BEFORE THE PUBLIC SERVICE COMMISSION
<u>OF THE STATE OF MISSOURI</u>

In the Matter of the Application of The Empire District Electric Company for a Certificate of Convenience and Necessity Related to its Customer Savings Plan	))))	**Case No. EA-2019-0010**
In the Matter of the Application of The Empire District Electric Company for a Certificate of Convenience and Necessity Related to its Customer Savings Plan	))))	**Case No. EA-2019-0118**

INITIAL POSTHEARING BRIEF

OF

MIDWEST ENERGY CONSUMERS GROUP

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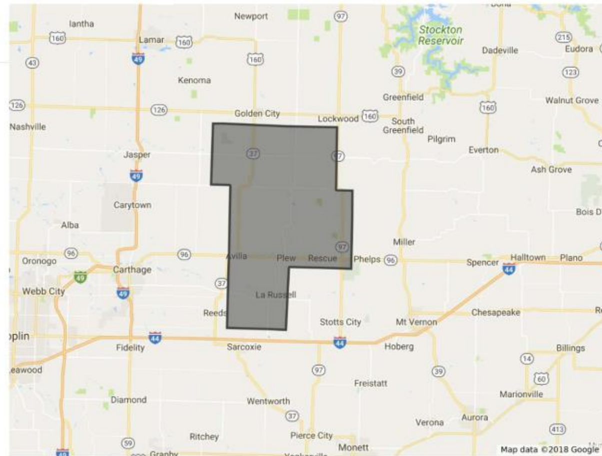
COME NOW the Midwest Energy Consumers' Group ("MECG") by and through the undersigned counsel, pursuant to the Commission's December 19, 2018 *Order Consolidating Cases, Amending Procedural Schedule*, *and Setting Local Public Hearing,* and provides its initial post-hearing brief.

<u>I. INTRODUCTION</u>

On October 18, 2018, Empire filed Case No. EA-2019-0010 seeking two certificates of convenience and necessity ("CCN") associated with wind farms to be located in the state of Missouri. First, Empire sought a CCN for a 150 MW wind farm, known as Kings Point, to be located in Barton, Dade, Jasper and Lawrence counties.



Second, Empire sought a CCN for a 150 MW wind farm, known as North Fork Ridge, to be located in northwestern Jasper and southwestern Barton counties.

Subsequently, on November 18, 2018, Empire filed Case No. EA-2019-0118. In that case, Empire seeks a CCN for a 300 MW wind farm, known as Neosho Ridge, to be located in Neosho County, Kansas. On December 19, 2018, the Commission consolidated Case Nos. EA-2019-0010 and EA-2019-0118.

As described in its Application for all three wind farms, Empire "will utilize a tax equity partner to finance a significant portion of the cost of the projects."

II. STANDARD OF REVIEW

Section 393.170.1 provides in pertinent part that "[n]o. . . electrical corporation. . . shall begin construction of. . . electrical plant. . . without first having obtained the permission and approval of the commission." Section 393.170.3 provides that such approval should be based upon whether it is "necessary or convenient for the public service."

> The Commission shall have the power to grant the permission and approval herein specified whenever it shall after due hearing determine that such construction or such exercise of the right, privilege or franchise is necessary or convenient for the public service.

Importantly in exercising such authority, and in an effort to ensure that the project is necessary or convenient for the public service, Section 393.170.3 also provides that "[t]he Commission may be its order impose such condition or conditions as it may deem reasonable and necessary."

In 1994, the Commission set forth standards designed to allow it to consider whether a project "is necessary or convenient for the public service." Specifically, for the past 25 years, the Commission has reviewed applications for a certificate of convenience and necessity based upon the following 5 factors:

1. Need for the Service;
2. Applicant's Qualifications;
3. Applicant's Financial Ability;
4. Economic Feasibility of the Proposal; and
5. Promotion of the Public Interest[1]

In this brief, MECG does not address the first four *Tartan* criteria. Rather, MECG accepts the Staff's assessment of the whether the Empire project meets those specific criteria as well as the conditions necessary for the project to meet each of those

[1] In re Tartan Energy, Report and Order, 3 Mo.P.S.C. 3d 173, Case No. GA-94-127, issued September 16, 1994.

criteria. Given this, MECG's brief is limited solely to the final criteria ("promotion of the public interest") as well as the conditions contained in the Non-Unanimous Stipulation which makes it possible for the Commission to make a public interest finding under the *Tartan* criteria.

MECG urges the Commission, in any order approving the Empire application, to impose each and every condition set forth herein. Any Commission finding that the Empire application is in the "public interest" is necessarily suspect if it is not supported by at least some segment of the public (the Empire customer base). Recognizing that Public Counsel is opposing the Non-Unanimous Stipulation, MECG is the only customer entity that has offered conditional support for the project. As the Non-Unanimous Stipulation clearly sets forth, however, MECG's support is conditioned on each and every condition set forth therein.[2] Any Commission order that disregards any of these important conditions will result in the opposition of MECG and therefore a Commission order that is opposed by <u>all</u> segments of Empire's customer base.

III. THE STIPULATION / NECESSARY CONDITIONS

In the Non-Unanimous Stipulation, the Signatories recommend that the Commission grant Empire CCNs for the Kings Point, North Fork Ridge and Neosho Ridge wind farms. That said, however, the Signatories state that any Commission order granting a CCN "must include each and every one" of certain conditions. In this brief, MECG addresses some of the more important conditions.

[2] See, Exhibit 13, Non-Unanimous Stipulation and Agreement, paragraph 2 ("This stipulation has resulted from extensive negotiations among the parties, and the terms herein are interdependent and non-severable. If the Commission does not approve this Stipulation unconditionally and without modification, or if the Commission approves the Stipulation with modifications or conditions to which a Signatory objects, then this Stipulation shall be void and none of the Signatories shall be bound by any of the agreements or provisions hereof.").

A. NECESSARY REPORTING REQUIREMENTS

Consistent with the Staff's recommended reporting requirements,[3] the Non-Unanimous Stipulation mandates certain reporting and filing requirements including: (1) an engineer report finding that each Wind Project "has achieved mechanical completion"; has a reasonable likelihood of satisfying the in-service criteria; and that the wind turbines will meet the guaranteed power curve; (2) achievement of in-service criteria; (3) quarterly reports setting forth construction level plans and specifications; (4) SPP definitive impact system studies; and (5) a notice of closing of each of the transactions contemplated by the purchase agreements.[4]

B. REQUIRED USE OF TAX EQUITY FINANCING

The Non-Unanimous Stipulation mandates that any CCN be expressly conditioned on the use of tax equity financing. "EDE, through its ownership in Wind Holdco(s), shall contract with tax equity partner(s) for financing of the Wind Projects."[5] The tax equity financing requirement, while novel in Missouri, is designed to maximize the immediate value of both production tax credits ("PTCs") and accelerated depreciation by placing these tax benefits in the hands of a third party. In exchange for these tax benefits, the third party provides a significant portion of the initial investment capital which significantly increases the economics for ratepayers.

As the Commission is aware, the federal government provides incentives for wind projects through production tax credits ("PTCs"). These production tax credits represent a dollar for dollar credit applied to the owner's tax liability. In addition to the production

[3] Exhibit 101, Staff Report, page 37.
[4] Exhibit 13, Non-Unanimous Stipulation, pages 4-5.
[5] *Id.* at pages 5-7.

tax credits, wind projects also qualify for an accelerated tax depreciation deduction.[6] While the use of PTCs and accelerated depreciation tax deductions would be of some value to the company, Empire does not have the "tax appetite" to utilize those tax "benefits in a timely fashion."[7] As Mr. Mooney noted in response to a question from Commissioner Hall, Empire has historically used "bonus depreciation" associated with "previous capital expenditures."[8] In fact, while Empire has used these bonus depreciation deductions, Empire still has more bonus depreciation deductions that it could currently use. Fortunately, these deductions are not lost to the company, but instead accumulate in the form of "tax loss carry forwards."[9]. "Those tax loss carry forwards can be used to offset cash tax payable in future years."[10] Because of these accumulated tax loss carry forward amounts, however, "Empire cannot realize cash savings from these tax benefits [associated with the wind farms] in the near term."[11]

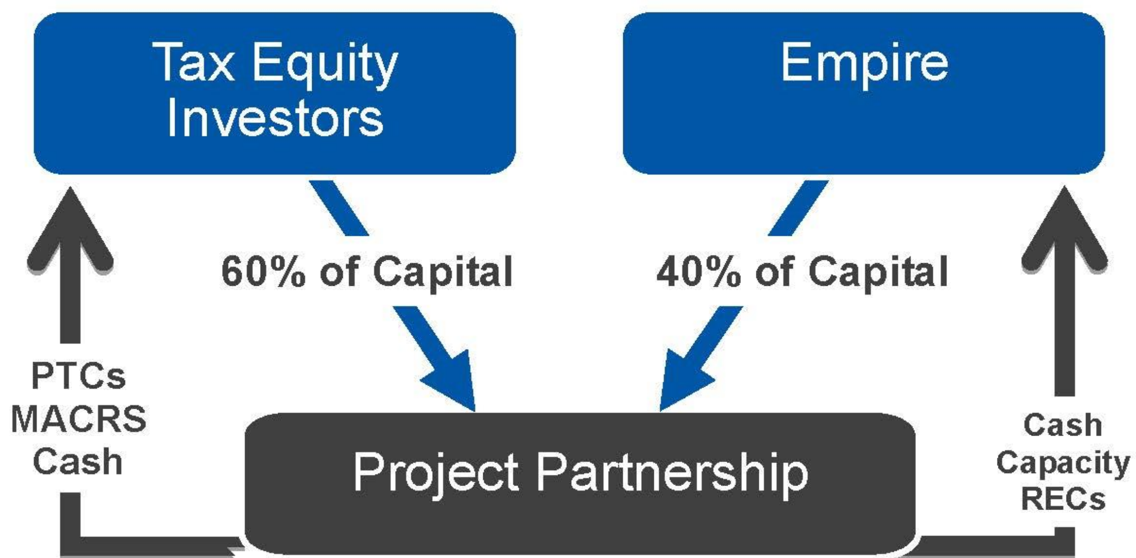
While Empire cannot maximize the value of the PTCs and accelerated depreciation in the near term, such tax benefits can be maximized in the hands of a third party. As a result, third parties, usually entities with significant tax liabilities, are willing to provide investment in a wind project, in order to access the associated PTCs and accelerated depreciation deduction.

> In a tax equity structure, large, tax-paying corporations (typically large banks and insurance companies) become equity partners in a wind project ("Tax Equity Partners"). In exchange for providing a significant portion of the capital investment of the partnership, which is used to develop the wind generation facility, a Tax Equity Partner receives the tax incentives (PTCs and MACRS discussed earlier) generated from the wind project

[6] Exhibit 11, Mooney Direct, page 5.
[7] Tr. 244.
[8] Tr. 279.
[9] *Id.*
[10] *Id.*
[11] *Id.*

during the first 10 years of the project's life. In addition, the Tax Equity Partner receives cash distributions in the latter years of the project (typically in years 6 to 10) as part of its return on and recovery of the capital it invested.[12]

The following visual demonstrates the relative investment of Empire and the tax equity partner as well as the benefits accruing to each entity. As discussed, the tax equity investor is willing to invest a significant amount of the upfront capital in exchange for PTCs, accelerated depreciation (MACRS), and some cash.



Source: Exhibit 5, Mooney Direct, page 13.

Importantly, the tax equity partner typically does not retain ownership for the life of the wind project. Instead, once the tax equity partner has recovered both its initial investment and the necessary return, "the ownership structure 'flips' and the majority of the ongoing financial benefits of the wind project transfers over to the non-tax equity partner, with the Tax Equity Partner retaining a nominal residual stake in the partnership

[12] Exhibit 5, Mooney Direct, page 13.

(typically 5%). At this point, the non-tax equity investor also has an option to purchase the tax equity partner's interest in the partnership."[13]

The utilization of tax equity financing is beneficial to ratepayers. Under the typical utility investment model, the utility would provide the entirety of the capital investment and would receive all PTCs and accelerated depreciation, whether immediately beneficial to the utility or not. Under this traditional investment paradigm, ratepayers would pay depreciation and return on a larger amount of investment. Under the tax equity structure, however, the PTCs and accelerated depreciation are monetized in the form of a third-party investment in the wind project. Therefore, while receiving the same amount of generated energy, ratepayers are required to pay depreciation and return on a lower amount of investment. Specifically, through the effective use of tax equity financing, ratepayers will be receiving the energy associated with approximately $1 billion of generation, but having to pay the depreciation and return on only approximately $500 million of Empire investment.[14]

C. IMPLEMENTATION OF A MARKET PRICE PROTECTION MECHANISM: Throughout this proceeding there have been criticisms that Empire did not immediately need capacity.[15] As such, critics contend that, if Empire wishes to build these wind farms, Empire should build them as an Independent Power Producer, instead of as a regulated venture. Critics postulate that, by making this a regulated venture, Empire is exposing its ratepayers to a significant amount of risk associated with future SPP market prices and wind farm production.

[13] *Id.* at pages 13-14.
[14] Tr. 208.
[15] During cross-examination, Public Counsel noted that, while Empire has an historic peak demand of 1,200 MWs, it currently already has generating resources with an accredited capacity of 1,447 to 1,477 MWs. (Tr. 115-116 and 130).

While MECG acknowledges that Empire currently has sufficient capacity to meet peak demand, events transpiring in the near future may change that calculus. Specifically, Empire's purchased power agreements for wind energy / capacity from Elk River and Meridian Way will expire in the next 7 years. Moreover, while Asbury is still economical and providing value to ratepayers, given the seemingly inevitable fate of coal generation, as a result of efforts to limit carbon production, the Asbury economics may change in the near future. Therefore, it is justifiable for Empire to begin considering replacement capacity. Furthermore, given that current high production tax credits will begin to be phased out, there is value to Empire acting today.

In order to allow for the addition of wind capacity while still protecting customers from market and production risks, the Non-Unanimous Stipulation provides for the implementation of a customer protection known as a Market Protection Plan ("MPP").[16] The MPP seeks to compare: (1) the revenues generated from selling the energy from the wind projects into the SPP Integrated Marketplace with (2) the typical ratemaking costs including return, depreciation and O&M expenses from those same wind projects.[17] To the extent that SPP revenues exceed costs, then ratepayers will necessarily benefit from the addition of wind generation. To the extent, however, that costs exceed SPP revenues then customers will suffer a detriment associated with the wind additions.

Given this, the MPP provides for a comparison of costs and revenues over a 10 year period, and if costs exceed revenues, then Empire will shield ratepayers from $52.5

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[16] Exhibit 13, Non-Unanimous Stipulation, page 9 and Appendix B.

[17] "On an annual basis, the Annual Wind Value ("AWV") will be calculated based on the SPP market revenues earned by the Wind Projects (SSP$) less the Wind Projects costs (WRR) plus the value associated with avoiding the replacement of the existing wind power purchase agreements (PPA_Replacement)." Exhibit 13, Non-Unanimous Stipulation, Appendix B.

million of detriment.[18] Equally important, if the detriment over the 10 year period is in excess of $52.5 million, the Commission shall determine the equitable treatment of such excessive amounts.[19]

As far as implementation of the MPP into Empire rates, the Signatories have agreed that a calculation will be performed annually comparing the SPP revenues and wind project ratemaking costs.[20] Recognizing that rate base costs are highest in the early years before the effects of depreciation are realized, it is expected that wind project ratemaking costs will initially exceed SPP revenues. Rather than immediately start crediting ratepayers with some portion of the $52.5 million of protection in these early years, the annual amount will simply be captured in a regulatory liability account which will include carrying costs.[21] At the end of the 10 year period, each of the annual comparison amounts will be summed and, to the extent that costs exceed SPP revenues at the end of the 10 year period, the MPP customer protection will be imposed.

For demonstrative purposes,[22] the Non-Unanimous Stipulation provides four examples of how expected SPP revenues compare to wind project ratemaking costs. Recognizing that SPP revenues are dependent primarily on wind project production levels[23] and SPP market prices, the examples reflect different permutations of these two

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[18] *Id.*
[19] *Id.* ("If the ASV_Sum amount exceeds the Guarantee amount of $52,500,000 (Missouri jurisdictional) at the end of the Guarantee period, the treatment of any amounts above the Guarantee shall be determined in the first rate case after the end of the Guarantee Period.").
[20] *Id.*
[21] Carrying costs are over and above the $52.5 million of ratepayer protection.
[22] As the examples expressly note, "all numbers utilized, unless specific elsewhere in the [Stipulation], are for example only, actual values will be input into the calculation during the life of the MPP."
[23] Wind production is given in terms of the percentage of time that the actual wind production is expected to exceed a certain amount. Thus, "[t]he P95 wind level is the amount of wind which will be exceeded 95% of the time." (Exhibit 4, Holmes Surrebuttal, page 14). Thus, a P25 level of wind production would provide for a greater amount of wind generation than a P50 level of wind production. Therefore, a P95 level of wind production is a minimal level of wind production.

critical factors. Those examples provide for the following 10 year comparison of revenues and costs:

P50 wind production and mid market prices: revenues > costs by $145.0 million

P50 wind production and high market prices: revenues > costs by $347.0 million

P50 wind production and low market prices: revenues > costs by $9.8 million

P95 wind production and low market prices: revenues < costs by $93.4 million

As can be seen from these examples, the $52.5 million of protection under the MPP provides a significant level of customer protection and, in the event that wind production and market prices are both lower than the worst cases modeled in this case, any further detriment will be addressed by the Commission at some point in the future.

D. NON-RESIDENTIAL ACCESS TO RENEWABLE ENERGY AND ASSOCIATED RENEWABLE ENERGY CREDITS: In recent years, many companies have made sustainability commitments or taken efforts to ensure that they are served by renewable energy.[24] "There are many larger customers, commercial customers or industrial customers, that have sustainability programs that require -- or they want to prove their greenness or their sustainability."[25]

While Missouri utilities are likely served by some amount of renewable energy, there is no way for Missouri customers with sustainability goals to demonstrate that the energy provided by its monopoly provider is actually from renewable resources. The only way for such a customer to effectively meet its sustainability commitment is to

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[24] For example, Walmart, AT&T, Dupont, Johnson & Johnson, Kellogg's, Google, 3M, Amazon, Ebay, Target, Yahoo, General Motors and dozens of other large commercial and industrial customers joined on to the Corporate Renewable Energy Buyers' Principles. One included principle is "Access to new projects that reduce emissions beyond business as usual." The six principles and members companies may be found at: https://buyersprinciples.org/

[25] Tr. 102.

actually receive the underlying credits associated with renewable generation ("RECs"). Recently, Ameren (Case No. ET-2018-0063) and KCPL / GMO (Case Nos. ER-2018-0145 / 0146) have implemented programs through which non-residential customers can access renewable energy and receive the associated RECs.

Through this provision, Empire agrees, as part of its first general rate case when the wind assets are placed in service, to propose a tariff by which non-residential customers may be assigned a portion of the RECs from the wind projects.[26] As Empire's witness explains, "So this program will allow us to -- when completely defined, assign or sell those recs to those – those commercial or industrial customers to meet their sustainability goals."[27]

More importantly, given that the Commission considers public interest as part of the *Tartan* inquiry, the inclusion of the Non-Residential Access to Renewable Energy and Credits provision is in the public interest.

> Q. And do you believe that the offering of such a program is in the public interest?
> A. Yes.
> Q. And why?
> A. Well, you know, just as -- as it is important for us as an electric utility to show our customers that we are trying -- trying to become more sustainability, these larger commercial and industrial cus-- larger industrial and commercial customers have the same type of goals. And to -- to prove to their customers that they are becoming more sustainable, that's what this program allows them to do.[28]

E. ASBURY PROVISION: Currently, Empire has generating assets with an accredited capacity of between 1,447 and 1,477 MWs.[29] Recognizing that Empire's historic peak is only 1,200 MWs, it is clear that Empire currently has sufficient

[26] See, Exhibit 13, Non-Unanimous Stipulation and Agreement, page 8.
[27] Tr. 102.
[28] *Id.*
[29] Tr. 115-116.

generating to meet peak demand.[30] Recognizing that this settlement, if approved, will result in the addition of 600 MWs of wind generation, it is apparent that it will potentially expedite the retirement of other Empire resources, especially the Asbury generating unit, which are not yet fully depreciated.

Given the undeniable nexus between the addition of wind capacity and the retirement of the Asbury unit, as well as the potential regulatory issues that will inevitably arise from the retirement of Asbury, the Signatories included a provision to address a situation in which the Asbury unit is sold or retired between general rate cases. In such a situation, the Stipulation would provide for the creation of both a regulatory asset as well as a regulatory liability so that the Commission can address all ratemaking aspects associated with the retirement of Asbury at the same time.

First, the Stipulation would provide for the creation of a regulatory asset "representing the undepreciated balance of the Asbury facility (net book value)." Second, the Stipulation provides for the creation of a regulatory liability "to accrue the types of costs and revenues included in EDE's cost of service used for setting general rates in its last preceding general rate case that EDE no longer incurs after retiring Asbury."[31] As Staff witness Oligschlaeger points out, the Asbury provision "calls for the creation of certain regulatory assets and liabilities if the Asbury plant is sold or retired between general rate cases and it does not specify any ratemaking treatment regarding Asbury and its retirement status but instead kind of tees up potential issues for litigation or resolution in future rate cases."[32]

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[30] Tr. 130.
[31] Exhibit 13, Non-Unanimous Stipulation, page 8.
[32] Tr. 335-336.

By providing for the creation of both the regulatory asset and the attendant regulatory liability, the Commission may consider the appropriate ratemaking, if any, for the approximately $200 million of undepreciated investment in Asbury[33], while also considering any offsetting savings including capital costs, depreciation expense, property taxes, operations and maintenance expense, fuel costs, SPP revenues and any deferred income tax effects."[34] As Empire expressly points out, such a provision is in the public interest.

> Q. And do you believe that provision is in the public interest?
> A. Yes.
> Q. And can you tell me why?
> A. Again, just to true that up -- true those costs up both for the shareholders and -- and the customers, to make sure that those are appropriately addressed in rates going forward.
> Q. So it would allow for treatment of the entire pie at one time, both the assets that the utility may seek as well as the liabilities that the customers may seek?
> A. Exactly.[35]

Given the "unusual nature"[36] of this docket (i.e., the massive addition of wind generation provided by this Stipulation), Staff agrees that the inclusion of the Asbury provision is appropriate.[37]

F. FUTURE BATTERY / ENERGY STORAGE TECHNOLOGY: Just as the introduction of 600 MWs of wind may accelerate the retirement of the Asbury generating unit, it may also dictate the eventual addition of energy storage technology. This is a result of the fact that wind energy is only available when the wind is blowing. When the wind stops blowing, wind turbines are of little value in meeting customer demand. For

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[33] Tr. 147.
[34] Exhibit 13, Non-Unanimous Stipulation, page 8.
[35] Tr. 104.
[36] Tr. 338 and 365.
[37] Tr. 338.

this reason, once battery storage becomes cost effective, it will undoubtedly be used to store wind energy when the wind is blowing, and dispatch that energy when the wind has stopped blowing. As the SPP CEO points out:

> Until battery storage is effective and affordable enough to operate at utility-scale, electricity must be generated, distributed and used nearly simultaneously. When the wind stops blowing or the sun goes down, or when unexpectedly rising or dropping temperatures lead to unforeseen electricity use, we can't just let the power to our region lapse.[38]

Given this conundrum underlying wind energy [the generation of wind energy may not occur at the same time as system peak demand], there is the belief that the addition of 600 MWs of wind resources to Empire's generation portfolio may necessitate the eventual addition of energy storage. For this reason, the Non-Unanimous Stipulation provides for a CCN type of review[39] for any future installation of battery technology by Empire.

> In the event that it is determined that a certificate of convenience and necessity from the Commission is not required, Empire shall, three months prior to installing any battery or energy storage device, make a presentation to the parties, regarding the costs and benefits and the impact on rates of installing such battery / energy storage technology. Such presentation shall include, but is not limited to, a discussion of the retirement of current generating units or the postponement of future generation additions resulting from the installation of the battery / energy storage technology. Further, such presentation will provide a discussion of how Empire's battery / energy storage technology is incorporated into and dispatched within the Southwest Power Pool. In the event that the battery / energy storage is on the customer side of the meter, Empire shall discuss rate design changes, if any, necessary to maximize the benefits of the battery / energy storage technology. Empire shall allow for reasonable discovery from the Signatories and OPC regarding the costs and benefits of the battery / energy storage technology.[40]

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[38] Exhibit 200, Marke Rebuttal, page 11.

[39] "[Empire] would have to basically present the same facts that we would at a CCN process to prove the battery storage is in the public good and a necessity for our customers." Tr. 103.

[40] Exhibit 13, Non-Unanimous Stipulation, pages 9-10.

As Empire recognizes, this provision is in the public interest in that requires Empire "to prove that it's the lowest cost alternative for our customers and provides good service in the long run."[41]

IV. CONCLUSION

Section 393.170.3 gives the Commission the authority to impose any conditions that it deems "reasonable and necessary" on the grant of a certificate of convenient and necessity. Through the Non-Unanimous Stipulation, the Signatories have provided a series of conditions which allows the Commission to find that the Empire CCN Application is in the public interest. As such, MECG urges the Commission to adopt each and every condition as part of its grant of a certificate of convenience and necessity.

Respectfully submitted,

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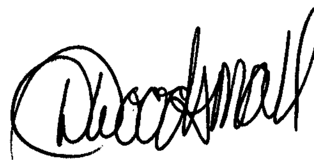
[41] Tr. 103.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have this day served the foregoing pleading by email, facsimile or First Class United States Mail to all parties by their attorneys of record as provided by the Secretary of the Commission.



David L. Woodsmall

Dated: April 29, 2018