energy Regulatory Commission Uniform System of Accounts, numbers 501, 503, 518, 536, 547, 555, and 565...." The eligible fuel costs identified in my testimony and included in the schedules and exhibits that I sponsor include only those costs

recorded in the above-referenced accounts as well as accounts 509 and 411.8 which the Commission has further determined should be treated as eligible. All other fuel-related costs are treated as ineligible, which means they are included in the Company's test year cost of service to set base rates or riders.

Q13. HAS THE COMPANY CREDITED OFF-SYSTEM SALES REVENUES AND MARGINS FROM THESE SALES TO ELIGIBLE FUEL EXPENSE?

A. Yes. Those amounts have been credited to eligible fuel expense. The Company records Off-System sales in FERC Account 447 (Sales for Resale) and has credited eligible revenues, including margins, from these Off-System sales to eligible fuel expense. This includes revenue from net sales into the MISO markets as outlined in question 11 above. Information concerning Off-System sales can be found on Schedule FR-4.4 b-e.

Q14. PLEASE DISCUSS THE COMPANY'S ACCOUNTING POLICIES FOR FOSSIL FUEL INVENTORIES AND INDICATE WHERE IN THIS APPLICATION THESE ACCOUNTING POLICIES AND THE RELATED FOSSIL FUEL COSTS CAN BE FOUND.

A. The Company uses the average cost method to value its coal and fuel oil inventory, and a modified average cost method to account for the gas inventory at the Spindletop gas storage facility. The Company's accounting policies for fossil fuel inventories are discussed in Schedule FR-1.2 – Inventory Values. As these

fossil fuel costs are charged to expense, they are properly recorded in FERC Account 501 - Fuel.

Schedule FR-16 – Eligible Fuel Costs reflects fossil fuel costs recorded to FERC Account 501 as well as emissions allowance costs and related gains recorded to FERC Account 509 and 411.8. Schedule FR-16 also reflects ineligible costs recorded to FERC Account 501 determined in accordance with the requirements of 16 TAC § 25.236(a). Schedule FR-16.1 – Fossil Fuel Mix (Burned) reflects fuel burned by plant and by fuel type. Schedule FR-16.2 – Fossil Fuel Mix (Purchased) reflects fuel purchased by plant and by fuel type. Costs associated with coal are described further below.

Q15. WHAT TYPES OF COSTS ARE INCLUDED IN THE COMPANY'S COAL INVENTORY?

A. With respect to Unit 6 at Nelson Station, the Company maintains a coal inventory that includes the following costs:

(1) commodity cost of coal and applicable taxes;

(2) freight cost to transport coal;

(3) rail car lease expenses;

(4) accrued maintenance costs on the leased unit trains; and

(5) ad valorem taxes on the leased unit trains.

Items (1) and (2) are treated as eligible fuel costs. Items (3), (4), and (5) are treated as ineligible fuel costs.

With respect to Big Cajun II, Unit 3, the Company includes the following costs in coal inventory:

(1) commodity cost of coal and applicable taxes;

(2) freight cost to transport coal (rail/barge); and

(3) rail car lease expenses.

Items (1) and (2) are treated as eligible fuel costs. Item (3) is treated as ineligible fuel expense. During the Reconciliation Period, Louisiana Generating, LLC billed Items (1), (2) and (3) to the Company as one aggregated amount. The Company, in turn, removed Item (3) from this aggregated amount and excluded it from eligible fuel costs because the cost of service that forms the basis of ETI's current base rates included expense for Item (3). This adjustment is made to avoid double recovery of the same cost in base rates and in fixed fuel factors.

Certain coal costs such as those related to fuel handling and ash proceeds are recorded to FERC Account 501 when incurred.

Q16. DID THE COMPANY MAKE PAYMENTS FOR FUEL COSTS TO ANY OF ITS AFFILIATES DURING THE RECONCILIATION PERIOD?

A. Yes. The Company made payments to and received payments from its affiliated Operating Companies during the Reconciliation Period. These transactions were conducted pursuant to the Entergy System Agreement, which was a FERC-approved rate schedule that is discussed further in the Direct Testimony of Company witness Andrew Dornier. Entergy System transactions were recorded in

the accounting records monthly based on the Intra-System Bills, as discussed by Mr. Dornier.

Following termination of the Entergy System Agreement, ETI continued to purchase capacity and associated energy from Entergy Louisiana, LLC pursuant to two contracts with terms identical to transactions that terminated with the System Agreement. Company witness Michael J. Goin describes those contracts in greater detail.

IV. OVER/(UNDER)-RECOVERED BALANCES

Q17. WHAT IS THE COMPANY'S METHOD OF ACCOUNTING FOR OVER/(UNDER)-RECOVERIES OF FUEL AND PURCHASED POWER EXPENSE?

A. The Company practices deferred accounting. Using deferred accounting, any under-recovery of fuel and purchased power expense is deferred and any over-recovery is accrued on the Company's books, pending future surcharges or refunds as approved by the Commission. Net under-recoveries are recorded in FERC Account 182.3 - Other Regulatory Assets, while net over-recoveries are recorded in FERC Account 254 – Other Regulatory Liabilities. This treatment is consistent with the provisions of the Commission's fuel cost recovery procedures that provide for periodic fuel cost reconciliations and also with the Accounting Standards Codification No. 980 ("ASC 980"), "Accounting for the Effects of Certain Types of Regulation." ASC 980 is the current definitive pronouncement

with respect to the application of GAAP to public utilities. The Company's fuel factor over/(under)-recovery balance for the Reconciliation Period is reflected in Schedules FR-21.

V. FUEL FACTOR RECONCILIATION

A. Calculation of Fuel Factor Under-Recovery Balance

Q18. HOW WAS THE CUMULATIVE AMOUNT OF THE COMPANY'S FUEL FACTOR RECONCILIATION PERIOD UNDER-RECOVERY CALCULATED?

A. The Company calculated the fuel factor under-recovery balance by comparing its eligible fuel and net purchased power costs allocated to the fixed fuel factor customers to the respective month's actual fuel factor revenues for each month during the Reconciliation Period. Any resulting differences were recorded in the Company's cumulative fuel factor over/(under)-recovery balance. Each month's over/(under)-recovery was added to the cumulative balance from the previous month resulting in a cumulative under-recovery balance, including interest, for the Reconciliation Period of $25,825,261 as presented in exhibit SMC-1.

Q19. DO THE MONTHLY OVER/(UNDER)-RECOVERY BALANCES FOR THE FUEL FACTOR RECONCILIATION PERIOD SHOWN ON SCHEDULE FR-21 MATCH THE MONTHLY OVER/(UNDER)-RECOVERY BALANCES

SHOWN ON THE MONTHLY COST REPORTS THAT ETI HAS FILED WITH THE COMMISSION?

A. No, they do not, for the following reasons:

(1) During certain months of the Reconciliation Period, the Texas fuel factor allocator changed based on a detailed examination of actual bills of certain customers. Because of historical rebilling of a number of these customers, the monthly kWh totals have been adjusted to correctly reflect the final kWh sales billed to customers.

(2) Due to the kWh changes described in (1) above, fuel revenue was also adjusted to correctly match the final fuel revenue received from those customers.

Q20. HAVE YOU PREPARED AN EXHIBIT DETAILING THE DIFFERENCES IN THE MONTHLY OVER/(UNDER)-RECOVERY BALANCES AS SHOWN ON THE COMPANY'S COST REPORTS FILED WITH THE COMMISSION COMPARED TO SCHEDULE FR-21?

A. Yes. Exhibit SMC-2 provides the adjustments necessary to reconcile the monthly over/(under)-recovery balances reported in the Cost Reports and Schedule FR-21 for the months April 2016 through March 2019.

Q21. HOW WAS INTEREST CALCULATED FOR THE UNDER-RECOVERY BALANCE?

A. The Commission's methodology for calculating interest is delineated in 16 TAC § 25.236(e)(1) and states in part, "[i]nterest shall be calculated on the cumulative monthly ending under- or over-recovery balance at the rate established annually by the Commission for overbilling and underbilling in §25.28(c) and (d) of this title...." The Company has, therefore, calculated interest for the over/(under)-recovery balances based on the rates established by the Commission under 16 TAC § 25.28(c) and (d).

In particular, the Company's method of calculating interest includes: (1) the use of the annual interest rate of 0.18 percent for the period April 2016 through December 2016; (2) the use of the annual interest rate of 0.58 percent for the period January 2017 through December 2017; (3) the use of the annual interest rate of 1.05 percent for the period January 2018 through December 2018; (4) the use of the annual interest rate of 1.99 percent for the period January 2019 through March 2019; and (5) the calculation of interest on the cumulative monthly ending balance. These interest rates were established by Commission order. Pursuant to 16 TAC § 25.236(e)(1), interest has been accrued monthly and has been compounded annually using an effective monthly interest factor based upon the Commission-ordered interest rates noted above. The monthly interest amount has been added to the cumulative over/(under)-recovery balance. The monthly over/(under)-recovery balances plus the respective interest calculations used to

determine the cumulative under-recovery balance for the Reconciliation Period are reflected on Schedule FR-21.

Q22. HAS THE METHOD OF CALCULATING THE UNDER-RECOVERY BALANCE FOR THE FUEL FACTOR RECONCILIATION PERIOD BEEN PERFORMED IN COMPLIANCE WITH THE COMMISSION'S RULES?

A. Yes. The Company has accurately accounted for all eligible fuel and net purchased power expenses and fuel factor revenues and has adhered to the Commission's rules in calculating its under-recovery balance.

B. Interim Refunds

Q23. HAS THE COMPANY BEEN AUTHORIZED TO SURCHARGE OR REFUND ON AN INTERIM BASIS THE FUEL FACTOR OVER/(UNDER)-RECOVERY BALANCE?

A. Yes. The Company was authorized to refund $67,969,449 (principal and interest) for the period of May 2014 through April 2016 pursuant to the final order in Docket No. 45888. ETI implemented that interim refund during the billing months of July 2016 through October 2016. Included in this amount was $14,410,214 of rough production cost equalization receipts for the years 2006 through 2008. The Company was also authorized to refund $24,541,485 (principal and interest) for the period of May 2016 through November 2016 pursuant to the final order in Docket No. 46966. ETI implemented that interim

refund during the billing months of April 2017 through June 2017. The Company was authorized to refund $30,712,168 (principal and interest) for the period of December 2016 through April 2017 pursuant to the final order in Docket No. 47257. ETI implemented that interim refund during the billing months of July 2017 through October 2017. Lastly, The Company was authorized to refund $30,473,593 (principal and interest) for the period of May 2017 through October 2017 pursuant to the final order in Docket No. 47834. ETI implemented that interim refund during the billing months of January 2018 through March 2018.

Q24. HOW DOES THE COMPANY PROPOSE TO HANDLE THE UNDER-RECOVERY BALANCE FROM THIS PROCEEDING?

A. ETI proposes to roll the cumulative fuel factor under-recovery amount from this proceeding, after taking into consideration the interim refund proceedings applicable to the Reconciliation Period, into the Company's cumulative fuel factor over/(under)-recovery balance to be addressed in the next appropriate fuel proceeding.

VI. CONCLUSION

Q25. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

Line No	Month	Year	(1) Total Company Fuel Cost	(2) Texas Fixed Fuel Factor Allocator	(3)=(1)*(2) Texas Allocable FFF Fuel Cost	(4) Texas FFF Fuel Cost Recoverable @ 100%	(5)=(3)+(4) Total Texas FFF Fuel (Refund)/Cost	(6) Texas FFF Revenue	(7)=(6)-(5) Texas Monthly Over/(Under) Recovery	(8) Commission Adjustments	(9) Adjustments	(10) Principal Refunds/ Surcharges	(11) Texas Cumulative Over/(Under) Recovery	(12) Prior Month Over/(Under) Recovery	(13) Monthly Interest Rate	(14)=(12)*(13) Current Month Interest	(15) Interest Refunds/ Surcharges	(16) Cumulative Interest After Refunds/Surchg	(17)=(11)+(16) Grand Total Over/(Under) Recovery
																			0
1	April	2016	30 412 802	100 000%	30 412 802		30 412 802	34 727,932	4 315 130				4,315 130	-	0 0149876%	-		-	4 315,130
2	May	2016	35 888,701	100 000%	35 888 701		35 888 701	37 501 925	1 613,224				5 928 354	4,315,130	0 0149876%	647		647	5 929 001
3	June	2016	50,852,125	100 000%	50 852,125		50 852 125	43 945 364	(6,906 761)				(978 407)	5 929 001	0 0149876%	888		1 535	(976 871)
4	July	2016	55,196,117	100 000%	55 196 117		55 196,117	47 575 277	(7,620,840)		14 375 902	(34 847 210)	(29,170 554)	(976 871)	0 0149876%	(146)	(35 402)	(34,013)	(29 204,568)
5	August	2016	55 130 162	100 000%	55,130,162		55 130 162	49 504 610	(5 625,552)			(12 569 886)	(47,366,093)	(29 204 568)	0 0149876%	(4 377)	(12 734)	(51,124)	(47,417 217)
6	September	2016	52 049 524	100 000%	52 049 524		52 049 524	42 273 823	10,224,299			(11,479 180)	(48,620 984)	(47 417,217)	0 0149876%	(7,107)	(11,629)	(69 860)	(48 680,844)
7	October	2016	37,671,844	100 000%	37 671 844		37 671 844	56 905 071	19 233 227			(10 168 972)	(39 556 729)	(48 680 844)	0 0149876%	(7,298)	(10 327)	(87 484)	(39,644,213)
8	November	2016	35 856 744	100 000%	35 856 744		35 856 744	49,227 301	13,570,557				(25 986 172)	(39 644,213)	0 0149876%	(5,942)	15	(93 411)	(26 079,583)
9	December	2016	39,877,901	100 000%	40 135 053		40 135 053	46 264 883	6 129,831				(19,856 341)	(26 079 583)	0 0149876%	(3 909)	3	(97,317)	(19 953,658)
10	January	2017	41 575,185	100 000%	41,572,074		41 572,074	48,910 786	8,338,713				(11 517 628)	(19 953 658)	0 0482053%	(9,619)	8	(106 928)	(11 624,556)
11	February	2017	34 070 885	100 000%	34 070 885		34 070 885	48 621 756	14,550 881				3,033 232	(11 624 556)	0 0482053%	(5,604)	-	(112 531)	2,920,701
12	March	2017	45,386 987	100 000%	45 386 987		45,386,987	42,184,875	(3,202,082)		(303 281)	(655)	(472 786)	2 920 701	0 0482053%	1 408	(1)	(111 124)	(583 920)
13	April	2017	42 387 788	100 000%	42,387 788		42,387,788	47 193 389	4,805 821			(16 987 780)	(12,634,855)	(583 920)	0 0482053%	(281)	(826 954)	(1 038 360)	(13 673,315)
14	May	2017	44 586 780	100 000%	44 586 780		44,586,780	49 513,780	4,917,001			(4 829 670)	(12 547,624)	(13 673,315)	0 0482053%	(6 581)	(283 846)	(1 308 787)	(13 856 421)
15	June	2017	53 723 816	100 000%	53 723 816		53 723 816	56 477,564	2,753 748		(62 884)	(3,913,448)	(13 770 218)	(13 856,421)	0 0482053%	(6,660)	(213 793)	(1 529 270)	(15,299 488)
16	July	2017	56 122 739	100 000%	56 122 739		56 122 739	61 589,467	5 466 728			(18,583 223)	(25 986 713)	(15 299 488)	0 0482053%	(7 375)	(54,151)	(1 590 798)	(27 477 508)
17	August	2017	54 505,263	100 000%	54 505,263		54 505,263	63,348 300	8 843 037			(5,946 846)	(22 992 522)	(27 477 508)	0 0482053%	(13,246)	(17 335)	(1,621,378)	(24 613 889)
18	September	2017	42 942 482	100 000%	42,942 482		42,942 482	47,666 487	4,724,005			(4 975 874)	(23 244 191)	(24 613,889)	0 0482053%	(11 685)	(14 486)	(1,647 740)	(24 891,931)
19	October	2017	41 820 858	100 000%	41 820 858		41,820 858	44 479,986	2,658,128			(185 156)	(20,750,218)	(24 891 931)	0 0482053%	(11,999)	(447)	(1,660 187)	(22,410 404)
20	November	2017	38,988,057	100 000%	38 988,057		38 988,057	40,847 884	858 807				(19 881 611)	(22,410 404)	0 0482053%	(10,803)	(34)	(1 671,023)	(21 582 634)
21	December	2017	39 367 385	100 000%	39,367 385		39,367,385	43,594 381	4 226,996		(3)		(15 884 818)	(21,582,634)	0 0482053%	(10 384)	(4)	(1 681,421)	(17 346,039)
22	January	2018	61,658,756	100 000%	61 658,756		61,658,756	49 408 980	(12 249 777)			(18 245 750)	(48,180,145)	(17,346 039)	0 0870817%	(15,105)	(66 087)	(1,762 584)	(47 922 738)
23	February	2018	31 148 943	100 000%	31,148,943		31 148,943	43,740 135	12 591 192			(7 353 483)	(40,922,417)	(47,922 738)	0 0870817%	(41,732)	(26 625)	(1 830 950)	(42,753 367)
24	March	2018	43,729,552	100 000%	43,729 552		43 729 552	38 018 319	(5 711,233)			(6 247 303)	(52 880 952)	(42 753,367)	0 0870817%	(37 230)	(22 821)	(1,890 802)	(54 771 754)
25	April	2018	31,512,292	100 000%	31 512,292		31,512 292	38,623 687	7,111,405			(241 334)	(46 010,882)	(54 771 754)	0 0870817%	(47,696)	(883)	(1,939 381)	(47,950,263)
26	May	2018	46 940 503	100 000%	46 940,503		46,940 503	41,082 174	(5 858 329)		5,087,000		(46 782,211)	(47 950 263)	0 0870817%	(41 758)	17	(1 981 121)	(48,763 332)
27	June	2018	53 052 251	100 000%	53 052,251		53,052 251	52 459 585	(592 666)		0		(47 374,877)	(48 763,332)	0 0870817%	(42,464)	8	(2,023 577)	(49 398 454)
28	July	2018	55 588 152	100 000%	55 588,152		55 588 152	54 087,145	(1 488 007)		(6,109 018)		(54 952,900)	(49 398 454)	0 0870817%	(43 017)	(14)	(2 086 808)	(57,019 508)
29	August	2018	54 805,388	100 000%	54 805,388		54,805,388	54,770,080	184 672				(54 768,228)	(57 019,508)	0 0870817%	(48,654)	(8)	(2 116 270)	(56 904 498)
30	September	2018	49 880 117	100 000%	49 880 117		49 880 117	54 076 379	4 396 262				(50 401,966)	(56 904 498)	0 0870817%	(49 553)	3	(2 165,820)	(52 567,786)
31	October	2018	46 215 278	100 000%	46 215 278		46 215 278	47 486 956	1 271,680				(49 130 285)	(52 567,786)	0 0870817%	(45,777)	2	(2,211 595)	(51,341 881)
32	November	2018	51,608 487	100 000%	51 608 487		51 608 487	41 260 118	(10 348 378)				(59,478 664)	(51 341 881)	0 0870817%	(44 706)	1	(2,256,303)	(61,734 968)
33	December	2018	47,123 788	100 000%	47 123 788		47 123,788	41 636,246	(5 487 543)		33 221 387		(31 744 841)	(61,734,968)	0 0870817%	(53 760)	0	(2,310 063)	(34 054 904)
34	January	2019	41,172 443	100 000%	41 172 443		41,172 443	43 172 338	1 999 896		0		(29 744,944)	(34 054 804)	0 1643386%	(55 986)	0	(2,366,029)	(32,110 973)
35	February	2019	32,825 842	100 000%	32 825 842		32,825,842	42 082,385	9 186 543				(20 578 402)	(32 110 973)	0 1643386%	(52 771)	0	(2,418 800)	(22,997 201)
36	March	2018	37 854 880	100 000%	37 854 880		37,854 880	35 064 584	(2,790 296)				(23 368,858)	(22 997 201)	0 1643386%	(37 784)	0	(2 456 583)	(25,825,261)

Notes on items in Adjustment columns

Jul-16	Includes RPCEA Reclass to fuel of $14,375 902 29
Mar-17	Adjustments of $854 89 made in advance of fuel refund filing due to revenue differences RPCEA of $303 281
May-17	Includes RPCEA collections for Docket 42730
Jun-17	Includes 2013 RPCEA reclassed dollars from rate stopped in 4/2017
Jul-17	Includes RPCEA reclass of $27 58
Dec-17	Includes RPCEA reclass of $3 32
May-18	RPCEA Reclass of $5 087 000
Jul-18	RPCEA Reclass of $6 108 017
Dec-18	Opportunity Sales Refund of $33 221 383 44 recognized in December 2018

Refunds

July 2016 - Oct 2016	Docket 45888*
April - June 2017	Docket 46986
Jan 2018 April 2018	Docket 47834

0054

Exhibit SMC-1
Docket No. 49916
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Exhibit SMC-2

ENTERGY TEXAS, INC.
MONTHLY OVER(UNDER)-FUEL RECOVERY
APRIL 2016 THROUGH MARCH 2019

COMPARISON OF COST REPORTS FILED WITH THE COMMISSION VS. SCHEDULE FR-21

MONTH	OVER/(UNDER) RECOVERY PER PUCT COST REPORT	OVER/(UNDER) RECOVERY PER PAGE 2, COLUMN 7 - SCHEDULE FR-21	DIFFERENCE	EXPLANATION CODE
Apr-16	4,412,171	4,315,130	(97,041)	1,2
May-16	2,054,415	1,613,224	(441,191)	1,2
Jun-16	(7,491,907)	(6,906,761)	585,146	1,2
Jul-16	(7,357,939)	(7,620,840)	(262,900)	1,2
Aug-16	(6,135,835)	(5,625,552)	510,283	1,2
Sep-16	10,565,392	10,224,299	(341,094)	1,2
Oct-16	19,209,084	19,233,227	24,143	1,2
Nov-16	13,541,769	13,570,557	28,788	1,2
Dec-16	6,116,273	6,287,282	171,009	1,2
Jan-17	8,352,720	8,335,621	(17,098)	1,2
Feb-17	11,480,991	14,550,861	3,069,869	1,2
Mar-17	(275,520)	(3,202,092)	(2,926,573)	1,2
Apr-17	4,845,307	4,805,621	(39,686)	1,2
May-17	4,653,285	4,917,001	263,716	1,2
Jun-17	2,877,846	2,753,748	(124,098)	1,2
Jul-17	6,425,813	6,466,728	40,915	1,2
Aug-17	8,882,655	8,843,037	(39,618)	1,2
Sep-17	4,735,444	4,724,005	(11,439)	1,2
Oct-17	2,652,189	2,659,129	6,940	1,2
Nov-17	858,608	858,607	(1)	
Dec-17	4,226,997	4,226,996	(1)	
Jan-18	(12,249,776)	(12,249,777)	(1)	
Feb-18	12,591,191	12,591,192	0	
Mar-18	(5,711,233)	(5,711,233)	0	
Apr-18	7,111,405	7,111,405	0	
May-18	(5,858,330)	(5,858,329)	0	
Jun-18	(592,666)	(592,666)	0	
Jul-18	(1,469,007)	(1,469,007)	-	
Aug-18	164,672	164,672	(0)	
Sep-18	4,386,263	4,386,262	(0)	
Oct-18	1,271,680	1,271,680	(0)	
Nov-18	(10,348,379)	(10,348,379)	(0)	
Dec-18	(5,487,544)	(5,487,543)	0	
Jan-19	1,999,896	1,999,896	(0)	
Feb-19	9,166,543	9,166,543	(0)	
Mar-19	(2,790,267)	(2,790,266)	0	
Total	86,814,208	87,214,277	400,069	

'Key to Explanation Codes'

1 Historical rebilling of certain customers

2 Fuel revenue tied to customers mentioned in (1)

SOAH Docket No. 473-20-0259
PUC Docket No. 49916
ETI Exhibit No. 9

DOCKET NO. 49916

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

DIRECT TESTIMONY

OF

MICHAEL J. GOIN

ON BEHALF OF

ENTERGY TEXAS, INC.

SEPTEMBER 2019

ENTERGY TEXAS, INC.
DIRECT TESTIMONY OF MICHAEL J. GOIN
DOCKET NO. 49916

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EXHIBITS

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I. INTRODUCTION

Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Michael J. Goin. My business address is Parkwood II Bldg., Suite 100, 10055 Grogans Mill Road, The Woodlands, Texas 77380.

Q2. ON WHOSE BEHALF ARE YOU PROVIDING THIS TESTIMONY?

A. I am testifying on behalf of Entergy Texas, Inc. ("ETI" or the "Company").

Q3. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am Director, Planning Analysis for the System Planning and Operations ("SPO") organization of Entergy Services, LLC ("ESL"),[1] the service company affiliate of the Entergy Operating Companies ("EOCs").[2]

Q4. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I earned a Bachelor of Electrical Engineering degree and a Master of Science in Management degree from The Georgia Institute of Technology.

I have been employed by Entergy Corporation since 1996. During my career, I have held numerous positions in financial planning and analysis,

[1] ESL is the services company affiliate of the EOCs that provides engineering, planning, accounting, technical, regulatory, and other administrative support services to each of the EOCs.

[2] In addition to ETI, the EOCs are Entergy Arkansas, LLC; Entergy Mississippi, LLC; Entergy New Orleans, LLC; and Entergy Louisiana, LLC ("ELL").

forecasting, accounting, strategic planning, and power marketing. From 1996 to 1997, I was in the Accounting organization. My main responsibilities were to produce financial analyses for the fossil and nuclear functions. From 1997 to 1999, I worked in the financial group responsible for utility planning and produced pro-forma financial statements. From 1999 to 2002, I worked in Strategic Planning on a variety of projects relating to transition to competition and various projects to support senior management. During that time period, I was promoted to Project Manager. In early 2002, I moved to the SPO organization and was promoted to manager in early 2003. As the Manager, Financial Analysis – System Planning for ESL, my responsibilities included coordinating analyses regarding the financial implications of generation supply alternatives for the Entergy System. Examples of this include financial forecasts and cost-benefit studies. My role also included developing financial models and analyses that supported decision-making and provided a System Planning interface for other groups. In February 2008, I assumed the position of Manager, Power Marketing in the SPO organization. The Power Marketing Team was responsible for the procurement and sale of short-term power. In February 2010, I assumed the role of Manager, Regulatory Projects. In March 2013, I was promoted to the role of Director, Regulatory and Strategic Initiatives. In this role, my team focused on several key initiatives related to membership in the Midcontinent Independent System Operator, Inc. ("MISO") Regional Transmission Organization, including participating in working groups, proposing market changes, and developing participation strategies. In addition, my team supported filing requirements related to state and federal regulators. In early

2017, I assumed the position of Director, Energy Management Organization ("EMO"). The EMO provides services to the EOCs by performing power dispatching services, procuring and transporting fossil fuels (natural gas, fuel oil, and coal) for generating plants, preparing load forecasts to submit as a demand bid to MISO in the Day-Ahead Market, and formulating resource offers for generation into the MISO markets.

I assumed my current role as Director, Planning Analysis, in mid-2018. In my current role, my responsibilities include developing generation supply plans, conducting analyses to assess generation supply alternatives, developing and executing planning models, including production models, and conducting load forecasting and research activities for the EOCs.

II. PURPOSE OF TESTIMONY

Q5. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to address the following topics in the context of the fuel reconciliation period of April 1, 2016, through March 31, 2019 ("Reconciliation Period").

- The System Planning and Operations Organization;
- Congestion Hedging and Other Aspects of Participation in the Organized Markets Operated by MISO; and
- Wholesale Revenues and Energy Costs under Purchased Power Agreements ("PPAs").

Q6. DO YOU SPONSOR ANY OF THE SCHEDULES INCLUDED IN THE COMPANY'S FUEL RECONCILIATION FILING PACKAGE?

A. Yes. I sponsor or co-sponsor the following schedules:

- FR-4.3(a-g) – Summary of Purchased Power Data;
- FR-4.4(b-e) – Summaries of System Sales Data;
- FR-5 – Fuel and Purchased Power Procurement Practices;
- FR-6 – Fuel and Purchased Power Committees;
- FR-7 – Fuel and Fuel Related Contracts;
- FR-11 – Employee Organizational Charts;
- FR-12 – Employee Ethics; and
- FR-20 – Fuel Management.

III. SYSTEM PLANNING AND OPERATIONS ORGANIZATION

A. The Role of SPO

Q7. WHAT IS SPO?

A. SPO is the department within ESL that has the responsibility for ensuring that a reliable, economic supply of electric capacity and energy is available to the EOCs to deliver service to their customers. Upon termination of the Entergy System Agreement, ETI contracted bi-laterally with SPO to provide these services in a manner that best meets the needs of ETI's customers, without regard to the other EOCs.

Q8. PLEASE PROVIDE AN OVERVIEW OF THE FUNCTIONS PERFORMED BY SPO ON BEHALF OF ETI AND THE OTHER EOCS.

A. First, SPO acquires fuel and fuel transportation services for the EOCs' fossil-fueled generating units. SPO also procures and sells wholesale purchased power for the EOCs. The fuel-purchasing task is one that any utility that operates generating facilities must perform – someone must negotiate for and buy fuel and then arrange for its delivery to the power plants. SPO performs that function for the EOCs. Similarly, every utility has the choice of generating power for itself or buying it from others, and if the choice is to purchase power, someone must negotiate the terms and conditions of power contracts and arrange for the delivery of the purchased power. SPO performs these functions as agent for the EOCs.

Second, SPO is responsible for the dispatch of generation for the EOCs. Every utility system is required by the North American Electric Reliability Corporation standards to either operate a balancing authority area or make arrangements to be included in a balancing authority area operated by a regional transmission organization. As members of MISO, the EOCs' generating units are dispatched by SPO, albeit with guidance from MISO; and SPO manages the EOCs' local area balancing requirements within MISO.

Third, SPO assists the EOCs in planning for future resource requirements and the procurement of limited and long-term resources based upon that planning. Every utility must consider future system requirements and determine the kinds of resources that it will need in order to meet its prospective obligation to provide reliable and economic power to its customers, and it then must procure

supplemental resources identified through such planning. Additionally, regulators and other governmental organizations frequently require electric utilities to provide detailed information about their future plans.

Q9. PLEASE SUMMARIZE THE ACTIVITIES UNDERTAKEN BY SPO TO CARRY OUT THE FUNCTIONS DISCUSSED ABOVE.

A. SPO operates as a single, unified organization having responsibility for:

- creating long-term and short-term resource and fuel plans for the EOCs and, while the Entergy System Agreement was in effect, the Entergy System;
- acquiring all of the fossil fuels for the EOCs' generating units;
- transacting for wholesale power on behalf of the EOCs and, while the Entergy System Agreement was in effect, the Entergy System;
- participation in MISO markets on behalf of the EOCs, and while the Entergy System Agreement was in effect, the Entergy System;
- dispatching the EOCs' resources;
- managing fossil fuel and purchased power contracts;
- administering the Entergy System Agreement while it was in effect as well as the associated Intra-System Billing; and
- reviewing and processing the invoices for the EOCs' (including ETI's) fossil fuel purchases and wholesale power transactions.

Integrating all of these functions into a single organization facilitates an effective process for determining and executing the most reliable and economic fuel

mix for the EOCs (and previously, the Entergy System) based on the facts and circumstances that were known or reasonably knowable at the time.

Q10. HOW IS SPO ORGANIZED TO CARRY OUT THESE FUNCTIONS?

A. During the Reconciliation Period, SPO was organized into six (6) groups. The individuals who supervise each of these groups reported directly to the Vice President responsible for the operations of SPO. Those six groups within SPO, and a brief description of the services performed by each, are:

(1) the EMO, which is responsible for planning for and the procurement of short-term fuel and purchased power resources to meet the EOCs' customers' needs, and the dispatch of the EOCs' generation fleet to provide reliable, economic electric service;

(2) the Commercial Operations group, which is responsible for the procurement of longer-term supply resources to meet the electric utility needs of ETI and the other EOCs;

(3) the Planning Analysis group, which is responsible for performing load forecasts and long-term planning and analysis to ensure resources are available to provide reliable and economic electric service to the EOCs' customers;

(4) the Back Office and Support Services group, which is responsible for developing and managing SPO's budget and cost-control initiatives, compliance, and administering the Intra-System Bill;

(5) the Regulatory Affairs and Strategic Initiatives group, which is primarily responsible for providing business, and regulatory support services to SPO, including participation in the MISO stakeholder processes; and

(6) the Local Balancing Authority, Meter Data Management Agent, and Meter Data Quality Analysis group (together, the LMM Operations group) is primarily responsible for monitoring system conditions, collecting and verifying meter data, and performing balancing authority functions.

As shown in Figure MJG-1, these six groups within SPO function in a structure that comprises two primary "offices" – the front office and the back office – as well as a general SPO support function. Each of these offices engages in a discrete aspect of the MISO market (*e.g.*, operations, compliance, and market settlements) and allows SPO to maintain the appropriate level of functional independence, separation of origination and settlement functions, and accountability.

Figure MJG-1
Structure of SPO Organization

	Front Office	Back Office	SPO Support
EMO	✓		
Commercial Operations	✓		
Planning Analysis	✓		
Back Office & Support Services		✓	✓
Regulatory and Strategic Initiatives			✓
LMM Operations	✓		

Q11. WHAT ACTIVITIES DOES THE FRONT OFFICE PERFORM?

A. The front office has the ultimate responsibility for managing the activities that result in the production or purchase of capacity and energy that the EOCs use to meet their customers' needs in the MISO markets. Structurally, the front office includes four primary components:

- the EMO;
- Planning Analysis;
- Commercial Operations; and
- LMM Services.

Q12. WHAT ACTIVITIES DOES THE BACK OFFICE PERFORM?

A. The back office is responsible for performing the accounting, billing and settlements, and some administrative activities for SPO, which include the responsibilities for:

- settling the various accounts within MISO;
- performing current settlement responsibilities associated with settling natural gas, fuel oil, coal, and bilateral wholesale power transactions; and
- preparing the Intra-System Bill.

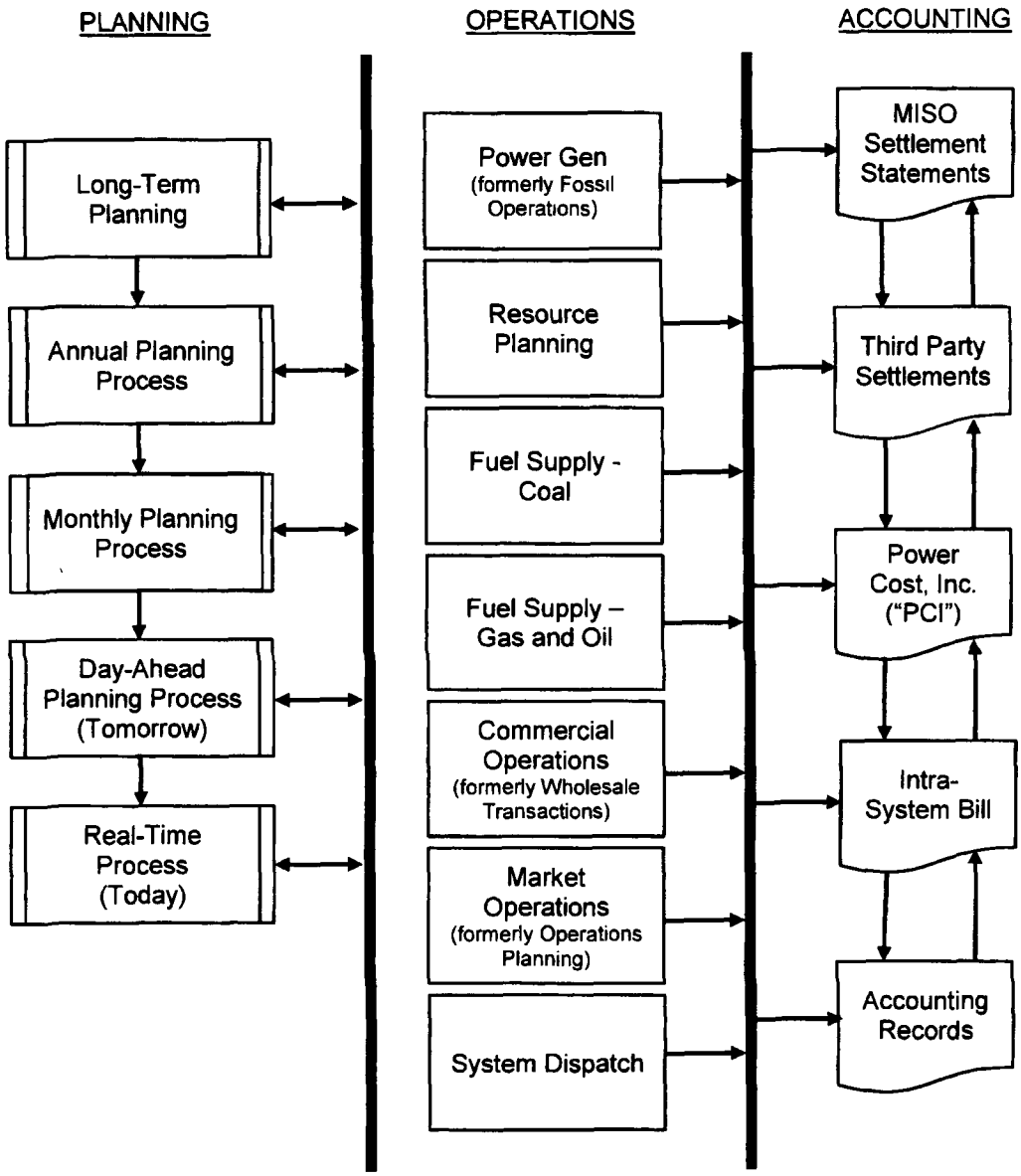
Q13. PLEASE DESCRIBE THE ACTIVITIES THAT FALL WITHIN THE SPO SUPPORT OFFICE.

A. There are certain types of activities that are common across the front and back offices, and these are provided through a core support group. These activities include executive management (*i.e.*, the Vice President of System Planning and Operations), the activities of the Regulatory Affairs and Strategic Initiatives group, and the compliance and budget support services provided by the Back Office and Support Services group.

Q14. HOW ARE THE SERVICES PROVIDED BY THESE VARIOUS GROUPS WITHIN SPO DELIVERED TO ETI AND THE OTHER EOCS?

A. Those services are delivered through various processes that are organized by task, not by organizational entities. Each process is performed by a team drawn from the various groups within SPO or other ESL organizations. The close proximity of the various groups that comprise SPO means that the appropriate skills can be brought to bear on any specific problem, regardless of the specific group in which the team members might work. Figure MJG-2 depicts these processes.

Figure MJG–2
SPO Processes



With regard to the planning processes, Company witness Devon Jaycox describes in detail the shorter-term processes (Monthly, Day-Ahead and Real-

Time); and I discuss below the longer-term planning processes (Long-Term and Annual). With regard to the operations processes, Company witness Christopher Burke addresses Power Gen operations, I address Resource Planning and Commercial Operations, and Mr. Jaycox covers the remainder, including how the EOCs bid their loads and offer generation into the MISO markets. As to the accounting processes, Company witness Andrew Dornier discusses third-party settlements, MISO settlement statements, Power Cost, Inc. and the Intra-System Bill, and Company witness Scott Celino addresses the Company's accounting records.

Q15. PLEASE DESCRIBE THE PURPOSE OF THE LONG-TERM PLANNING PROCESS.

A. The long-term planning process has been designed to accomplish three broad objectives:

- to serve customers' power needs reliably;
- to reliably provide power at the lowest reasonable supply cost; and
- to mitigate the effects and the risk of production cost volatility resulting from fuel and purchased power price uncertainty, MISO market-related charges such as congestion costs, and possible supply disruptions.

These objectives are measured from a customer perspective. That is, the long-term planning process has been designed to achieve a portfolio of resources that reliably meets customer power needs at the lowest reasonable supply cost while considering risk.

Prior to termination of the Entergy System Agreement, long-term planning was carried out on a system-wide basis for the benefit of the System as a whole. Following termination of the Entergy System Agreement, long-term planning is carried out separately for each of the individual EOCs.

Q16. PLEASE DESCRIBE THE PURPOSE OF THE ANNUAL PLANNING PROCESS.

A. The EOCs use the annual planning process to evaluate the extent to which they may rely on MISO's annual planning resource auction to meet their respective annual resource adequacy requirements imposed by MISO.

As with the long-term planning process, the annual planning process was carried out on a system-wide basis prior to termination of the Entergy System Agreement and on an individual Operating Company basis following termination of the Entergy System Agreement.

Q17. HOW DOES RESOURCE PLANNING AS AN OPERATIONS PROCESS DIFFER FROM THE ANNUAL AND LONG-TERM PLANNING PROCESSES?

A. Resource Planning as an Operations Process refers to the seasonal (summer and winter) assessment of the EOCs' generating resources to determine their expected operations capability to inform SPO regarding how to offer those generating resources into the MISO markets.

Q18. WHAT DOES COMMERCIAL OPERATIONS ENTAIL AS AN OPERATIONS PROCESS?

A. That Operations Process refers to the fact that the Commercial Operations group has responsibility for executing on procurement of longer-term resources to satisfy resource needs identified in the long-term planning process.

IV. PARTICIPATION IN MISO MARKETS

A. Risk Control Requirements

Q19. REGARDING THE SPO PROCESSES THAT INVOLVE PARTICIPATION IN THE MISO MARKETS, WHAT RISK CONTROL, CREDIT, AND MARKET RISK REQUIREMENTS ARE REQUIRED BY MISO PARTICIPATION?

A. MISO's business practices require that entities like ETI demonstrate an effective program that includes:

1) a formal risk policy addressing market, credit, and liquidity risks, which policy must be approved by a group independent of the commercial front office organization;
2) an organizational structure that segregates commercial activity from the risk management function;
3) the delegation of authorized trading activity;
4) adequate training regarding MISO markets for the commercial function;
5) the imposition of applicable risk limits;
6) risk reporting;
7) processes to validate trading activity; and

8) when and where applicable, periodic valuation of mark-to-market positions.

Q20. HOW HAS SPO ADDRESSED THESE REQUIREMENTS FOR ETI?

A. The ESL finance organization developed the Utility Risk Committee comprised of SPO leadership and representatives of the EOCs to address MISO's risk control, credit, and market risk requirements. As part of this Committee's review of SPO's participation in the MISO markets, a risk policy was drafted to provide structured guidance for the commercial operations, commodity procurement, generation and hedging activities for Entergy Corporation's regulated business operations, including a Utility Risk Manual intended to formalize the methods to effectively manage, monitor, and evaluate the various risks associated with SPO's business activities. Specifically, the risk policy outlines:

- the risk management objectives that apply to SPO;
- the roles and responsibilities of the front and back-office functions, as well as the functions that oversee their activities; and
- the guidelines for managing market and credit risk.

Through the establishment of the Utility Risk Committee, the Company is compliant with MISO's risk-management requirements.

B. MISO Participation Structure

Q21. DOES ETI INCUR ELIGIBLE FUEL COSTS AS A RESULT OF ITS PARTICIPATION IN MISO?

A. Yes. Eligible fuel costs are charged to ETI under the terms of the MISO Tariff, and how those costs are charged is largely a function of ETI's respective MISO participation structure.

Q22. WHAT IS REFERRED TO AS THE MISO "PARTICIPATION STRUCTURE"?

A. MISO Participation Structure determines how ETI and the other EOCs are allocated the responsibility among themselves and other members of MISO for the different functions of utility operations under the MISO Tariff. This structure includes:

- the Transmission Pricing Zones, which determine the transmission rate for Network Service for loads in the zones[3];
- the Load Zones, which are aggregations of load busses that serve as the basis for the financial settlement of energy demand;
- the Local Resource Zones, which establish local capacity requirements that are defined by MISO with input from stakeholders;
- the Auction Revenue Rights ("ARR") Zones, which are geographic areas identified as "sinks" for the purpose of allocating ARRs; and

[3] *E.g.*, MISO Tariff, Module A § 1.671a.

- the number of Market Participants (the entities financially responsible to MISO for market settlements) and Asset Owners (the entities that own generation assets and/or serve load in MISO) to be established by the EOCs.

Q23. OF THESE PARTICIPATION STRUCTURES, WHICH INFLUENCE THE COMPANY'S ELIGIBLE FUEL COSTS?

A. The assignment of Load Zones, ARR Zones, and the number of Market Participants and Asset Owners affect how MISO identifies market activities for settlement statements. I will address how these have been implemented since ETI joined MISO.

Q24. WHAT IS A LOAD ZONE?

A. A Load Zone represents an aggregate area of consumption for a load-serving entity ("LSE"). Within the MISO structure, a Load Zone is a type of Commercial Pricing Node ("CPNode"). A Load Zone CPNode consists of an aggregation of load busses. Energy demand and associated ancillary services are financially settled at the Load Zone CPNode level based on the appropriate CPNode locational marginal prices ("LMPs") (day-ahead or real-time LMPs) and CPNode withdrawal level. The geographic area of a Load Zone is determined by the Market Participant. ETI's service territory is a separate Load Zone in MISO.

Q25. WHAT IS AN ARR ZONE?

A. An ARR Zone is defined under the MISO Tariff as a geographic area identified as a "sink" for the purpose of allocating ARRs. Specifically, ARRs are sourced at specific generator nodes and sink at ARR Zones. ARR Zones are based upon locations where a Market Participant serves load. ETI established a separate ARR Zone to correspond to its Load Zone. I discuss ARRs and ETI's ARR management strategy in further detail in the Congestion Strategy section below.

Q26. CAN ARR ZONES BE CHANGED ONCE THEY ARE ESTABLISHED?

A. No. Once ARR Zones are established upon joining MISO, they may not be changed.

Q27. WHAT IS A MARKET PARTICIPANT?

A. A Market Participant is an entity that is financially responsible to MISO for market settlements. A Market Participant may represent one or more Asset Owners. It is the Market Participant that is billed by MISO for each Asset Owner it represents. ETI is a Market Participant.

Q28. WHAT IS AN ASSET OWNER?

A. The term Asset Owner is used generically to refer to an entity that owns generation assets and/or serves load in MISO. To participate in MISO's markets, an Asset Owner must be represented by a Market Participant. As noted, the Market Participant receives the market settlements statement from MISO. Those market

settlements statements detail the credits and charges for each Asset Owner that is represented by the Market Participant, including the credits and charges related to the Asset Owner's loads and resources. While each Asset Owner receives a duplicate market settlements statement from MISO for its loads and resources, it is the Market Participant, not the Asset Owner, that is billed by MISO and is financially responsible for MISO settlements.

Q29. PLEASE DESCRIBE THE PROCESS BY WHICH MISO STAKEHOLDERS PARTICIPATE IN MISO'S PLANNING AND DECISION-MAKING.

A. MISO's Transmission Owners Agreement requires an open and transparent stakeholder process. Therefore, MISO has developed a stakeholder governance process that provides a forum for stakeholders to provide MISO with input to effectuate changes to MISO's tariff, Business Practice Manuals, market processes and transmission planning. As shown in Exhibit MJG-1, MISO's stakeholder process is a hierarchical committee structure, consisting of Subcommittees, Working Groups, User Groups, and Task Forces that report to an Advisory Committee that makes decision recommendations to MISO's Board of Directors. MISO engages stakeholders during the meetings of the various committees and groups.

Q30. DOES THE MISO STAKEHOLDER PROCESS ALLOW FOR INPUT FROM THE COMMISSION?

A. Yes. As recognized in the Commission's Order approving ETI's transition to MISO, the Organization of MISO States, Inc. ("OMS") is one of the four main committees reporting to the MISO Board of Directors.[4] This committee provides retail regulators an opportunity to provide input and receive updates on MISO's activities. The OMS is a non-profit, self-governing organization with representatives from each retail regulatory body in the MISO footprint with regulatory jurisdiction over entities participating in MISO. The OMS coordinates regulatory oversight among the retail jurisdictions and makes recommendations to MISO and the MISO Board of Directors as well as to the Federal Energy Regulatory Commission and other relevant governmental entities and state commissions.

In addition, the Entergy Regional State Committee ("E-RSC") provides collective retail regulatory agency input on the operations of and upgrades to the Entergy Transmission System. The E-RSC is comprised of retail regulatory commissioners from agencies in Texas, Arkansas, Louisiana, Mississippi, and the Council of the City of New Orleans.

[4] *See, e.g.*, Docket No. 40346, Order at Finding of Fact 24.b.

Q31. HOW DO THE EOCS MONITOR THESE MISO STAKEHOLDER PROCESSES?

A. In order to allow the EOCs to monitor MISO's stakeholder process, ESL has developed an Oversight Team, which includes members from each EOC. The Oversight Team designates a representative from ESL to attend each MISO committee or group meeting that is open to the EOCs' participation. When a topic presented during a committee or group meeting requires stakeholder comments or a vote, the representative requests feedback from the Oversight Team to develop the response to MISO.

C. MISO Congestion Strategy

Q32. PLEASE EXPLAIN HOW PARTICIPATION IN THE MISO MARKETS AFFECTS THE FUEL COSTS PAID BY ETI'S CUSTOMERS.

A. Fuel costs paid by customers reflect a netting of various revenues and charges to arrive at a cost to provide power to the end-use customers. Specifically, a Market Participant (here, ETI) will pay an LMP for all the energy needed to serve its load plus related MISO market charges. That cost of energy to serve load is then offset by revenues the Market Participant receives for energy and related services it sold into the MISO markets net of the fuel and purchased power costs incurred to provide energy and related services to the market. That cost of energy to serve load is then further offset by revenues produced by financial transmission rights ("FTRs") held by the Market Participant. Figure MJG-3 below provides an illustrative example of how this netting occurs.

Figure MJG-3
Fuel Cost Component Comparison

	MWh	$/MWh	$
Load Charge	1,000	$35	(35,000)
Fuel and Purchased Power	1,000	$30	(30,000)
Generator Revenue	1,000	$30	30,000
FTR Revenue	1,000	$5	5,000
Net			(30,000)

In sum, fuel costs incurred to serve customers include the cost of fuel consumed and power purchased to provide the energy and related services consumed by customers as well as the revenues the utility is separately paid for the energy and related services it provides to the MISO markets and the costs charged for the energy and related services it takes from the markets. In addition, the utility may use FTRs to offset the congestion exposure of energy in the MISO markets.

Q33. WHAT IS CONGESTION?

A. Congestion is the term used to describe a state in which one or more elements (lines, breakers, transformers, etc.) of the transmission system have more electricity flowing than is desirable. Analogous to cars on a highway, a given element is only designed for a certain amount of flow. Reliability coordinators are responsible for ensuring that flows on the system stay within limits so that congestion that may occur after an unexpected outage remain within the limitations of each element of the system. MISO uses Day-Ahead and Real-Time markets to create market signals, including congestion prices, that serve to provide incentives to generators that maintain congestion within limits while serving customer load.

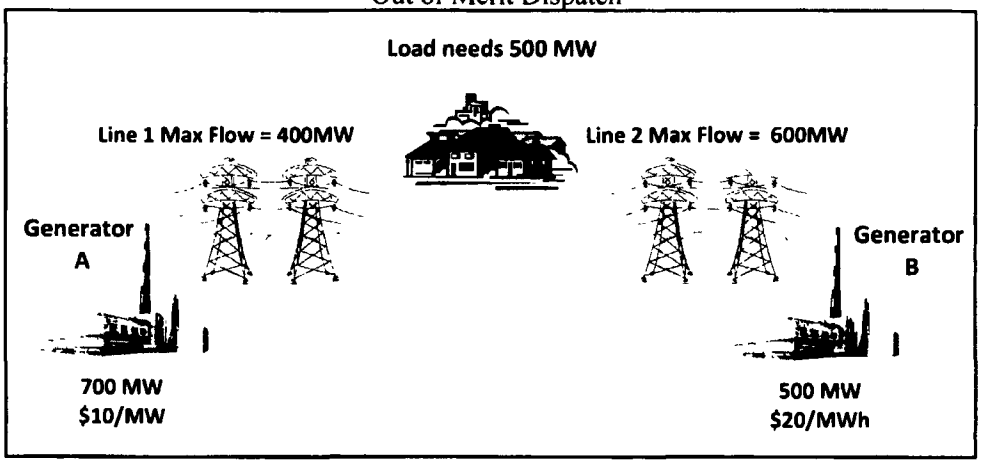
Q34. HOW IS CONGESTION REFLECTED IN THE PRICE OF ENERGY ON THE MISO SYSTEM?

A. Each location in MISO is represented by an LMP. The LMP shows the marginal cost of serving demand at a particular location. There are three components that are combined to form the LMP: the Marginal Energy Component ("MEC"), the Marginal Congestion Component ("MCC"), and the Marginal Loss Component ("MLC"). The MEC represents the least-cost energy resource in MISO, and its value is the same for each location on the system in any given hour. The MCC and MLC denote the change in energy cost at a location due to congestion and losses on the transmission system.

Q35. HOW DOES CONGESTION GIVE RISE TO CONGESTION CHARGES?

A. If, due to transmission constraints, lower-cost energy is unable to serve load and higher-cost energy must instead serve the load, the difference between the lower and higher-cost energy is considered a congestion charge to the load. For example, in Figure MJG-4 below, the 700 MW of low-cost energy at Generator A represents the MEC and is more than sufficient to meet total load of 500 MW, but because of the limitation on Line 1 transfer capacity (maximum flow of 400 MW), an out-of-merit unit (Generator B) must be dispatched to serve the load.

Figure MJG-4
Out of Merit Dispatch



Therefore, congestion creates different LMPs at different locations. In Figure MJG-4, the marginal cost to serve an increment of load is $20/MWh, and the LMPs are set accordingly. The load is charged the Load Zone LMP, and generators are paid the generator bus LMP. If these load charges and generator credits are netted against one another, as in Figure MJG-5, there is a net charge equal to $4,000. This net charge is implicit, but identifiable, and is referred to as a "congestion charge" because, as illustrated in Figure MJG-5, it represents the cost to load of purchasing energy at a price that is $10/MWh higher than the price at which the energy is sold at Generator A.

Figure MJG-5
Calculation of Congestion Charges

Gen A Credit	400	10	4,000
Gen B Credit	100	20	2,000
Load Charge	500	20	(10,000)
Congestion Charge			(4,000)

Q36. WHAT MECHANISMS EXIST IN MISO TO OFFSET THOSE CONGESTION COSTS?

A. With MISO's operation of the transmission system, LSEs such as ETI no longer require physical transmission rights in order to deliver their generation to their load. However, MISO provides financial transmission rights through its ARR and FTR process in order to mitigate the financial implications of an LSE paying a different LMP at its load than the LMP it is paid at its generator.

Q37. WHAT ARE AUCTION REVENUE RIGHTS AND FINANCIAL TRANSMISSION RIGHTS?

A. ARRs and FTRs entitle the holder to receive a share of the congestion charges collected by MISO. MISO does not keep the congestion charges that result from paying generators one price and charging loads another price; MISO returns the congestion charges to FTR holders. ARRs and FTRs are defined by a source, sink, season, on or off-peak, and MW quantity.

Q38. HOW IS AN ARR UTILIZED?

A. An ARR is a financial instrument that affords its holder the right to revenues or charges in the Annual FTR Auction. ARRs provide value to their holder in two ways: 1) ARRs entitle the owner to revenues or charges from the Annual FTR Auction, or 2) ARRs can be converted into FTRs. If the ARR is not converted to an FTR, the ARR is valued based on the price difference between its source and sink in the Annual FTR Auction. The ARR settlement is determined by the FTR

Auction participants' expectation of the congestion to occur in the MISO Day-Ahead Market. However, an ARR can be converted to an FTR from the same source and sink.

Q39. PLEASE EXPLAIN WHAT AN FTR IS.

A. An FTR is a financial instrument that settles based on the price difference between a source and sink in MISO's Day-Ahead Market. MISO makes a payment or issues a charge to each FTR holder in each hour that is approximately equal to the MW quantity times the difference between the MCC at the sink and the MCC at the source. Thus, FTR settlement is aligned with the actual congestion charges incurred in the MISO Day-Ahead Market.

Q40. EXPLAIN HOW THE COMPANY OBTAINS ARRS AND FTRS FROM MISO.

A. MISO has an annual process, the Annual ARR Allocation Process, in which transmission customers are able to nominate ARRs that source at network resources and sink at ARR Zones. MISO evaluates ARR nominations in the Annual ARR Allocation process in separate stages. The first stage, Stage 1A, of the process analyzes Market Participants' nominations sourcing at paths from base-load resources *(i.e.*, resources expected to operate at a high capacity factor). ARRs awarded in this stage are guaranteed to their holder in perpetuity. The second stage, Stage 1B, evaluates all ARR paths including those sourcing from both base-load and peaking resources. In each of these stages, MISO evaluates the simultaneous feasibility of ARRs nominated by all customers, curtails nominations to the extent

necessary to achieve feasibility, and allocates a resulting set of simultaneously feasible ARRs. As described previously, ARRs can be converted to FTRs in the annual FTR auction. The Company also receives Stage 2 ARR revenues.

Q41. WHAT ARE STAGE 2 ARRS?

A. Excess revenues are generated in the Annual FTR Auction. These revenues are distributed to LSEs in pro rata portions based on an LSE's unnominated portion of their peak load. This is guaranteed to be a value greater than or equal to zero since it is funded with excess revenues.

Q42. WHAT IS THE COMPANY'S STRATEGY IN OBTAINING ARRS AND FTRS?

A. The Company participates in MISO's Annual ARR Allocation Process and Annual FTR Auction with a priority on hedging the delivery of generation from resources expected to operate at a high capacity factor. The Company also seeks to add a portfolio hedge by looking at the projected value of the path.

Q43. HOW SUCCESSFUL HAS ETI BEEN IN OBTAINING ARRS AND FTRS BASED ON THIS STRATEGY?

A. As shown in Figure 6 below, ETI was successful in obtaining most of its Stage 1 ARR nominations in each of the Annual ARR Allocation processes completed during the Reconciliation Period.

Figure MJG-6
ETI Stage 1 ARR Nominations

	Total Stage 1
2017	94.4%
2018	95.1%
2019	96.1%

V. RECONCILIATION PERIOD WHOLESALE POWER

Q44. DID ETI INCUR COSTS FOR PURCHASED POWER DURING THE RECONCILIATION PERIOD?

A. Yes. The total Reconciliation Period purchased power costs for the Company are set out in Schedule FR-4.3a-g. The eligible costs are made up of:

- payments for Entergy System Agreement Service Schedule MSS-3 Exchange of Electric Energy among the EOCs (discussed by Mr. Dornier);
- Entergy System Agreement Service Schedule MSS-4 energy payments (also discussed by Mr. Dornier);
- net purchased energy and related MISO market charges (discussed by Messrs. Dornier and Jaycox); and
- Long-term (*i.e.*, one-year or longer) third-party PPA costs (discussed below).

All of the Company's long-term PPAs that were in effect during the Reconciliation Period are found in Schedule FR-7 and the workpapers supporting that schedule. The PPAs identified in Schedule FR-7 under which eligible fuel

costs were incurred during the Reconciliation Period have been submitted to the Commission for review in prior fuel and base rate proceedings. Also, two long-term PPAs – (1) the MSS-4 Replacement Tariff between ETI and ELL for the purchase of capacity and energy from River Bend, and (2) the MSS-4 Replacement Tariff between ETI and ELL for the purchase of capacity and energy from Perryville Station – were agreed to by ETI, ELL, the Commission and the Louisiana Public Service Commission as part of the settlement agreement that supported early termination of the Entergy System Agreement.[5] Both of these PPAs substitute for the Service Schedule MSS-4 contracts that ended with the termination of the Entergy System Agreement. Like Service Schedule MSS-4, which operated when the Entergy System Agreement was in effect, the MSS-4 Replacement Tariff is a cost-based formula rate. The same formula rate is applied to each unit-specific transaction between EOCs. The cost structure for the underlying resource is unique to each resource, but the rate charged is the same for all EOCs.

Q45. DID ETI RECEIVE ANY REVENUES FROM WHOLESALE POWER SALES DURING THE RECONCILIATION PERIOD?

A. Yes. The total Reconciliation Period wholesale power revenues for the Company are set out in Schedule FR-4.4b-e. Those revenues are derived from:

- receipts for Entergy System Agreement Service Schedule MSS-3 Exchange of Electric Energy among the EOCs (discussed by Mr. Dornier);

[5] *Entergy Arkansas, Inc , et al* , Docket No. ER14-75-000, *et al.*, Settlement Agreement (filed August 15, 2015).

- Entergy System Agreement Service Schedule MSS-4 payments (also discussed by Mr. Dornier);
- margins from off-system sales made when the Entergy System Agreement was in effect (also discussed by Mr. Dornier); and
- net revenue credits from MISO market settlements (addressed by Messrs. Dornier and Jaycox).

Q46. DID TERMINATION OF THE ENTERGY SYSTEM AGREEMENT AFFECT HOW ETI INCURS WHOLESALE POWER EXPENSES AND REVENUES?

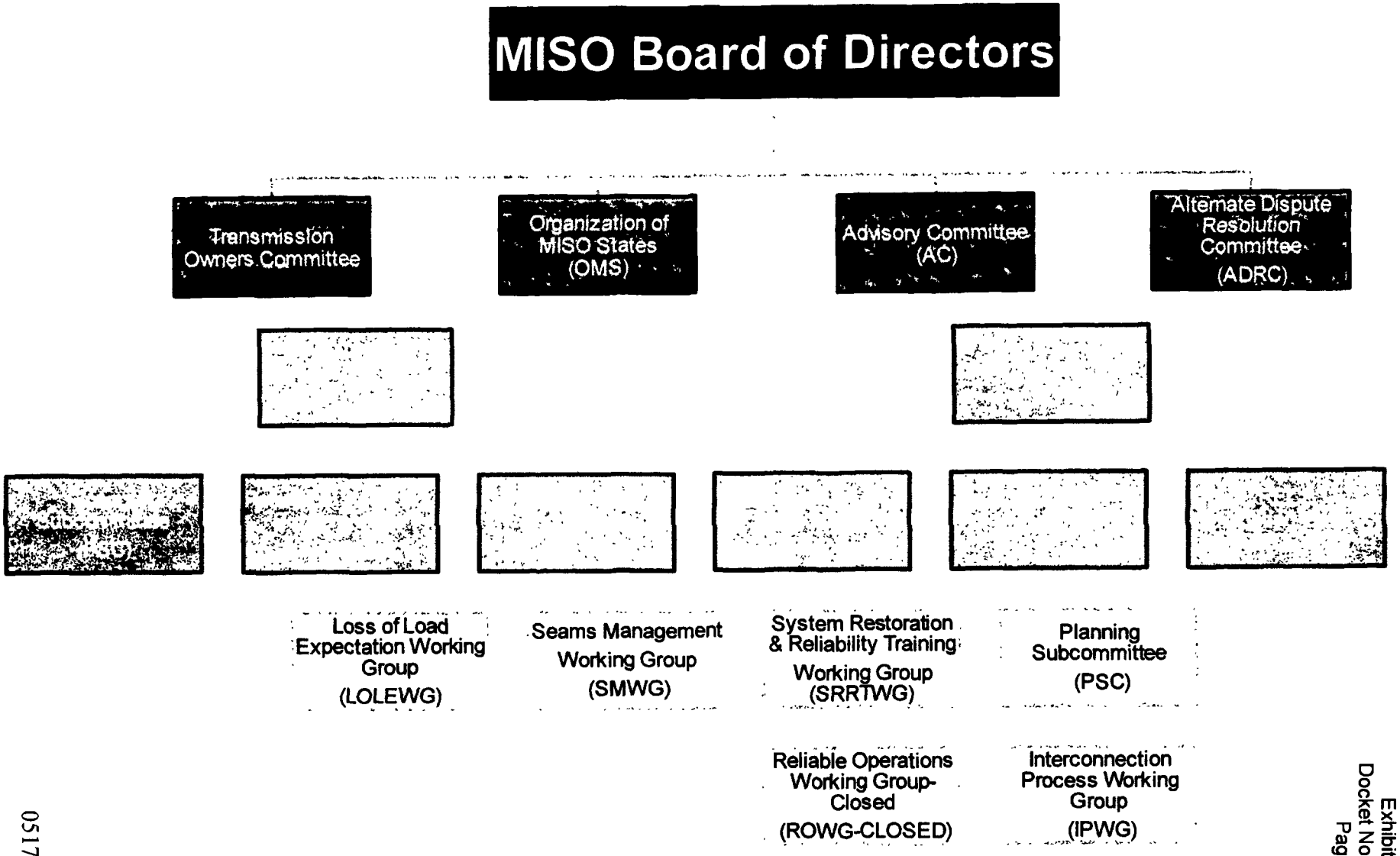
A. Yes. Prior to termination of the Entergy System Agreement, shorter-term purchases and off-system sales were made on a System basis, and the costs and net margins were shared on a load responsibility ratio basis. Longer-term purchases were also made on a System basis, but those resources and associated costs were allocated among the EOCs at the discretion of the Entergy Operating Committee.

Following termination of the Entergy System Agreement, the only allocation of wholesale power transactions among the EOCs occurs pursuant to bilateral transactions.

Q47. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

Entity Organization Chart



0517

Exhibit MJG-1
Docket No. 49916
Page 1 of 1

SOAH Docket No. 473-20-0259
PUC Docket No. 49916
ETI Exhibit No. 10

DOCKET NO. 49916

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

DIRECT TESTIMONY

OF

ANDREW L. DORNIER

ON BEHALF OF

ENTERGY TEXAS, INC.

SEPTEMBER 2019

SOAH Docket No. 473-20-0259
PUC Docket No. 49916
ETI Exhibit No. 10

ENTERGY TEXAS, INC.
DIRECT TESTIMONY OF ANDREW L. DORNIER
DOCKET NO. 49916

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I. INTRODUCTION

Q1. PLEASE STATE YOUR NAME AND CURRENT BUSINESS ADDRESS.

A. My name is Andrew L. Dornier. My business address is Parkwood II Bldg., Suite 300, 10055 Grogans Mill Road, The Woodlands, Texas 77380.

Q2. ON WHOSE BEHALF ARE YOU PROVIDING THIS TESTIMONY?

A. I am testifying on behalf of Entergy Texas, Inc. ("ETI" or the "Company").

Q3. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am Manager, Settlements, Analysis and Reporting for the System Planning and Operations ("SPO") organization of Entergy Services, LLC ("ESL"),[1] the service company affiliate of the Entergy Operating Companies ("EOCs"), which (prior to September 1, 2016) coordinated, planned, and operated their electric generation and bulk transmission facilities as a single, integrated electric system (the "Entergy System" or the "System").[2] As Manager, Settlements, Analysis and Reporting, I am responsible for overseeing reporting and settlements for gas, coal, emissions, fuel oil, and purchased power. Prior to the termination of the Entergy System Agreement on September 1, 2016, I was also responsible for administering Intra-System Billing ("ISB") associated with the cost allocations

[1] ESL is the services company affiliate of the Entergy Operating Companies that provides engineering, planning, accounting, technical, regulatory, and other administrative support services to each of the Entergy Operating Companies.

[2] The EOCs consist of Entergy Arkansas, LLC; Entergy Mississippi, LLC; Entergy New Orleans, LLC ("ENOL"); and Entergy Louisiana, LLC ("ELL").

required by the Entergy System Agreement (or "System Agreement"), a Federal Energy Regulatory Commission ("FERC")-approved tariff that included eight FERC-approved rate schedules.

Q4. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I graduated from Southeastern Louisiana University with a Bachelor of Science degree in Accounting (2000) and a Master of Business Administration (2001). I also earned a Master of Integrated Supply Chain Management (2017) from the University of Wisconsin – Platteville. I began working for ESL as a Lead Internal Auditor in 2008 after approximately seven years of professional auditing experience in both industry and government. In August 2013, I transferred to SPO in The Woodlands to work in the Energy Analysis and Reporting group working on the ISB. In July 2015, I was promoted to the Manager with responsibility for performing energy settlements, including producing the ISB as well as a number of other functions. In January 2019, my group was renamed the Settlements, Analysis and Reporting group and restructured to include verification and settlement of Midcontinent Independent System Operator, Inc. ("MISO") market charges and revenues.

I am a Certified Public Accountant ("CPA") licensed by the Louisiana State Board of CPAs (Lic. #25423) and a Certified Internal Auditor.

Q5. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I describe the processes employed on ETI's behalf to settle payments to third-party vendors for fuel, fuel-related services, and purchased power. These processes include verification and settlement of revenues and costs resulting from ETI's participation in the markets administered by MISO. In general, this part of my testimony addresses the boxes labeled Third-Party Settlements, MISO Settlement Statements and Power Cost, Inc., on Figure MJG-2 of Company witness Michael J. Goin's testimony and Figure DSJ-1 of Company witness Devon S. Jaycox's testimony.

My testimony also supports the reconcilable (or "eligible") costs and revenues associated with ETI's participation in the Entergy System Agreement prior to September 1, 2016. In supporting these costs and revenues, I discuss how ETI coordinated its generation and bulk transmission functions with the other EOCs via the System Agreement. In general, this part of my testimony addresses the boxes labeled "Intra-System Bill" on Figure MJG-2 of Mr. Goin's testimony and Figure DSJ-1 of Mr. Jaycox's testimony.

II. THIRD-PARTY SETTLEMENTS

Q6. EXPLAIN HOW YOUR GROUP ASSURES THAT ETI PAYS THE CORRECT AMOUNTS TO THIRD PARTIES OTHER THAN MISO FOR FUEL AND PURCHASED POWER.

A. The Settlements, Analysis and Reporting group performs settlements of invoices received for natural gas commodity and transportation, fuel oil commodity and

transportation, coal commodity and transportation, purchased power transactions, and emissions credits and allowances. Prior to approving payment, invoices are first reviewed against internal Front Office records relating to the transaction and third-party records such as pipeline meter statements. After reconciling any discrepancies based on these records, including, if necessary, further communications with the counterparty, payment is authorized and the transaction is recorded. Where applicable, the transaction became an input to the System Agreement and ISB processes I describe below.

Q7. CAN YOU PROVIDE AN EXAMPLE OF THE LEVEL OF DETAIL INVOLVED IN VERIFICATION OF INVOICES FROM THIRD-PARTY FUEL SUPPLIERS?

A. Yes. I will use coal costs invoiced at Nelson 6 as the example. Each train shipment of coal is assigned to the proper coal supply and transportation contract in the Railcar & Coal Management System ("RCMS") database. Each invoice rendered by a vendor is verified by comparing the contract identification number, tons shipped, price per ton invoiced, and total invoice amount to the information contained in RCMS for the same time period covered by the invoice. The RCMS data is obtained electronically from the mine at the time of loading. Both the mine and railroads use this information for billing purposes. The relevant coal supply contracts require that the mine have a scale certification performed twice a year using a State of Wyoming certified scale test.

The monthly quality adjustments for Btu and SO_2 are also verified. The average monthly Btu and SO_2 content is compared to the value in a database for Nelson 6 and the current allowance price is verified by an index publication.

In addition, the Settlements, Analysis and Reporting group calculates the sales and use tax imposed by the State of Louisiana on boiler fuels. The sales and use tax is assessed on boiler fuel based on a percentage of its commodity cost at the time of the fuel's consumption.

III. MISO SETTLEMENTS

Q8. PLEASE ELABORATE ON THE RESPONSIBILITIES OF YOUR GROUP WITH REGARD TO MISO SETTLEMENTS.

A. The Settlements, Analysis and Reporting group is responsible for evaluating Settlement Statements received from MISO. The group receives billings from MISO for each of the EOCs and is responsible for their review and reconciliation. Through the Power Cost, Inc. ("PCI") system, the Settlements, Analysis and Reporting group independently calculates MISO Market transactions to identify potential discrepancies with the MISO bills. When warranted, the group submits and monitors billing disputes with MISO based on variance thresholds.

Q9. PLEASE INTRODUCE THE CONCEPTS PARTICULAR TO MISO PARTICIPATION DISCUSSED IN THIS SECTION OF YOUR TESTIMONY.

A. In describing how my group processes and analyzes MISO Settlements on behalf of ETI, my testimony will discuss specific MISO markets and types of MISO

participants. MISO operates four competitive markets, which MISO relates to the generation function: the Day-Ahead Energy and Operating Reserve Market, the Real-Time Energy and Operating Reserve Market, the Annual Capacity Auction, and the Financial Transmission Rights ("FTR") Market. The Settlements, Analysis and Reporting group receives statements that financially settle transactions in all four of these markets. I will also refer to Market Participants and Asset Owners, which are terms for the entities associated with the charges and credits that result from these market transactions. A Market Participant is an entity that is financially responsible to MISO for Market Settlements and may represent one or more Asset Owners. It is the Market Participant that is billed by MISO for each Asset Owner it represents. The term Asset Owner is used by MISO to refer to an entity that represents generation assets and/or load assets in MISO.

ETI is both a Market Participant and an Asset Owner. Prior to termination of the Entergy System Agreement, many of the charges and credits made to the individual EOCs pursuant to the MISO Tariff were allocated among the EOCs pursuant to the terms of the System Agreement, which I discuss later. Following termination of the System Agreement, the allocation of MISO market charges and credits among the EOCs is much more limited and occurs pursuant to co-ownership arrangements and bilateral transactions.

Q10. PLEASE EXPLAIN THE TYPES OF MISO MARKET CHARGES THAT ARE SUBJECT TO SETTLEMENT.

A. MISO currently has 59 individual Market Settlement Charge Types applicable to the EOCs that correspond to the settlement of the Day-Ahead and Real-Time Energy and Operating Reserves Markets, the FTR Market (including Auction Revenue Rights), and the Annual Capacity Auction. In order to facilitate the System Agreement's allocation of Market Settlement expenses and wholesale revenues among the System EOCs, as well as to provide a sufficient level of detail for accounting and reporting purposes, these MISO's Charge Types used by the EOCs have been grouped into seven different categories. A description of each category (and the accounting for each category as discussed by Company witness Scott M. Celino) is summarized in Figure ALD-1 below:

Figure ALD-1

Accounting Category	FERC Accounts		Description
	Revenue	Expense	
Energy	447	555	Revenues associated with the sale of energy and expenses associated with the purchase of energy excluding any congestion and loss revenues and expenses
Congestion	447	555	Revenues and expenses associated with congestion, including FTRs
Losses	447	555	Revenues and expenses associated with the assessment of loss charges
Ancillaries	447	555	Revenues and expenses associated with the provision and use of market-based ancillary services
Uplift	447	555	Revenues and expenses associated with make whole payments and uplift funding mechanisms

Administration	457.1	575	Revenues and expenses associated with the provision of services by MISO and Local Balancing Authorities
Capacity	447	555	Revenues and expenses associated with participation in the annual MISO Capacity Auction

Attached as Exhibit ALD-1 is a table showing which Market Settlement Charge Types are aggregated in each category.

Q11. PLEASE ELABORATE ON THE CATEGORIES OF MISO SETTLEMENT CHARGES THAT AFFECT ETI'S ELIGIBLE FUEL COSTS.

A. I understand the Administration and Capacity categories are not included in ETI's eligible fuel costs. I will address the other categories:

- ***Energy Purchases and Sales at the Locational Marginal Price***

While the MISO Settlement Statements will include explicit information related to the quantity and price corresponding to load, generation, and scheduled purchases/sales in MISO's Day-Ahead and Real-Time Markets, the quantity and price of Locational Marginal price ("LMP") purchases and sales is implicit. The quantity of LMP purchases/sales is reflected in the difference between the total load and the total generation plus scheduled purchases/sales identified on the MISO Settlement Statements. If the total load exceeds the total generation plus scheduled purchases and sales, net LMP purchases result based on this difference. If the total generation plus scheduled purchases and sales exceeds the total load, net LMP sales result based on this difference. See Exhibit ALD-1 for a list of all explicit MISO Charge Types that are included in the energy category.

- ***Congestion***

As described by Company witness Goin, congestion occurs when the transmission system is constrained and, as a result, generators connected to the transmission system are dispatched out of economic merit order to maintain system reliability. Congestion charges are the dollar amounts associated with the settlement of Financial Transmission Rights ("FTRs")[3] and congestion charges associated with Financial Schedules. See Exhibit ALD-1 for a list of all explicit MISO Charge Types that are included in the congestion category.

- ***Losses***

A MISO LMP represents the cost, expressed in $/MWh, to supply the next increment of energy at a specific location or "Node" on the transmission system in a manner that respects the physical and operational limitations of generation and transmission facilities. Each LMP includes a separately-stated component for the marginal cost of energy (Marginal Energy Component or MEC), the marginal cost of losses (Marginal Loss Component or MLC), as well as the marginal cost of congestion (Marginal Congestion Component or MCC). During the settlement process, MISO distributes a surplus of losses collected in each hour for the MLC. This distribution, plus losses charges associated with Financial and Physical Schedules makes up the losses category. See Exhibit ALD-1 for a list of all explicit MISO Charge Types that are included in the losses category.

[3] FTRs are settled based on the difference between the Day-Ahead Marginal Congestion Component of the LMP at the points of delivery and receipt for the respective FTR.

- ***Ancillary Services***

MISO procures regulation, spinning, and supplemental reserve services in the Day-Ahead and Real-Time Markets based on offers made by Market Participants. These ancillary services provided to MISO and consumed in the Day-Ahead and Real-Time Markets are settled on a five-minute interval in the same manner as the energy component of the Day-Ahead and Real-Time Markets. MISO assesses costs related to these ancillary services based on the amount of energy used by a Market Participant.[4] Credits are assessed to the generating units selected by MISO to provide ancillary services on the basis of their offers. See Exhibit ALD-1 for a list of all explicit MISO Charge Types that are included in the ancillary services category.

- ***Uplift***

In order to efficiently operate its market and incent appropriate economic behavior, MISO provides Make-Whole Payments to the generating units it selects to satisfy its requirements. These payments, also referred to as "uplift" payments or credits, essentially ensure that a generating unit offered to and selected by MISO will be compensated in an amount that is no less than the unit's offer costs. See Exhibit ALD-1 for a list of all explicit MISO Charge Types that are included in the uplift category.

[4] For example, MISO's Market Settlement Calculation Guide, MS-OP-029-r36, which details the calculation of each charge type, provides that the RT ASM REG DIST (Regulation Cost Distribution) charge is assessed to load based on billable real-time meter volumes (energy) at each load CPNODE (pp. 333-337).

A. MISO Settlement Statements

Q12. DESCRIBE HOW MISO SETTLEMENT STATEMENTS ARE RECEIVED AND PROCESSED.

A. MISO Settlement Statements are provided at a daily aggregated level for each Asset Owner by MISO Market transaction type: Day-Ahead Market, Real-Time Market, and FTR Market. Each charge or credit calculated by MISO is assigned a "Charge Type." Depending on the Charge Type, the cost or credit may be calculated on a five-minute interval or hourly and summed to a daily total, or calculated on a daily interval. The Charge Type describes the type of transaction being settled. Each settlement statement has separately defined Charge Types, and each Charge Type uses specified billing determinants and an applicable calculation formula.[5] There are typically four versions of statements issued for each Operating Day: S7, S14, S55, and S105. Figure ALD-2 below shows the date of issuance of the four statements assuming an Operating Day of January 1. The number in the Statement Type refers to the number of days after the corresponding Operating Day that the statement is issued, *e.g.*, for operations on January 1, the Company will receive an initial statement on January 8. Each Statement Type reflects all validated data received by MISO prior to noon Eastern Time on the day before issuance.

[5] The MISO charge types and allocation formulae may be found in the MISO Business Practice Manual for Market Settlements at the following internet website address: https://www.misoenergy.org/legal/business-practice-manuals/.

Figure ALD-2

Statement Type	Date of Issuance
S7 (initial)	January 8
S14	January 15
S55	February 25
S105	April 16

The statements issued after the S7 Statement report the changes resulting from updated information to the charges and credits reported in the S7 Statement. In total, ETI receives 103 MISO Market Settlements each day due to the different statement types and the breakouts by Asset Owner and transaction type.

In practice, MISO also periodically issues resettlement statements outside of the S7, S14, S55, S105 cycle due to MISO billing issues or requirements of a FERC order. Resettlements may occur after the final statement is issued or between Settlement Statements. The Settlements, Analysis and Reporting group utilizes PCI to process each statement as well as any resettlements.

Q13. ARE THE SETTLEMENT STATEMENTS THE SAME AS INVOICES?

A. No. On Tuesday of each week, MISO issues to the Market Participant two settlement invoices based on the charges and credits in the Settlement Statements issued the previous week (*e.g.*, S7, S14, S55, and S105).[6] The two separate invoices are the Net Market Invoice and the Administrative Fee Invoice. The Net Market Invoice includes charges and credits related to the Day-Ahead Market,

[6] A "week" begins on Saturday and ends on Friday.

Real-Time Market, and FTR Market. The Administrative Fee invoice includes charges related to MISO's costs of administering the markets. For each invoice, the Market Participant is either a net payee or net payer. The invoices are payable within seven days of the invoice date. The Settlements, Analysis and Reporting group verifies both MISO Settlements Statements and invoices through PCI.

B. Power Cost, Inc.

Q14. WHAT IS PCI?

A. The PCI software is a commercially available information management system for market participants in organized power markets that holds and processes MISO Market data that are inputs to the MISO bill. The PCI software is used to perform a number of functions as part of interfacing with the MISO markets, including: submitting day-ahead offers of generation and bids for load, receiving after-the-fact billing data, checking and validating billing results, and submitting billing disputes. With respect to the Settlements, Analysis and Reporting group, the PCI Software has four primary functions in the accounting arena:

1. Capturing Market Settlement Data and other pertinent data;
2. Estimating settlements for the Operating Days for which no S7 Statement is yet available and purchase power costs required for month-end accounting prior to settlement of these costs later in the month;

3. Facilitating the aggregation of the Market Settlement Charge Types for use in the ISB and for accounting and reporting purposes; and

4. Validating Market Settlement Statements through a "Shadow Settlements" process (discussed in more detail below).

With respect to the first function listed above, the PCI system retrieves and receives Market Settlement Data from MISO. This data is captured by market – Day-Ahead, Real-Time and FTR – and by settlement interval. The PCI Software also captures data such as generation meter data from internal sources to use in validating data from MISO.

Q15. WITH RESPECT TO THE SECOND FUNCTION, WHY IS IT NECESSARY TO ESTIMATE SETTLEMENTS?

A. Estimating settlements is necessary because of the various accounting and regulatory processes and requirements that utilize a calendar-month accounting cycle. The current month-end accounting close records an estimate of purchased power costs because the actual volumes and prices are not completely settled between the counterparties until later in the month after the accounting books are closed. Any true-ups between the estimated generation and purchased power amounts and the actual amounts are recorded in the following month. As described previously, there will be Operating Days in the calendar month for which S7 Statements will not have been received by the end of the month. Therefore, to facilitate the calendar-month accounting processes, the Settlements,

Analysis and Reporting group develops an estimate of the Market Settlement credits and charges for those Operating Days at the end of each month. To develop that estimate, the Settlements, Analysis and Reporting group relies on PCI's Shadow Settlement Process described below.

Exhibit ALD-2 illustrates the flow of Market Settlement Data from MISO to the Settlements, Analysis and Reporting group and ultimately to the accounting general ledger.

Q16. WITH RESPECT TO THE THIRD FUNCTION, FOR WHAT PURPOSE IS THE MARKET SETTLEMENTS DATA IN PCI UTILIZED BY THE ISB?

A. As I discuss later, the ISB as well as other internal accounting functions used Market Settlements Data provided by PCI to allocate revenues and costs according to the Entergy System Agreement when it was still in effect. Market Settlement Data originated at MISO and was captured by the PCI Software. From there, and as a result of the Shadow Settlement Process, the data was gathered into the ISB System. The ISB System used aggregated Market Settlement Data and applied the System Agreement formulae to the data to allocate revenues and expenses to the System Agreement EOCs. Ultimately, the output of the ISB was the primary basis for the journal entries for purchased power expenses and wholesale revenues on the System Agreement EOCs' respective accounting records (*i.e.*, general ledgers). These entries include the results of the MISO Market Settlement Statements.

Q17. DID THE SETTLEMENTS, ANALYSIS AND REPORTING GROUP CEASE USING THE ISB SYSTEM WHEN THE SYSTEM AGREEMENT TERMINATED?

A. No. The ISB System is still used to aggregate MISO Market Charge types for accounting and reporting purposes, as discussed earlier. The ISB System is also used to net purchase and sale transactions from the MISO market, which netting is required by FERC Order No. 668,[7] and to allocate MISO Market Charges among the EOCs pursuant to co-ownership arrangements and bilateral transactions. Thus, the ISB System continues to gather and process Market Settlements Data from PCI.

Q18. WITH RESPECT TO THE FOURTH FUNCTION, WHY IS ESL VALIDATING MISO'S MARKET SETTLEMENT STATEMENTS?

A. Validating energy purchases and sales data (volume and dollars) from any third party is a necessary and prudent accounting practice, especially given the magnitude of dollars involved in settling MISO Market Charges to the EOCs.

Q19. HOW DOES THE SETTLEMENTS, ANALYSIS AND REPORTING GROUP VERIFY MISO SETTLEMENT STATEMENTS UTILIZING PCI?

A. The Settlements, Analysis and Reporting group performs "Shadow Settlements." The PCI Software contains billing algorithms that simulate MISO's calculations.

[7] *Accounting and Financial Reporting for Public Utilities Including RTOs*, Docket No. RM04-12-000, 113 FERC ¶ 61,276, Order No. 668 at PP 80-84 (Dec. 2005).

The group captures Market Settlement Data and uses those billing algorithms in PCI to calculate the expected charges and credits for an Operating Day independent from MISO's results (*i.e.,* Shadow Settlements). The Settlements, Analysis and Reporting group then compares these calculations to the charges reported in the various MISO Settlement Statements to validate the Settlement Statements. If the charges in the Settlement Statements vary from those calculated in the Shadow Settlements, outside acceptable tolerances, the group researches the market transaction to determine if there is an issue with the MISO billings that requires resolution through the MISO dispute process.

Q20. DOES THE SETTLEMENTS, ANALYSIS AND REPORTING GROUP REVIEW EACH VARIANCE IDENTIFIED BY PCI?

A. No. Only variances above a threshold approved by ETI are reviewed and, if necessary, disputed. The following factors were considered in developing the thresholds:

1. Feedback from other Independent System Operator participants and consultants;
2. The Financial Processes Controls materiality thresholds discussed with internal accounting;
3. ETI's MISO asset registration;
4. Historical MISO dispute activity; and
5. Customer effects.

These considerations resulted in a tiered variance threshold for the Shadow Settlement Process. For each Charge Type processed daily by Asset Owner, the Settlements, Analysis and Reporting group applies a $2,000 threshold. Also, the group evaluates the hourly data at an asset level (*e.g.*, unit) based on a $500 threshold. These thresholds are monitored and periodically evaluated to determine if adjustments may be needed.

Q21. FOR EACH VARIANCE IT REVIEWS OVER THE THRESHOLD, DOES THE SETTLEMENTS, ANALYSIS AND REPORTING GROUP SUBMIT A DISPUTE TO MISO?

A. No. A variance in the Shadow Settlement that PCI produces may indicate either: 1) MISO billing issues requiring the submission of a dispute; or 2) Shadow Settlement calculation differences. Possible Shadow Settlement calculation differences may include:

1. Shadow Settlement input errors, such as a missing data element;
2. An inability of PCI to shadow certain types of charges identically to MISO's processes. In some cases, PCI cannot identify the exact same time and place utilized by MISO in a calculation and a difference may result, but it is not necessarily indicative of a MISO billing issue; or
3. A temporary lag between when MISO updates its settlement processes and when a corresponding update is made in PCI.

To the extent possible, the Settlements, Analysis and Reporting group works with the developer of the PCI software to update its calculations to address any shadow calculation input errors. When the variance is identified as not pertaining to a MISO billing issue, an explanation of the variance is documented.

Q22. DOES THE SETTLEMENTS, ANALYSIS AND REPORTING GROUP EMPLOY ANY OTHER TOOLS TO IDENTIFY POTENTIAL DISPUTES WITH MISO SETTLEMENT STATEMENTS?

A. Yes. Although the Shadow Settlement Process is the primary method for identifying billing disputes, the Settlements, Analysis and Reporting group also consults with the Energy Management Organization ("EMO") to identify disputes that cannot be identified through the Shadow Settlement Process. As the group that interacts with the MISO Markets daily, the EMO group may recognize issues not reflected in the data gathered by PCI.

C. MISO's Billing Dispute Process

Q23. DESCRIBE THE PROCEDURE THE SETTLEMENTS, ANALYSIS AND REPORTING GROUP IMPLEMENTS WHEN IT INITIATES A DISPUTE WITH MISO.

A. The Settlements, Analysis and Reporting group pursues disputes whether the Company or MISO is owed costs or revenues. The group manually files disputes with MISO through the MISO portal, tracks each dispute filed with MISO in the PCI system, and synchronizes internal records with the dispute status in the MISO

portal to facilitate dispute reporting. The Settlements, Analysis and Reporting group continually tracks and monitors the status of outstanding disputes for timely resolution and records awarded disputes to ensure billing adjustments are appropriately made after disputes are granted.

Q24. EXPLAIN THE BILLING DISPUTE PROCESS IN MISO.

A. Under MISO's Dispute Process, for disputes involving the S7, S14, and S55, the Company must submit the dispute no later than 70 days from the Operating Day.[8] MISO requires that disputes involving final statements, S105, must be submitted within ten calendar days after the final statements are issued. If there is a dispute of a resettlement beyond issuance of the final statement, the Company must submit the dispute no later than ten days from the date of resettlement. MISO typically resolves all disputes within 30 calendar days of the dispute submission. There are two general categories of disputes in MISO:

1. Statement disputes covering any calculation, determinant data, or process issues regarding the charges or credits provided on the Market Settlement Statements; and
2. Invoice disputes covering discrepancies between the statement totals and the invoice.

[8] Effective November 1, 2018, the deadline is now 120 days.

Q25. DID THE SETTLEMENTS, ANALYSIS AND REPORTING GROUP FILE DISPUTES WITH MISO ON BEHALF OF ETI DURING THE RECONCILIATION PERIOD?

A. Yes. There were 23 disputes filed with MISO on behalf of ETI during the Reconciliation Period. As of March 31, 2019, ETI has received $517,462.40 in net revenues from MISO due to disputes resolved during the Reconciliation Period.

Q26. DOES MISO HAVE AN ALTERNATIVE DISPUTE RESOLUTION PROCESS AVAILABLE TO MARKET PARTICIPANTS?

A. Yes. When a dispute cannot be resolved through the MISO Settlements dispute process, a Market Participant may bring a matter to MISO through its Alternative Dispute Resolution process ("ADR") at any time. MISO handles three types of disputes through its ADR process:

1. Transmission Settlements Issues;
2. Market Settlements Issues; and
3. Disagreements between Market Participants and MISO.

Q27. DESCRIBE THE COMPANY'S PARTICIPATION IN MISO'S ALTERNATIVE DISPUTE RESOLUTION PROCESS.

A. ETI has an opportunity to initiate ADR or join a process initiated by another Market Participant as a third-party intervener. In the event the Company may be monetarily affected by an ADR proceeding initiated by another Market

Participant, MISO will provide ETI written notice of the dispute and the opportunity to participate. Whether there is a third-party or an ETI-initiated dispute, the Settlements, Analysis and Reporting group will confer with the Legal Department and the Subject Matter Experts ("SME") regarding the dispute before deciding to submit an ADR request or join in an ongoing ADR process. If the Company determines it should participate in ADR, the Settlements, Analysis and Reporting group will monitor the dispute process involving the Legal Department and SMEs from notification of ADR through resolution of the dispute.

Q28. DID THE SETTLEMENTS, ANALYSIS AND REPORTING GROUP FILE AN ADR DISPUTE WITH MISO ON BEHALF OF ETI DURING THE RECONCILIATION PERIOD?

A. Yes. ETI submitted one request for ADR during the Reconciliation Period. ETI filed the request to highlight a discrepancy between an Asset Owner's obligation to re-dispatch generation in response to MISO instructions that were given to maintain system stability and MISO's rules for compensating an Asset Owner for generation selected to serve load. The amount at issue was relatively small (less than $5,000), but ETI thought it important to point out this discrepancy so that it could be addressed before the same situation occurred on a larger scale. MISO recently informed ETI that MISO concurs with ETI's position and that MISO will be taking steps to amend its tariff to eliminate the discrepancy.

IV. ENTERGY SYSTEM AGREEMENT

Q29. WHAT WAS THE ENTERGY SYSTEM AGREEMENT?

A. The Entergy System Agreement was a FERC-approved tariff that mandated that the participating EOCs operate as a single, integrated system. The System Agreement allocated among the participating EOCs the benefits and costs of coordinated operation of those EOCs' generation and bulk transmission services and stated the terms and conditions (including the formula to determine the price) under which certain transactions were to occur. Those terms and conditions were set forth in Service Schedules made part of the System Agreement, which I identify below.

The System Agreement was entered into on April 23, 1982, and, as subsequently amended, was among ESL and the three EOCs that still participated in the System Agreement (ETI, ELL and ENOL) during the Reconciliation Period. Pursuant to a settlement agreement dated August 14, 2015 among the then remaining System EOCs and their retail regulators, the System Agreement terminated on August 31, 2016. ETI was a participant in the System Agreement for the portion of the Reconciliation Period spanning from April 1, 2016 through August 31, 2016.

Q30. WHAT EXPERIENCE HAVE YOU HAD WITH THE ENTERGY SYSTEM AGREEMENT?

A. All of my previous positions with the SPO have required knowledge and understanding of the Entergy System Agreement, including a working knowledge of its schedules and the allocation methodologies set forth in those schedules.

Q31. PLEASE SUMMARIZE THE SYSTEM AGREEMENT ACCOUNTING PROCESSES.

A. The Entergy System Agreement governed the accounting for certain benefits and costs incurred and received by the EOCs, including ETI, during their operation as a single, integrated electric system. During that time, the participating EOCs' generating units were dispatched without regard to ownership or individual EOC loads. Likewise, during that time, wholesale power purchases were made for the benefit of the System. Therefore, the after-the-fact accounting processes set forth in the Entergy System Agreement were necessary to allocate the costs and benefits to the individual EOCs.

Q32. PLEASE IDENTIFY THE SERVICE SCHEDULES MADE PART OF THE SYSTEM AGREEMENT AND WHICH SCHEDULES ARE RELEVANT TO THE RECONCILABLE COSTS INCLUDED IN THIS FILING.

A. The System Agreement included eight Service Schedules, denoted as Service Schedules MSS-1 through MSS-8.[9] These rate schedules did not contain specific prices, but rather, the "rates" were formulae by which to calculate the costs to be allocated among the participating EOCs pursuant to the various schedules. The Service Schedules were:

MSS-1 – Reserve Equalization;

MSS-2 – Transmission Equalization;

MSS-3 – Exchange of Electric Energy Among the Companies and Rough Production Cost Equalization;

MSS-4 – Unit Power Purchase;

MSS-5 – Distribution of Revenue from Sales Made for the Joint Account of All Companies;

MSS-6 – Distribution of Operating Expenses of System Operations Center; [10]

MSS-7 – Merger Fuel Protection Procedure; and

MSS-8 – Distribution of Administrative Charges of MISO.

[9] The "MSS" designator for service schedules under the System Agreement is a remnant of the period when ESL was named Middle South Services, Inc.

[10] These costs were included in the ESL affiliate billings.

Of these schedules, Service Schedules MSS-3 (energy allocation), MSS-4 (energy costs) and MSS-5 relate to reconcilable costs and revenues at issue in this proceeding. In the remaining portion of this Section, I provide a more detailed discussion of these Service Schedules.

Q33. PLEASE DESCRIBE SERVICE SCHEDULE MSS-3.

A. For purposes of this proceeding, Service Schedule MSS-3 served to mandate how energy and MISO charges were allocated among the System Agreement EOCs, which I discuss below. Service Schedule MSS-3 also dictated how production costs were roughly equalized among the EOCs on an annual basis.[11]

Q34. WAS THERE A FUNDAMENTAL PRINCIPLE AT WORK BEHIND THE OPERATION OF SERVICE SCHEDULE MSS-3 AS IT RELATES TO ENERGY ALLOCATION?

A. Yes. The fundamental principle of the System Agreement was that, subject to the operational and reliability constraints imposed on the System, the lowest-cost resources available to the System Dispatcher were the first resources used to meet the aggregate System load, without regard to which System Agreement EOC owned the resource or which EOC load was being served. Although the economic dispatch of the entire System resulted in total System generation output

[11] *Louisiana Pub. Serv. Comm'n v. Entergy Servs., Inc.*, Opinion No. 480, 111 FERC ¶ 61,311, Order on Reh'g, Opinion No. 480-A, 113 FERC ¶ 61,282 (2005), Order on Compliance, 117 FERC ¶ 61,203 (2006), Order on Reh'g and Compliance, 119 FERC ¶ 61,095 (2007).

matching total System load, in any given hour the generating output of some EOCs was greater than their individual load, and the generating output of other EOCs was less than their load. Therefore, after the System was economically dispatched, an energy accounting process was conducted to, in effect, have the participating EOCs that were "short" on energy in an hour compensate the "long" EOCs for the energy that was used to meet the short EOCs' needs. This Exchange Energy accounting was set out in Service Schedule MSS-3.

Q35. HOW DID SERVICE SCHEDULE MSS-3 WORK WITH RESPECT TO THE OPERATIONS OF EXCHANGE ACCOUNTING?

A. Service Schedule MSS-3 allocated all of the System's energy resources among the System Agreement EOCs. Under MSS-3, a participating EOC retained the energy (and the associated costs, as defined within the System Agreement) actually produced from its lowest-cost resources if those resources were needed to meet the loads of its customers. Only after the needs of a participating EOC's own customers were met would the excess energy that the EOC generated in a particular hour, and the associated costs, be allocated to other System Agreement EOCs. This allocation of excess energy pursuant to Service Schedule MSS-3 was referred to as "Exchange Energy" or "Pool Energy." System Agreement EOCs whose resources provided an amount of energy that was greater than their load in an hour allocated energy to the Entergy Energy Exchange (the "Exchange"), and EOCs whose load was greater than the amount of energy provided by their resources in an hour were allocated energy from the Exchange. However, it is

important to note that, in total, MSS-3 was a zero-sum equation. The sum of the MSS-3 payments and receipts for all of the System Agreement EOCs for any individual hour was zero.

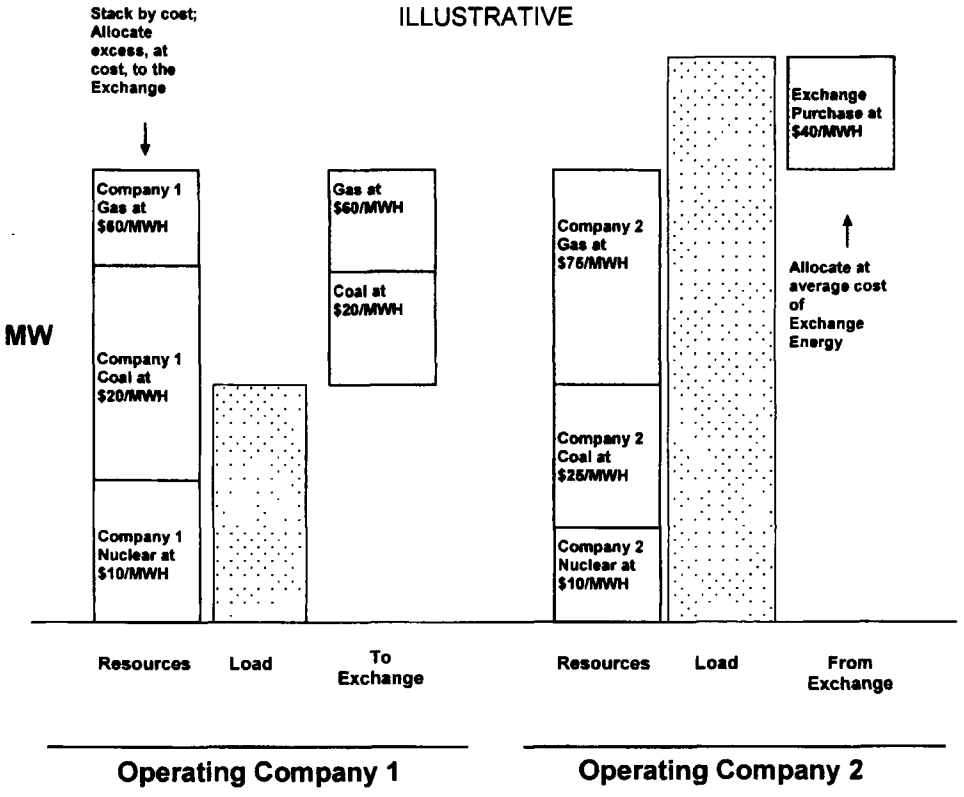
Q36. HOW WAS THE MSS-3 EXCHANGE ENERGY ACCOUNTING PERFORMED?

A. It was performed by the ISB. The process that was used to calculate Exchange Energy was sometimes known as a "stacking" process. An example of the stacking process is shown in the following Figure ALD-5. As shown in that example, the underlying process was to stack the amount of energy produced by each participating EOC's resources from lowest cost to highest cost in separate stacks for each EOC. Included in an EOC's stacked resources were Joint Account Purchases, which were purchases from non-Entergy sources made on behalf of all System EOCs and allocated based on an EOC's Responsibility Ratio.[12] Within each hour, the amount of energy within each participating EOC's stack was compared to the amount of energy that was consumed by its customers. If, for an individual company, the amount of energy produced was greater than the amount of energy used by its own customers, the energy (and associated costs) at the top end of the stack (in essence, above the level needed for that EOC's own customers) was allocated to the Exchange. An EOC whose resources produced less energy than the amount of energy its own customers used was allocated the

[12] The Responsibility Ratio of an EOC was the load responsibility of that company divided by the System Load Responsibility as set forth in Section 2.18 of the System Agreement.

deficit amount of energy from the Exchange. Each of these transactions occurred at a cost set forth in the System Agreement. System Agreement EOCs that had excess energy allocated to the Exchange received a payment, as defined in Section 30.08 of the System Agreement, that was based on average fuel costs (plus some small cost-based adders) or the actual cost of a purchase. The EOCs that had energy allocated to them from the Exchange paid the weighted average cost of all of the energy allocated to the Exchange in that hour.

Figure ALD-3
MSS - 3 EXCHANGE ENERGY ACCOUNTING
EXAMPLE
ILLUSTRATIVE



Q37. HAS THE COMMISSION PREVIOUSLY ADDRESSED WHETHER EXCHANGE ENERGY COSTS INCURRED BY ETI UNDER SERVICE SCHEDULE MSS-3 ARE REASONABLE?

A. Yes. In its Order on Rehearing in Docket No. 15102, the Commission addressed costs incurred under Service Schedule MSS-3 in the following Findings of Fact:

> 202. Schedule MSS-3 of the ESA (Entergy System Agreement) determined the pricing and exchange of energy among EGS and the affiliate EOCs (Entergy Operating Companies) during the reconciliation period.
>
> 203. By approving Schedule MSS-3 and the ESA, the Federal Energy Regulatory Commission (FERC) has determined how the EOCs will be reimbursed for energy sold to the exchange pool and how the EOCs, including EGS, will purchase energy from the exchange pool.
>
> 207. The FERC has determined that the ESA and Schedule MSS-3 is a just and reasonable way of allocating energy costs and revenues among the EOCs, including EGS, and has determined that the charges imposed on EGS by operation of the ESA are fair and reasonable in comparison to the charges imposed on the other EOCs.

As these Findings of Fact demonstrate, the Commission has already concluded that costs incurred pursuant to Service Schedule MSS-3 are reasonable.[13]

[13] *See also* Docket No. 15102, Proposal for Decision at 94-96; Docket No. 16705, Second Order on Rehearing at 138 (Conclusion of Law 11D); Docket No. 32710, Order at 9 (Finding of Fact 43).

Q38. DID THE SYSTEM AGREEMENT PROVIDE THE PARTICIPATING EOCS ANY DISCRETION IN TAKING ENERGY FROM OR SUPPLYING ENERGY TO THE EXCHANGE?

A. No. Service Schedule MSS-3 was an automatic, after-the-fact allocation mechanism. The "short" EOCs were required to take the energy allocated to them in a given hour, and the "long" EOCs were required to supply the energy allocated to the "short" companies. In other proceedings, the FERC has noted that "the interchange transactions are wholly within the integrated System, are centrally dispatched, and are mandated by [ESL] rather than the individual companies."[14]

Q39. WERE THE COSTS THAT ETI INCURRED UNDER SERVICE SCHEDULE MSS-3 FOR EXCHANGE ENERGY ANY MORE THAN THE COSTS INCURRED BY ANY OTHER EOC UNDER THAT SERVICE SCHEDULE?

A. No. ETI incurred the exact same cost per kWh for energy from the Service Schedule MSS-3 Exchange as did any other EOC that was allocated energy from the Service Schedule MSS-3 Exchange in the same hour.

[14] *Middle South Energy, Inc.*, Opinion No. 234, 31 FERC ¶ 61,305 at 61,661 (1985).

Q40. WERE ANY OTHER ALLOCATIONS OF ENERGY GOVERNED BY SERVICE SCHEDULE MSS-3?

A. Yes. The allocation of energy used to supply sales to off-system companies made for the joint account of all the System Agreement EOCs (Joint Account Sales) was made pursuant to Service Schedule MSS-3. According to Service Schedule MSS-3, any costs incurred by the EOCs whose resources supplied the sale were paid out of the gross revenue received for such sales. The remaining positive or negative margin from such sales (the "Net Balance") was then divided among the EOCs in accordance with Service Schedule MSS-5.

Q41. WHERE ARE SERVICE SCHEDULE MSS-3 EXPENSES AND REVENUES PRESENTED IN THE FILING?

A. Service Schedule MSS-3 Exchange expense and revenue is identified in Schedules FR-4.3 a-g and FR-4.4 b-e.

Q42. PLEASE DESCRIBE SERVICE SCHEDULE MSS-4.

A. Service Schedule MSS-4 prescribed a method for determining the payment for a unit power purchase between EOCs and/or the sale of power purchased by another EOC. A unit power purchase was defined as the purchase of a portion of a Designated Generating Unit's capability, which entitled the purchaser to receive in each hour that portion of the total energy generated by that unit.

Q43. PLEASE EXPLAIN HOW AFFILIATED POWER PURCHASES WERE MADE PURSUANT TO SERVICE SCHEDULE MSS-4.

A. Service Schedule MSS-4 was a cost-based formula rate that billed the buyer a monthly per-kilowatt rate relating to the non-fuel cost and a per kWh rate relating to the actual energy cost for the participating unit subject to the transaction. During the term of a Service Schedule MSS-4 transaction, the resource was considered to be under the control of the purchasing EOC for purposes of cost responsibility and allocation of energy under the Entergy System Agreement.

Q44. HAS THE COMMISSION ADDRESSED SERVICE SCHEDULE MSS-4 COSTS?

A. Yes. The Commission previously recognized:

> Service Schedule MSS-4 of the System Agreement sets forth the method for determining the payment for unit power purchases between Operating Companies. By approving Service Schedule MSS-4, the FERC has approved the methodology for pricing Inter-Operating Company unit power purchases.[15]

Q45. WERE THE RATES PAID BY ETI UNDER SERVICE SCHEDULE MSS-4 ANY MORE THAN THE RATES CHARGED TO ANY OTHER EOC UNDER THAT SERVICE SCHEDULE?

A. No. Service Schedule MSS-4 is a cost-based formula rate. That same formula rate was applied to each Service Schedule MSS-4 transaction between EOCs.

[15] Docket No. 32710, Order at 9 (Finding of Fact 44).

The cost structure for the underlying resource was unique to each resource, but the rate charged was the same for all EOCs.

Q46. WHERE ARE SERVICE SCHEDULE MSS-4 EXPENSES AND REVENUES PRESENTED IN THE FILING?

A. Service Schedule MSS-4 expense and revenue is identified in Schedules FR-4.3 a-g and FR-4.4 b-e.

Q47. PLEASE DESCRIBE SERVICE SCHEDULE MSS-5.

A. Service Schedule MSS-5 prescribed the method for distributing the Net Balance from Joint Account Sales, which were opportunity wholesale sales to third parties made by the System on behalf of all of the System Agreement EOCs. The System made such Joint Account Sales when they could be made at a price that was expected to exceed the System's incremental cost. As mentioned above, according to Service Schedule MSS-3, any costs associated with these Joint Account Sales first were deducted from the gross revenue received for such sales and distributed to the EOCs whose resources supplied the sale. The remaining Net Balance was distributed among the System Agreement EOCs in proportion to the Responsibility Ratio of each EOC.

Q48. WHERE ARE SERVICE SCHEDULE MSS-5 REVENUES PRESENTED IN THE FILING?

A. Service schedule MSS-5 revenue is identified in Schedule FR-4.4 b-e.

V. BILLING FOR ENTERGY SYSTEM AGREEMENT-RELATED REVENUES AND COSTS

Q49. HOW WERE OPERATING COMPANIES BILLED FOR THE COSTS INCURRED PURSUANT TO THE ENTERGY SYSTEM AGREEMENT?

A. The EOCs were billed through a monthly ISB.

Q50. WHAT WAS THE ISB?

A. The ISB was used to create inter-company invoices prepared by ESL on a monthly basis. The ISB detailed the costs to be paid and revenues to be received by each EOC for the transactions that occurred pursuant to the Entergy System Agreement.

Q51. HOW WAS THE MONTHLY ISB PREPARED?

A. The ISB was prepared by a custom computer program that incorporated the algorithms specified in the Entergy System Agreement. On an hourly and/or daily basis, fuel costs, unit generation, EOC load, and wholesale transactions data were collected and compiled into the ISB's database records.

Q52. HOW WAS THE MONTHLY ISB ORGANIZED?

A. The monthly ISB was divided into attachments, with each attachment containing multiple pages, if necessary. The attachments as of August 2016 were:

- Attachment 1 – kWh Disposition by Operating Company, Joint Account Purchases and Individual Company Purchases by Operating Company;
- Attachment 2 – Exchange Energy (to/from), Unit Power Purchases, AECC Excess Energy;
- Attachment 3 – Joint Account Sales and Net Balance;
- Attachment 4 – Peak Load Data and Responsibility Ratios;
- Attachment 5 – Owned or Contracted Capacity, Reserve & Transmission Equalization;
- Attachment 6 – Operating Company Summaries and System Total;[16] and
- Attachment 11 – Summary of Joint Account Purchases and Individual Company Purchases.

Q53. IS IT YOUR OPINION THAT THE ISB PROPERLY IMPLEMENTED THE ALLOCATION OF COSTS PURSUANT TO THE ENTERGY SYSTEM AGREEMENT?

A. Yes. The ISB properly implemented the FERC-approved allocation of costs among the EOCs as specified in the Entergy System Agreement.

[16] Attachment 6 contained summaries of all the MISO Market Settlements Charges allocated among the Operating Companies.

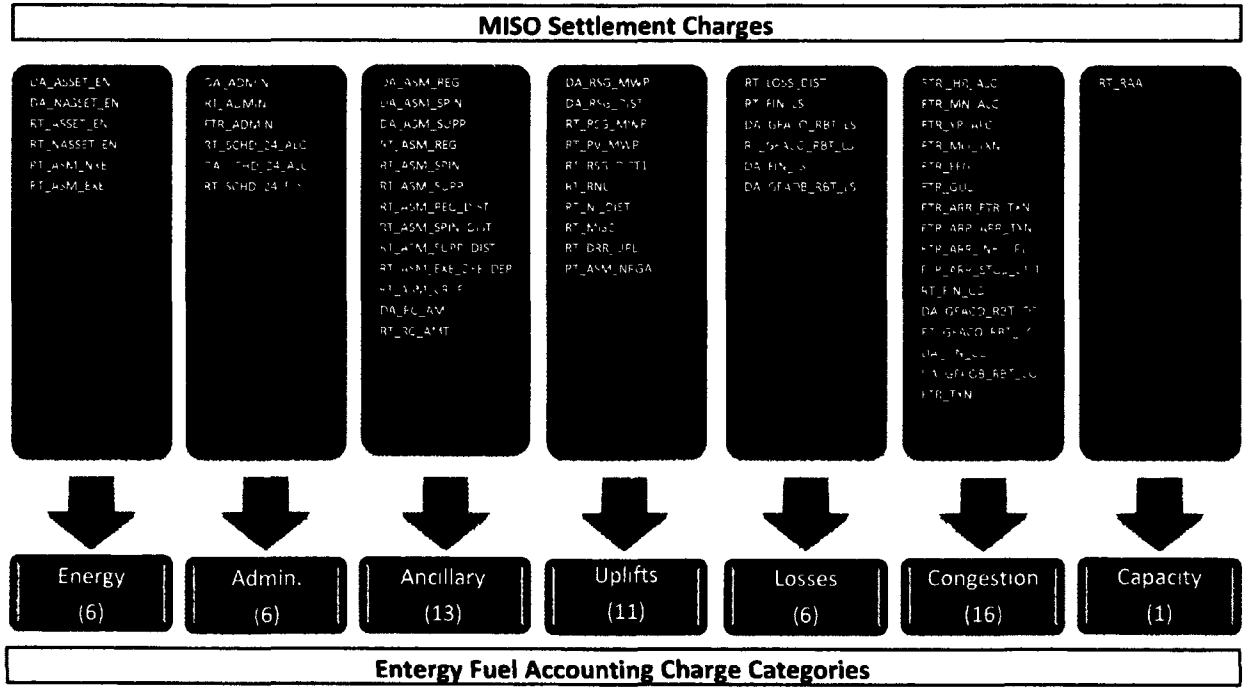
Q54. CAN THE COSTS ALLOCATED THROUGH THE ISB BE REVISED SOLELY FOR THE BENEFIT OF A SINGLE OPERATING COMPANY OR JURISDICTION?

A. No. Any revision to the allocation of energy and/or costs reflected in an ISB will necessarily affect the other EOCs. It is my understanding that FERC is the only regulatory authority with jurisdiction to review the multi-jurisdictional effects of such a revision.

Q55. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

CATEGORIZATION OF MISO MARKET SETTLEMENTS CHARGE

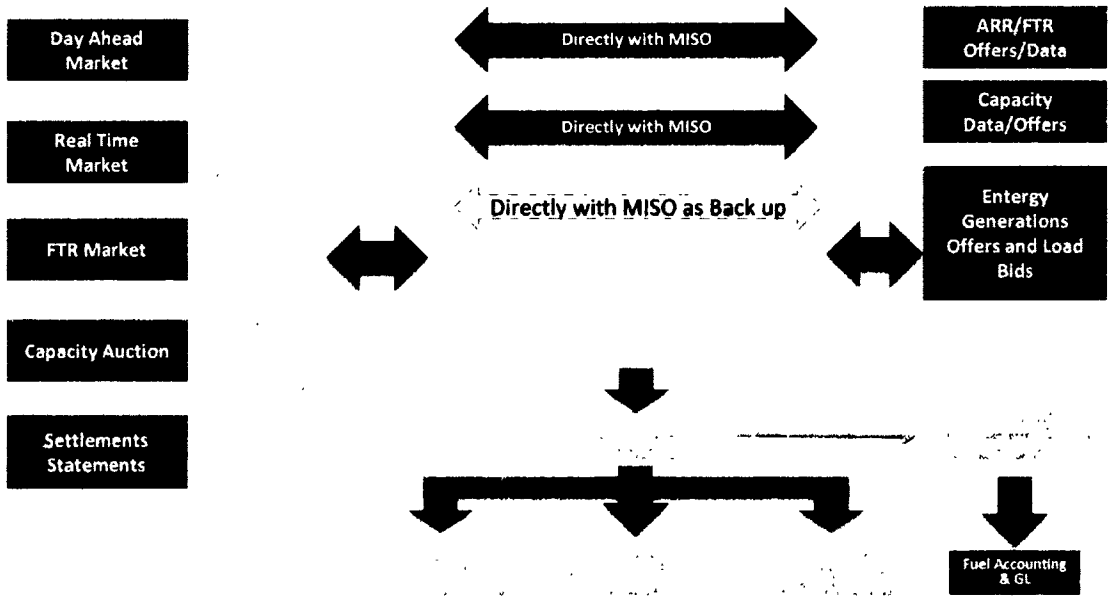


Note: With the exception of Administrative and Capacity costs, all of the above revenues and costs flow through recoverable fuel in accounts 447 or 555 in each jurisdiction.

0095

Exhibit ALD-1
Docket No 49916
Page 1 of 1

ESL / MISO System Interface



ESL uses PCI Generation Supply Management System to interface with MISO Market Portal. All data and communication are captured and can be queried for Settlements validation.

9600

Exhibit ALD-2
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Karis Anne Gong Parnham
Senior Counsel
Federal Energy Regulatory Affairs

January 27, 2016

VIA ETARIFF FILING

The Honorable Kimberly Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Re: *Entergy Services, Inc.*
Docket No. ER16-____

Dear Ms. Bose:

Pursuant to the order of the Federal Energy Regulatory Commission ("FERC" or "Commission") in *Entergy Arkansas, Inc* , 153 FERC ¶ 61,347 (2015) ("December 29 Order"), Entergy Services, Inc. ("ESI"), acting as agent for the Entergy Operating Companies,[1] hereby submits this compliance filing.

The Commission issued the December 29 Order in Docket Nos. ER14-75-000, ER14-75-001, ER14-76-000, ER14-76-001, ER14-77-000, ER14-77-001, ER14-78-000, ER14-78-001, ER14-79-000, ER14-79-001, ER14-80-000, ER14-80-001, ER14-128-000, ER14-1328-000, and ER14-1329-000, which approved an uncontested Settlement Agreement that resolves all issues in those dockets. One of the terms of the Settlement Agreement provides for termination of the Entergy System Agreement effective August 31, 2016 at 11:59:59 Central Daylight Time. In its filing of the Settlement Agreement, ESI submitted proposed revisions to the Entergy System Agreement to reflect the termination date in *pro forma* format and requested a temporary waiver of FERC's eTariff filing requirements pending FERC's action on the merits of the filing. In the December 29 Order, FERC directed ESI to file the proposed revisions in eTariff format within 30 days of the order's issuance date. December 29 Order at P 5. As the December 29 Order terminates Docket Nos. ER14-75-000, ER14-75-001, ER14-76-000, ER14-76-001, ER14-77-

[1] For purposes of this filing, the Entergy Operating Companies are Entergy Texas, Inc ("ETI"), Entergy Louisiana, LLC ("ELL"), and Entergy New Orleans, Inc ("ENO") On October 1, 2015, Entergy Gulf States, Louisiana, L L C ("EGSL") and the former Entergy Louisiana, LLC ("Entergy Louisiana") completed a transaction in which EGSL and Entergy Louisiana combined substantially all of their respective assets and liabilities into a single successor public utility operating company, Entergy Louisiana Power, LLC ("Entergy Louisiana Power"), now known as ELL In FERC Docket No ER16-218, ESI submitted on behalf of ELL a Notice of Succession, notifying the Commission that ELL had succeeded to the tariffs and rate schedules of EGSL, Entergy Louisiana, and Entergy Louisiana Power On December 18, 2015, by delegated letter order, the Director, Division of Electric Power Regulation – Central, accepted the Notice of Succession filing

000, ER14-77-001, ER14-78-000, ER14-78-001, ER14-79-000, ER14-79-001, ER14-80-000, ER14-80-001, ER14-128-000, ER14-1328-000, and ER14-1329-000, ESI understands that this compliance filing will generate new dockets. *See* December 29 Order at P 6.

I. Background

On August 14, 2015, ESI submitted a Settlement Agreement in Docket Nos. ER14-75-000, ER14-75-001, ER14-76-000, ER14-76-001, ER14-77-000, ER14-77-001, ER14-78-000, ER14-78-001, ER14-79-000, ER14-79-001, ER14-80-000, ER14-80-001, ER14-128-000, ER14-1328-000, and ER14-1329. The Settlement Agreement resolves all outstanding issues among the Settling Parties[2] in those dockets. Section II.A(1) of the Settlement Agreement provides that "[t]he System Agreement shall terminate, effective August 31, 2016 at 11:59:59 PM Central Daylight Time (the "System Agreement Termination Date"), for all Operating Companies remaining a party to the System Agreement as of that date." Section II.A.(2) of the Settlement Agreement requires the Entergy Operating Companies to "make such regulatory filings . . . that are necessary to effectuate the purposes of this Agreement, including . . . revisions to Section 1.01 of the System Agreement indicating that the System Agreement will terminate effective August 31, 2016 at 11:59:59 PM Central Daylight Time."

At the time ESI filed the Settlement Agreement, ESI requested a limited and partial waiver of the Commission's eTariff filing requirements under Order No. 714 and Sections 35.7 and 35.9 of the Commission's regulations, and ESI committed to file the revisions to the Entergy System Agreement via eTariff within thirty (30) days following the Commission's approval of the Settlement Agreement. In the December 29 Order, the Commission directed ESI to file the proposed revisions to the System Agreement in eTariff format within 30 days. December 29 Order at P 5.

The instant filing consists of the following documents:

(1) This transmittal letter;
(2) A redline copy of the System Agreement reflecting changes approved in the December 29 Order (Attachment 1); and
(3) A revised/clean copy of the System Agreement reflecting changes approved in the December 29 Order (Attachment 2).

[2] As of the date of the Settlement Agreement filing, the following parties were "Settling Parties": the Entergy Operating Companies and ESI. In addition, by notice filed on October 5, 2015, the Public Utility Commission of Texas informed the Commission that it had voted in an open meeting on September 24, 2015 to join the Settlement Agreement "without modification." By status report filed on October 30, 2015, the Louisiana Public Service Commission informed the Commission that it approved the Settlement Agreement "without modification" in an open meeting held on October 28, 2015. By supplemental report filed on November 6, 2015, the Council for the City of New Orleans informed the Commission that it voted unanimously on November 5, 2015 to adopt a resolution approving the Settlement Agreement without modification.

II. E-Tariff

Consistent with the Commission's direction in the December 29 Order, ESI here is submitting the revised version of the System Agreement for the Entergy Operating Companies through the eTariff system.

For purposes of this filing, the Entergy Operating Companies do not include Entergy Arkansas, Inc. ("EAI") or Entergy Mississippi, Inc. ("EMI"). EAI's participation in the System Agreement terminated on December 18, 2013. Likewise, EMI's participation in the System Agreement terminated on November 7, 2015. ESI is submitting updated versions of the System Agreement in the eTariff databases of ELL, ENO, and ETI.

Because the December 29 Order terminates Docket Nos. ER14-75-000, ER14-75-001, ER14-76-000, ER14-76-001, ER14-77-000, ER14-77-001, ER14-78-000, ER14-78-001, ER14-79-000, ER14-79-001, ER14-80-000, ER14-80-001, ER14-128-000, ER14-1328-000, and ER14-1329-000, ESI submits this filing as a rate schedule change other than rate increase.

III. Communications

ESI requests that all correspondence and communications with respect to this filing should be sent to, and that the Secretary include on the official service list, the following:

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VP, Federal Regulatory Affairs
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If you have any questions concerning this filing, please feel free to contact the undersigned.

Respectfully submitted,

/s/
Karis Anne Gong Parnham
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kparnha@entergy.com
Attorney for Entergy Services, Inc.

Agreement Among:

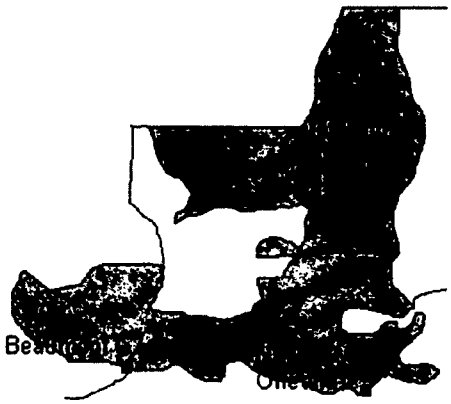
Entergy Gulf States Louisiana, L.L.C.

Entergy Louisiana, LLC

Entergy New Orleans, Inc.

Entergy Texas, Inc.

Entergy Services, Inc.



AGREEMENT

Among

ENTERGY GULF STATES LOUISIANA, L.L.C.

ENTERGY LOUISIANA, LLC

ENTERGY NEW ORLEANS, INC.

ENTERGY TEXAS, INC.

ENTERGY SERVICES, INC.

INDEX

Exchange of Electric Energy Among the Companies

Service Schedule MSS-4

Unit Power Purchase

Service Schedule MSS-5

Distribution of Revenue from Sales Made for the Joint Account of All Companies

Service Schedule MSS-6

Distribution of Operating Expenses of System Operations Center

Service Schedule MSS-7

Merger Fuel Protection Procedure

Service Schedule MSS-8

Distribution of Administrative Charges of MISO

AGREEMENT

Among

ENTERGY GULF STATES LOUISIANA, L.L.C.

ENTERGY LOUISIANA, LLC

ENTERGY NEW ORLEANS, INC.

ENTERGY TEXAS, INC.

ENTERGY SERVICES, INC.

THIS AGREEMENT, first made and entered into on the 23rd day of April 1982, and subsequently amended, is by and among; Entergy Gulf States Louisiana, L.L.C., herein-after called EGSL or Gulf States Louisiana; Entergy Louisiana, LLC, hereinafter called ELL;; Entergy New Orleans Inc., hereinafter called ENOI; Entergy Texas Inc., hereinafter called ETI, and Entergy Services, Inc., hereinafter called Services, all of whose common stock is wholly owned by Entergy Corporation, hereinafter called Parent Company.

WITNESSETH

0.01 WHEREAS, EGSL, ELL, EMI, ENOI, and ETI hereinafter called Companies, are the owners and operators of electric generation, transmission and distribution facilities with which they are engaged in the business of generating, transmitting and selling electric energy to the general public and to other electric distributing agencies; and

0.02 WHEREAS, Services is an associated Service Company acting as the Agent for the Companies under the terms of the Middle South Utilities System Agency

Agreement and the Middle South Utilities System Agency Coordination Agreement dated the 11th day of December 1970; and

0.03 WHEREAS, the Companies have been achieving substantial benefits for their customers by operating within the framework of an interconnection agreement dated April 11, 1973; and

0.04 WHEREAS, the individual Companies are interconnected by transmission lines and operated as a coordinated system from a central dispatching center; and

0.05 WHEREAS, technological progress and changed economic conditions have necessitated the updating of the aforementioned interconnection agreement to continue to obtain the maximum benefits for them and their respective customers;

NOW THEREFORE, the Parties hereto mutually understand and agree as follows:

ARTICLE I TERM OF AGREEMENT

1.01 This agreement shall become effective on August 1, 1982, or such later date as may be fixed by any requisite regulatory approval or acceptance for filing and shall continue in full force and effect until terminated by mutual agreement of the Companies. Notwithstanding this, any Company may terminate its participation in this Agreement by sixty (60) months written notice to the other companies hereto; and effective upon and after the date of implementation of retail open access in Texas, ETI shall terminate its participation in this Agreement, except as to Service Schedule MSS-2 (Transmission Equalization), consistent with Section 2.02 below. This agreement shall terminate effective August 31, 2016 at 11:59:59 PM Central Daylight Time.

1.02 This Agreement shall supersede the agreement listed below: Agreement among Arkansas Power & Light Company, Arkansas-Missouri Power Company, Louisiana Power & Light Company, Mississippi Power & Light Company, New Orleans Public Service Inc. and Middle South Services, Inc. dated the 16th day of April 1973 in FPC Docket No. E-8130 as amended in FERC Docket No. ER79-277, FERC Docket No. ER80-366, and FERC Docket No. ER 81-405.

1.03 This Agreement will be reviewed periodically by the Operating Committee to determine whether revisions are necessary to meet changing conditions. In the event that revisions are made by the parties hereto, and after requisite approval or acceptance for filing by the appropriate regulatory authorities, the Operating Committee will thereafter, for the purpose of ready reference to a single document, prepare for distribution to the Companies an amended document reflecting all changes in and additions to this Agreement with notations thereon of the date amended.

ARTICLE II DEFINITIONS

For the purpose of this Agreement and of the Service schedules which are a part hereof, the following definitions shall apply:

2.01 Agreement shall be this Agreement together with all attachments and service schedules applying thereto and any amendments made hereafter.

2.02 Company shall be one of the Entergy System Operating Companies (ELL, EMI, ENOI, EGSL, ETI).

2.03 Parent Company shall be Entergy Corporation.

2.04 Agent shall be Entergy Services, Inc. which shall act as Agent for one or more of the Companies whenever appropriate.

2.05 System shall be the interconnected coordinated systems of the Companies.

2.06 Operating Committee shall be the administrative organization created under this Agreement to administer its provisions.

2.07 Generating Unit shall be an electric generator, together with its prime mover and all auxiliary and appurtenant devices and equipment designed to be operated as a unit for the production of electric power and energy or as otherwise determined by the Operating Committee.

2.08 Base Generating Units - shall be all generating units included in FERC accounts 310 through 316 and whose fuel supply is coal and all generating units included in FERC accounts 320 through 325 whose fuel supply is nuclear respectively, and such other generating units as may be designated from time to time by the Operating Committee.

2.09 Intermediate Generating Units - shall be all generating units included in FERC accounts 310 through 316 and whose fuel supply is gas or oil and such other generating units as may be designated from time to time by the Operating Committee.

2.10 Peaking Generating Units - shall be all generating units included in FERC accounts 340 through 346 and such other generating units as may be designated from time to time by the Operating Committee.

2.11 Hydraulic Production Units - shall be all generating units included in FERC accounts 330 through 336.

2.12 Qualified Cogeneration Capacity shall be any capacity available from a cogeneration facility that qualifies under Subpart B of Part 292 of the Regulations of the FERC, 18 C.F.R. § 292.201, et seq., as amended, or any successor provisions issued pursuant to Section 3(18)(B)of the Federal Power Act, and which, in accordance with Section 4.08 of this Agreement is under the control of the System Operator, to the extent practicable, and where the State or local regulatory body having jurisdiction over any Company which establishes the rate for a particular purchase also determines that the purchase will permit non-qualifying facility capacity costs to be avoided or, in the absence of such determination, to the extent that the Operating Committee determines that, in accordance with Section 4.01 of this Agreement and pursuant to Section 292.304 of the FERC Regulations or any successor provision, the capacity will be employed to postpone generation that would otherwise be installed and thereby benefit the customers of all Companies. Individual Qualified Cogeneration Capacity below 10 mW will not be considered as a power or energy source to any party to the System Agreement but will be considered as a negative load.

2.13 Qualified Small Power Production Capacity shall be any capacity available from a small power production facility that qualifies under Subpart B of Part 292 of the FERC Regulations, 18 C.F.R. § 292.201, et seq., as amended, or any successor provisions issued pursuant to Section 3(17)(C) of the Federal Power Act, and which, in accordance with Section 4.08 of this Agreement, is under the control of the System Operator, to the extent practicable, and where the State or local regulatory body having jurisdiction over any Company which establishes the rate for a particular purchase also determines that the purchase will permit non-qualifying facility capacity costs to be avoided or, in the absence of such determination, to the extent that the Operating Committee determines that, in accordance with Section 4.01 of this Agreement and pursuant to Section 292.304 of the FERC Regulations or any successor provision, the capacity will be employed to postpone generation that would otherwise be installed and thereby benefit the customers of all Companies. Individual Qualified Small Power Production Capacity below 10 mW