PSC REF#:429279

Public Service Commission of Wisconsin
RECEIVED: 01/19/2022 1:19:17 PM

BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Joint Application of Wisconsin Electric Power Company, Wisconsin Public Service Corporation, and Madison Gas and Electric for Approval to Acquire Ownership Interests in the Paris Solar Generating and Battery Energy Storage System	Docket No. 5-BS-254

WISCONSIN INDUSTRIAL ENERGY GROUP'S INITIAL BRIEF

I. INTRODUCTION

Applicants Wisconsin Electric Power Company (WEPCO), Wisconsin Public Service Corporation (WPSC), and Madison Gas and Electric (MGE) (together, the "Applicants") are seeking the Public Service Commission of Wisconsin's (Commission) approval to acquire the Paris Solar Generating and Battery Energy Storage System (Paris Project) from Invenergy Services, LLC (Invenergy), which acquired a Certificate of Public Convenience and Necessity (CPCN) for the project in late 2020[1]. At a cost of $433 million, the Paris Project will be Wisconsin's first integrated solar PV and battery storage system, combining 200 megawatts (MW) of solar generation with 110 MW of battery energy storage system (BESS).[2] If approved, WEPCO will own 75 percent of the shared solar and BESS resources, WPSC will own 15 percent, and MGE 10 percent.

[1] *See* Final Decision, Application for a Certificate of Public Convenience and Necessity of Paris Solar Farm, LLC, to Construct a Solar Electric Generation Facility in the Town of Paris, Kenosha County, Wisconsin (PSC Docket 9801-CE-100) (December 20, 2020) (PSC REF#: 402226).

[2] The Commission granted Invenergy a CPCN for 60 MW of BESS in its Final Decision. Invenergy subsequently sought Commission approval to increase that original BESS by 50 MW. The Commission approved the request in January 2022. *See* Final Decision on Reopening in PSC Docket 9801-CE-100 (January 12, 2022) (PSC REF#: 428664).

One of the Wisconsin Industrial Energy Group's (WIEG) primary concerns in this proceeding, and the focus of this brief, is WEPCO's and WPSC's portion of the proposed battery energy storage system and that system's interconnection with the project's solar facilities. If approved, the Paris Project will be Wisconsin's first utility-scale BESS and the largest battery storage investment in Wisconsin to date. (Direct-WEPCO WPSC-Gerlikowski-r-11) Particularly because the Paris Project includes a technology untested in Wisconsin, WIEG believes that ratepayers must be protected against the system—primarily BESS—not working as expected.

WIEG's members, which include manufacturers served by WEPCO and WPSC, operate in highly competitive environments in which energy costs often are one-third of total production costs. (Direct-WIEG-Maini-r-4). WIEG is concerned that not only is the cost of the Paris Project substantial, it is just a small portion of WEPCO's and WPSC's very ambitious Generation Reshaping Plan (GRP) to replace in just three years more than 1,500 MW of fossil-fuel fired baseload generation with renewable resources at a cost of $2.5 billion. (Direct-WEPCO WPSC-Gerlikowski-28c, Table 10) The speed at which the replacement is to take place, the replacement of baseload generation with intermittent renewable resources, and the extraordinary total cost of WEPCO's and WPSC's generation reshaping plan raises concerns about both energy reliability and affordability for WIEG's members. At a time when any increase in electricity rates will have a significant impact on WIEG member companies, the sheer scope of the GRP is striking and will result, as WEPCO and WPSC detail, in near-term energy increases for all customers. (Direct-WIEG-Maini-r-4) Therefore, the outcome of this proceeding will have a material and near immediate impact on Wisconsin manufacturers' energy costs.

In testimony that it supported, WIEG expressed a number of concerns regarding WEPCO's and WPSC's proposal, including the speed with which WEPCO and WPSC are planning to prematurely retire and replace base-load power plants with renewable generation. The GRP is the two utilities' joint plan to retire and replace a combined 1,631 MW[3] of mostly baseload generation with 1,533 MW of mostly renewable generation at a cost of nearly $2.6 Billion before the end of 2024—less than three years from today. (Direct-WEPCO WPSC-Gerlikowski-r-28, Table 10). As detailed at some length in the testimony of WIEG witness Ms. Kavita Maini, among WIEG's concerns was whether WEPCO and WPSC provided sufficient evidence to establish a need for its portfolio of GRP projects, including the Paris Project; whether MISO would even permit the immediate retirement of WEPCO's Oak Creek coal plants (the retirement of which creates the utilities' "need" for the Paris Project); and whether the two utilities provided support for the GRP, including the Paris Project, with a reasonable economic analysis. (*See*, *generally*, Direct-WIEG-Maini-r-1-15; Surrebuttal-WIEG-Maini-r-1-7) WIEG is not addressing these issues in this brief. WEPCO's and WPSC's GRP is at the center of at least four construction/project acquisition proceedings in addition to the Paris Project,[4] and should WIEG wish to address these questions, including the GRP generally, it may do so in one of these other pending proceedings.

[3] Here and throughout WIEG's Initial Brief, unless otherwise stated, capacity values are on an unforced capacity (UCAP) basis. The Application and witness testimony refers to both ICAP (installed capacity) and UCAP. WIEG will refer only to UCAP because UCAP reflects MISO's capacity accreditation of generation resources and is the value used in calculating a utility's available capacity for the purpose of meeting its MISO capacity position and reserve margin obligations. (*See*, *e.g.*, Direct-WEPCO WPSC-Gerlikowski-r-4, 5, 28 and Tables 1, 2, 10) nko

[4] Joint Application of Wisconsin Public Service Corporation and Wisconsin Electric Power Company for Authority to Construct the Weston Reciprocating Internal Combustion Engine Project in the Villages of Rothschild and Kronenwetter, Marathon County, Wisconsin (Docket No. 5-CE-153); Joint Application of Wisconsin Electric Power Company, Wisconsin Public Service Corporation, and Madison Gas and Electric for Approval to Acquire Ownership Interests in the Darien Solar Generating and Battery Storage System (Docket No. 5-BS-255); Joint Application of Wisconsin Electric Power Company, Wisconsin Public Service Corporation, and Madison Gas and Electric for Approval to Acquire Ownership Interests in the Koshkonong Solar Generating and Battery Storage System (Docket No. 5-BS-258)

Instead of these issues, WIEG takes this opportunity to ask that, in the event of approval, the Commission insulate WEPCO and WPSC ratepayers from problems that may arise from the untested technology central to the Paris Project. That is, if the Commission is inclined to approve the Paris Project, WIEG asks that it do so only by first protecting ratepayers from costs that would arise in the event that BESS performance is less than the utilities expect. That protection should come through WEPCO's and WPSC's execution of a Power Purchase Agreement (PPA) with Invenergy in contrast to the outright ownership the utilities are seeking. Short of a PPA, the Commission should condition approval of the Paris Project with order points that would offer ratepayers the same protections as they would have if WEPCO and WPSC had entered into a PPA with Invenergy.

II. DISCUSSION

Under the Paris Project as proposed, the Applicants will acquire ownership interests from Invenergy Services, LLC, which obtained a CPCN to build the Paris Project through its subsidiary, Paris Solar Energy Center, LLC, on December 29, 2020. (Direct-WEPCO WPSC-Eidukas-4) The two principal components of the acquisition are an asset purchase agreement (APA) and an engineering, procurement, and construction agreement (EPC). (*Id.*). The Applicants also are negotiating an Operations and Maintenance Agreement ("O&M Agreement) with Invenergy Services. (*Id.* at 5) Under the O&M Agreement, "Invenergy will provide the vast majority of daily O&M services for the Paris Project." (*Id.*) Essentially, if approved as proposed, WEPCO and WPSC would own the Paris Project, but day-to-day operations would be managed by Invenergy.

A. Although The Paris Project Is A Small Portion Of WEPCO's And WPSC's Proposed Generation, The Commission's Decision Here Can Be Expected To Foreshadow The Two Utilities' Subsequent New Generation Investment Proposals Totaling $2.6 Billion.

Although the Commission is asked in this proceeding to approve 310 MW of capacity for the three Applicants, its decision for Paris is likely to have an outsized significance given the interconnection of the several related GRP proceedings now pending before the Commission.

First, the Paris Project is just one small part of WEPCO's and WPSC's aggressive GRP that aims, between now and November 2024, to replace about 1,650 MW of fossil fuel fired generation with 1,533 MW of new generation. (Direct-WEPCO WPSC-Gerlikowski-r-5, 7) The Paris Project, if approved, will provide just 18 percent of the needed new capacity. Already in the queue with the Commission are the following additional projects *within* the GRP totaling 1,072 MW of new generation.

- Weston RICE – 128 MW (8.3 percent; $171 million)
- Darien Solar and BESS – 293 MW (19.1 percent; $451 million)
- Koshkonong Solar and BESS – 419 MW (27.3 percent; $649 million)
- Whitewater Cogeneration – 236.5 MW (15.2 percent; $73 million)

If the Commission finds that it must decide whether the GRP is reasonable before approving the Paris Project in this proceeding, it seems that such a finding could be expected in all of the cases. WEPCO and WPSC, then, are working for approval of a total of 1,533 MW of new generation through the Commission's close examination of just 18 percent of the total it is going to need to acquire under the GRP.

Second, and the concern WIEG expresses here, is the untested BESS queued for the Commission's approval in these proceedings. It is one thing to essentially conclude, in a single proceeding, that the GRP is reasonable. But inclusion of the untested BESS in those decisions is most concerning. On the heels of the Paris Project are the Darien (67.5 MW) and Koshkonong

(148.5 MW) BESS proposals. WIEG believes that incorporation of BESS into the utility's generation portfolio should move modestly, to ensure that it does work as WEPCO and WPSC have said it will. But there is nothing modest about WEPCO's and WPSC's GRP, and WIEG is concerned that, as relates to BESS, the Commission's approval of the Paris Project will almost certainly lead to the approval of Darien and Koshkonong BESS projects as well. Thus, before we will have any evidence of Paris Project's BESS performance—indeed, before the Paris Project is even in service—the Commission may well have approved the Applicants' acquisition of more than <u>one-half billion dollars</u> in the untested technology. And still, that amount is less than the total BESS costs WEPCO and WPSC seek to put in service in 2023 and 2024: WEPCO will add 1,244 MW of replacement generation in total, of which over 35% (442 MW) is BESS, and WPSC is adding 289 MW of replacement generation, of which more than 36% (105 MW) is BESS. (Direct-WEPCO WPSC-Gerklikowski-r-6) In short, between Paris, Darien, and Koshkonong, WEPCO and WPSC propose 315 MW of BESS at a cost of $454 million; their GRP calls for still 232 MW more BESS that one would expect to cost, at the same $/MW of the Paris Project, an additional $310 million. It is concern for these extraordinary BESS costs—$750 million—that could well be approved before the technology is even in service that supports the ratepayer protections that WIEG is calling for.

B. BESS Portion of The Paris Project Presents Cost and Technological Uncertainties.

Staff and party witnesses have identified two concerns regarding the battery portion of the Paris Project. First, the Paris Project may not perform as expected because WEPCO and WPSC have no experience operating the technology. As noted above, the BESS component of the Paris Project is the first large-scale battery storage system to be proposed in Wisconsin, and is one of the largest in the country. (Direct-WEPCO WPSC-Gerlikowski-r-11; Direct-WIEG-

Maini-r-16) WEPCO and WPSC do not have experience operating the technology. Invenergy though does have the experience and it chose the technology employed in the project. (Direct-WIEG-Maini-r-16) Whether owned or contracted for in the form of a PPA, WEPCO and WPSC are relying on Invenergy and its experience, and Invenergy should be held to account in the event the technology fails to live up to expectations. (*Id.*)

Second, the Paris Project may be at risk of premature technological obsolescence. While the Joint Applicants expect the technology components to be available and fully functional their entire planned book life, it is not unreasonable to believe that at least some components of the Project become obsolete before that time. (Direct-WIEG-Maini-r-17-18) WEPCO and WPSC are relying on Invenergy to choose, install, and operate the lithium-ion battery technology. (Direct-WIEG-Maini-r-17) There is a possibility that the lithium-ion battery technology that Invenergy has chosen for Paris will be rendered obsolete by evolving technology, well before the expected end of life of Paris. (Direct-PSC-Bacalao-r-12) This

> concern hinges on whether it is likely that, during the course of the expected 20-year economic and depreciable life of the lithium-ion battery elements, the rapidly evolving battery technology will produce, test, and viably offer an economically and financially more attractive alternative to lithium-ion batters that can be demonstrated to present a compelling case for replacing those original lithium-ion batters before the projected 20-year lifespan has been completed.

(Direct-PSC-Bacalao-r-14) And if WEPCO and WPSC own the Paris Project, ratepayers are at risk of the technological obsolescence as the utilities will be expected to pass the risk and cost of replacement of the current technology on to customers. (Direct-WIEG-Maini-r-17).

C. The Commission Should Reject WEPCO's And WPSC's Arguments Against The Benefits Of A PPA.

Staff witness Bacalao and WIEG witness Maini both argue that ratepayers would be protected from the cost and technological uncertainties of BESS if WEPCO and WPSC entered into a PPA with Invenergy instead of owning the Paris Project outright. In arguing against a PPA to protect ratepayers, WEPCO and WPSC acknowledge that they cannot be certain that the new battery storage facility will not be overtaken by alternative, more cost-effective technology, but downplay the significance.

WEPCO and WPSC acknowledge that they considered both an ownership option and PPA. (Direct-WEPCO WPSC-Gerlikowski-r-13) They concluded, however, that outright ownership was preferable to PPA because outright ownership for several reasons: avoids future site development costs; helps in having a choice of extending the useful lives of the Paris Project components; and avoids negative implications of a debt-structured PPA on the utilities balance sheet. None of these issues should be viewed as significant concerns in light of the risks associated with outright ownership. (*Id.*) The negative implications of a debt-structured PPA is particularly not worthy of concern. The Commission has, historically, neutralized the effect of PPAs (and other obligations) by adjusting the utility's capital structure in rate-making proceedings as it did in WEPCO's base rate case in 2019, Docket 5-UR-109 ("if additional common equity is added to restore the financial capital structure ratios, the financial leverage and credit ratings of the utility will remain the same….") (Surrebuttal-WIEG-Maini-7 citing 5-UR-109, at 65-66).

WEPCO and WPSC also suggest that a final barrier to entering into a PPA is that Invenergy did not offer them a PPA. This last argument should be rejected by the Commission. First, Invenergy appears open to negotiating a PPA. (Direct-WIEG-Maini-r-18-19) Indeed, in seeking a CPCN for the Paris Project, Invenergy itself stated in its application that it intended to "sell the electrical output of the Project to customers" pursuant to PPAs and that, in the alternative, could sell the Project outright. (Direct-WIEG-Maini-r-19, citing Paris Solar CPCN

Application, PSC Docket 9801-CE-100, at 3-4) Therefore, Invenergy certainly anticipated at one time entering into a PPA, and WEPCO and WPSC do not provide evidence, much less suggests that, if asked, Invenergy *wouldn't* enter into a PPA. WEPCO and WPSC appear simply not to have even discussed a possible PPA with Invenergy. That WEPCO and WPSC did not discuss a PPA is far from concluding that a PPA was not available to it. And the fact that the utilities acknowledge that they considered both ownership and PPA supports the conclusion that they also recognize that they could negotiate terms for a PPA.

III. CONCLUSION

For each of the above-stated reasons, WIEG respectfully asks that, in the event that the Commission looks to approve the Paris Project, the benefits be acquired through a PPA. In the event the Commission looks to approve the Paris Project without a PPA, it should make the acquisition contingent on ratepayer protections the equivalent of those that would be available in a PPA.

Respectfully submitted this 19th day of January 2022.

HEINZEN LAW, S.C.

s/ Steven Heinzen
By: ______________________
Steven A. Heinzen
State Bar No. 1032278

Attorney for Wisconsin Industrial Energy Group

Heinzen Law, S.C.
PO Box 930370
Verona, WI 53593
608.209.7468
steve.heinzen@heinzenlaw.com