

Exhibit No.
Issue: Fuel Adjustment Clause
Witness: Aaron J. Doll
Type of Exhibit: Supplemental Direct Testimony
Sponsoring Party: The Empire District Electric
Company
Case No. ER-2019-0374
Date Testimony Prepared: December 2019

Before the Missouri Public Service Commission

Supplemental Direct Testimony

of

Aaron J. Doll

on behalf of

The Empire District Electric Company

A Liberty Utilities Company

December 2019



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OF
AARON J. DOLL
ON BEHALF OF
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION
CASE NO. ER-2019-0374**

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1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Aaron J. Doll. My business address is 602 South Joplin Avenue, Joplin,
4 Missouri.

5 **Q. ARE YOU THE SAME AARON J. DOLL THAT FILED DIRECT**
6 **TESTIMONY IN THIS CASE?**

7 A. Yes. My Direct Testimony on behalf of The Empire District Electric Company
8 (“Liberty-Empire” or the “Company”) was filed on August 14, 2019.

9 **Q. WHAT IS THE PURPOSE OF THIS SUPPLEMENTAL DIRECT**
10 **TESTIMONY?**

11 A. Since the filing of my Direct Testimony, the Company has discussed rate case matters
12 with the Staff of the Commission, the Office of the Public Counsel, and other
13 stakeholders, and the Company has continued to refine its requests and
14 recommendations. My Supplemental Direct Testimony is to clarify and adjust
15 revenues and expenses that are proposed to flow through Liberty-Empire’s fuel
16 adjustment clause (“FAC”) and to provide additional fuel cost information as it
17 pertains to the Minimum Filing Requirements (“MFRs”) contained in the Corrected
18 Direct Testimony of Sheri Richard filed on August 23, 2019.

19

1 **II. FAC REVENUES AND EXPENSES**

2 **Q. ARE THERE REVENUE AND EXPENSE ITEMS THAT ARE PROPOSED**
3 **TO FLOW THROUGH THE FAC WHICH NEED ADDITIONAL**
4 **CLARIFICATION OR ADJUSTMENT?**

5 A. Yes. Due to a discrepancy between my Direct Testimony and the Direct Testimony of
6 Libery-Empire witness Todd W. Tarter filed on August 14, 2019, additional
7 clarification and adjustments are necessary.

8 **Q. PLEASE EXPLAIN.**

9 A. On page 6 of my Direct Testimony, I propose adjusting the percentages of
10 recoverable transmission expenses from 34% and 50% for the Southwest Power Pool
11 (“SPP”) and the Midcontinent Independent System Operator (“MISO”), respectively,
12 to 100%. Additionally, I propose to include Schedule 1A and Schedule 12 charges in
13 SPP as recoverable, as currently those charges are not included in the aforementioned
14 recoverable expenses. However, in the Net Base Energy Cost (“NBEC”) figure
15 provided in Mr. Tarter’s Direct Testimony, the percentages of recoverable
16 transmission expense were increased to 100% but Schedule 1A and Schedule 12
17 charges were mistakenly not included in those figures. The inclusion of those charges
18 increases the NBEC from \$24.88/MWh to \$25.49/MWh.

19 **Q. ARE THERE ANY ADDITIONAL ADJUSTMENTS THAT YOU PROPOSE**
20 **FLOW THROUGH THE FAC THAT ARE DIFFERENT FROM WHAT WAS**
21 **FILED BY COMPANY WITNESSES IN DIRECT TESTIMONY?**

22 A. Yes. After discussion with different stakeholders following the Company’s initial
23 filing, it became clear that interest exists in flowing transmission revenue through the
24 FAC, if transmission expense will flow through at 100%.

1 **Q. WHAT IS THE COMPANY’S NEW PROPOSAL?**

2 A. At this time, the Company proposes to include transmission revenue, exclusive of
3 what is received from non-retail loads in the Empire zone, into the NBEC figure
4 provided. The inclusion of transmission revenue will more than offset the increase in
5 transmission expense relating to the inclusion of Schedule 1A and Schedule 12
6 charges.

7 **Q. WHAT TRANSMISSION REVENUE IS THE COMPANY PROPOSING TO**
8 **INCLUDE IN THE FAC?**

9 A. The transmission revenue accounts that are proposed to flow through the FAC
10 represent the revenue received from SPP distributions according to Attachment L of
11 the SPP Open Access Transmission Tariff (“OATT”). The primary revenue schedules
12 will be:

- 13 • Schedule 1 Scheduling, System Control and Dispatch,
- 14 • Schedule 2 Reactive Supply and Voltage Control
- 15 • Schedule 7 Firm Point-to-Point (“PTP”)
- 16 • Schedule 8 Non-Firm PTP
- 17 • Schedule 11 Base Plan Zonal and Region-Wide Network Service
- 18 • Schedule 11 Base Plan Zonal and Region-Wide PTP Service

19 Furthermore, revenue received from MISO for Schedule 2 Reactive Power due to the
20 Plum Point pseudo-tie is also proposed to be included. The only revenue that will not
21 be distributed will be from non-retail loads inside the Empire zone for which retail
22 load does not contribute to the revenue requirement.

23 **Q. PLEASE EXPLAIN HOW THE NBEC WILL CHANGE AS A RESULT OF**
24 **THESE TWO PROPOSED ADJUSTMENTS?**

1 A. The FAC Base Factor \$ per MWh provided in the Schedule TWT-3 of Mr. Tarter's
2 Direct Testimony is comprised of \$136,016,133 in NBEC divided by 5,465,856 MWh
3 for a base fuel rate of \$24.88/MWh. As mentioned above, the inclusion of Schedule
4 1A and Schedule 12 transmission expense at the proposed 100% inclusion rate
5 increases the base fuel rate to \$25.49/MWh, which represents an increase of 2.5%.
6 The offset of transmission revenue at an inclusion of 100% then decreases the
7 adjusted fuel rate from \$25.49/MWh to \$24.16/MWh, or a net decrease of 5.5% from
8 the adjusted fuel rate. The net total impact of these adjustments on the FAC Base
9 Factor would result in a \$0.72/MWh decrease from the original proposed base fuel
10 rate in this case. This amounts to a 3.0% reduction overall in the base fuel rate. The
11 total cost and revenue components of the proposed FAC base factor calculation
12 inclusive of the proposed adjustments are summarized in **Supplemental Schedule**
13 **AJD-1** attached to this testimony.

14 **Q. WHAT IS THE COMPANY'S EXISTING FAC BASE FACTOR?**

15 A. The existing FAC base factor, that has been in effect since September 14, 2016, is
16 \$24.15/MWh.

17 **Q. HOW DOES THE NEW PROPOSED FAC BASE FACTOR COMPARE TO**
18 **LIBERTY-EMPIRE'S EXISTING FAC BASE FACTOR?**

19 A. When taking into consideration the proposed changes as described in my Direct
20 Testimony and Mr. Tarter's Direct Testimony as clarified and adjusted in this
21 Supplemental Direct Testimony, the new FAC base factor proposal would have a
22 very minimal change to the existing FAC base factor on a per unit basis. The new
23 proposal (which includes the ARR/TCR offset, 100% recovery of transmission
24 expenses including the Schedule 1A and Schedule 12 charges, plus the transmission

1 revenue offset (exclusive of what is received from non-retail loads in the Liberty-
2 Empire zone)) is \$24.16/MWh. The difference between the existing FAC base factor
3 and the Company's proposed FAC factor would reflect an increase of only 0.04%.

4 **III. MINIMUM FILING REQUIREMENTS SUPPLEMENT**

5 **Q. WHAT SUPPLEMENTS DO YOU HAVE TO THE MINIMUM FILING**
6 **REQUIREMENTS?**

7 A. As part of the Corrected Direct Testimony of Sheri Richard, a list of the accounts
8 proposed to be included in the FAC was provided in Corrected Schedule SDR-14 per
9 Commission Rule 20 CSR 4240-20.090, subsections (2)(A)(9) and (10). However,
10 with the proposed addition of transmission revenue accounts in the FAC calculation,
11 a new schedule is provided and attached to this testimony as **Supplemental Schedule**
12 **AJD-2**. Furthermore, after discussion with stakeholders during the data request
13 process, it was communicated that it may be helpful to have additional details
14 provided regarding the General Ledger ("GL") sub-accounts included in the
15 Company's filing for FAC inclusion. This information is also contained in
16 Supplemental Schedule AJD-2.

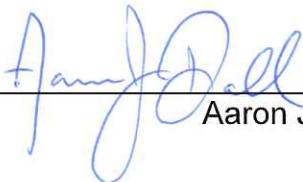
17 **Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL DIRECT TESTIMONY?**

18 A. Yes.

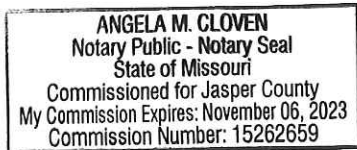
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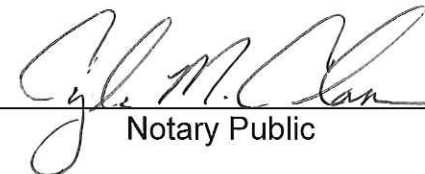
STATE OF MISSOURI)
) ss
COUNTY OF JASPER)

On the 18th day of December, 2019, before me appeared Aaron J. Doll, to me personally known, who, being by me first duly sworn, states that he is the Director Electric Procurement of The Empire District Electric Company – Liberty Utilities Central and acknowledges that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief.


Aaron J. Doll

Subscribed and sworn to before me this 18th day of December, 2019.




Notary Public

My commission expires: 11/06/2023 .

FAC BASE FACTOR CALCULATION

	<u>Proposed FAC Base</u> <u>Total Company</u>
<u>FUEL</u>	
Fuel	\$ 97,782,989
Nat Gas Transportation Variable (Nat Gas Commodity Costs)	\$ 227,825
Natural Gas Losses at the Cost of Natural Gas	\$ 922,713
Other Fuel Related (Undistributed & Other and Unit Train)	\$ 4,178,553
Total Fuel and Related Costs	\$ 103,112,080
<u>PURCHASED POWER ENERGY</u>	
Purchased Power Energy (e.g. Plum Point PPA and Wind PPAs)	\$ 36,279,098
Plum Point O&M Cost-Variable	\$ 3,927,710
Total Purchased Power	\$ 40,206,808
Total F&PP (without purchase demand or Nat Gas Transport)	\$ 143,318,888
<u>MARKET REVENUES</u>	
Resource Sales into the SPP IM (OSS Revenue)	\$ (159,095,653)
<u>NATIVE LOAD COST</u>	
SPP Charge - Liberty-Empire Load	\$ 146,170,942
Ancillary/Other	\$ 1,500,000
Net ARR/TCR	\$ (14,663,530)
Total Native Load Cost	\$ 133,007,413
<u>NET F&PP</u>	
Total Net F&PP (without purchase demand or Nat Gas Transport)	\$ 117,230,648
<u>OTHER ENERGY RELATED AND ADJUSTMENTS</u>	
Net Emissions Allowances	\$ -
AQCS Consumables (Ammonia, Limestone, PAC) - Variable	\$ 1,782,816
Net Renewable Energy Credits (RECs)	\$ (229,286)
Fuel Admin/Labor	\$ (276,885)
RTO Net Transmission	\$ 13,568,075
Total Other Energy Related and Adjustments	\$ 14,844,720
Total F&PP for FAC Base	\$ 132,075,368
Total Kwh	5,465,856,000
FAC Base Factor \$ per kWh	0.02416
FAC Base Factor \$ per MWh	24.16

Accounts and Definitions from Empire's Existing and Proposed FAC

GL	Descriptions	Details
501011	Conv & Seminar-Fuel	Expenses related to coal industry conferences - Not included in fuel adjustment
501042	Fuel - Coal	Coal costs used in steam generation - includes coal, freight, railcar lease, property tax on railcars, railroad maintenance (material and labor), railcar maintenance, coal handling costs (equipment, repairs, fuel, labor)
501045	Fuel - Oil	Oil costs used in steam generation - includes oil, freight, handling costs
501054	Fuel - Natural Gas	Natural gas costs used in steam generation - includes gas, pipeline transportation cost
501183	Sales Of Ash	Proceeds from the sale of coal ash
501211	Ineffect (Gain)Loss Deri Steam	Ineffective gain/loss on FAS133 derivatives for steam generation - currently not used
501212	Effective (Gn)Less Deriv Steam	Effective gain/loss on FAS133 derivatives for steam generation - currently not used
501216	NonFAS133Deriv(Gain)/LossSteam	Gain/loss on Non-FAS133 derivatives for steam generation
501300	Fuel - Tires	Tire costs used in steam generation
501400	Ops Labor-Fuel Handling	Fuel Handling labor costs - Plum Point - not included in fuel adjustment
501401	Ops Mtls-Fuel Handling	Fuel Handling materials costs - Plum Point
501601	Fuel Administration - Asbury	Misc fuel costs steam generation - Asbury - not included in fuel adjustment
501604	Fuel Administration - Riverton	Misc fuel costs steam generation- Riverton - not included in fuel adjustment
501605	Fuel Administration Plum Point	Misc fuel costs steam generation - Plum Point - not included in fuel adjustment
501607	Fuel Adm E Trader Commission	Commission expense for derivatives for steam generation - currently not used
509052	Emission allowance expense	Expenses related to the purchasing of emissions allowances (NOx, SO ₂ , etc)
547205	Natural Gas SLCC Tolling	Natural gas costs used in combustion turbine generation - SLCC Tolling - currently not used
547206	Nat Gas-Tolling SLCC Ineffectiv	Ineffective gain/loss on FAS133 derivatives for combustion turbine generation - SLCC Tolling - currently not used
547207	Nat Gas-Tolling SLCC Effective	Effective gain/loss on FAS133 derivatives for combustion turbine generation - SLCC Tolling - currently not used
547208	Comb Turb Fuel Sales - Nat Gas	Sales of natural gas
547210	Combust Turb Fuel Natural Gas	Natural gas costs used in steam generation - includes gas, pipeline transportation cost
547211	Ineffect (Gain)Loss Deriv Gas	Ineffective gain/loss on FAS133 derivatives for combustion turbine generation - currently not used
547212	Effective (Gain)Loss Deriv Gas	Effective gain/loss on FAS133 derivatives for combustion turbine generation - currently not used
547213	Fuel - No 2 Oil Fuel	Oil costs used in combustion turbine generation
547301	NonFAS133 Deriv (Gain)/Loss	Gain/loss on Non-FAS133 derivatives for combustion turbine generation
547605	Fuel Adm State Line	Misc fuel costs combustion turbine generation - State Line - not included in fuel adjustment
547606	Fuel Adm Energy Center	Misc fuel costs combustion turbine generation - Energy Center - not included in fuel adjustment
547607	Fuel Adm E Traders Commission	Commission expense for derivatives for combustion turbine generation - currently not used
548202	Ammonia Expense	Ammonia hydroxide expense for environmental compliance
411800	Gains-Disposition Emmiss Allow	Gain on disposition of Emission Allowances
456071	Misc Elec Rev-Green Credits-AR	Revenue for sale of Renewable Energy Credits -allocated to Arkansas
456072	Misc Elec Rev-Green Credits-KS	Revenue for sale of Renewable Energy Credits -allocated to Kansas
456073	Misc Elec Rev-Green Credits-MO	Revenue for sale of Renewable Energy Credits -allocated to Missouri
456074	Misc Elec Rev-Green Credits-OK	Revenue for sale of Renewable Energy Credits -allocated to Oklahoma
506127	Limestone Expense - Iatan	AQCS limestone expense - Iatan
506128	Powdered Activated Carbon	AQCS powdered activated carbon expense
506129	Ammonia Expense	AQCS ammonia expense
506201	Limestone Expense	AQCS limestone expense - Iatan
506202	Ammonia Expense	AQCS ammonia expense
506203	Powdered Activated Carbon	AQCS powdered activated carbon expense - Iatan
506204	Limestone Expense	AQCS limestone expense - Plum Point
548202	Ammonia Expense	AQCS ammonia expense - SLCC
447113	Gen Ark Off-Sys Sale-Resale	Off-System Sales of energy - allocated to Arkansas - currently not used
447124	Gen Ks Off-System Sale-Resale	Off-System Sales of energy - allocated to Kansas - currently not used
447133	Gen Mo Off-Sys Sale-Resale	Off-System Sales of energy - allocated to Missouri - currently not used
447143	Gen Ok Off-Sys Sales-Resale	Off-System Sales of energy - allocated to Oklahoma - currently not used
447430	Aec - Off-Sys-Missouri	Off-system sales of emergency service and off-system sales sold to Associated Electric - not included in fuel adjustment
447540	Oklahoma GRDA Off-System	Off-system sales of emergency service and off-system sales sold to GRDA - not included in fuel adjustment
447860	Bilateral Sales	Bilateral sales and revenue from offline-auxillaries for JOUS
447610	Energy Imbalance - Ar	Off-system sales revenue allocated to Arkansas - not included in fuel adjustment
447620	Energy Imbalance - Ks	Off-system sales revenue allocated to Kansas - not included in fuel adjustment
447630	Energy Imbalance - Mo	Off-system sales revenue allocated to Missouri - not included in fuel adjustment
447640	Energy Imbalance - Ok	Off-system sales revenue allocated to Oklahoma - not included in fuel adjustment
456075	REC Revenue	Revenue received for renewable energy credits from renewable generating resources

457131	Oth EI Rev-Sched Sys Ctrl&Disp	Revenue received from non-retail loads in the EDE zone - not included in fuel adjustment	
457137	Ot EI RvOffSys LTFSTF PTP Trns	Revenue received for Long-Term firm and short-term firm point-to-point transmission service	
457138	Ot EI RvOffSys NnFrm PTP Trns	Revenue received for non-firm point-to-point transmission service	
457139	Ot EI RvOffSys NITS Rev	Network revenue received for Network Integration Transmission Service (retail SPP Schedule 9) - not included in fuel adjustment	
457140	Oth EI Rev-Off-Sys Losses	Revenue received for transmission losses - currently not used	
457141	Sch 11 NITS	Revenue allocated for base plan funded facilities from network customers	
457142	Sch 11 PTP	Revenue allocated for base plan funded facilities from point-to-point customers	
457160	Sch 1 PTP	System control scheduling and dispatch revenue from retail loads in EDE zone	
555430	Direct Purchases	Long-term PPA's, MISO congestion and losses, AECl Line losses, MISO Inadvertent, MISO Schedule 24, MISO ARR Distribution, MISO ARR Transaction, MISO Miscellaneous	
555431	Purchase Power Tolling Fees	Expense related to using IOU counterparts generating unit share - currently not used	
555432	Energy Imbalance	Expense from SPP energy imbalance - currently not used	
555437	Interrupt Svc Compensation	Interruptible service rider - currently not used	
555800	DA Asset Energy	Net Day Ahead Asset Energy, netted by MWh position (purchase or sale) per settlement interval - Settlement of the net Day Ahead Market energy position at an Asset Owner's resources and loads.	Integrated Market energy charge types performed on an hourly basis for each operating day and based on the results of the Day Ahead Market clearing.
555810	DA Non-Asset Energy	Net Day Ahead Non Asset Energy, netted by MWh position (purchase or sale) per settlement interval - Settlement of the net Day Ahead Market energy position at interchange locations into and out of SPP footprint.	
555820	DA Virtual Energy	Net Day Ahead Virtual Energy, netted by MWh position (purchase or sale) per settlement interval - Settlement of the net Day Ahead Market energy position of cleared virtual transactions, financial only now mwths.	
555840	DA Reg-Up	Net Day Ahead Regulation-Up Amount & Day Ahead Regulation-Up Distribution Amount, netted by dollars (revenue or expense) per settlement interval - settlement for Regulation-Up cleared to an asset owner's zonal obligation.	Integrated Market operating reserve charge types, these help to ensure reliability within the market. Regulation-up and regulation-down maintain the balance between load and generation. Spinning and supplemental are available in the event of outages.
555850	DA Reg-Down	Net Day Ahead Regulation-Down Amount & Day Ahead Regulation-Down Distribution Amount, netted by dollars (revenue or expense) per settlement interval - settlement for Regulation-Down cleared to an asset owner's zonal obligation.	
555860	DA Spinning	Net Day Ahead Spinning Amount & Day Ahead Spinning Distribution Amount, netted by dollars (revenue or expense) per settlement interval - settlement for Spinning cleared to an asset owner's zonal obligation.	
555870	DA Supplemental	Net Day Ahead Supplemental Amount & Day Ahead Supplemental Distribution Amount, netted by dollars (revenue or expense) per settlement interval - settlement for Supplemental cleared to an asset owner's zonal obligation.	
555880	DA Other	<u>Other Day Ahead charges that settle at the EDE EDE Load node including</u> DA Make Whole Payment (MWP), DA MWP Distribution, DA Over-collected losses Distribution Amount, DA Demand Reduction (DR), DA DR Distribution Amount, DA Grandfathered Agreement (GFA) Carve-Out Daily, DA GFA Carve-Out Monthly, DA GFA Carve-Out Yearly, GFA Carve-Out Distribution Daily Amount, GFA Carve-Out Distribution Monthly Amount, GFA Carve-Out Distribution Yearly Amount, DA Virtual Transaction Fee Amount	See Below
555900	RT Asset Energy	Net Real Time Asset Energy, netted by MWh position (purchase or sale) per settlement interval - Settlement of the net Real Time Market energy position at an Asset Owner's resources and loads.	Integrated Market energy charge types performed on a dispatch interval basis (5 minutes)for each operating day and are based on the difference between the results of the Real Time Balancing Market process and the Day Ahead Market Clearing..
555910	RT Non-Asset Energy	Net Real Time Non Asset Energy, netted by MWh position (purchase or sale) per settlement interval - Settlement of the net Real Time Market energy position at interchange locations into and out of SPP footprint.	
555920	RT Virtual Energy	Net Real Time Virtual Energy, netted by MWh position (purchase or sale) per settlement interval - Settlement of the net Real Time Market energy position of cleared virtual transactions, financial only now mwths.	
555940	RT Reg-Up	Net Real Time Regulation-Up Amount & Real Time Regulation-Up Distribution Amount, netted by dollars (revenue or expense) per settlement interval - settlement for Regulation-Up cleared to an asset owner's zonal obligation.	Integrated Market operating reserve charge types, these help to ensure reliability within the market. Regulation-up and regulation-down maintain the balance between load and generation. Spinning and supplemental are available in the event of outages.
555950	RT Reg-Down	Net Real Time Regulation-Down Amount & Real Time Regulation-Down Distribution Amount, netted by dollars (revenue or expense) per settlement interval - settlement for Regulation-Down cleared to an asset owner's zonal obligation.	
555960	RT Spinning	Net Real Time Spinning Amount & Real Time Spinning Distribution Amount, netted by dollars (revenue or expense) per settlement interval - settlement for Spinning cleared to an asset owner's zonal obligation.	
555970	RT Supplemental	Net Real Time Supplemental Amount & Real Time Supplemental Distribution Amount, netted by dollars (revenue or expense) per settlement interval - settlement for Supplemental cleared to an asset owner's zonal obligation.	
555980	RT Other	<u>Other RT charges that settle at the EDE EDE Load node including</u> Reliability Unit Commitment (RUC) MWP, RUC MWP Distribution Amount, RT Over Collected Losses Distribution Amount, RT Regulation Non-performance, RT Regulation Non-performance Distribution, RT Contingency Reserve Deployment Failure, RT Contingency Reserve Deployment Failure Distribution Amount, RT Regulation Deployment Adjustment, RT Out of Merit, RT Joint Operating Agreement, RT Reserve Sharing Group (RSG), RT RSG Distribution Amount, RT Demand Response, RT Demand Response Distribution Amount, RT Revenue Neutrality Uplift Distribution, RT Miscellaneous, RT Pseudo-Tie Congestion Amount, RT Pseudo-Tie Losses Amount, RT unused Reg-up mileage make whole payment, RT unused Reg-down mileage make whole payment	See Below
555990	TCR Activity	<u>All Transmission Congestion Rights charges including</u> TCR Funding Amount, TCR Daily Uplift Amount, TCR Monthly Payback Amount, TCR Annual Payback Amount, TCR Annual Closeout Amount, TCR Auction Transaction Amount	See Below
555995	ARR Activity	<u>All ARR Charges including</u> Auction Revenue Rights Funding Amount, ARR Uplift Amount, ARR Monthly Payback Amount, ARR Annual Payback, ARR Annual Closeout Amount,	See Below
565413	Trans Of Electricity By Others	Network revenue paid for transmission service for retail load to host transmission owner (EDE); short pays	

565414	SPP Fixed Chg - Native Load	Charges related to SPP activities allocated largely on load ratio share. Charges are primarily comprised of Schedule 1A Tariff administration, Schedule 11 Base Plan Funding (Zonal & Regional), Schedule 1 System Control Scheduling, and Dispatch, and any other SPP charges related to network service	
565415	SPP Var Chg - Native Load	Charges related to SPP activities that are largely allocated on native load. Charges primarily consist of Schedule 12 FERC administration and any other SPP charges related to Point-to-point service	
565416	Non SPP Fixed Chg -Native Load	Charges related to activity from non-SPP RTO/ISO/entities. Charges primarily consist of MISO charges: Schedule 7 PTP service, Schedule 26 Transmission expansion, Schedule 1 Scheduling, System Control and Dispatch, Schedule 2 Reactive Power, Schedule 10 FERC fees, and Schedule 33 Black Start Service, and Schedule 45 NERC fees	
565417	PP Non SPP Var - Native Load	Transmission expense from non-SPP entity for native load purchased power asset - currently not used	
565418	Gen Non SPP Var - Native Load	Transmission expense from non-SPP entity for native load owned asset - currently not used	
565419	Off Sys Sales Trans Costs	Transmission costs associated with off-system sales pre-SPP Integrated Marketplace - currently not used	
447810	SPP IM Revenue - AR	The Arkansas share of any and all of the above charge types that net to a revenue per the appropriate netting procedure(s) - currently not used	
447820	SPP IM Revenue - KS	The Kansas share of any and all of the above charge types that net to a revenue per the appropriate netting procedure(s) - currently not used	
447830	SPP IM Revenue - MO	The Missouri share of any and all of the above charge types that net to a revenue per the appropriate netting procedure(s) - currently not used	
447840	SPP IM Revenue - OK	The Oklahoma share of any and all of the above charge types that net to a revenue per the appropriate netting procedure(s) - currently not used	
447850	SPP IM Revenue	Any and all of the above charge types that net to a revenue per the appropriate netting procedure(s)	

Day Ahead Other Charges

Day Ahead Make Whole Payment	Any resource that is committed by SPP during the Day Ahead market is eligible to recover the eligible costs associated with the commitment period.
Day Ahead Make Whole Payment Distribution	Cost allocation of Make Whole Payments for resources committed in the Day Ahead market to cleared loads.
Day Ahead Over Collected Loss Distribution	Rebate of surplus collected as a result of the marginal pricing of losses.
Day Ahead Demand Reduction	Charge or credit required in order to remove the settlement impact of grossing up the host load by the amount of the Demand Response Reduction output.
Day Ahead Demand Reduction Distribution	Charge or credit for each asset owner in which a Demand Response Reduction was cleared in order to fund the credits paid for the Demand Response Reduction.
Day Ahead Virtual Transaction Fee	Fee for virtual bids and offers.
Day Ahead Grandfathered Agreement (GFA) Carve-Out Daily Amount	Day-ahead credit or charge for the exclusion of transactions associated with GFA's from market settlement of congestion, losses, and hedging instruments.
Day Ahead Grandfathered Agreement (GFA) Carve-Out Monthly Amount	Monthly credit or charge for the exclusion of transactions associated with GFA's from market settlement of congestion hedging instruments.
Day Ahead Grandfathered Agreement (GFA) Carve-Out Yearly Amount	Yearly credit or charge for the exclusion of transactions associated with GFA's from market settlement of congestion hedging instruments.
Day Ahead Grandfathered Agreement (GFA) Carve-Out Daily Distribution Amount	A GFA carve-out credit or charge determined by the Asset Owners load ratio share for GFA revenue inadequacy.
Day Ahead Grandfathered Agreement (GFA) Carve-Out Monthly Distribution Amount	A monthly charge or credit to ensure SPP revenue neutrality relating to the reversal of credits of GFA carve-outs through monthly TCR and ARR Payback.
Day Ahead Grandfathered Agreement (GFA) Carve-Out Yearly Distribution Amount	A monthly charge or credit to ensure SPP revenue neutrality relating to the reversal of credits of GFA carve-outs through yearly TCR payback, TCR Closeout, ARR Payback, ARR Closeout.

Real Time Other Charges

Reliability Unit Commitment Make Whole Payment	Revenue guarantee to resources committed economically in the Real Time to cover eligible costs.
Reliability Unit Commitment Make Whole Payment Distribution	Cost allocation of Make Whole Payment for resources committed in RUC to an asset owner's Real Time deviations.

Real Time Over Collected Loss Distribution	Rebate of surplus collected as a result of the marginal pricing of losses.
Real Time Regulation Deployment Adj Amount	Adjustment to resource revenue for the combined impact of Energy and Regulation deployment.
Real Time Regulation Non-Performance	Charge when a resource with cleared Real Time Regulation-up and or Regulation-down operates outside of the operating tolerance
Real Time Regulation Non-Performance Distribution	Cost allocation of penalties collected for Regulation Non-Performance
Real Time Contingency Deployment Failure	Penalty for failing to provide Contingency Reserve amount when deployed.
Real Time Contingency Deployment Failure Distribution	Cost allocation of penalties collected for Contingency Reserve failure.
Out of Merit	Adjustment to compensate resources for additional cost incurred as a result of being manually dispatched away from the optimal point.
Real Time Joint Operating Agreement	Settlement for price coordination of a co-managed reciprocal flowgate.
Real Time Reserve Sharing Group Amount	Settlement for response to Contingency Reserve event.
Real Time Reserve Sharing Group Distribution Amount	Asset owners payment, based on real time load ratio share, for response to a contingency event, by an RSG entity.
Real Time Demand Reduction	Credit or charge relating to the difference between the actual demand response reduction output and what was cleared in the day-ahead market.
Real Time Demand Reduction Distribution	Credit or charge to asset owners for each hour in which a demand response resource was dispatched.
Real Time Revenue Neutrality Uplift	Credit of charge calculated at each settlement location for each asset owner for each hour in order for SPP to remain revenue neutral.
Unused Reg-Up Mileage Make Whole Payment	A credit for each asset owner that is charged for unused regulation-up mileage at a rate that is in excess of the asset owners regulation-up mileage offer to the extent the resources regulation-up service margin is not sufficient to offset the charge induced by the difference in the two rates.
Unused Reg-Down Mileage Make Whole Payment	A credit for each asset owner that is charged for unused regulation-down mileage at a rate that is in excess of the asset owners regulation-down mileage offer to the extent the resources regulation-down service margin is not sufficient to offset the charge induced by the difference in the two rates.
Real Time Misc	Charge or credits that cannot be handled through standard Settlement billing.
Real Time Pseudo-Tie Congestion Amount	Real time congestion amount for resource or load that is pseudo-tied out of SPP balancing authority.
Real Time Pseudo-Tie Losses Amount	Real time loss amount for resource or load that is pseudo-tied out of SPP balancing authority.

TCR Activity

Transmission Congestion Rights (TCR)	
Auction Transaction	Settlement of the purchase or sale of a TCR instrument at auction.
TCR Funding	Credit or charge calculated for each TCR instrument held by an asset owner incurred by load bid into the Day Ahead market.
TCR Daily Uplift	Allocation of the deficit between congestion collections and TCR funding in Day Ahead.
TCR Monthly Payback	Use of excess congestion in a month to payback uplift in that month.
TCR Annual Payback	Use of excess congestion in a year to payback remaining uplift in that year.
TCR Annual Closeout	Allocation of the net difference between Auction Revenue Rights value and the daily settlement of TCR Auctions

ARR Activity

Auction Revenue Right (ARR) Funding	Settlement of an ARR instrument by the TCR auction price.
ARR Daily Uplift	Allocation of the net difference between ARR value and the daily settlement of TCR auctions.
ARR Monthly Payback	Use of excess auction revenue in a month to payback uplift in that month.
ARR Annual Payback	Use of excess auction revenue in a year to payback uplift in that year.
ARR Annual Closeout	Allocation of the net difference between Auction Revenue Rights value and the daily settlement of TCR Auctions

FC		501 & 506
#	Description	Accounts
1	Coal Commodity and railroad transportation	501042, 501400, 501401, 501601, 501604, 501605
2	switching and demurrage charges	501042
3	applicable taxes	501042
4	natural gas costs	501054
5	alternative fuels	501300
6	fuel additives	501042
7	Btu adjustments assessed by coal suppliers	501042
8	Quality adjustments assessed by coal suppliers	501042
9	Fuel hedging costs	501211, 501212, 501216
10	fuel adjustments included in commodity and transportation costs	501042
11	broker commissions and fees associated with price hedges	501607
12	oil costs	501045
13	propane costs	
14	combustion product disposal revenues and expenses	501183
15	consumables related to AQCS (ammonia, lime, limestone, powder activated carbon, urea, sodium bicarbonate, & trona)	506127, 506128, 506129, 506201, 506202, 506203, 506204
16	settlement proceeds	
17	insurance recoveries	
18	subrogation recoveries for increased fuel expenses in Account(s) 501	

FC		547 & 548
#	Description	Accounts
1	Natural gas generation costs related to commodity	547205, 547206, 547207, 547208, 547210, 547605, 547606
2	oil	547213
3	transportation	547210
4	storage	547210
5	capacity reservation	547210
6	fuel losses	547210
7	hedging costs for natural gas	547211, 547212, 547301
8	oil	547213
9	natural gas used to cross-hedge purchased power	
10	fuel additives/consumables	548202
11	settlement proceeds	
12	insurance recoveries	
13	subrogation recoveries for increase fuel expenses	
14	broker commissions	547607
15	fees and revenues and expenses resulting from fuel and transportation portfolio optimization activities	

PP 555, 565, 457

#	Description	Accounts
1	Purchased Power costs	555430
2	PPA demand (capacity) cost (< 1 Year PPA)	Have not incurred any costs of this kind since the inception of the IM and future costs are variable and thus unable to be estimated
3	settlements	Have not incurred any costs of this kind since the inception of the IM and future costs are variable and thus unable to be estimated
4	insurance recoveries	Have not incurred any costs of this kind since the inception of the IM and future costs are variable and thus unable to be estimated
5		
6	subrogation recoveries for purchased power expenses	Have not incurred any costs of this kind since the inception of the IM and future costs are variable and thus unable to be estimated
7	virtual energy charges	555820, 555920
8	generating unit price adjustments	Have not incurred any costs of this kind since the inception of the IM and future costs are variable and thus unable to be estimated
9	load/export charges	555910, 555810
10	energy position charges	555800, 555900
11	ancillary services including penalty & distribution charges	555840, 555850, 555860, 555870, 555940, 555950, 555960, 555970
12	broker commissions	Have not incurred any costs of this kind since the inception of the IM and future costs are variable and thus unable to be estimated
13	fees and margins	Have not incurred any costs of this kind since the inception of the IM and future costs are variable and thus unable to be estimated
14	<u>SPP energy marketing charges including but not limited to:</u>	
14a	Energy	555800, 555810, 555820, 555900, 555910, 555920
14b	Ancillary Services	555840, 555850, 555860, 555870, 555940, 555950, 555960, 555970
14c	Revenue Sufficiency	555880
14d	Losses	Losses are now handled through the market and are a component of the LMP which will be reflected in the Energy (555800-555820 & 555900-555920)
14e	Revenue Neutrality	555880
14f	Congestion Management	555990, 555995
14g	Demand Reduction	555880
14h	Grandfathered Agreements	555880
14i	Virtual Transaction Fee	555880
14j	Psuedo Tie	555980
14k	Miscellaneous	555980
15	Non-Spp costs/revenues (MISO, PJM, etc)	555430
16	<u>Costs not received from centrally administrated market including:</u>	
16a	Costs for purchases of energy	Have not incurred any costs of this kind since the inception of the IM and future costs are variable and thus unable to be estimated
16b	Costs for purchases of generation capacity (< 1 year)	Have not incurred any costs of this kind since the inception of the IM and future costs are variable and thus unable to be estimated
16c		
17	SPP NITS service Charges (Schd 11)	565414, 457141, 457142
18	<u>SPP Point-to-point revenue</u>	
18a	Schedule 7 - Firm PTP	457137
18b	Schedule 8 Non-firm PTP	457138
18c	Schedule 1 Sc	565414, 457160
19	Schedule 1a - SPP Tariff Administration	565414
20	SPP Schedule 12 - FERC Assessment	565415
21	<u>Non SPP costs/revenues associated with:</u>	
21a	Network transmission service	
21b	Point-to-point transmission	565416
21c	System control & dispatch	565416
21d	Reactive supply & voltage control	565416

E		509, 411	
#		411	Accounts
1		Net Emission Allowances	411800

OSSR		447	
#		411	Accounts
1		Revenue from off-system sales	447113, 447124, 447133, 447143, 447810, 447820, 447830, 447840

REC		456	
#		411	Accounts
1		Renewable Energy Credit Revenue	456071, 456072, 456073, 456074