BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Establishment of a Working Case Regarding the Membership of Missouri's Investor-Owned Electric Utilities in Regional Transmission Organizations	)))	Case No. EW-2021-0104

LIBERTY'S RESPONSE TO COMMISSION ORDER

COMES NOW The Empire District Electric Company ("Liberty" or the "Company"), and for its Response to Commission Order, respectfully states as follows to the Missouri Public Service Commission ("Commission"):

1. On October 14, 2020, the Commission issued its *Order Opening a Working Case to Consider the Membership of Missouri's Investor-Owned Electric Utilities in Regional Transmission Organizations*.
2. The Commission stated it "believes there are benefits resulting from Missouri's investor-owned electric utilities maintaining membership in a Regional Transmission Organization (RTO)." The Commission, however, also stated that "(i)t is less clear that the long-term benefits of RTO membership exceed the long-term costs and commitments of RTO membership, especially given that the structure, services, and membership of both Southwest Power Pool (SPP) and the Midcontinent Independent System Operator (MISO) continue to change significantly with the passage of time" and stated it would undertake an examination of the nature of RTO membership benefits, the monetized value of those benefits, and what time horizons should be employed to compare asset lives (costs) to the values of benefits streams.
3. The Commission then issued its *Order Directing Comments* herein on December 21, 2020, directing Liberty and the other Missouri investor-owned electric utilities to respond to a list of questions by February 16, 2021.

4. Liberty appreciates the opportunity to work with the Commission and other stakeholders regarding the benefits of continued RTO membership and provide comments herein.
5. Pursuant to the Commission's s *Order Directing Comments*, Liberty's responses are set forth below.

RTO Benefits

1. For your utility, please identify and describe all direct and indirect benefits that your utility receives from RTO participation.

There are numerous benefits to participating in a RTO, and Liberty discusses the primary cost saving benefits of participation herein. These primary benefits are summarized in the following categories: (a) Socialized Transmission, (b) Reliability Coordination, (c) Co-optimization (market operations), and (d) Reserve Sharing.

Socialized Transmission: SPP estimates socialized transmission to save market participants roughly $437 million dollars a year. Socialized transmission creates benefits from the planning perspective as SPP decides which projects are the most beneficial, while eliminating the need for independent Balancing Authorities to make the call of what is in their individual best interests. Liberty also sees benefits in production costs, reduced transmission losses, and an increased access to any wheeling revenue.

Reliability Coordination: SPP estimates the Reliability Coordination to provide approximately $60 million in benefits across 17 Load Balancing Authorities. From the reliability coordination perspective, Liberty benefits from having a larger pool of resources to satisfy contingencies instead of having to solve reliability concerns with what could be less economical alternatives.

Co-optimization (Market Operations): Co-Optimization is the chief benefit of participation, at an estimated $728 million savings per year. Liberty has experienced this benefit daily with quicker and more cost-effective integration of renewables driving the wholesale cost of electricity down over the last several years. SPP had the lowest wholesale electricity prices of any organized market in 2018 and 2019 (~$29/MWh and ~30/MWh, respectively).

Reserve Sharing: SPP estimates reserve sharing to save roughly $449 million annually. Reserve Sharing allows flexibility with contractors when scheduling outages, eliminates the need to purchase costly reserves from a counterparty, and minimizes the need to carry the minimum reserve amount required by NERC.

2. **For each benefit, please identify the time period over which the utility expects to accrue those benefits. Additionally, please give the utility's best approximation of when each benefit will be experienced. If that benefit is expected to increase or decrease annually over time, please explain what changes would cause the benefit to change.**

With the continued expansion of transmission and modernization projects, which allow for easier access to renewables and low-cost resources, the Company expects benefits to remain stable if not increase over the short-term. Liberty experiences, on a daily basis, each of the above identified benefits in some form, and Liberty expects benefit to extend the life of the membership.

3. **For each benefit, please identify whether or not this benefit can be quantified.**

    a. **Can the quantifiable benefits be measured or valued over a certain timeframe?**

The Company can attempt to quantify the adjusted production costs resulting from joint commitment and dispatch, but that would not include transmission expansion as a component. Remaining benefits would either have to be culled from SPP published reports, assessed via a third party study, or left unquantifiable.

Liberty can attempt to quantify adjusted production cost benefits by running back casts to determine how many additional dollars it would cost to supply our own load with our available resources. However, it should be noted even this quantification is limited, as it only estimates the direct difference between self-commitment and dispatch and joint commitment and dispatch. Some of the SPP figures relating to adjusted production costs include items such as co-optimization of ancillary services and a congestion management market, which are not quantified in the aforementioned back cast. Additionally, the back cast would rely on assumptions of a liquid bilateral market that would have to exist to facilitate the easy trading of economic power. This potential analysis ought to be considered a quick effort to determine if the Integrated Marketplace ("IM") is providing simple adjusted production cost value and **not** whether removing oneself from the IM would have additional costs from a commitment and dispatch perspective.

All of the remaining benefits described in question one may be quantifiable from Liberty's perspective; however, those quantifications would likely rely on costly third party studies or information gleaned from SPP published reports and allocated to smaller segments (e.g. individual utilities or individual states) which would likely limit some of the accuracy of the information provided at a total SPP level. In previous iterations of the ITP studies, economic projects have been identified on the APC metric valuation of the collective portfolio of projects on an entity basis, but not on a project basis. The extraction of adjusted APC on a project specific basis is not available at this time.

Liberty will continue to participate in the RTO study processes to attain the most beneficial portfolio of projects for our customers.

b. Please identify any discount rates used for measuring future benefits or likelihoods if scenario planning is involved.

Not applicable.

4. For each quantifiable benefit, has the utility quantified those benefits since the utility began participation in the RTO? Why or why not? Additionally, please explain how the utility has quantified those benefits, provide any/all workpapers that calculated these

benefits, and provide the cost of gathering, analyzing, and interpreting such information.

Liberty has only attempted to quantify a limited portion of the adjusted production cost benefit as discussed further in question three above. It is Liberty's opinion that quantifying these benefits is beyond what the utility can complete without contracting for a what has, historically, been a costly third-party study.

a. **Have any measurable benefits factored into the utility's business plan or performance metrics?**

From a Fuel and Purchased Power perspective only, Liberty has seen a decrease in the base fuel rate since the commencement of the IM. However, it is difficult to isolate this benefit to either factors outside of the SPP construct (natural gas prices, tax credits incentivizing renewable generation, etc.) from those inside the SPP construct (more economic commitment and dispatch, co-optimization of energy and operation reserves, a transparent congestion market, etc.). It is Liberty's view that the investment in the transmission system has allowed a quicker pivot to low cost renewables than what may have been possible without the investment in the transmission system. It is not unreasonable to conclude that if it were not for a more reliable and secure grid which is holistically planned, the retirement of traditional base load generation and the proliferation of renewables may have taken significantly more time to achieve.

Furthermore, the participation in the RTO coordinated studies on the greater transmission system within the SPP footprint, Liberty realizes reliability benefits in ensuring reliability under various contingency situations. These benefits have no specific metrics directly attached, however in the event of a widespread outage event, these studies prove to be of extremely high value should the restoration efforts need to be executed (e.g.

- Blackstart restoration drills, Real Time Contingency Analysis, etc.). The inter-regional dependencies during such events are extremely beneficial, much akin to real time market operations of generation units.

5. Please identify how the utility would ideally quantify future benefits of RTO participation. Please provide the cost of gathering, analyzing, and interpreting such information under the ideal scenario. If such information is not reasonably and economically available, what kind of information would the utility propose as a proxy? Please provide the cost of gathering, analyzing, and interpreting such proxy information.

The two methods of quantifying the future benefits of RTO participation would be either to have a third party conduct a thorough study of various scenarios relative to what direction the RTO may take in relation to upcoming issues in the electric utility space or to attempt to leverage existing SPP quantifications, some of which may be somewhat forward looking in nature, and allocate those benefits out to each utility.

Regarding the third party avenue, it is likely that this method would come at considerable cost and may not even accurately capture the future benefits of SPP beyond the immediate future as the rapidly changing electric utility landscape will never have perfect knowledge of what issues are to come and even if they did have perfect clairvoyance, the study of RTO benefits to those issues would have to assume solutions that would be acceptable to a diverse membership which can be a complicating factor that is difficult to study, even with a robust scenario analysis.

Regarding leveraging future benefits from existing SPP studies, this would be less costly to produce as the only additional workload would be to derive a fair allocation methodology for benefits. However, this methodology would stop short of quantifying all future benefits of RTO participation and would only produce some forward-looking estimates of current SPP studied benefits, which may not be exhaustive of all future benefits.

a. **What will drive these future benefits?**

It is challenging to say what will drive future benefits more than generically, as any quantification would be limited to existing issues for which future benefits could be quantified and derived. Generically, however, without a significant change to the current SPP construct, it would fall along the general themes as listed in response to question one, above, regarding the benefits of RTO participation.

b. **Are there any existing benefits that will be eliminated based on upcoming or expected changes at the RTO?**

At this time, there are no known benefits that are expected to be eliminated based on RTO changes.

6. **For each benefit of RTO participation that is not quantifiable, please explain why it is not quantifiable.**

As stated in response to question five, benefits related to reliability coordination, transmission planning, reserve sharing, etc., are difficult to quantify due to the interconnected nature of their benefits to other items of benefit. For example, if Liberty were not a member of SPP, it would be one thing to study how our process would be relating to planning our own transmission system inside our own balancing authority and how much that process would cost. It is another thing to quantify the reliability benefits that the Company would not have had but for the facilities being jointly planned. How would self-commitment and dispatch be affected if the local transmission system was planned independently and what facilities would exist or not exist but for that planning? The interconnected nature of SPP's activities make it difficult to quantify any one benefit without failing to quantify other indirect benefits.

Liberty does not believe it can accurately provide benefits down to the utility level for something like reliability (SAIDI, SAIFI, etc.), nor does it believe it can provide quantification for something less esoteric like adjusted production costs without a full study that provides a holistic interpretation of the benefits of SPP participation. The aforementioned reliability benefits attributed during wide area impacting events cannot be directly extracted, however, given past coordination efforts of grid events of varying degrees, Liberty's customers have experienced enhanced reliability of the system.

7. **For each non-quantifiable benefit, has your utility placed a monetary value on the benefit? If so, please explain how the monetary value was derived, and provide the cost of gathering, analyzing, and interpreting such information.**

No.

8. **Does your utility receive an adder from FERC for any of its RTO participation? What is the monetary value of those adders?**

No, Liberty does not receive an adder from FERC for any of its RTO participation.

9. **How many FTE are there in your utility whose positions solely or mostly involve working with or monitoring or reporting data to the RTO? What is the cost of those positions or the parts that deal only with the RTO? What is the overall ancillary support budget to maintain these positions? Do you expect the number of employees and the budget in this area to increase over time? Why?**

Liberty does not have any FTEs who are solely involved in monitoring or reporting data to the RTO. Rather, the Company uses many individuals to monitor SPP working groups for changes or updates that would impact operating procedures. Below are just a few of the positions responsible for monitoring and communicating with the various primary working groups associated with the RTO:

Name	**SPP Working Group**
Tim Wilson (voting member)	Members Committee SPP Membership
Nate Morris (voting member)	Transmission Working Group, Market and Operations Policy Committee, Model Development Working Group
David Pham (voting member)	Operating Reliability Working Group
Todd Tarter (voting member)	Regional Tariff Working Group

Brian Berkstresser (voting member)	Supply Adequacy Working Group
Brad Parker (voting member)	Change Working Group
Josh Tupper	Market Working Group

a. **Please estimate how the employment needs would change absent RTO membership.**

Liberty does not anticipate changes in employment needs as a result of working group participation, as monitoring and communicating with SPP are spread out among a large group of employees, and it only makes up a portion of their respective responsibilities. Further, some of the individuals now performing functions for the utility that are currently collaborative with SPP (transmission planning, reliability dispatch, power marketing, etc.) may require departmental changes to accommodate a more independent approach to their job functions, which may or may not change staffing levels depending on the area and the new approach.

RTO Costs

1. **For your utility, please identify and describe all costs that your utility incurs from RTO participation.**

Annual SPP Membership Fee – The contract, that specifies the rights and obligations of the parties, executed between SPP and an entity seeking to become an SPP member.

Schedule 1 System Control and Dispatch – the scheduling the movement of power through, out of, within or into the SPP balancing authority.

Schedule 1A- Administration Fee - to carry out SPP's administration responsibilities under the SPP Open Access Transmission Tariff ("OATT") including running the IM and operating the SPP transmission system

Schedule 12 FERC charge - annual charges assessed by the Commission, pursuant to Part 382 of its regulations (the "FERC Assessment")

Schedule 11 base plan funding – the socialization of transmission facilities identified in the SPP transmission plan to ensure the continued reliability of the SPP transmission system (Load Ratio Share)

Labor/travel costs associated with SPP participation in working groups – costs associated with labor, travel, food, and lodging associated with participation in the SPP working groups.

Additionally, Liberty may incur costs for studies related to new load additions (Attachment AQ), directly-assigned upgrade costs including network upgrades from either generation interconnection requests or transmission studies, or credits for facilities built by other entities that would not have allowed transmission service 'but for' their investment (Attachment Z2).

2. **For each cost, please identify the time period over which the utility expects to incur those costs. Additionally, please give the utility's best approximation of when each cost will be experienced. If that cost is expected to increase or decrease annually over time, please explain what changes would cause the cost to change.**

Membership Fee – Annually in perpetuity. It has not changed in the recent past and a significant change to the membership process would most likely be the reason that the cost could change.

Schedule 1A-Tariff Administration Fee – Monthly in perpetuity. It is expected to decrease for most market participants by approximately 2.5% in January of 2021 with a new four-part methodology. It changes annually based largely on coincident peak allocation and projected costs of the SPP.

Schedule 12 FERC Charge – Monthly in perpetuity. The recovery of Schedule 12 fees varies monthly based on native load and traditionally increases in the year following a mild heating/cooling season and decreases in a year following a more extreme heating/cooling season.

Schedule 11 base plan funding – Monthly in perpetuity. With the exception of a reduction in the annual transmission revenue requirement ("ATRR") due almost exclusively to the Tax Cuts and Jobs Act of 2017 which lowered income tax and refunded accumulated deferred income tax ("ADIT"), Schedule 11 expense has always increased. The cause of the increase in continued investment in SPP's transmission system which has consistently outpaced depreciation. At this point in time, investment is expected to continue to outpace deprecation into the near future.

SPP Working Group Participation Costs – As incurred (monthly). The cost will be incurred based on the working group's schedule and meeting location. More frequent meetings or meetings requiring or benefitting from face to face gathering will require more costs than less frequent and virtual option meetings.

SPP Study Costs – Incurred as a service as requested. Depending on the nature of the request, the costs are largely related to either the cost of labor or the cost of the investment.

3. For each cost, please identify whether or not this cost can be quantified.

All mentioned costs can be quantified as to their current cost. However, identifying the future costs of these items would be significantly more difficult and would rely on more and more assumptions, which may compromise their accuracy. For further details, please see RTO response five below.

4. For each quantifiable cost, has the utility quantified those costs since the utility began participation in the RTO? Why or why not? Additionally, please explain how the utility has quantified those costs, provide any/all workpapers that calculated these cost, and provide the cost of gathering, analyzing, and interpreting such information.

Liberty quantified all transmission schedules referenced in RTO question two on a monthly basis. Currently, the costs of estimating these charges are minimal as SPP provides monthly Transmission Statements with these charges included and they can be shadowed to validate the calculated charge. Regarding costs relating to the working group process or SPP studies/upgrade reimbursement, the costs may be able to be quantified on an as needed basis.

5. Please identify how the utility would ideally quantify future costs of RTO participation. Please provide the cost of gathering, analyzing, and interpreting such information under the ideal scenario. If such information is not reasonably and economically available, what kind of information would the utility propose as a proxy? Please provide the cost of gathering, analyzing, and interpreting such proxy information.

Estimating future costs becomes increasingly challenging as the timeline expands. The costs described above could be estimated in the future by using some sort of assumptions for changes in rate. However, the estimates would be highly contingent upon those assumptions and it is quite possible that points further in the future could become less and less reliable. Furthermore, Liberty would have to assume that the methodologies for recovering these costs won't change which isn't always the case. For example, in January 2021, Schedule 1A will be broken down into 4 separate rates to separately recover costs relating to Transmission Administrative Service, Transmission Congestion Rights, Integrated Marketplace Clearing

Administrative Service, Integrated Marketplace Facilitation Administrative Service. Without a historical basis for this decoupled charge, it is difficult to quantify its impact in the future. Finally, the only costs that could be assessed by the Company, are those costs currently being incurred. If Liberty were subject to additional costs relating to either new services or a new method to capture a current service, it would be unlikely these changes in costs would be properly captured by such an analysis.

i. What will drive these future costs?

It is difficult to confidently define future costs. Certainly, increased costs of labor and/or software and systems would drive future costs relating to Schedule 1A, Schedule 1, and Schedule 12. Future investment and revenue requirement inputs would drive future costs relating to Schedule 11 charges. Even the drivers for work group costs are difficult to quantify as a post-COVID world has not occurred, which makes it difficult to determine what/how a remobilization of the SPP working group process will entail.

ii. Are there any existing costs that will be eliminated based on upcoming or expected changes at the RTO?

At this time, it is not expected that any existing costs will be eliminated.

6. For each cost of RTO participation that is not quantifiable, please explain why it is not quantifiable.

Not applicable.

7. For each non-quantifiable cost, has your utility placed a monetary value on the cost? If so, please explain how the monetary value was derived, and provide the cost of gathering, analyzing, and interpreting such information. - What have been the total cost of the RTO overheads allocated to the utility the past 3 years on an annual basis? What specific benefits are provided for those costs?

Not applicable.

8. What would be the cost of exiting an RTO? Are offsets to these costs possible? Please provide in graph form if possible from the date your company entered the RTO and the

date at which the RTO mandated an exit fee (if these dates are not the same please explain) on a yearly basis the cost of what an exit fee would have been if your company had exited the RTO versus what the estimated benefits received were for those same years.

Calculation of a Members existing obligation is calculated as follows: A = 100[0.25(1/N) + 0.75(B/C)]

Where A= Member's share (expressed as a percentage)
N= Total number of Members
B= The Member's previous year Net Energy for Load
C= Total of Factor B for all Members

Withdrawing members must pay any existing or outstanding obligations such as (unpaid annual membership fees, unpaid dues, assessments, and other charges) described under section 3.8 of the membership agreement, as well as the Members share of the entire principal amounts of all SPP Financial Obligations outstanding as of the Termination Date. "Financial Obligations" are all long-term (in excess of six months) financial obligations of SPP. Additionally the Member must pay any costs, expenses, or liabilities incurred by SPP directly due to the Termination. Lastly, Members must pay their share of all interest that will become due for payment with respect to all interest-bearing Financial Obligations after the Termination Date and until the maturity of all Financial Obligations in accordance with their respective ("Future Interest").

RTO Benefit-Cost Study Period

As of now, when would your utility anticipate conditions being favorable to performing a benefit cost study? What would the time period be for that analysis? Please explain what changes to current conditions result in that period being selected. Additionally, are there identifiable events or categories of events that would result in that period being moved forward or back? Please identify and explain.

As mentioned in the responses above, Liberty is in favor of relying on the existing SPP analysis and agreed to methodology for allocating benefits on a utility-specific basis. This would minimize the costs associated with studying the costs/benefits and would leverage existing SPP reports and personnel to provide an estimate of benefits for the Missouri utilities. Most of the reports from which benefits can be pulled have a specific time period with which the benefits are quantified, so the time period would be reliant on the SPP report and its study parameters.

Is there value in the Commission maintaining the conditions in prior orders for utilities to provide benefit-cost studies? What if anything do other states in which a utility or its affiliates operate require for a comparable review?

Liberty believes there is benefit in the Commission requiring utilities to perform some sort of review as to the benefits/costs associated with continued RTO membership. For instance, it would be reasonable to perform a review if there were to be a significant change in the operation of SPP that Liberty believes negatively impacts the value of SPP membership or if a significant number of departures were to occur in SPP membership resulting in a significant reduction in SPP load. However, this determination should be largely left to the discretion of the utility and if a further study is needed as directed by the Commission, that the pursuit of the scope and parameters be a collaborative effort between the utilities and stakeholders.

RTO Withdraw Events

Are there any identifiable "deal breaker" events or categories of events that would make it unreasonable for a Missouri investor-owned utility to remain in their current RTO? If so, please identify the event or category of events. Please provide a recommendation for how to analyze the costs and benefits for each event or category of events.

Yes. Although this should not be considered exhaustive, any change that substantially increases the costs to the utility without associated benefits could be considered a deal-breaker. However, based on the current exit fees associated with Liberty's membership, the cost shifting would have to be significant enough that a net benefit could be considered by severing SPP membership. Any analysis would have to be on a case by case basis.

WHEREFORE, Liberty submits this Response to Commission Order and requests such relief as is proper under the circumstances.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that the above document was filed in EFIS on this 16th day of February, 2021, with notice of the same sent to all counsel of record.

/s/ Diana C. Carter