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PUBLIC SERVICE COMMISSION OF WISCONSIN

Joint Application of Wisconsin Electric Power Company, Wisconsin Public Service Corporation, and Madison Gas and Electric Company for Approval to Acquire Ownership Interests in the Koshkonong Solar Electric Generation Facility in the Town of Christiana and the Town of Deerfield, Dane County, Wisconsin — 5-BS-258

FINAL DECISION

This is the Final Decision in the joint application filed by Wisconsin Electric Power Company (WEPCO), Wisconsin Public Service Corporation (WPSC) (together, WEC), and Madison Gas and Electric Company (MGE) (all together, applicants) seeking approval from the Public Service Commission of Wisconsin (Commission) under Wis. Stat. § 196.49 to acquire and construct the Koshkonong Solar Electric Generation Facility, a utility-scale solar-powered electric generating facility consisting of 300 megawatts (MW) of solar generating nameplate capacity and 165 MW of battery energy storage system (BESS) nameplate capacity (the solar facilities and BESS will be referred to collectively as the Koshkonong Project), located in the Towns of Christiana and Deerfield, Dane County, Wisconsin, at a total cost of $649,000,000 excluding allowance for funds used during construction (AFUDC).

The application is GRANTED, subject to the conditions in this Final Decision.

Introduction

The Koshkonong Project is being developed and constructed in the Towns of Christiana and Deerfield in Dane County, with a nameplate capacity of 300 MW alternating current (AC) solar generation and 165 MW/660 MWh BESS. The Koshkonong Project is being developed and constructed by Koshkonong Solar Energy Center, LLC (Koshkonong LLC). Koshkonong

LLC, as a wholly owned subsidiary of Invenergy Solar Development North America LLC and an affiliate of Invenergy LLC (Invenergy), is an independent power producer (IPP) and the majority owner of the facility, which was granted a Certificate of Public Convenience and Necessity (CPCN) to begin construction in docket 9811-CE-100 on May 5, 2022. (PSC REF#: 437761.) The Final Decision was modified to correct a typographical error relating to the applicant's entity name, by a Correction Order on June 1, 2022. (PSC REF#: 439245.) Under the proposed transaction, the ownership shares of the facility's solar and BESS capacity will be distributed among the applicants as listed in Table 1 below.

Table 1: Proposed Ownership Interests per Applicant

	Solar Capacity (MW)	BESS Capacity (MW)	Percent Ownership
WEPCO	225.00	123.75	75 percent
WPSC	45.00	24.75	15 percent
MGE	30.00	16.50	10 percent

The applicants state that they seek approval of the purchase as part of a larger effort to transition their respective generation fleets to lower carbon emitting generation resources. On October 27, 2022, the Commission issued a Notice of Investigation in this docket and indicated its intent to conduct the investigation without a hearing. (PSC REF#: 450481.)

Citizens Utility Board of Wisconsin (CUB), Rob Danielson, Roxann Engelstad and Edward Lovell, Chris Klopp, RENEW Wisconsin, Inc. (RENEW), Town of Christiana, and Wisconsin Industrial Energy Group (WIEG) requested intervention in the docket but did not request a hearing be held. (PSC REF#: 424301 for CUB, PSC REF#: 422384 for Danielson, PSC REF#: 418728 for Engelstad-Lovell, PSC REF#: 418718 for Klopp, PSC REF#: 435325 for RENEW, PSC REF#: 418530 for Town of Christiana, PSC REF#: 426612 for WIEG) Since no hearing was requested and none was required, no hearing was held. On February 23, 2023, the Commission posted a Commission staff memorandum for comment by parties and the public. (PSC REF#: 460173.) In total, seven comments were received in this docket. The Commission received comments from intervenors CUB, Danielson, Engelstad-Lovell, RENEW, the Town of Christiana and the joint applicants. (PSC REF#: 461423 for CUB, PSC REF#: 461374 for Danielson, PSC REF#: 461355 for Engelstad-Lovell, PSC REF#: 461382 for Klopp, PSC REF#: 461272 for RENEW, PSC REF#: 461333 for Town of Christiana, PSC REF#: 461385 for the applicants.)

On December 7, 2022, Commission staff applied for and the Commission approved a request for an extension of time pursuant to Wis. Stat. § 196.49(5r)(b). (PSC REF#: 454448.) Commission staff cited the need for additional modeling due to announcements regarding the delayed retirement of coal-fired electric generating units and staff workload on several buy/sell dockets, including this docket, as rationale for a time extension. The approved extension moved the date for taking final action in this docket to April 25, 2023.

The Commission considered this matter at its open meeting of March 16, 2023.

Findings of Fact

1. The applicants are public utilities as defined in Wis. Stat. § 196.01(5)(a) and provide electric service in Wisconsin.

2. The Koshkonong Project will be a solar photovoltaic (PV) electric generation facility with a nameplate capacity of up to 300 MW AC and an associated 165 MW/660 MWh BESS in the Towns of Christiana and Deerfield, Dane County, Wisconsin.

3. The Koshkonong Project is being developed and constructed by Koshkonong LLC.

4. The breakdown of the capacity acquired by each of the applicants is: WEPCO, 225 MW AC Solar and 123.75 MW BESS; WPSC, 45 MW AC Solar and 23.75 MW BESS; and MGE, 30 MW AC Solar and 16.50 MW BESS.

5. The applicants propose to acquire the Koshkonong Project under agreements with the developer at a total cost of approximately $649 million, or approximately $1,373 per kilowatt (kW) for the solar facilities and $1,436 per kW for the BESS. The acquisition price, subject to conditions enumerated in this Final Decision, is reasonable.

6. It is reasonable for the Commission, consistent with its past practice, to review in a future rate proceeding the recoverability of costs associated with the acquisition, operations and maintenance (O&M) costs, and revenues associated with the projects; provided, however, that in no event shall the recoverability of the acquisition costs exceed the estimated cost for each applicant specified in the application. If it is discovered or identified that the acquisition cost may exceed the estimated cost of $649 million, the applicants shall notify the Commission within 30 days of when it becomes aware of the possible cost increase.

7. It is reasonable to require the applicants to record 100 percent AFUDC on construction work in progress (CWIP) at their respective weighted average costs of capital.

8. Upon completion of the proposed acquisition, it is reasonable to direct the applicants to submit to the Commission their respective proposed accounting entries to record the acquisition of the facilities within 30 days.

9. It is reasonable to direct the applicant to provide copies of agreements between the applicants and the developers as they become available for informational purposes.

10. Should the applicants not proceed to closing or enter any arrangement with another party regarding ownership or operation of the projected project, it is reasonable to direct the applicants to provide prior notice to the Commission.

11. It is reasonable to direct the applicant to notify the Commission of the effective date of the purchase of the project within 30 days of the effective date of the transfer.

12. To the extent the applicants proceed to closing prior to completion of construction of the projects, it is reasonable to direct the applicant's to file with the Commission quarterly progress reports that include the following: the date that construction commences; major construction and environmental milestones, including permits obtained, by agency, subject, and date, summaries of the status of construction; updates on efforts to hire Wisconsin local construction laborers at each of the Solar Project sites; the anticipated in-service date; the overall percent of physical completion; and the actual project costs to-date. Annually, the applicants shall file with the Commission a revised total cost estimate for the project. Additionally, the applicants shall file with the Commission the date that the projects are placed in service and the final, as-built cost of the project.

13. The applicants' acquisition of the project is consistent with the energy priorities laws under Wis. Stat. §§ 1.12 and 196.025.

14. The acquisition is not expected to affect any historic properties under Wis. Stat. § 44.40, or any threatened or endangered species under Wis. Stat. § 29.604.

15. The approval of the purchase is a Type III action under Wis. Admin. Code § PSC 4.10(2) and is unlikely to have a significant impact on the human environment as defined by Wis. Stat. § 1.11.

16. To the extent applicable, the proposed acquisition complies with Wis. Stat. § 196.49(4) because the use of brownfields was previously determined in docket 9811-CE-100 not to be practicable for construction of the Solar Facility and BESS.

17. The purchase will not substantially impact the efficiency of each applicant's service, provide facilities unreasonably in excess of each applicant's probable future requirements, or add to each applicant's cost of service without proportionally increasing the value or available quantity of service.

18. The acquisition, as amended by the conditions prescribed by the Commission in this Final Decision, is reasonable and in the public interest after considering alternative sources of supply, engineering, economic, safety, reliability, and environmental factors.

Conclusions of Law

1. The Commission has jurisdiction under Wis. Stat. §§ 1.11, 1.12, 44.40, 196.02, 196.025, 196.395, 196.49, and Wis. Admin. Code chs. PSC 4 and 112, to issue a Certificate and Order authorizing the applicants, as electric public utilities, to acquire, own, and operate the facility described in this Final Decision, subject to the conditions stated in this Final Decision.

2. The Commission may impose any term, condition, or requirement necessary to protect the public interest pursuant to Wis. Stat. §§ 196.02, 196.395, and 196.49.

3. The acquisition is consistent with the public interest.

4. The proposed acquisition of the Solar Facility and BESS complies with the Energy Priorities Law as required under Wis. Stat. § 1.12 and 196.025(1).

5. This is a Type III action under Wis. Admin. Code § PSC 4.10(2); therefore, the preparation of neither an environmental impact statement nor an environmental assessment (EA) is necessary.

Opinion

Standard for Approval

The applicants seek approval to acquire the project under Wis. Stat. § 196.49. Wisconsin Stat. § 196.49(2) states:

> [n]o public utility may begin the construction, installation or operation of any new plant, equipment, property or facility, nor the construction or installation of any extension, improvement or addition to its existing plant, equipment, property, apparatus or facilities unless the public utility has complied with any applicable rule or order of the commission.

The Commission may require by rule or special order that no addition to a plant "may proceed until the Commission has certified that public convenience and necessity require the project." Wis. Stat. § 196.49(3). The Commission may refuse to certify a project if it appears that the completion of the project will do any of the following:

> 1. Substantially impair the efficiency of the service of the public utility.
> 2. Provide facilities unreasonably in excess of the probable future requirements.
> 3. When placed in operation, add to the cost of service without proportionately increasing the value or available quantity of service unless the public utility waives consideration by the commission, in the fixation of rates, of such consequent increase of cost of service.

Wis. Stat. § 196.49(3)(b). Electric utilities must obtain Commission authorization to place in service a generating plant or unit whose costs exceed the threshold established in Wis. Admin.

Code § PSC 112.05(3), such as the proposed solar and storage facilities. Wis. Admin. Code § PSC 112.05(1)(a).

The Commission finds that under the specific circumstances presented here, the proposed acquisition was appropriately considered under the CA standard. The Commission's review of the dockets has resulted in a record of evidence that addresses all required statutory criteria under Wis. Stat. § 196.49 (the CA statute) and Wis. Stat. § 196.491 (the Certificate of Convenience and Necessity (CPCN) statute). While need and alternatives were not addressed in the merchant CPCN docket because the law precluded such an analysis, need, alternatives, and other economic and ratepayer protections were addressed in this docket. The environmental and other site-specific standards were considered in detail in the CPCN docket, and the EA was incorporated into this record. While all required criteria was examined in different dockets, the Commission's review here between all the dockets was comprehensive and holistic.

Further, the Wisconsin Supreme Court has already concluded that the CPCN statute does not automatically apply any time Wisconsin utilities seek Commission approval to add large electric generation facilities to their generation fleets. The Court provided an analysis of when the CA Statute applies and when the CPCN Statute applies to applications for the construction of large electric generating facilities when it considered the Commission's use of the CA process to approve out-of-state generation facilities constructed and owned by a public utility. *Wisconsin rgy Grp., Inc. v. Pub. Serv. Comm'n, 2012 WI 89, ¶ 60, 342 Wis. 2d 576, 610, 819 N.W.2d 240, 257 ("WIEG")*. The Court recognized that the Commission had a thorough and mandatory procedure under which it analyzed applications to construct electric generating facilities under the CA Statute. *WIEG* at ¶ 32. The Court also recognized that the primary purpose of the CPCN statute is to require a more thorough review of local site-specific factors, and not primarily analyzing ratepayer impacts. *Id*. at ¶ 49. The Court noted its view that the Commission has essentially bound itself under the CA statute to consider the same information under the CA statute as the legislature required the agency to consider under the CPCN statute. *Id*. at 49 n. 15. Therefore, the Court's analysis supports the Commission's use of the CA statute to review the addition of new generation to Wisconsin utilities' fleet when site-specific factors are not at issue.

The Commission's review of the proposed solar facilities in the CPCN dockets assessed all relevant site-specific factors required for approving construction of the solar facilities, and the CA process used here assessed all the relevant need, alternatives, and ratepayer impacts that would otherwise have been assessed in the CPCN dockets if the applicants had not been wholesale merchants. As the Wisconsin Supreme Court recognized in *WIEG*, the CPCN process is a procedural siting law for large electric generating facilities. In this docket, it is the purchase of such facilities that is before the Commission. Therefore, the analysis of need, alternatives, and ratepayer impacts are the relevant inquiries in this docket, and the CA statute provides for ample review of whether the acquisition of the solar facilities by the applicants is in the public interest considering these factors.

The record in this matter involves the purchase of the Koshkonong Project. The record in this matter does not indicate that the proposed acquisitions would substantially impair the efficiency of the service of either WEPCO, WPSC, or MGE. The record indicates that there is need for additional generation capacity for WEPCO, WPSC, and MGE. WEPCO and WPSC have capacity needs due to the broader WEC Energy Group (WEC) Generation Reshaping Plan (GRP) fleet transition, establishing carbon dioxide emissions reduction goals that will require the retirement of legacy coal-fired generating facilities. Similarly, MGE has a capacity need, and due to its own goals of achieving carbon reduction goals, is seeking to retire approximately 250 MW of legacy generation assets by the year 2024, though the timeframe may be extended by the delayed retirement of the Columbia coal electric generating units. MGE cites a commitment to deep carbon reductions and a need to transition to cleaner energy sources, which includes projects such as the Koshkonong Project. The Koshkonong Project acquisition would be one of a number of investments that MGE would seek to be making in cost-effective, clean energy projects.

WEC Energy Group

WEC Energy Group (WEC), as a holding company, owns and operates WEPCO and WPSC, setting overarching goals for the two utilities. In the application, WEPCO and WPSC described the broader WEC GRP fleet transition. The entirety of WEC has established goals for a 60 percent carbon dioxide emissions reduction target by 2025, as compared to 2005 levels, with further goals of an 80 percent reduction by 2030 and carbon neutrality by 2050. The GRP will require the retirement of approximately 1,600 MW of generation, including approximately 1,385 MW of coal-fired electric generating facilities (WPSC's ownership shares of Columbia Units 1 and 2 and the WEPCO South Oak Creek Units 5 through 8). With these intended retirements, WPSC and WEPCO will have energy and capacity needs that will be partially offset by ownership shares of the Koshkonong Project.

WEPCO and WPSC indicate that a combination of solar PV, wind, BESS, and natural gas fired electric generating units will be utilized as the basis for replacement of the retiring generation. WEPCO and WPSC note that the Koshkonong Project is an example of the collective commitment of WEC to construct non-emitting generation resources against the carbon reduction goals while maintaining high levels of reliability and customer savings.

WEPCO's Modeling Efforts

At the request of Commission staff, WEPCO modeled a number of sensitivities in addition to its base model. (PSC REF#: 444402.) Included in the sensitivities requested was an explicit modeling of demand side response, energy efficiency, an unconstrained model where the solar PV and BESS were able to be selected separately by the model, and full availability of all generic alternatives. Additionally, Commission staff requested a sensitivity that changed the effective load carrying capability (ELCC) for all solar PV and BESS units to the values under consideration by the Midcontinent Independent System Operator, Inc. (MISO) Resource Adequacy Subcommittee, and another sensitivity that removed the Koshkonong Project from the model and added an alternative generator or generator/storage combination in the Koshkonong Project's place. The latter sensitivity was performed to provide a valuation of the individual contribution of the Koshkonong Project acquisition to the GRP portfolio. These models were all updated to include the extension of the operational lives of the South Oak Creek units. Additionally, in some sensitivities the Koshkonong solar and BESS facilities were allowed to be picked separately from each other rather than as a combination, to check if the model would pick both or just one. Lastly, Commission staff requested updated modeling pertaining to how the sub-annual construct that is being implemented by MISO would affect the selection of the Koshkonong Project and WEPCO's capacity position under the sub-annual construct with and without the Koshkonong Project. (PSC REF#: 454433.)

Commission Review of WEPCO's Modeling Efforts

WEPCO's modeling contained three scenarios. The three scenarios were: Status Quo, in which the generating units that were operating at the time of the original modeling continued to run for the modeling period; Scenario A, which allowed an unconstrained choice of new generating units in the 2023 through 2026, regardless of whether those units could realistically be constructed and placed into service in that timeframe; and Scenario B, which allowed an unconstrained choice of new generating units in the 2023 through 2026, but included only those units that could realistically be constructed and placed into service in that timeframe. For each scenario, WEPCO modeled additional sensitivities.

In review of the PLEXOS modeling submitted by WEPCO, Commission staff was able to replicate the Total Revenue Requirement Net Present Value (NPV) supplied by WEPCO for select modeling sensitivities. (PSC REF#: 445284 confidential, PSC REF#: 445285 public.) Commission staff also calculated NPVs for modeling sensitivities beyond those supplied by WEPCO. In total, Commission staff verified or calculated NPVs for approximately 24 WEPCO modeling runs. The Koshkonong Solar and BESS generating unit and storage combination was chosen, in differing years, in all of the PLEXOS runs modeled by WEPCO except those in which it was intentionally excluded or otherwise unavailable (e.g. the "status quo" runs which only analyzed legacy generation units). WEPCO also performed a sensitivity in which the MISO capacity accreditation for solar PV projects was assumed to be based on ELCC methodology and reduced from 70 to 25 percent accreditation value. The Koshkonong Project was chosen as a part of WEPCO's portfolio for all six of these sensitivity runs, including across a range of carbon costs and timeframes in which generic alternatives are available for the model to pick. While

Commission staff could replicate the Total Revenue Requirement NPV, it could not independently validate the output results of the PLEXOS model runs because the Commission does not have a license to use the software.

For the WEPCO portion of the acquisition, the total GRP suite of projects demonstrates lower NPV valuations when the Koshkonong Project is included, indicating higher value to ratepayers, as compared to when other resources take its place. This outcome was true for all six comparative runs in Scenarios A and B, as tabulated in Table 2. (PSC REF#: 445284 confidential, PSC REF#: 445285 public.)

Table 2: NPV Benefits for the Koshkonong Project

NPV benefits for the Koshkonong Project in GRP	Scenario A – all alternatives available from beginning (thousands of dollars)	Scenario B – alternatives available after 2026 (thousands of dollars)
\$10 per ton CO_2 cost offset	128,437	203,348
\$20 per ton CO_2 cost offset	141,451	265,211
\$30 per ton CO_2 cost offset	150,150	244,892

In addition to calculating the NPV for the PLEXOS modeling output scenarios, Commission staff also reviewed the load forecast used by WEPCO in its PLEXOS model. (PSC REF#: 433791 confidential, PSC REF#: 433792 public.) Commission staff compared the WEPCO load forecast to those filed in WEPCO's Annual Reports for the years 2016 through 2021 and did not identify any particular concerns with the provided load forecast. Commission staff does take note of the load forecast beginning in 2030 where it is assumed WEPCO's load will remain flat, which could be a conservative estimate.

As part of its review, Commission staff requested that WEPCO provide the results of a sensitivity analysis where the Koshkonong Project is under a purchase power agreement (PPA) instead of utility ownership. (PSC REF#: 444402.) In its response, WEPCO stated that "for the reasons outlined in the application, WEC and MGE did not pursue a solar and/or BESS PPA." (PSC REF#: 445511 confidential, PSC REF#: 445512 public.) WEPCO also stated that it believes ownership provides benefits that a PPA does not. Specifically, WEPCO outlined the following benefits:

- The ability to repower or replace the generation at the end of the useful life of the Koshkonong solar and BESS generating and storage facility; the ability to continue to operate the Koshkonong Project after it has been fully depreciated.
- The ability to derive additional value through incorporation of technological advancements and cost reductions during the life of the Koshkonong Project, the avoidance of additional costs to utility customers due to the effect of debt-like PPAs on utility balance sheets and capital structures.
- The ability to amend generator interconnection agreements to allow additional facilities to use the same point of interconnection to the transmission system without the need for significant additional transmission investment, and ownership of the interconnection agreement would allow the point of interconnection to be repurposed for a new source of supply when the Koshkonong Project is retired.

In a subsequent data request, Commission staff requested modeling to investigate the effect of having the Koshkonong Project as a PPA instead of being partially owned by WEPCO as part of a sub-annual construct with summer and winter seasonal sensitivities. (PSC REF#: 454433.) WEPCO's response referred back to the previous answer pertaining to PPAs and additional modeling was not provided. (PSC REF#: 455254.)

Although a sensitivity analysis where the Koshkonong Project is under a PPA instead of utility ownership was not provided, for the reasons identified above, the Commission finds the record with respect to the PPA to be complete.

Commission staff also requested that WEPCO provide the results of a sensitivity analysis to show the impacts a higher rate of Energy Efficiency deployment would have on the Koshkonong Project purchase.[1] The sensitivity analysis was to include scenarios that increase WEPCO's energy efficiency spending by 50 and 100 percent relative to their existing Focus on Energy contributions. (PSC REF#: 444402.) In producing this sensitivity, WEPCO analyzed the Focus on Energy's Potential Study as well as energy efficiency and demand response data from EIA and worked with the Commission's Focus on Energy staff.

Commission staff reviewed the 50 and 100 percent increased energy efficiency funding scenario calculation supplied by WEPCO (PSC REF#: 445243) and confirmed that the WEPCO percentage share of annual peak demand reduction used in the calculation could be replicated using sales data reported in the 2021 filed Annual Report and total state sales as filed. (PSC REF#: 456624.) Commission staff also verified that the numbers in the calculation were derived from the supplied EIA data. In its review of the PLEXOS output files supplied by WEPCO, Commission staff notes that, while the year in which it was chosen varied by sensitivity, the 100 percent increased energy efficiency funding option was chosen in every sensitivity.

[1] Although not included in the analysis, in Response-Data Response-PSC-JAK-1.18, WEPCO reported that it currently has 126 MW of interruptible load. Customer's enrolled in an interruptible offering are paid credits that are based on CONE.

Commission staff also reviewed WEPCO's estimated cost of a demand response-derived megawatt of peak demand calculation and, based on the EIA data supplied, Commission staff did not identify any concerns with the estimated annual cost per actual peak demand savings.

Commission staff also reviewed the capital costs expected to be incurred due to the operating extension of the South Oak Creek coal units. (PSC REF#: 447143 confidential; PSC REF#: 447144 public) The provided analysis suggested that a substantial portion of the savings that were expected to occur due to the early retirement the South Oak Creek coal units will be retained even with the recently announced extension of the operating life of those units.

Commission staff also reviewed the WEPCO response to the request for additional modeling as it pertained to the sub-annual construct being implemented by MISO. (PSC REF#: 455254.) WEPCO indicated that the previously supplied modeling, which was performed on an annual construct basis, would be substantially similar or identical to the results for a sub-annual construct model. WEPCO stated that its need for additional capacity and energy is controlled by the summer season and that additional PLEXOS modeling would only proffer a different result if there was a capacity deficiency in one of the other seasons. The annual construct modeling that has been put into the record for this docket is already based on the annual peak planning reserve margin, which for WEPCO occurs in the summer, as well as summer accreditations. Thus, in WEPCO's view, any additional modeling to incorporate the sub-annual construct with different peaks and accreditations in other seasons would lead to the same capacity expansion plan results, rendering the additional modeling redundant. The seasonal capacity positions of WEPCO were also provided to substantiate this claim. (PSC REF#: 455257 confidential narrative response and graphs, PSC REF#: 455258 public narrative response and graphs, PSC REF#: 456466 confidential Excel spreadsheets, PSC REF#: 456467 public Excel spreadsheets.) Commission staff could not independently validate the conclusions reached by WEPCO pertaining to the sub-annual construct because the Commission does not have a license to use the software.

Based on the entirety of the analysis presented, including the proportion of the projected cost to the value of the additional capacity, the Commission finds WEPCO's modeling efforts to be reasonable and adequate to support the requested acquisition of the Koshkonong solar PV facility and associated BESS, as well as the acquisition being in the public interest.

WPSC's Modeling Efforts

At the request of Commission staff, WPSC modeled a number of sensitivities in addition to its base model. (PSC REF#: 444402.) Included in the sensitivities requested was an explicit modeling of demand side response, energy efficiency, an unconstrained model where the solar PV and BESS were able to be selected separately by the model, and full availability of all generic alternatives. Additionally, Commission staff requested a sensitivity that changed the ELCC for all solar PV and BESS units to the values under consideration by the MISO Resource Adequacy Subcommittee, and another sensitivity that removed the Koshkonong Project from the model and added an alternative generator or generator/storage combination in the Koshkonong Project's place. The latter sensitivity was performed to provide a valuation of the individual contribution of the Koshkonong Project acquisition to the GRP portfolio. These models were all updated to include the extension of the operational lives of the Columbia units. Additionally, in some sensitivities the Koshkonong solar and BESS facilities were allowed to be picked separately from each other rather than as a combination, to check if the model would pick both or just one. Lastly, Commission staff requested updated modeling pertaining to how the sub-annual construct that is being implemented by MISO would affect the selection of the Koshkonong Project and WPSC's capacity position under the sub-annual construct with and without the Koshkonong Project. (PSC REF#: 454433.)

Commission Review of WPSC's Modeling Efforts

WPSC's modeling contained three scenarios. The three scenarios were the Status Quo in which the generating units that were operating at the time of the original modeling continued to run for the modeling period, Scenario A which allowed an unconstrained choice of new generating units in the 2023 through 2026, regardless of whether those units could realistically be constructed and placed into service in that timeframe, and Scenario B which allowed an unconstrained choice of new generating units in the 2023 through 2026, but included only those units that could realistically be constructed and placed into service in that timeframe. For each scenario, WPSC modeled additional sensitivities.

In review of the PLEXOS modeling submitted by WPSC, Commission staff was able to replicate the Total Revenue Requirement NPV supplied by WPSC for select modeling sensitivities. (PSC REF#: 445284 confidential, PSC REF#: 445285 public.) Commission staff also calculated NPVs for modeling sensitivities beyond those supplied by WPSC. In total, Commission staff verified or calculated NPVs for approximately 24 WPSC modeling runs. The Koshkonong solar and BESS generating unit and storage combination was chosen, in differing years, in some of the PLEXOS runs modeled by WPSC. Seven exceptions wherein the Koshkonong Project was not picked were when Koshkonong Solar and Koshkonong BESS were split into two options, rather than a single package. In these seven cases, the solar portion was solely selected. These seven runs are specified in Table 3. The only other exceptions in which the Koshkonong Project was not chosen were runs wherein the Koshkonong Project was intentionally excluded or otherwise unavailable (e.g. the "status quo" runs which only analyzed legacy generation units). While Commission staff could replicate the Total Revenue Requirement NPV, it could not independently validate the output results of the PLEXOS model runs because the Commission does not have a license to use the software.

Table 3: Runs in which full Koshkonong Solar and BESS Facility Was Not Selected

Runs in which full Koshkonong Solar and BESS Facility was not selected	**Conditions**	**What was chosen**
101 – Case 1 – Scenario A	All alternatives available immediately \$20 per ton CO_2 cost offset 70 percent capacity accreditation	31.5 MW Koshkonong PV
101 – Case 3 – Scenario A	All alternatives available immediately \$20 per ton CO_2 cost offset 25 percent capacity accreditation	11.3 MW Koshkonong PV
101 – Case 2 – Scenario B	All alternatives available after 2026 \$20 per ton CO_2 cost offset 70 percent capacity accreditation	31.5 MW Koshkonong PV
102 – Case 1 – Scenario A	All alternatives available immediately \$10 per ton CO_2 cost offset 70 percent capacity accreditation	31.5 MW Koshkonong PV
103 – Case 1 – Scenario A	All alternatives available immediately \$30 per ton CO_2 cost offset 70 percent capacity accreditation	31.5 MW Koshkonong PV
103 – Case 3 – Scenario A	All alternatives available immediately \$30 per ton CO_2 cost offset 25 percent capacity accreditation	11.3 MW Koshkonong PV
103 – Case 2 – Scenario B	All alternatives available after 2026 \$30 per ton CO_2 cost offset 70 percent capacity accreditation	31.5 MW Koshkonong PV

Despite the fact that the PLEXOS model did not pick the full Koshkonong solar and BESS facility in all runs for an optimized WPSC portfolio, the model did pick the Koshkonong solar and BESS combination in eleven of eighteen runs in which the facility was available to be chosen, including a subset of five of twelve runs where the solar PV, BESS, and the combination of solar PV and BESS were separately selectable. WPSC performed a sensitivity in which the MISO capacity accreditation for solar PV projects was assumed to be based on ELCC methodology and reduced from 70 to 25 percent accreditation. The Koshkonong Project was chosen as a part of WPSC's portfolio for four of the six runs, with the Koshkonong solar PV portion being consistently selected in all six runs, including across a range of carbon costs and timeframes in which generic alternatives are available for the model to pick.

Commission staff requested more analysis from the applicant to explore why the Koshkonong BESS was not selected consistently as part of the WPSC portfolio, as it was for WEPCO. (PSC REF#: 454433.) WPSC's response argued that the selection of the Koshkonong BESS in five of twelve unconstrained modeling runs is indicative of the Koshkonong BESS being close to having economic viability in all instances, as well as incremental NPV savings for plans that include the entirety of the Koshkonong project to alternative plans that do not include the Koshkonong project. WPSC also pointed to other value the Koshkonong BESS may add, including greater reliability to the transmission system as the system transitions towards more intermittent generation resources. (PSC REF#: 455256.)

Since the Koshkonong solar and BESS combination was chosen in a majority of PLEXOS runs, including nearly half of the runs in which the components were separately selectable by the model, the Commission finds the WPSC acquisition of both the solar PV and BESS portions of the Koshkonong facility reasonable and in the public interest.

The total GRP suite of projects demonstrates lower NPV valuations when the Koshkonong Project is included, as compared to when other resources take its place, for the WPSC portion of the acquisition. This outcome was true for all six comparative runs in Scenarios A and B, as tabulated in Table 4. (PSC REF#: 445284 confidential, PSC REF#: 445285 public.)

Table 4: NPV Benefits for Koshkonong Project in Scenarios A and B

NPV benefits for the Koshkonong Project in GRP	**Scenario A – all alternatives available from beginning (thousands of dollars)**	**Scenario B – alternatives available after 2026 (thousands of dollars)**
$10 per ton CO_2 cost offset	24,318	58,147
$20 per ton CO_2 cost offset	12,662	52,915
$30 per ton CO_2 cost offset	11,404	10,400

In addition to calculating the NPV for the PLEXOS modeling output scenarios, Commission staff also reviewed the load forecast used by WPSC in its PLEXOS model. (PSC REF#: 433791 confidential, PSC REF#: 433792 public.) Commission staff compared the WPSC load forecast to those filed in WPSC's Annual Reports for the years 2016 through 2021 and did not identify any particular concerns with the provided load forecast. Commission staff does take note of the load forecast beginning in 2030 where it is assumed WPSC's load will remain flat, which could be a conservative estimate.

As part of its review, Commission staff requested that WPSC provide the results of a sensitivity analysis where the Koshkonong Project is under a purchase power agreement (PPA) instead of utility ownership. (PSC REF#: 444402.) In its response, WPSC stated that "for the reasons outlined in the application, WEC and MGE did not pursue a solar and/or BESS PPA." (PSC REF#: 445511 confidential, PSC REF#: 445512 public.) WPSC also stated that it believes ownership provides benefits that a PPA does not. Specifically, WPSC outlined the following benefits:

- The ability to repower or replace the generation at the end of the useful life of the Koshkonong Project, the ability to continue to operate the Koshkonong Project after it has been fully depreciated.
- The ability to derive additional value through incorporation of technological advancements and cost reductions during the life of the Koshkonong Project, the avoidance of additional costs to utility customers due to the effect of debt-like PPAs on utility balance sheets and capital structures.
- The ability to amend generator interconnection agreements to allow additional facilities to use the same point of interconnection to the transmission system without the need for significant additional transmission investment, and ownership of the interconnection agreement would allow the point of interconnection to be repurposed for a new source of supply when the Koshkonong Project is retired.

In a subsequent data request, Commission staff requested modeling to investigate the effect of having the Koshkonong Project as a PPA instead of being partially owned by WPSC as part of a sub-annual construct with summer and winter seasonal sensitivities. (PSC REF#: 454433.) WPSC's response referred back to the previous answer pertaining to PPAs and additional modeling was not provided. (PSC REF#: 455254.)

Although a sensitivity analysis where the Koshkonong Project is under a PPA instead of utility ownership was not provided, for the reasons identified above, the Commission finds the record with respect the PPA to be complete.

Commission staff also requested that WPSC provide the results of a sensitivity analysis to show the impacts a higher rate of Energy Efficiency deployment would have on the Koshkonong Project purchase.[2] The sensitivity analysis was to include scenarios that increase WPSC's energy efficiency spending by 50 and 100 percent relative to their existing Focus on Energy contributions. (PSC REF#: 444402.) In producing this sensitivity, WPSC analyzed the Focus on Energy's Potential Study as well as energy efficiency and demand response data from EIA and worked with the Commission's Focus on Energy staff.

Commission staff reviewed the 50 and 100 percent increased energy efficiency funding scenario calculation supplied by WPSC (PSC REF#: 445243) and confirmed that the WPSC percentage share of annual peak demand reduction used in the calculation could be replicated using sales data reported in the 2021 filed Annual Report and total state sales as filed. (PSC REF#: 456624.) Commission staff also verified that the numbers in the calculation were derived from the supplied EIA data. In its review of the PLEXOS output files supplied by WPSC, Commission staff noted that, while the year in which it was chosen varied by sensitivity, the 100 percent increased energy efficiency funding option was chosen in every sensitivity.

Commission staff also reviewed WPSC's estimated cost of a demand response-derived megawatt of peak demand calculation and, based on the EIA data supplied, Commission staff did not identify any concerns with the estimated annual cost per actual peak demand savings.

Commission staff also reviewed the capital costs expected to be incurred due to the operating extension of the Columbia coal units. (PSC REF#: 447138.) WPSC's response

[2] Although not included in the analysis, in Response-Data Response-PSC-JAK-1.18, WPSC reported that it currently has 185 MW of interruptible load. Customer's enrolled in an interruptible offering are paid credits that are based on CONE.

indicated that, as a minority owner of the facility, it was not able to respond to some aspects of how a reported 350-million-dollar expenditure would be required to extend the Columbia units past a 2026 retirement date. However, WPSC did point to an additional $42 million dollars associated with the delayed retirement that was incorporated in the GRP modeling to reflect the extension of the Columbia units. This information suggests that a substantial portion of the savings that were expected to occur due to the early retirement of the Columbia coal units is retained even with the recently announced extension of the operating life of those units.

Commission staff also reviewed the WPSC response to the request for additional modeling as it pertained to the sub-annual construct being implemented by MISO. (PSC REF#: 455255.) WPSC indicated that the previously supplied modeling, which was performed on an annual construct basis, would be substantially similar or identical to the results for a sub-annual construct model. WPSC stated that its need for additional capacity and energy is controlled by the summer season and that additional PLEXOS modeling would only proffer a different result if there was a capacity deficiency in one of the other seasons. The annual construct modeling that has been put into the record for this docket is already based on the annual peak planning reserve margin, which for WPSC occurs in the summer, as well as summer accreditations. Thus, in WPSC's view, any additional modeling to incorporate the sub-annual construct with different peaks and accreditations in other seasons would lead to the same capacity expansion plan results, rendering the additional modeling redundant. The seasonal capacity positions of WPSC were also provided to substantiate this claim. (PSC REF#: 455257 confidential narrative response and graphs, PSC REF#: 455258 public narrative response and graphs, PSC REF#: 455261 confidential Excel spreadsheets, PSC REF#: 455262 public Excel spreadsheets.) Commission staff could not independently validate the conclusions reached by WPSC pertaining to the sub-annual construct because the Commission does not have a license to use the software.

Based on the entirety of the analysis presented, including the proportion of the projected cost to the value of the additional capacity, the Commission finds WPSC's modeling efforts to be reasonable and adequate to support the requested acquisition of the Koshkonong solar PV facility and associated BESS, as well as the acquisition being in the public interest.

MGE

In the application, MGE stated the main drivers for the proposed partial ownership acquisition are a forecasted capacity need, cost-effectiveness, and risk mitigation from potential future environmental standards. Specifically, MGE cited a need for 250 MW in capacity by 2024 to offset the expected retirement of coal-fired electric generating units and the expiration of various purchase power agreements, though the operational use of the Columbia units was subsequently extended through part of 2026. In preparing its application, MGE used Electric Generation Expansion Analysis System (EGEAS) modeling to evaluate the acquisition of a partial ownership share in Koshkonong Project over a range of possible sensitivities.

Additionally, MGE used the PROMOD model to forecast annual locational marginal price (LMP) differentials and then used those results as inputs into its EGEAS modeling. In response to Commission staff's data requests, MGE confirmed that previously submitted EGEAS and PROMOD data provided in August 2021 represented an accurate depiction of the modeling for the purposes of the docket analysis. (PSC REF#: 434498 and PSC REF#: 434499).

MGE's Modeling Efforts

MGE developed three different futures for their EGEAS analysis – the business as usual or reference future, carbon constrained future, and a carbon constrained future with higher gas and LMP prices. MGE's EGEAS scenarios analyzed their least-cost plan as optimized by EGEAS in the three future scenarios. In addition to the scenario analysis, MGE studied eight sensitivities in EGEAS. These sensitivities include screening of a new coal-based planning alternative, screening of a new nuclear based planning alternative, screening of a new biomass-based planning alternative, and screening of the West Riverside ownership share option. For all the above stated scenarios and sensitivities, MGE assumed solar resources receiving a capacity accreditation of 50 percent in the MISO market. MGE also performed other EGEAS sensitivities assuming solar resources receiving 40, 30, 20, and 70 percent capacity accreditation in the MISO market.

MGE also performed PROMOD analysis for the years 2022, 2023, 2024, 2025, and 2029 to obtain LMP differentials between the Koshkonong Project site and the MGE load zone. These differentials obtained from PROMOD were then extrapolated for the intermediate years and used as an input to MGE's EGEAS analysis.

When the retirement dates of Columbia Units 1 and 2 were revised, Commission staff requested MGE to submit updated EGEAS modeling to reflect the updated retirement dates. (PSC REF#: 454433.)

Commission Review of MGE's Modeling Efforts

Commission staff reviewed the modeling analysis provided by MGE and was able to validate the results of MGE'S PROMOD and EGEAS modeling analysis. Additionally, staff was able to validate that EGEAS selected the Koshkonong Project in each sensitivity provided by the applicant even with delaying the retirements of Columbia Units 1 and 2 from 2023 and 2024 to 2026.

The results of the EGEAS analysis show that the Koshkonong Project is part of the least-cost plan for meeting MGE's future electric power supply needs as optimized by EGEAS. In addition to verifying each of the provided futures and sensitivities, staff requested and verified several more runs from the applicant, as well as independently performed a number of sensitivities, for a total of approximately 50 runs. These runs involved raising the cost of the Koshkonong Project for each sensitivity provided by the applicant, delaying the retirement date of the Columbia units to 2026 in each sensitivity, doubling the demand response from what it currently is for the MGE footprint, increasing Focus on Energy Funding by 50 and 100 percent, increasing the forced outage rate of the Koshkonong Project, and lowering the projected natural gas prices. Of these, the Koshkonong Project was selected by EGEAS for the MGE portfolio in a majority of the cases.

The first category of runs in which the Koshkonong Project was not selected were those in which the Koshkonong Project's cost was increased above a certain level. In the runs where the Columbia units were scheduled to retire in 2023 and 2024, the Koshkonong Project was selected by EGEAS until project costs were increased by 18 percent. In the runs where the Columbia unit retirements were delayed to 2026, the Koshkonong Project was selected by EGEAS until project costs were increased by four percent.

The second category of runs in which the Koshkonong Project was not selected were those in which the Koshkonong Project's forced outage rate was increased above a certain level. A forced outage rate is the percentage of time a generating resource is unavailable, outside of planned shutdowns to perform maintenance or repairs. Generally, adjusting the mature forced outage rate up is a proxy for reducing the capacity factor, which in turn is a proxy for how much energy the unit produces. In the runs where the Columbia units were scheduled to retire in 2023 and 2024, the capacity factor of the Koshkonong Project was able to be lowered to 19 percent and still be selected by EGEAS. In the runs where the Columbia unit retirements were delayed to 2026, the capacity factor of the Koshkonong Project was able to be lowered to 23 percent and still be selected by EGEAS.

The third category of runs in which the Koshkonong Project was not selected were those in which projected natural gas prices were lowered below a certain level. In the runs where the Columbia units were scheduled to retire in 2023 and 2024, the Koshkonong Project was selected by EGEAS until natural gas prices were decreased by 28 percent. In the runs where the Columbia unit retirements were delayed to 2026, the Koshkonong Project was selected by EGEAS until natural gas prices were decreased by 18 percent.

The last category of runs in which the Koshkonong Project was not selected were those in which the EGEAS model was not allowed to select it as a generation resource. Commission staff verified that in these runs, the present value of revenue requirements was higher than in the scenarios were the Koshkonong Project was allowed as an available planning alternative. Notwithstanding the model runs referenced above, in the remaining EGEAS runs validated or performed by Commission staff, the Koshkonong Project was chosen as part of the low-cost plan for MGE.

In its review of the PROMOD modeling submitted by MGE, Commission staff was able to replicate the MGE PROMOD model runs using the supplied database. Additionally, Commission staff reproduced, and was able to replicate, MGE's LMP cost differential between the Koshkonong Project and MGE system nodes. Commission staff then modified the PROMOD model to incorporate the delayed retirement dates recently announced for the Columbia coal-fired generating units and reran the PROMOD model, as well as other changes to the electrical system topology. The LMP cost differential between the Koshkonong facility and MGE system nodes was recalculated using the output from the Commission staff modified PROMOD run. The change in the LMP cost differential between the Koshkonong Project and MGE system nodes from the MGE modeling and the staff modified PROMOD model run was approximately 5 percent.

Based on Commission staff's review of the MGE EGEAS and PROMOD modeling, the Commission finds MGE's modeling efforts to be reasonable and adequate to support the requested acquisition of the Koshkonong solar PV facility and associated BESS, as well as the acquisition being in the public interest.

Applicants' Needs, Alternatives, and Economic Analysis

All three applicants will be facing capacity needs in the near future. WEPCO has proposed the retirement of the South Oak Creek units, with unit 5 and 6 expecting to retire in May 2024 and units 7 and 8 expecting to retire in late 2025. WPSC will also need capacity, with the expected closure of Weston Units 2, 31, and 32 in 2023 and the retirement of the Columbia Generating Station, expected in 2026. In total, WEPCO and WPSC will need to replace approximately 1,600 MW of capacity with other resources. MGE is in a similar position, expecting the closure of legacy coal assets and the expiration of PPAs. In total, MGE is expecting to have to replace 250 MW of capacity in the near future.

The Koshkonong Project was selected to be a part of all three applicants' future generation portfolios across a range of different assumptions about key metrics, including future electricity demand, alternative generation resources, different solar capacity accreditation values, capital cost increases to the project, the availability of energy efficiency and demand response resources, and the extension of legacy coal-fired electric generating units. In most or all model runs provided by the applicants and reviewed by Commission staff, the Koshkonong Project was routinely selected as part of the optimal generation resource plan for each of the applicant utilities. Based on this overall analysis, the Commission finds that it is reasonable for each utility to acquire the requested ownership shares in the Koshkonong Project for each of the applicant utilities.

Acquisition Price

As discussed above, the applicants requested approval to purchase the Koshkonong Project for $649 million excluding AFUDC, with cost being distributed among the applicants based on their percent ownership as shown in Table 5. The applicants shall record 100 percent AFUDC on CWIP for this acquisition. In their application, the applicants state that each applicant will reflect their portion of the approximately $649 million acquisition cost in their rate base.

Table 5: Acquisition Costs including and excluding estimated AFUDC

	Acquisition Cost	AFUDC	Total Cost (Including AFUDC)
WEPCO	$486,750,000	$27,500,000	$514,250,000
WPSC	$97,350,000	$4,800,000	$102,150,000
MGE	$64,900,000	$2,900,000	$67,800,000
Total	$649,000,000	$35,200,000	$684,200,000

The Commission staff memorandum did not identify specific concerns with the applicants' revenue requirement modeling and cost analysis but did offer reporting conditions for

Commission consideration. Moreover, the staff memorandum noted the applicant's stated costs savings resulting from the Koshkonong Project and the entire GRP.[3]

Upon review of the entirety of the record in this proceeding, the Commission finds the acquisition by the applicants is reasonable based on the proportion of the projected cost to the value of additional capacity and is in the public interest. Therefore, the Commission approves an acquisition price of $649 million, with reporting conditions as described below. After completion of the proposed acquisition, the applicants shall submit to the Commission their respective accounting entries to record the acquisition of the project.

The applicants requested approval to acquire the project at a cost of up to 110 percent of the $649 million acquisition price. The applicants stated that as engineering, design, and construction get underway, the project is subject to certain unanticipated scope changes or *force majeure* events that are beyond the applicants' control that could increase the cost to complete the project, and they therefore requested this flexibility in the acquisition price.

The Commission disagrees with the applicant's request. In prior dockets considering applications for a CA similar to this one, the Commission has found it reasonable to include a condition specifying how construction cost increases might be considered by the Commission. In addition to contractual protections intended to shield ratepayers from unexpected construction cost overruns, such a condition governing the recoverability of acquisition costs can further ensure that any construction cost overruns are not borne by ratepayers without Commission approval. The Commission finds it reasonable to include a similar condition here. Therefore,

[3] The application identified a cumulative GRP nominal savings of $1,049 million over the first 20 years and a combined NPV savings of $880 million for WEC customers compared to maintaining WEC's existing generation fleet.

the Commission approves an acquisition price of $649 million, with conditions. In particular, the Commission shall review in a future rate case the recoverability of costs associated with the acquisition, O&M costs, and revenues associated with the project; provided, however, the recoverability of acquisition payments to the applicants and the seller should not exceed $649 million.

Market concentration

The Herfindahl-Hirschman Index (HHI) is a common measure of market concentration and is used to determine market competitiveness, often pre- and post-merger and acquisition (M&A) transactions. The total market Herfindahl–Hirschman Index (HHI) prior to the proposed Koshkonong sale is 2734.9, which would be considered a highly concentrated market by the Department of Justice (DOJ) criteria. The executed sale of the Koshkonong Project would result in an HHI of 2770.5 which is a slight increase of 35.6. Combining the WEC group entities into a single entity, the HHI shows a slightly larger increase. The total market HHI prior to the proposed sale of the Koshkonong facility is 4243.6, which would be considered a highly concentrated market by the Department of Justice (DOJ) criteria. The executed sale of the proposed Koshkonong facility would result in an HHI of 4314.2 which is a slight increase of 70.6. This increase in HHI with the sale of the proposed Koshkonong facility is considered a small decrease in competition in a highly concentrated market.

Based on the information presented in the record, the Commission did not raise an issue with market concentration. The sale of the proposed Koshkonong facility and its subsequent change in the applicants' market share should not adversely affect wholesale competition, as evidenced by the small increase in the HHI.

Transfer of the CPCN

Approval of a wholesale merchant CPCN with knowledge that ownership of the facility could transfer to a regulated utility has been considered by the Commission in the past. In *Application of Power Ventures Group, LLC, for a Certificate of Public Convenience and Necessity to Construct a Large Electric Generating Facility in Sheboygan County*, No. 05-CE-131 (Wis. PSC 2004), the Commission included conditions binding any new owner of the proposed electric generation plant to the terms and conditions of the Commission's order citing protection of ratepayer interests. In this docket, the Commission similarly considered the transfer of CPCN's issued to a wholesale merchant to regulated utilities. The applicants stated that the acquisition of the project includes the transfer of the CPCN rights from the wholesale merchant developer to the applicants.

Because the rights granted under the CPCN were only those applicable to the developers and the applications submitted by that entity, the Commission finds it reasonable to include conditions requiring the applicants be bound by all commitments made by the developers in their applications, and to limit the authority granted under the CPCN to only those rights afforded the developers at the time of the Commission's issuance of the CPCN. These conditions include limitations on the use of eminent domain. The Commission also finds it reasonable to prohibit applicants from proceeding with any substantial change in scope, design, size, or location of the project except as provided in the final decisions in the CPCN docket. The inclusion of such conditions is not new. Such conditions will ensure that any ambiguity between the rights and authority granted in the CPCN to the wholesale merchants will remain constant despite ownership by public utilities that may possess rights and authority beyond that available to a non-regulated wholesale merchant.

Review of Statutory Criteria

The acquisition of the project will increase the quantity of service, adding a total of approximately 300 MW AC of solar and 165 MW of BESS to the applicants' generating capacity. Based upon the economic analysis demonstrating the customer benefits of the transaction and the other considerations discussed above and in the record for this docket, and with the conditions imposed by this Final Decision, the Commission finds that the public convenience and necessity require the acquisition, and approves the application. For the reasons stated in this Final Decision, the Commission finds that the project will not add to the applicants' cost of service without proportionately increasing the value or available quantity of service. In addition, the Commission concludes that the project will neither substantially impair the efficiency of the applicants' service nor provide facilities unreasonably in excess of the applicants' probable future requirements. As such, and for the additional considerations as stated in this Final Decision, the Commission finds the proposed project is consistent with the public interest.

Pursuant to Section 196.49 of the Wisconsin Statutes, the Commission finds it reasonable and necessary to impose a number of conditions on its approval of the application, many of which are similar to those that have been imposed in prior similar dockets, and which the Commission finds will be useful here to ensure that the project meets the statutory requirements for approval.

Energy Priorities Law

Wisconsin Stat. § 196.025 provides that "[t]o the extent cost-effective, technically feasible and environmentally sound, the Commission shall implement the priorities under s. 1.12(4) in making all energy-related decisions." The proposed project will be the acquisition and operation of a new solar-electric generation and battery storage facility. As such, it is a "noncombustible renewable energy resource" and is entitled to the highest priority of all energy generation resources under the Energy Priorities Law. The Commission finds that energy and capacity from the proposed project cannot be replaced by energy conservation and efficiency, the highest priority alternative. No evidence exists that would lead a decision-maker to conclude that any of the higher energy priorities listed in Wis. Stat. §§ 1.12 and 196.025, would be applicable or provide a cost-effective and technically feasible alternative to the proposed project. There is no evidence in the record that energy conservation or efficiency meets the stated capacity needs of the applicants.

Environmental Impacts

This is a Type III action under Wis. Admin. Code § PSC 4.10(3). No unusual circumstances suggesting the likelihood of a significant environmental effects on the human environment have come to the Commission's attention. Preparation of an environmental impact statement under Wis. Stat. § 1.11 is not required. The proposed ownership transfer is not expected to affect any historic properties under Wis. Stat. § 44.40, or any threatened or endangered species under Wis. Stat. § 29.604. The environmental impacts of the project were evaluated in the associated CPCN docket (9811-CE-100) through the respective EA. The Commission finds that the proposed acquisitions comply with Wis. Stat. § 1.11 and Wis. Adm. Code Ch. PSC 4.

Use of Brownfields

When considering issuing a CA for the construction of electric generating equipment and associated facilities, the Commission may only grant a CA if it determines that brownfields were used to the extent practicable. Wis. Stat. § 196.49(4). As the application under consideration in this docket is an application to approve the purchase of electric generating equipment, this requirement is potentially inapplicable. Regardless, the underlying CPCN docket authorizing the project included such an analysis as part of the EA. No party introduced any evidence that there exists any brownfield site of a large enough size to accommodate the Koshkonong Project. The Commission finds that the use of brownfields was not practicable.

General Conditions

In addition to the more-specific conditions discussed above, Commission staff suggested the Commission could consider including a number of conditions similar to those the Commission has found to be reasonable in its past prior electric construction and acquisition orders to the acquisition of the Koshkonong Solar and BESS Project.

The joint applicants did not object to the imposition of the suggested typical conditions, but requested that one condition, identified in the staff memorandum as Order Point 5 (PSC REF#: 460173 at 38), be modified. The applicant suggested removing the language stating "…provided, however, that in no event shall the recoverability of the acquisition costs exceed the estimated cost for each applicant specified in the application…", and that the requirements in Order Point 5 be presented as two separate Order Points.

The Commission disagrees with the applicants' proposed modification and finds it reasonable to adopt each of the typical conditions suggested by Commission staff for the

Koshkonong Solar and BESS Project acquisition without the modification requested by the applicant. The Commission finds that the imposition of such general conditions as described in the Order Conditions of this Final Decision are reasonable and necessary for application approval.

Certificate

The Commission certifies that the applicants are authorized to acquire, own, and operate 300 MW of solar generating capacity and 165 MW of BESS, the project known as Koshkonong Solar Generating and BESS Facility, at a cost of approximately $649 million, as described in the application and as modified by this Final Decision.

Order

1. The proposed acquisition, ownership, and operation of the project, as described in the application, is authorized, subject to conditions identified in this Final Decision.

2. After completion of the proposed acquisition, the applicants shall submit to the Commission their respective proposed accounting entries to record the acquisition of the facilities within 30 days.

3. The applicants shall provide copies of agreements between the applicants and the developers as they become available for informational purposes.

4. If the applicants do not proceed to closing or enter into any arrangement with another party regarding ownership or operation of the projected project, applicants shall provide prior notice to the Commission.

5. To the extent the applicants proceed to closing prior to completion of construction of the projects, the applicants shall file with the Commission quarterly progress reports that include the following: the date that construction commences; major construction and environmental

milestones, including permits obtained, by agency, subject, and date, summaries of the status of construction; the anticipated in-service date; the overall percent of physical completion; and the actual project costs to-date. Annually, the applicants shall file with the Commission a revised total cost estimate for the project. Additionally, the applicants shall file with the Commission the date that the projects are placed in service and the final, as-built cost of the project.

6. The Commission, consistent with its past practice, shall review in a future rate proceeding the recoverability of costs associated with the acquisition, O&M costs, and revenues associated with the project; provided, however, that in no event shall the recoverability of the acquisition costs exceed the estimated cost for each applicant specified in the application. If it is discovered or identified that the acquisition cost may exceed the estimated cost of $649 million, the applicants shall notify the Commission within 30 days of when it becomes aware of the possible cost increase.

7. The applicants shall record 100 percent AFUDC on CWIP at their respective weighted average costs of capital.

8. The applicants shall notify the Commission of the effective date of the purchase of the project within 30 days of the effective date of the transfer.

9. The applicants shall be bound by all commitments made by the developer in its application, subsequent filings, and the provisions of the Commission's Final Decision, as modified by the Correction Order, in docket 9811-CE-100. The assignment of the CPCN for the project does not confer additional rights to the applicants than what was afforded to the developer at the time of the application and as specified in the Final Decision in docket

9811-CE-100. Notwithstanding Wis. Stat. §§ 32.02 and 32.03(5)(a), such transfer shall not confer any right to use eminent domain.

10. All commitments made by the applicants in their application, subsequent filings, and the provisions of the Final Decision shall apply to the applicants, any agents, contractors, successors, assigns, corporate affiliates and any future owners or operators of the project. To the extent the applicants transfer any ownership or operational interest in the project, in whole or in part, to a third-party, such transfer does not confer either additional rights or obligations upon that third party than what is afforded to the original developers of the project specified in the Final Decision in docket 9811-CE-100. If the successor, assign, or future owner or operator of the project is a public utility, and notwithstanding Wis. Stat. §§ 32.02 and 32.03(5)(a), such transfer shall not confer any right to use eminent domain.

11. The applicants may not proceed with any substantial changes in scope, design, size, or location of the approved project except as provided for in the Final Decision in docket 9811-CE-100.

12. The Final Decision takes effect one day after the date of service.

13. Jurisdiction is retained

ABSENTION

Commissioner Huebner abstained and did not participate in the Commission's deliberations or decision

Dated at Madison, Wisconsin, the 10th day of April, 2023.

By the Commission:

Cru Stubley
Secretary to the Commission

CS:JAK:arw:dsa:DL: 01927534

See attached Notice of Rights

PUBLIC SERVICE COMMISSION OF WISCONSIN
4822 Madison Yards Way
P.O. Box 7854
Madison, Wisconsin 53707-7854

NOTICE OF RIGHTS FOR REHEARING OR JUDICIAL REVIEW, THE TIMES ALLOWED FOR EACH, AND THE IDENTIFICATION OF THE PARTY TO BE NAMED AS RESPONDENT

The following notice is served on you as part of the Commission's written decision. This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

PETITION FOR REHEARING

If this decision is an order following a contested case proceeding as defined in Wis. Stat. § 227.01(3), a person aggrieved by the decision has a right to petition the Commission for rehearing within 20 days of the date of service of this decision, as provided in Wis. Stat. § 227.49. The date of service is shown on the first page. If there is no date on the first page, the date of service is shown immediately above the signature line. The petition for rehearing must be filed with the Public Service Commission of Wisconsin and served on the parties. An appeal of this decision may also be taken directly to circuit court through the filing of a petition for judicial review. It is not necessary to first petition for rehearing.

PETITION FOR JUDICIAL REVIEW

A person aggrieved by this decision has a right to petition for judicial review as provided in Wis. Stat. § 227.53. In a contested case, the petition must be filed in circuit court and served upon the Public Service Commission of Wisconsin within 30 days of the date of service of this decision if there has been no petition for rehearing. If a timely petition for rehearing has been filed, the petition for judicial review must be filed within 30 days of the date of service of the order finally disposing of the petition for rehearing, or within 30 days after the final disposition of the petition for rehearing by operation of law pursuant to Wis. Stat. § 227.49(5), whichever is sooner. If an *untimely* petition for rehearing is filed, the 30-day period to petition for judicial review commences the date the Commission serves its original decision.[4] The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

If this decision is an order denying rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not permitted.

Revised: March 27, 2013

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[4] *See Currier v. Wisconsin Dep't of Revenue,* 2006 WI App 12, 288 Wis. 2d 693, 709 N.W.2d 520.