BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of a Subscription-Based Renewable Energy Program	)))	**File No. EA-2022-0245**

STAFF'S POST-HEARING BRIEF

COMES NOW the Staff of the Missouri Public Service Commission ("Staff"), by and through counsel, and tenders the following post-hearing brief.

INTRODUCTION

The issues before the Commission for decision are as follows:

A. Does the evidence establish that the 150 megawatt ("MW") solar generation facility to be constructed in White County, Illinois (the "Boomtown Solar Project" or "Project") for which Ameren Missouri is seeking a certificate of convenience and necessity ("CCN") necessary or convenient for the public service?

1. Should the Commission find that the Project satisfies the first Tartan Factor of need?

2. Should the Commission find that the Project satisfies the second Tartan Factor of economic feasibility?

3. Should the Commission find that the Project satisfies the third Tartan Factor of ability to finance?

4. Should the Commission find that the Project satisfies the fourth Tartan Factor of qualified to construct?

5. Should the Commission find that the Project is in the public interest and satisfies the fifth Tartan Factor?

B. If the Commission grants the CCN for the Boomtown Solar Project, what conditions, if any, should the Commission impose on the CCN?

C. Is this an appropriate proceeding for the Commission to review Ameren Missouri's Renewable Solutions Program?

1. If so, should the Commission approve the Renewable Solutions Program proposed by Ameren Missouri in accordance with its authority to approve utility programs and tariffs?

D. If the Commission approves the Renewable Solutions Program proposed by Ameren Missouri, what, if any, conditions should the Commission impose on such approval?

Staff does not dispute that the Project satisfies Tartan factors two, three, and four. Staff contends that the evidence is insufficient to find that the Project satisfies the first Tartan factor of need or the fifth Tartan factor of promoting the public interest. Staff contends, accordingly, that the evidence is insufficient to establish that the Boomtown Solar Project is necessary or convenient for the public service. Staff contends that if the Commission does grant the CCN, it should do so with the following conditions:

1. Ameren Missouri should specifically delineate within each FERC account all revenues, investments and expenses associated with the Boomtown Solar Project. The specific delineation of the Project should also include a reasonable allocation of the items related to the Project in which the amount is indirectly attributable to the Project. The unique recording for these items is to be available for Staff's review during future Ameren Missouri general rate cases.

2. Ameren Missouri shall use sound engineering judgment and commercially reasonable efforts to meet the IEEE standard P2800 for the Boomtown project and future transmission interconnected solar projects.

3. Ameren Missouri shall accept that the in-service criteria contained in confidential attachment SEL-3 and confidential attachment SEL-4 are appropriate for use in a future case to determine whether the Boom Town solar project is in-service.

4. Ameren Missouri shall notify the Commission and provide an updated economic analysis if the upgrade cost exceeds those outlined in the GIA more than 15%.

5. Ameren Missouri shall file with the Commission all as-built drawings for the project no later than 60 days after the site is commercially operational.

6. Ameren Missouri shall file with the Commission the final version of the plans for restoration of safe and adequate service no later than 60 days after the site is commercially operational.

7. Progress Reports: Ameren Missouri shall file with the Commission quarterly progress reports on the plans and specifications for the Project, and the first report shall be due on the first day of the first calendar quarter beginning after the CCN is issued.

8. Ratepayers that do not participate in the Renewable Solutions Program shall be held-harmless during any rate review period if the costs of the Boomtown Solar facility exceeds the revenues from the facility.

Staff states that this is the appropriate proceeding for the Commission to review Ameren Missouri's Renewable Solutions Program. The Commission should not approve the Program.[1] In the event that the Commission does approve the program, the Commission should impose the following conditions:

1. Ameren Missouri should specifically delineate within each FERC account all revenues, investments and expenses associated with the Renewable Solutions Program. The specific delineation of the Project should also include a reasonable allocation of the items related to the Program in which the amount is indirectly attributable to the Program. The unique recording for these items is to be available for Staff's review during future Ameren Missouri general rate cases.

2. All costs of the renewable generation facilities in the program shall be borne by the subscribers and/or shareholders while the RSP phase is in effect.

3. In addition to an in-service evaluation at the time the facility is initially placed into rates, Ameren Missouri shall demonstrate the facility is fully operational at the time the RSP program ends.

4. The costs of the generation facilities to be placed on ratepayers will be determined at the time the RSP program ends. The valuation of the facility will take into account the current book cost, the state of the facilities, depreciation, degradation over time, and current market prices for similar sized assets. The least cost option will be chosen.

5. Tariff language of the RSP will be changed to outline how the Company will retire RECs on the subscribing customer's behalf.[2]

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[1] The Program does little to offset the capital investment expenditures of the solar facility. The customers targeted by this program have other avenues to receive renewable generation of RECs without pushing risk onto general rate payers. In addition, Ameren Missouri would retire RECs on behalf of subscribers for 15 years, and those RECs would not be useable for RES compliance if needed using that timeframe. Exhibit 115.Cedric E. Cunigan, Rebuttal Testimony, pp. 5 and 6. Exhibit 121, Michael Stahlman, Rebuttal Testimony, p. 9.

[2] At the conclusion of this brief, Staff makes a suggestion as a Project hold-harmless that involves the Program.

In this brief, Staff develops its contention that Ameren Missouri has not sustained its burden to show that the Project is needed or promotes the public interest. Staff's brief is necessarily selective as to issues and positions. That this brief does not develop an argument on an issue in no way concedes any such issue or changes any stated Staff position on any issue.

ARGUMENT

On July 14, 2022, Union Electric Company d/b/a Ameren Missouri ("Ameren Missouri") filed an Application for a Certificate of Convenience and Necessity ("CCN") for a 150 megawatt solar facility to be constructed in White County, Illinois ("Boomtown Project," "Boomtown," or "the Project"). The project was to be constructed per a Build Transfer Agreement with Boomtown Solar Holdings LLC. The application included a request for authority to utilize a tax equity partnership to finance the Project. It also included a request for approval of a Renewable Solutions Program ("Renewable Solutions" or "Program") and authorization to track Program revenues to ensure that they are reflected as an amortization to reduce the revenue requirement in future electric review for the benefit of all customers.

The Commission has the power to grant a CCN whenever after due hearing it shall determine that such is necessary or convenient for the public service.[3] In determining whether granting a CCN is necessary or convenient for the public service, the Commission applies the Tartan factors. The factors considered are: a) there must be a need for the service; b) the applicant must be qualified to provide the proposed service; c) the applicant must have the financial ability to provide the service; d) the applicant's

[3] Section 393.170.3, RSMo.

proposal must be economically feasible; and e) the service must promote the public interest.[4]

The "term necessity does not mean essential or absolutely indispensable, but that additional service would be improvement justifying its costs" (emphasis added).[5] Thus, implicit in the analysis is the Section 393.130.1, RSMo, prohibition against unjust or unreasonable charges.[6] An applicant seeking a certificate of convenience and necessity from the Public Service Commission does not meet its burden of proof by mere speculation, guesswork, hopes, or aspirations; a present need must be established.[7] Moreover, "[i]n matters of public convenience and necessity there must be consideration of the future; consideration of the future should be part of a comprehensive evaluation of whether the public convenience and necessity would be served by the Public Service Commission's grant of a certificate of convenience and necessity."[8]

<u>Need for the Service</u>

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[4] *Re Tartan Energy Company, L.C. d/b/a Southern Missouri Gas Company*, GA-94-127 (September 15, 1995).

[5] *State ex rel. Intercon Gas, Inc. v. Public Service Com'n of Missouri*, 848 S.W.2d 593 (Mo. App. W.D. 1993).

[6] 1. Every gas corporation, every electrical corporation, every water corporation, and every sewer corporation shall furnish and provide such service instrumentalities and facilities as shall be safe and adequate and in all respects just and reasonable. All charges made or demanded by any such gas corporation, electrical corporation, water corporation or sewer corporation for gas, electricity, water, sewer or any service rendered or to be rendered shall be just and reasonable and not more than allowed by law or by order or decision of the commission. Every unjust or unreasonable charge made or demanded for gas, electricity, water, sewer or any such service, or in connection therewith, or in excess of that allowed by law or by order or decision of the commission is prohibited.

[7] *Matter of Application of KCP&L Greater Missouri Operations Company for Permission and Approval of a Certificate of Public Convenience and Necessity Authorizing It to Construct, Install, Own, Operate, Maintain and Otherwise Control and Manage Solar Generation Facilities in Western Missouri,* 515 S.W.3d 754, (App. W.D. 2016). ("Any improvement which is highly important to the public convenience and desirable for the public welfare may be regarded as necessary, as would support the Public Service Commission's grant of a certificate of convenience and necessity; *if it is of sufficient importance to warrant the expense of making it*, it is a public necessity." Emphasis added.)

[8] *Matter of Application of KCP&L Greater Missouri Operations Company for Permission and Approval of a Certificate of Public Convenience and Necessity Authorizing It to Construct, Install, Own, Operate, Maintain and Otherwise Control and Manage Solar Generation Facilities in Western Missouri,* 515 S.W.3d 754, (App. W.D. 2016).

A

Energy Shortfall

Ameren Missouri claims, first, that the Project addresses a present need to begin to add renewable energy resources in order to begin to address a shortfall in its energy position expected to arise in less than five years.[9] Ameren Missouri's witness Ajay Arora testified that the "main driving force is we have a shortage of energy and the implications. . . ."[10] He stated:

> [The] [m]ain driving force is renewables are the least cost way to meet energy needs. All of the other aspects are a hedge against potential risks that may manifest themselves in the future. To meet energy needs renewables are the least cost resource.[11]

Witness Ajay Arora testified:

> In the interim [between now and 2031] we addressing the very real energy needs. And just under normal conditions we expect to have an energy need potentially by 2028 but under adverse conditions we could have it as of year 2026. And this is pretty dramatic because we have gone from a portfolio that had abundance of energy that protected our customers from various adverse conditions in the market to having an actual shortage, all this while the MISO market that we operate in is also short. So it is a pretty concerning state of affairs from an energy perspective. And Boomtown is just one of the resources that we will need to fulfill that.[12]

But witness Aurora then states that Ameren Missouri has no concerns about MISO's role in assuring system's energy reliability:

> Q. Do you have any concerns as I guess the executive in charge of making sure the system's reliable with having generation in Zone 4?
> A. I don't, no. We have operated that way for decades.
> Q. Why is that, why should the Commission not be concerned?
> A. Because MISO has a responsibility to ensure MISO wide there's enough capacity. And we have an obligation to ensure enough capacity to meet our needs. There is free flow between Zone 4 and Zone 5 from a transmission perspective.[13]

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[9] Hearing Transcript, pp. 12-13.
[10] Hearing Transcript, p. 82-83; 114.
[11] Hearing Transcript, p. 83.
[12] Hearing Transcript, p. 111.
[13] Hearing Transcript, pp. 112-113.

Ameren Missouri states that Boomtown is needed to address a future energy shortfall. Staff witness J Luebbert testified, without contradiction, that adding Boomtown will not change the amount of market energy which Ameren Missouri will purchase from MISO to serve its load:

> And so just looking at the total generation compared to the total load in megawatt hours on an annual basis really isn't -- isn't kind of the best metric, especially given kind of the construct that Ameren is operating in because of MISO. And what I mean by that is that every megawatt hour that Ameren's generating units produce are sold into MISO at a given value in a given time period. And Ameren is going to purchase enough energy to meet its load in every single hour of every single year, unless something changes. The fact that you add -- the fact that you add Boomtown as an asset will not change the amount of market energy purchases to serve Ameren's load.[14]

Staff Witness Michael L. Stahlman testified that Ameren Missouri participates in MISO and purchases all the electricity it needs to serve the load of its ratepayers through MISO.[15] He testified further:

> Due to Ameren Missouri's participation in MISO, the electricity needed to serve the load of its ratepayers is purchased from MISO markets regardless of the generation resource mix owned. MISO dispatches the generation throughout its footprint based upon a security constrained economic dispatch ("SCED") model and a real-time SCED algorithm. Subsequently, all of Ameren Missouri's generating units are bid into and dispatched by MISO markets based upon results of the SCED which account for the loads of the MISO footprint. In other words, Ameren Missouri's existing fossil-fuel resources will continue to *be dispatched by the MISO SCED regardless of the addition of the Boomtown Solar project to the generation fleet* [emphasis added].[16]

Finally, the fact that Ameren Missouri may be a MISO "net purchaser" from time to time does not equate to an energy need. Staff witness Shawn Lange testified:

> What I have gathered from the work papers and information from Matt Michels and -- and Ameren witnesses and work papers and information that has been provided in this case, I would refer to that more as a net purchaser situation; that we

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[14] Hearing Transcript, pp. 516-517.
[15] Michael L. Stahlman Rebuttal Testimony, Exhibit 106, p. 2.
[16] Michael L. Stahlman Rebuttal Testimony, Exhibit 106, p. 2.

> currently have utilities in the state that are in a net purchasing situation. That in and of itself does not mean that the grid is going to collapse because it's in a net energy situation and they are a net purchaser. It just means that, you know -- and what they have provided is an annual net purchase amount. So a lot of this is dependent upon, you know, the hours in which there is need, what the load is doing in those hours, what the assumed losses are for the load, what the assumed growth is for the load, what -- what all of that information is doing in – in those hours, as well as what assumptions for fuel, what assumptions for fuel price, what assumptions for planned outages, what all of that is doing at the same time. And so the company has not provided information to show where the shortfall is on an hourly basis or over the year. They show there is a net purchase situation at the end of the year. I --I -- I -- I don't know how I can equate a net purchase situation to an energy need.[17]

Ameren Missouri does not claim that it cannot meet all energy needs through MISO or that without Boomtown it will have MISO accreditation issues between now and when a planned combined cycle facility is online in 2031. In fact, Ameren Missouri is not required by any federal or Missouri rule or law, nor any MISO tariff requirement, to generate energy in excess of the Ameren Missouri load.[18]

Justifying Costs

To reiterate: The "term necessity does not mean essential or absolutely indispensable but that additional service would be improvement *justifying its costs*" (emphasis added).[19] Additional MISO revenues through the sale of energy produced by Boomtown is not an "additional service" that "justifies the cost of the project." Unfortunately, Boomtown is not expected to generate revenues that are sufficient to cover the costs of the asset that will be realized by ratepayers over the life of the asset. The ability to generate revenues from Boomtown energy sales in MISO is not, in and of itself, a demonstration of a ratepayer benefit, especially when the costs of the asset realized

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[17] Hearing Transcript, pp. 406-407.
[18] Hearing Exhibit 110
[19] *State ex rel. Intercon Gas, Inc. v. Public Service Com'n of Missouri*, 848 S.W.2d 593 (Mo. App. W.D. 1993).

through rates far exceeds those expected revenues.[20] Consider for a moment that private businesses regularly file for bankruptcy, despite the fact that they were able to generate revenue, when the costs outweigh those revenues. Unfortunately for ratepayers, if Ameren is allowed to include Boomtown in rate base, the ratepayers will be shouldered with the burden to cover the revenue shortfall that is expected, not only by Staff, but as verified in Ameren's own projections from supplemental direct testimony updated for the cost increase that occurred following the rebuttal round of testimony in this case.[21] Adding MISO market revenues from Boomtown energy production that are never expected to exceed the costs of the project being recovered through rates should not be considered an "improvement justifying its cost".

Ameren Missouri's entire energy shortfall argument seems to distill down to being in a net-purchaser position from time to time. Ameren Missouri has not sustained its burden to show that its projected short-term period of being in a net-purchasing position for energy in MISO is a need that justifies the substantial costs of Boomtown.

B

Continuing Need for Non-Renewables

Separate and distinct from Ameren Missouri's claim that Boomtown is needed to address an energy shortfall in the next five years, Ameren Missouri claims that Boomtown is needed now "so that Ameren Missouri can reliably, sustainably, affordably, and in a timely way transition its fleet from the old fleet that we have today to one that's going to look significantly different."[22] Thus, Ameren Missouri claims Boomtown satisfies the

[20] Highly Confidential Hearing Exhibit 112.
[21] Highly Confidential Hearing Exhibit 112.
[22] Hearing Transcript, p. 16.

Tartan need factor in two ways: 1) by addressing an energy need; and 2) by addressing a need to reduce reliance on non-renewable energy facilities.

The evidence was insufficient to show that Boomtown could reduce reliance on non-renewable energy facilities. Starting with MISO's accreditation percentages, replacing a higher accredited capacity facility with a lower one creates a significant capacity shortfall of approximately 2,200 megawatts, to be addressed with a combined cycle by 2031.[23] Likewise, Ameren Missouri will have to continue to address needed ancillary services with non-renewable energy sources:

> Before 2030 I expect to get them [ancillary services] from our coal fire generation, after 2030 I expect to get them from our coal fire generation, our hydro generation, as well as the combined cycle. So before 2030 hydro and coal fired, after that – and gas fired, sorry. Hydro, coal fired, gas fired. After that it's the same resources, including the new combined cycle[24].

Ameren Missouri's case relies heavily upon its prior and updated Preferred Resource Plans. But those same IRPs set out an Ameren Missouri plan to continue to rely on non-renewable resources that is hard to square with Ameren Missouri's stated aspiration to transition away from those resources:

> Q. As a part of Ameren Missouri's Updated Preferred Resource Plan, was there any non-renewable resources included?
>
> A. Yes, the addition of a 1,200 MW natural gas-fired combined cycle plant in 2031 was included.
>
> Q. Is there any other dispatchable resources included in the Company's Updated Preferred Resource Plan prior to the inclusion of this 1,200 MW natural gas-fired combined cycle plant in 2031?
>
> A. No. All new additional resources prior to the addition of the combined cycle plant in 2031 are non-dispatchable resources.
>
> Q. The Updated Preferred Resource Plan still shows a need for a natural gas-fired

[23] Hearing Transcript, pp. 94-95.
[24] Hearing Transcript, pp. 116-117.

combined cycle plant during the 20-year planning horizon even with the addition of 5,400 MW of renewable generation?

A. Yes. Even after the planned addition of 3,500 MW of renewables being added by 2031, and another 1,900 MW added from 2031 and beyond, the addition of a 1,200 MW natural gas-fired combined cycle plant is still expected to be needed in 2031.

Q. Is the need for the natural gas-fired combined cycle plant new to an Ameren Missouri preferred resource plan?

A. No. As far back as Ameren Missouri's preferred resource plan in Case No. EO-2011-0271, filed on February 23, 2011, there has been a projected need for a natural gas-fired combined cycle plant around 2031. In this case, Case No. EO-2011-0271, there was a projected need for a 600 MW natural gas-fired combined cycle plant in 2029. However, in its Updated Preferred Resource Plan, there is now a projected need for a 1,200 MW natural gas-fired combined cycle plant in 2031.

Q. So there has been a known projected need for a natural gas-fired combined cycle plant since 2011?

A. Yes, since at least 2011. But now, the size of that plant has not only doubled, it is now in combination with 5,400 MW of projected need from renewable resources as well.

Q. Has Ameren Missouri modeled a plan that either only includes a natural gas-fired combined cycle plant at an earlier date, for example, prior to 2031, or a plan that includes a natural gas-fired combined cycle plant prior to 2031 with renewable additions after since it has continuously planned to need a natural gas-fired combined cycle plant?

A. Not to my knowledge.[25]

The second need which Ameren Missouri states Boomtown meets is to transition away from fossil fuel reliance. Ameren Missouri has not met its burden to show that Boomtown represents a transition "away." The evidence shows that while this project would add more generation capacity in Ameren Missouri's renewable portfolio once this

[25] Exhibit 102, Brad J. Fortson Rebuttal Testimony, pp. 8-10.

project is operational, it will not cause any reduction in Ameren Missouri's generation from its fossil fuel generating units.[26] Staff's witness Michael L. Stahlman states:

> Q. With those facts in mind, do you agree that Ameren Missouri is making a "sustained transition to renewable resources"?
>
> A. No. More accurately, Ameren Missouri is diluting its existing fossil-fueled fleet through rate base additions of renewable resources. On a percentage basis, Ameren Missouri's generation fleet may give the appearance of being "greener", but the fossil-fueled resources will remain and continue to be dispatched. Ameren Missouri's load will continue to be served by the generating resources of the various MISO participants which are dispatched through the SCED.[27]

Why Ameren Missouri can, at best, only dilute its existing fossil-fuel fleet (which amounts simply to building out rate base) and cannot actually transition away from fossil-fuel is not a mystery. Solar facilities are not exactly ideal for the identified winter peak demand shortfall. Staff witness Michael Stahlman testified:

> Q. Is a solar facility ideal to meet winter demands?
>
> A. No. Figure 3 shows Staff's weather-normalized peak hours for the update period in Ameren Missouri's current rate case. As can be seen the peak hour usage for the winter months occurred between 7 and 8 a.m.; a period when the sun is low and solar will not produce much generation.

Figure 3. Hour of Ameren Missouri's Monthly Peak

Month	October	November	December	January	February	March	April
Hour (1-24)	17	8	8	8	8	8	18

> In White County, IL, where the project is located, the sun does not even rise until 7:20 am for about half of the month January, and the winter periods tend to be considerably cloudier on average than summer months. About half of the days between November and March are considered "cloudy" by the state climatologist

[26] Michael L. Stahlman Rebuttal Testimony, Exhibit 106, p. 7.

[27] Michael L. Stahlman Rebuttal Testimony, Exhibit 106, p. 3. [SCED refers to security constrained economic dispatch: SCED is defined as " An algorithm capable of clearing, dispatching, and pricing Energy, Operating Reserve, Up Ramp Capability, and Down Ramp Capability in a simultaneously co-optimized basis that minimizes Production Costs and Operating Reserve Costs while enforcing multiple security constraints. The algorithm keeps the commitment of Resources fixed in the dispatch." See F.N. 1 of Exhibit 106, Michael L. Stahlman Rebuttal Testimony.]

for Cairo, IL, the city closest to the project for which I was able to obtain data. Another 23% were considered "partly cloudy".[28]

In summary, Staff states that Ameren Missouri has not sustained its burden to show that it has a future energy need, justifying the expense of Boomtown; or that Boomtown will effectively address a need to transition away from fossil fuel, justifying the expense of Boomtown.

C

Corporate Renewable Goals

Ameren argues that the Renewable Solutions Program "further supports why the Boomtown Project is needed and is in the public interest."[29] Through the Program, Ameren proposes to provide the renewable attributes of the generation from Boomtown to a handful of customers in exchange for a relatively small offset to the overall cost of the asset, which will be realized by ratepayers as a whole.

Staff contends that this additional service is not an improvement that justifies its cost, in part because ratepayers as a whole are expected to bear a majority of the substantial costs of Boomtown while a small handful of customers receive the renewable attributes of the asset over the first 15 years. Based upon the evidence in this case and the proposed Program, the acquisition of Boomtown in conjunction with the Program is expected to be a ratepayer detriment for non-participants.[30] If the acquisition of Boomtown is necessary to serve the interests of a small contingent of Ameren customers that desire the renewable attributes of the facility, then it is equitable to allow those same participating customers to bear all the risk that the project is ultimately uneconomic.

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[28] Michael L. Stahlman Rebuttal Testimony, Exhibit 106, p. 6.
[29] Surrebuttal testimony of Robert B. Dixon.
[30] Highly Confidential Hearing Exhibit 112.

Promotes the Public Interest

A

Revenues vs. Costs

It is a matter of certainty, or at least one which Ameren Missouri disdains to debate, that over the operational life of the asset, Boomtown's revenues will not cover its costs. Ameren Missouri is dismissive of the point, arguing that regardless of whether its revenues cover its costs, "by definition" the Boomtown project is cost effective because it is "needed to meet our energy needs."31 Ameren Missouri Lindsey Forsberg testified:

> Q. Okay. Do you concur that the overall plan that's involved here that the Boomtown project fits into for the purposes of that plan, whether or not the revenue of the Boomtown meets its expected operational costs over its life, that's not something that Ameren is concerned with one way or another, do you agree with that?
>
> A. I do agree with that.[32]
>
> Ms. Forsberg further testified:
>
> Q. Now, these tables that we've been looking at have been about the Renewable Solutions Program?
>
> A. Yes.
>
> Q. All these operational expenses, all of these other expenses, every expense that we've been talking about has been about that program?
>
> A. No. The expenses we've been talking about are the ongoing expenses for the resource itself for the entire project.
>
> Q. For the entire project?
>
> A. Correct.
>
> Q. Right. And so you worked up five tables that concern expenses, not only the expenses of building the facility but the expenses of operating the facility for its entire operational life, correct?

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[31] See Hearing Transcript p. 108; 109; 138.
[32] Hearing Transcript, p. 166.

A. I'm not sure which tables you're referring to.

Q. Well, the tables you've been referring to in your testimony here.

A. Those include the ongoing expenses for the project, yes.

Q. Right out to the end of its operational life, --

A. Yes, exactly.

Q. -- correct? But it was not important to Ameren that there be a comparison to establish whether or not those operational expenses over the operational life of the project would be covered by the revenues?

A. Which revenues?

Q. The common -- the revenues that come in from rate payers.

A. I may need additional clarification. Are you referring to the project revenues?

Q. I'm talking about the project revenues.

A. Sure. I mean, I will say in the results I presented --

Q. Let me just explain it this way.

A. Okay.

Q. The rate payers are going to have to cover a deficit; is that right?

A. That's right. That's what the present value of revenue requirement results are designed to capture.[33]

At the hearing Ameren Missouri Steve Wills explained that there really was “no economic litmus test for a needed project in terms of it paying for itself.”34 He pointed to the transformer hanging outside of the house that does not provide revenues but is needed to provide service.35

[33] Hearing Transcript,– 194-196
[34] Hearing Transcript, p. 213
[35] Hearing Transcript, p. 214.

B

<u>Waste</u>

Staff contends that there is a litmus test. Picking up with Witness Will's transformer argument, the question is whether one can reasonably predict whether the transformer will be a wasted expenditure requiring duplicative expenditures. Witness J Luebbert explained:

> Q. Are there policy implications of approving a CCN for electric generating assets for ratepayer needs that will not occur until the assets have been depreciated for several years?
>
> A. Yes. Allowing a monopoly utility to add generating assets to rate base well in advance of the ratepayer needs could result in ratepayers paying multiple times for solutions to the same identified need and lead to unwarranted duplication of profits for utility shareholders. Adding large amounts of generating resources well ahead of an identified ratepayer need increases the likelihood that the resource is not the optimal resource to meet the actual needs of ratepayers. All electric generating plants have a finite life expectancy. If resources are added too far in advance of an actual ratepayer need, the length of time that the specific resource will be able to fulfill that need is reduced. *In other words, ratepayers run the risk that another resource will need to be added to rate base sooner than would have been necessary and Ameren Missouri's shareholders would benefit* [emphasis added].[36]

Staff witness Luebbert then put the question of whether adding a renewable energy resource is wasteful if one must still add a non-renewable resource—where the non-renewable can also cover the needs that the renewable address. Put squarely, Ameren Missouri claims that Boomtown is a hedge against an energy shortage between 2026 and 2031. Is putting a 30 year asset into rate base a wasteful way to address an alleged 3-year energy shortfall? Pivoting back to a the original question: Should the Commission simply be dismissive that the Project's operational life's revenues will not pay its operational life's costs—where we are likely also to end up with redundancy?

[36] Exhibit 105, pp. 11-12.

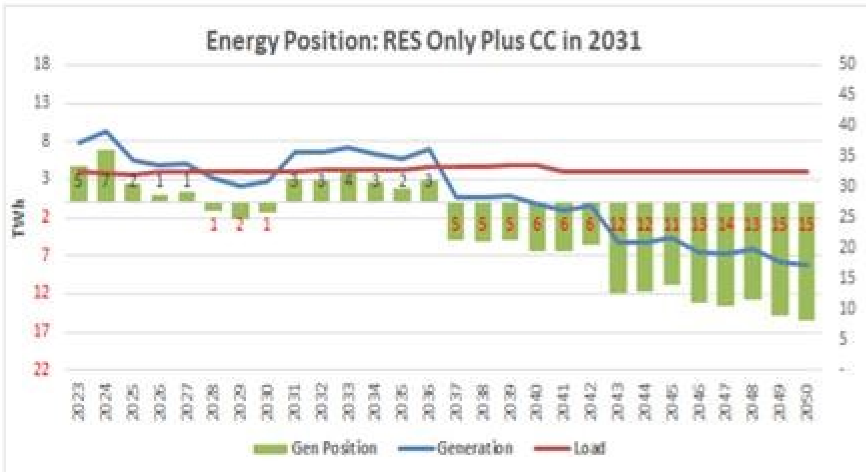
Staff witness J. Luebbert expanded further on this question. Ameren has a plan to add the 2031 combined cycle somewhere around the time that it expects to retire Sioux. Luebbert testified:

> And I think what we heard yesterday from their witnesses is that they're going to be replacing the capacity from Sioux with that combined cycle. And largely that that capacity need hits a summer need -- 1 and this is out in kind of the 2031 time frame.
>
> So if you're building resources now that can only provide -- or -- or their best kind of attributes is to provide energy with the expectation that you're going to build another asset in the future to build -- to add capacity that's required to meet MISO needs, the combined cycle's also going to provide the potential to sell energy into the MISO market.
>
> And I think looking at Ameren's – at Matt Michels' figures within his testimony where he discusses no new RES -- no new resources -- sorry. The -- the next addition being a combined cycle without the additional renewable resources results in Ameren having a short energy deficit, which I – I just talked about not being a great metric, but it does have a short -- short duration energy deficit for let's say three or four years. And then you add this combined cycle unit in and it's -- it is back to a surplus of energy on an annual basis.
>
> Well, the assets that you're -- you're requesting approval for have a 30-year life. And so if you're only getting three years of kind of adding to that energy deficit before you have to add another asset, that's not a very efficient way to -- to kind of spend money that ratepayers will end up realizing through their rates.[37]

Witness Luebbert was referring to Figure 2 of Matt Michels surrebuttal.[38]

[37] Hearing Transcript, pp. 517-518.
[38] Exhibit, 102, p. 21.

Figure 2



Staff witness J. Luebbert explained when and why it is imperative for the Commission to consider whether revenues from a project will cover its costs—the litmus test. The litmus test question of when rate payers should pay for an asset whose revenues predictably do not meet costs focuses on the magnitude of the risk that the rate payers could end up wasting their money—to the benefit of shareholders. To reiterate the legal standard: The ”term necessity does not mean essential or absolutely indispensable but that additional service would be improvement justifying its costs” (emphasis added).39 A justification of costs is a touchstone in any “need” analysis. The burden is on the applicant to justify the costs. Staff contends that meeting that burden requires evidence that the expenditure will not be a waste of money. Staff witness Luebbert testified:

> Q. Does that same principle hold when a given project is either not necessary to serve the needs of ratepayers, is not an economically efficient use of resources, or is not in the 1public interest?

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[39] *State ex rel. Intercon Gas, Inc. v. Public Service Com'n of Missouri*, 848 S.W.2d 593 (Mo. App. W.D. 1993).

A. No. Captive ratepayers should not be expected to shoulder the risk that an electric generating plant, built beyond the energy and capacity needs of the ratepayers being served, is uneconomic.

Q. Are there solutions to avoid this unnecessary risk to ratepayers?

A. Yes. The Commission's role as the regulator of the monopoly is a key protection against the introduction of unnecessary risk, by utility management, on behalf of ratepayers. The Commission has typically exercised this role through the application of the Tartan factors when considering the request to build new generating facilities. By ensuring that all of the Tartan factors are met by the utility and ensuring that the utility provides all crucial supporting analysis that establishes needs, economic feasibility, and promotion of the public interest. If the Commission determines that adding additional renewable resources is appropriate but recognizes that the potential risk of uneconomic outcomes should not be borne solely by ratepayers, it is within the Commission's discretion to condition approval of the CCN. One potential solution is for the Commission to condition any potential approval of an asset with a hold harmless provision that would shift some of the risk of an uneconomic outcome back to shareholders and away from the captive customers.[40]

The Project's revenues will not cover its costs over its 30-year operational life. Ameren Missouri will continue to serve the load of its ratepayers by purchasing energy through the MISO market. Boomtown is a poor economic choice to fulfill winter capacity needs and will not alter the fact that Ameren Missouri intends to fulfill summer capacity and ancillary service needs in the future through additions of large fossil-fueled generation. Staff contends that Ameren Missouri's evidence did not establish that the Project promotes the public interest.

CONCLUSION AND A MODEST PROPOSAL

Staff contends that the Commission should reject the application for a CCN. If the Commission, however, decides to grant the application, Staff urges the Commission to protect rate payers with a hold harmless condition. Staff's major objection to the Renewable Solutions Program is that the Program does not fairly and justly spread the

[40] Exhibit 105, pp. 7 – 11.

Project risks. But if the Commission grants the CCN and the request for the Program, then one such formulation of a hold harmless mechanism, addressing the problems both of the Project and the Program, could involve the following stipulations for the Renewable Solutions Program.

A) That the participants in the Renewable Solutions Program shall, in rates, bear all the costs (including rate base costs) of the Project throughout its whole operational life;

B) But that the participants in the Renewable Solutions Program shall also receive the benefit of all MISO revenues generated by the Project.

The Commission Staff supports renewable energy as evidenced by being a signatory to numerous Stipulations and Agreements for renewable projects, including several of Ameren Missouri's proposals. Staff, however, has a duty to provide the Commission with a neutral recommendation to ensure that the Commission is aware of the potential for unreasonable risks being placed on the utility's ratepayers that could result in unjust and unreasonable rates. With respect to the risks of its proposals, Ameren Missouri has the burden to justify the substantial costs of the project; and Ameren Missouri's evidence simply does not address a real risk that ratepayers will bear additional costs as a result of Boomtown that far outweigh the projected benefits of the project. Ameren Missouri's evidence does not address the risk that another resource will need to be added to rate base sooner than would have been necessary, with Ameren Missouri's shareholders reaping the benefits due to Ameren's inefficient investment decisions to meet ratepayer needs.

Staff respectfully submits that placing the risks involved on the participants of the Program for the Project's entire operational life while also giving the participants the

Program's MISO revenues, is a just and reasonable way to support renewable energy resources, to protect non-participant rate payers from an unreasonable risk of waste, and to provide shareholders with a just and reasonable return on their investments.

WHEREFORE, Staff respectfully submits this post-hearing brief.

Respectfully Submitted,

/s/ *Paul T. Graham* #30416
Senior Staff Counsel
Missouri Public Service Commission
P.O. Box 360
Jefferson City, Mo 65102-0360
(573) 522-8459
Paul.graham@psc.mo.gov

Attorney for the Staff of the
Missouri Public Service Commission

CERTIFICATE OF SERVICE

The undersigned by his signature below certifies that the foregoing pleading was served upon all counsel of record on this March 3, 2023, by electronic filing in EFIS, electronic mail, hand-delivery, or U.S. postage prepaid.

/s/ *Paul T. Graham*