

STATE OF IOWA
DEPARTMENT OF COMMERCE
UTILITIES BOARD

IN RE: INTERSTATE POWER AND LIGHT COMPANY	DOCKET NO. GCU-2022-0003
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**ORDER GRANTING APPLICATION FOR A CERTIFICATE OF PUBLIC
CONVENIENCE, USE AND NECESSITY UNDER IOWA CODE CHAPTER 476A**

BACKGROUND

On July 18, 2022, Interstate Power and Light Company (IPL) filed with the Utilities Board (Board) a request for a public informational meeting, and the Board identified IPL's request as Docket No. GCU-2022-0003. On August 2, 2022, the Board issued a letter scheduling the informational meeting and directing IPL to file certain information prior to the meeting, including a copy of its informational meeting presentation materials. IPL filed the identified information on September 16, 2022. IPL caused notice of the informational meeting to be published on September 16, 2022, in The Daily Democrat, a newspaper published and circulated in Lee County, Iowa. On September 27, 2022, the informational meeting was held in Fort Madison, Iowa.

On October 31, 2022, IPL filed an application for a certificate of public convenience, use and necessity pursuant to Iowa Code chapter 476A (Application) for a proposed 150 megawatt (MW) solar generating facility and a 75 MW battery energy storage system (BESS) located near the unincorporated community of Wever in Lee

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County. With its Application, IPL filed a number of exhibits, an appendix, and an application for confidential treatment.

On December 14, 2022, the Board issued an order as required by Iowa Administrative Code (IAC) subrule 199—24.5(1). The Board determined IPL's application to be substantially complete, accepted the application pursuant to subrule 24.5(3), and docketed the matter for investigation. In the order, the Board also granted IPL's request for confidential treatment, set an intervention deadline, directed IPL to mail an attached notice to all persons included in its Exhibit M, and tentatively scheduled a hearing for April 13, 2023. On January 5, 2023, IPL filed a proof of mailing in which it averred that on December 22, 2022, it mailed notice to all persons identified in its Exhibit M.

On January 11, 2023, IPL and the Office of Consumer Advocate (OCA), a division of the Iowa Department of Justice, filed responses to the Board's December 14, 2022 order, stating neither had an objection to the proposed hearing date. Also on January 11, 2023, the Iowa Business Energy Coalition (IBEC) filed a petition to intervene, and Shirley Deck and Bob Brown filed a joint petition to intervene. On January 20, 2023, IPL filed a revised Exhibit L with an application for confidential treatment. On February 3, 2023, the Board issued an order establishing a procedural schedule, which included testimony submission dates and set hearing for April 13, 2023. The February 3, 2023 order also granted IPL's request for confidential treatment and granted the intervention requests filed by IBEC,¹ and Ms. Deck and Mr. Brown.

¹ On April 6, 2023, IBEC filed a letter indicating that it did not file testimony and did not expect to attend the hearing.

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On January 26, 2023, IPL filed a request for waiver pursuant to Iowa Code § 476A.15 and rule 24.15. Specifically, IPL requested the Board waive the hearing and associated procedural requirements set forth in Iowa Code §§ 476A.4 and 476A.5 and 199 IAC rules 24.6, 24.8, and 24.9. In its request, IPL stated it intended to mail a copy of its waiver request to all owners of record of real property within the proposed project's footprint and within 1,000 feet of the proposed project's boundary. On February 6, 2023, IPL filed a proof of mailing, indicating that its waiver request had been mailed to all persons identified in its Exhibit M.

On February 3, 2023, Intervenor Deck and Brown filed a response to IPL's waiver, stating they requested the Board prohibit IPL from installing solar panels on the western portion of the agricultural field adjoining their property. On February 15, 2023, OCA filed a response to IPL's waiver request in which it asserted it "does not oppose IPL's request for a waiver and certificate" subject to certain conditions.

In response to the concerns of Intervenor Deck and Brown, on March 24, 2023, IPL filed the rebuttal testimony of Mr. Justin A. Foss. IPL witness Foss testified as follows:

At this point in the design phase IPL has determined that it will not use the western field, identified in Intervenor Deck's testimony and Deck Exhibit 1, closest to the Intervenor's properties for this project. Filed with my testimony is Foss Rebuttal Exhibit 1 which shows IPL's proposed revised Project Boundary in the area near the Intervenor's properties. . . . This property is being excluded from the project boundary

(IPL Foss Rebuttal Testimony, p. 2.)

On April 6, 2023, the Board issued an order granting IPL's waiver request and canceling the April 13, 2023 hearing. With respect to Intervenor Deck and Brown's

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concerns, the Board noted that given IPL's amendment to the proposed project area, the contested issue in dispute identified by Intervenor Deck and Brown in their response to IPL's request for waiver had been resolved.

DESCRIPTION OF PROJECT

IPL, incorporated under Iowa law, is an electric and gas public utility operating in Iowa, and is a wholly owned subsidiary of Alliant Energy Corporation.

IPL requests a generating certificate for a proposed 150 MW solar generating facility and a 75 MW BESS near the unincorporated community of Wever. The proposed project will cover approximately 925 acres within a 2,685-acre area that primarily consists of agricultural land. The proposed project will consist of a solar array system, direct current and alternating current electric cabling systems, inverter and step-up transformer stations, monitoring equipment, access roads, and perimeter fencing. See IPL Application Exhibit D (proposed site development map that shows locations for solar arrays, BESS, perimeter fencing, access roads, inverter stations, underground cables, and planned interconnection station); IPL Foss Rebuttal Exhibit 1 (revised project boundary map near Intervenor Deck and Brown's property).

IPL states it will solely own the proposed project. Because it has an immediate need for the capacity and energy, IPL states it has not committed to or planned any purchase power agreements for the energy generated by the proposed project. According to IPL, adding the proposed project to its generating portfolio will enable it to continue to provide reliable service and to meet the capacity needs of its customers in a cost-effective manner.

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IPL anticipates the project will use approximately 300,000 solar panels mounted to a single-axis tracking system that will automatically adjust the tilt of the solar panels to track the movement of the sun through the sky from east to west. See IPL Application Exhibit E (solar panel specification sheets that IPL states are representative of technologies that may be used in the project). The panels will be connected to central inverter stations, consisting of centralized inverter equipment and step-up transformers that fit within an approximate footprint of 22 feet by 8 feet. See IPL Application Exhibit F (product specification sheets IPL states are representative of technologies that may be used in the project). Under its conceptual design plan, IPL anticipates using 44 central inverter stations.

IPL anticipates utilizing a 34.5 kilovolt (kV) alternating current collector circuit system to connect the inverters to the project collector substation, which will be located in the southwest corner of the project area. The project collector substation will connect to the ITC Midwest LLC (ITC Midwest) Wever substation, which is located across the street, through a 350- to 400-foot 161 kV generation-tie (gen-tie) line.

IPL anticipates the BESS component of the proposed project will be located adjacent to the collector substation on approximately five acres. See IPL Application Exhibit D (proposed site development map showing the proposed location of the BESS), and Exhibit G (BESS specification sheets that IPL states are representative of technologies that may be used in the project). The BESS will consist of battery cabinets connected to inverter/transformer skids, which will connect directly to the collector substation. The BESS will use specialized software and control systems to regulate between energy storage and the release of energy to the transmission grid. IPL states

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the BESS will improve its generating fleet reliability by injecting power into the bulk electric grid during times of lower solar generation.

IPL states the primary materials used for the project will be steel, aluminum, copper, silicon, and glass. IPL states that because the fuel source is the sun, no other fuel or raw material will be used by the proposed project in generating electricity. Similarly, IPL asserts the storage batteries will not create any waste product during their charging and discharging cycles. Therefore, over the proposed project's expected 30-year life, IPL does not anticipate the creation of any significant amount of waste.

Subject to receipt of all necessary permits and agency approvals, IPL anticipates final engineering and design plans will conclude during the fourth quarter of 2023 and an in-service date in December 2024.

BOARD ANALYSIS

Pursuant to § 476A.2(1), a person may not construct an electric power generating plant with a total capacity of 25 MW or more without first obtaining a Board-issued certificate of public convenience, use and necessity. In this matter, IPL requests the Board issue it a generating certificate for a proposed 150 MW solar generation facility and a 75 MW BESS.

The Board's review of IPL's request is governed by Iowa Code § 476A.6, which provides that the Board shall issue a generating certificate if the Board finds all of the following:

- (1) The services and operations resulting from the construction of the facility are consistent with legislative intent as expressed in section 476.53 and the economic development policy of the state as expressed in Title I,

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subtitle 5, and will not be detrimental to the provision of adequate and reliable electric service.

(2) The applicant is willing to construct, maintain, and operate the facility pursuant to the provisions of the certificate and this subchapter.

(3) The construction, maintenance, and operation of the facility will be consistent with reasonable land use and environmental policies and consonant with reasonable utilization of air, land, and water resources, considering available technology and the economics of available alternatives.

Prior to evaluating the § 476A.6 criteria, the Board will examine OCA's concerns with IPL's Application.

1. *OCA's Position.* In its February 15, 2023 response to IPL's waiver request, OCA states that it does not oppose IPL's request for a generating certificate "as long as the Board makes clear in its order that granting the certificate does not constitute a finding that the proposed project is needed or cost-effective, and that IPL's ability to recover the costs of the project from ratepayers will be decided when IPL seeks to include those costs in rates."² See also OCA Alvarez Direct Testimony p. 13 (testifying that OCA does not object to the Board issuing IPL a generating certificate for the proposed project subject to the conditions set forth above and requesting the Board require IPL to file in the above-captioned docket the final status and cost of the project, the final status of the BESS interconnection, and the final safety and emergency response plans for the BESS).

² In its April 6, 2023 letter, IBEC expressed its agreement with OCA's contention that "any decision by the Board in this proceeding also confirm that such a decision 'does not constitute a finding that the proposed project is needed or cost-effective, and that IPL's ability to recover the costs of the project from ratepayers will be decided when IPL seeks to include those costs in rates.' "

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OCA states that review of IPL's Application for a generating certificate in the above-captioned case reveals no request for the Board to address cost-recovery or to make findings that would carry over or be material to a ratemaking proceeding. OCA points out that IPL presented no evidence or argument concerning the prudence of the proposed generation project, and, through this order, the Board makes no such factual finding or legal conclusion. Similarly, through this order, the Board is not making any finding concerning the need or the cost-effectiveness of the proposed project, at least to the extent those terms have importance and significance in the context of an advance or traditional ratemaking proceeding.

In sum, in this order and in this proceeding, the Board is only rendering a decision on IPL's Application for a certificate of public convenience, use and necessity under Iowa Code chapter 476A. Whether this proposed project is prudent, necessary, and cost-effective and, ultimately, whether IPL may recover the costs of the proposed project from ratepayers, are questions that must be resolved in a ratemaking proceeding, and not based on this record, which is centered on whether IPL is entitled to a generating certificate for its proposed project.

In light of its agreement with OCA concerning the scope of this proceeding, the Board understands OCA's response as indicating it does not oppose IPL's application for a generating certificate.

2. *Legislative Intent/Economic Development/Adequate and Reliable Service.*

The first Iowa Code § 476A.6 criterion requires the Board to consider whether the proposed project is consistent with legislative intent as expressed in § 476.53 and the

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state's economic development policies, and whether the generating facility is detrimental to the provision of adequate and reliable electric service.

Through Iowa Code § 476.53(1), the Legislature expressed its intent “to attract the development of electric power generating and transmitting facilities within the state in sufficient quantity to ensure reliable electric service to Iowa consumers and provide economic benefits to the state.” Further, Iowa Code § 476.41 provides that “[i]t is the policy of this state to encourage the development of alternative energy production facilities . . . in order to conserve our finite and expensive energy resources and to provide for their most efficient use.” See *Mathis v. Iowa Utilities Bd.*, 934 N.W.2d 423, 429 (Iowa 2019) (stating “it is the official policy of this state to encourage the development of new alternative energy facilities”). Solar facilities fall within the definition of “alternative energy production facilities.” Iowa Code § 476.42(1)(a).

First, IPL submitted evidence supporting the finding that the proposed project will provide long-term and short-term economic benefits to Lee County and the state. In support of its application, IPL submitted an economic impact and land use analysis prepared by Strategic Economic Research, LLC. (IPL Application, Exhibit R.) The authors of the analysis opined that during the construction of the project, between 685 and 749 new local jobs will be created for the state of Iowa, including between 207 and 222 new jobs located in Lee County. (IPL Application, Exhibit R, p. 7.) The authors further opine that during the operational life of the proposed project, more than 4.6 new long-term jobs will be created in Lee County and 5.4 new local long-term jobs will be created for the state of Iowa. (*Id.*)

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The authors expect the following “output”:³

- between \$23.3 and \$25 million in new local output during construction for Lee County
- between \$83.5 and \$92 million in new local output during construction for the state of Iowa
- between \$739,000 and \$740,000 in new local long-term output for Lee County
- more than \$962,000 in new local long-term output for the state of Iowa

(*Id.*) Over the life of the project, the authors anticipate more than \$3.6 million in total school district revenue, more than \$707,000 in total county property taxes, and between \$5.7 million and \$5.8 million in total property taxes for all taxing districts. (*Id.*) Finally, as part of their land-use analysis, the authors conclude that “the land use value of solar leasing far exceeds the value for agricultural use.” (*Id.* at 8). On this final point, the authors opined:

- The price of corn would need to rise to \$14.08 per bushel or yields for corn would need to rise to 295.7 bushels per acre⁴ by 2054 for corn farming to generate more income for the landowner and the local community than the solar lease.
- The price of soybeans would need to rise to \$39.76 per bushel or yields for soybeans would need to rise to 108.4 bushels per acre⁵ by the year 2054 for soybean farming to generate more income for the landowner and the local community than the solar lease.

(*Id.*)

Finally, IPL states the proposed project will be consistent with standard utility practices and will not degrade the adequacy, reliability, and operating flexibility of the existing transmission system in the area. IPL further states the proposed project’s

³ As used in the analysis, “output” refers “to economic activity or the value of production,” similar to how “gross domestic product” measures output on a national basis. (*Id.* at 31.)

⁴ As of the date of the analysis, the authors state that the price of corn was \$4.69 per bushel with a 174.6 bushel-per-acre yield. (*Id.*)

⁵ As of the date of the analysis, the authors state that the price of soybeans was \$11.10 per bushel with a 58.1 bushel-per-acre yield. (*Id.*)

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interconnection will comply with both the Midcontinent Independent System Operator, Inc.'s (MISO), interconnection planning criteria and the North American Electric Reliability Corporation's standards and requirements. IPL states the proposed project's interconnection requirements will be determined through the MISO study process.

IPL anticipates the point of interconnection between the proposed project will be the ITC Midwest Wever substation through a 161 kV gen-tie line. The total distance of the gen-tie line is approximately 0.08 miles, or between 350 and 400 feet.

Solely for purposes of this proceeding, the Board finds IPL's proposed project is consistent with legislative intent and the economic development policies of the state and will not be detrimental to the provision of electric service. Consequently, the Board finds the first § 476A.6 decision criterion is established.

3. Construction, Operation, and Maintenance.

The second § 476A.6 factor requires the Board to examine whether IPL will construct, operate, and maintain the facility pursuant to the provisions of the certificate and Iowa Code chapter 476A. As a condition of the generating certificate, this order will require IPL to comply with all provisions of the certificate and of Iowa Code chapter 476A, subchapter I, in the construction, maintenance, and operation of the facility. Therefore, the Board finds the second § 476A.6 factor is established.

4. Land Use and Environmental Policies.

The final factor requires the Board to examine whether the "construction, maintenance, and operation of the facility will be consistent with reasonable land use and environmental policies and consonant with reasonable utilization of air, land, and water resources, considering available technology and the economics of available

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alternatives.” Iowa Code § 476A.6(3). In considering this factor, the Board also considers whether the adverse impacts of the proposed facility have been reduced to a reasonable level, whether the site represents a reasonable choice among available options, and whether the proposed facility complies with local zoning and other requirements. 199 IAC 24.10(2)(b). The Board finds this factor in § 476A.6 is established.

a. Adverse Impacts and Decommissioning.

Pursuant to subparagraph 24.10(2)(b)(1), the Board should consider whether “all adverse impacts attendant the construction, maintenance and operation of the facility have been reduced to a reasonably acceptable level.” IPL asserts it does not anticipate the project will have any permanent negative impacts, while having a number of positive impacts.

First, from a general perspective, IPL notes that photovoltaic solar facilities do not produce smoke or other emissions, do not create odors, and are designed to absorb, rather than reflect, sunlight. The proposed project will generate electricity through the absorption of energy from the sunlight, and, consequently, the proposed project will not use other raw materials or fuels to generate electricity. Similarly, the storage batteries do not produce waste products during the charging and discharging cycles. IPL does not anticipate the proposed product will result in the creation of any significant waste.

IPL further states that the proposed project will not have any permanent adverse impacts to neighboring residential properties. IPL proposes a number of setbacks, including:

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- solar panels will be located a minimum of 20 feet from the site perimeter fence and at least five feet from all access roads;
- the perimeter fence setback will be a minimum of 10 feet from property lines;
- proposed project equipment will be a minimum of 50 feet from property lines and a minimum of 300 feet from inhabitable structures absent a waiver by the owner of the inhabitable structure;
- other setback requirements required by local ordinances and permit requirements.⁶

In his testimony, Intervenor Brown expressed concern that the proposed project could emit noise. (Intervenor Brown Testimony, p.3.) Concerning potential sound impacts, IPL contracted with a third party to perform a noise impact assessment that, in part, evaluated the noise emissions from the proposed project and provided an opinion on the location of certain facility components to minimize the potential for disruption to nearby landowners. (IPL Application, Exhibit Q). IPL asserts that it intends to follow the recommendations from the third-party contractor to ensure noise emissions do not exceed the ambient noise thresholds at surrounding residences.⁷

Concerning potential visual impacts, Intervenor Deck expressed concern over the potential glare caused by the proposed project. (Intervenor Shirley Deck Direct Testimony, pp. 4-6.) By design, solar panels are intended to absorb light rather than reflect it and, consequently, IPL does not anticipate the proposed project will result in

⁶ Lee County has not adopted a utility-scale solar and BESS facilities ordinance. However, on or about December 5, 2022, IPL and Lee County entered into a Solar Generating Facility Joint Development Agreement (JDA) concerning the proposed project. Under the JDA, IPL agreed to a number of other setback requirements, including: 150 feet from non-participating property lines; for local residential/commercial roads, the greater of 60 feet from centerline or 25 feet from road right-of-way; for local non-residential/non-commercial roads, the greater of 75 feet from centerline or 35 feet from road right-of-way; for minor collector (or higher) roads, 100 feet from centerline; and for minor collector (or higher) roads, 60 feet from road right-of-way.

⁷ With respect to construction noise, the JDA provides that “[c]onstruction activities that include significant noise generating activities will generally occur between the hours of 7:00 a.m. and 7:00 p.m., unless dusk occurs later. While not anticipated, in the event construction needs to occur outside of these hours or after dusk, residents within one quarter mile of where such activities are actually occurring within the Site will be notified.”

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any significant visual impairment or glare. IPL states the solar panels used in the project will have a low profile with a height no greater than 15 feet and IPL contends the visual impact from a street level will be minimal. Regardless, IPL states it will work with participating and adjacent non-participating landowners to implement mitigation efforts to minimize visual impacts from the proposed project. With respect to potential glint and glare, IPL states that following the proposed project's construction, it will conduct a glint and glare study that, at least in part, will assess any glare impacts on residences, public routes, and flight paths. Depending on the results of the study, IPL commits to implement necessary mitigation measures.

Intervenors Deck and Brown also express concern over potential loss of property value as a result of the proposed project. (Intervenor Deck Direct Testimony, p. 7; Intervenor Brown Direct Testimony, p. 3.) As an exhibit to its application, IPL included a Market Impact Analysis conducted by MaRous and Company, a business entity that has been conducting similar market studies for 41 years. (IPL Application, Exhibit P, p. 3.)

The analysis reached the following conclusion:

As a result of the market impact analysis undertaken, **the conclusion made is that there is no market data indicating the project will have a negative impact on either rural residential or agricultural property values in the surrounding area.** Further, market data from Iowa, specifically, also supports the conclusion that the project will not have a negative impact on rural residential or agricultural property values in the surrounding area. For agricultural properties that host photovoltaic panels, the additional income from the solar lease may increase the value and marketability of those properties.

(*Id.* at 9.) (Emphasis added). The conclusion was based on a number of facts and factors, including a survey of county assessors in seven counties within Iowa in which solar farms are located, which revealed “that there was no market evidence to support a

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negative impact upon residential property values as a result of the development of and the proximity to a solar farm, and that there were no reductions in assessed valuations.”

(*Id.* at 10.) Similar county assessor surveys were undertaken with the same results in other states: 20 counties in Michigan, six counties in Illinois, 11 counties in Wisconsin, nine counties in Indiana, five counties in North Carolina, and 13 counties in Maryland.

(*Id.* at 10-11.)

Intervenor Deck also expressed concern regarding the ability of the proposed project to withstand extreme weather events, such as derechos. (Intervenor Deck Direct Testimony, p. 6.) IPL states that it will design and construct the proposed project to withstand high winds, flooding, seismic events, and accumulating winter precipitation. Further, because the proposed project will be primarily located on agricultural land, IPL asserts the health and safety risk from extreme weather events is small.

IPL asserts the proposed project will have no adverse impact on the agricultural ground on which the project is located. IPL states that approximately 89 percent of the project area is currently being used to farm row crops. During the life of the proposed project, agricultural use of the property will be suspended. IPL prepared a Vegetation Management Plan that sets forth steps to “prepare the site, develop and install prescribed seed mixes, manage invasive species and noxious weeds, and control erosion and sedimentation.” (IPL Application, Exhibit S, p. 6.) Per its plan, IPL states that it will plant and maintain perennial ground vegetation within the project site, including under and between rows of solar panels, throughout the life of the proposed project. At the completion of the proposed project and following decommissioning, IPL

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will restore the location to substantially the same condition as existed prior to the development of the project.

IPL also states the proposed project is not expected to have any adverse impact to open spaces or wildlife. On this issue, Merjent, Inc., (Merjent) on behalf of IPL, performed a review of federal- and state-protected species that may be present within the footprint of the proposed project site. (IPL Application, Exhibit T, p. 2.) With respect to state-protected species, on February 4, 2022, the Iowa Department of Natural Resources (IDNR) informed IPL that it “did not have a record of any sensitive resources within the Project area.” (*Id.* at 5.) IDNR also provided guidelines for solar energy projects that the department developed, and while not required, IPL states it intends to abide by the guidelines to the extent possible.

With respect to the proposed project’s potential impact on federally listed species, after consulting federal resources, Merjent concluded that while there are no designated critical habitats identified in the project area, there are a number of federally listed species that are potentially present within the proposed project area. (*Id.* at 2). However, for each identified species, Merjent concluded that project design or the implementation of best management practices could reduce, if not negate, impacts. (*Id.* at 3-5.) In its application, IPL indicated such practices will be implemented.

Next, IPL contends the proposed project is not forecasted to have any significant impact on transportation. IPL states that at the conclusion of the construction and throughout the life of the project, it will restore and improve the road infrastructure that has been impacted by the project in Lee County. IPL states that under the terms of its JDA with Lee County, the parties agreed to enter into a road use agreement relating to

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IPL's use of obligation to repair county roads. IPL further states that it will file the road use agreement with the Board after the agreement has been executed.

With respect to the potential impact of cultural resources, IPL states it retained Merjent to perform a cultural resources desktop review for the proposed project area plus a one-mile buffer. Merjent indicated its literature review identified 27 previously recorded archaeological sites and five architectural properties within the research area. The review also identified four additional notable locations, including two burial areas and one area of heightened archaeological potential. (IPL Application, Exhibit V, pp. 17-18.) IPL states that in response to the review, it consulted with the University of Iowa Office of the State Archeologist (OSA) to address concerns about the identified archeological resources in the project area. OSA recommended steps to mitigate any potential impacts to cultural resources in the project area, and IPL committed to following OSA's recommendations and to continue working with OSA. Further, in the event any previously undocumented cultural resources are discovered during construction, IPL has an Unanticipated Discovery Plan in place. (IPL Application, Exhibit W).

Finally, with respect to decommissioning, IPL states that it will decommission the proposed project within one year from when the project ceases operation. In its Application, IPL described the general measures and procedures to decommission the proposed project, restore the project site, and safely dispose of or recycle project materials. IPL states that to the extent possible, project equipment will be reconditioned, resourced, or recycled. IPL will dispose of any materials that cannot be recycled at approved locations. Concerning the land, IPL states that once the facility

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structures are removed, the site area will be restored to a clean, safe, and environmentally stable condition. To facilitate the land's return to agricultural use, IPL intends to reseed disturbed areas with perennial vegetation mixtures. Finally, IPL notes that pursuant to its JDA with Lee County, IPL is required to provide a decommissioning plan to the county. IPL states it contracted with a vendor to prepare a draft Decommissioning Plan, which IPL attached to its Application as Exhibit X. IPL states the Decommissioning Plan outlines a typical decommissioning program that will satisfy its requirements under the JDA.

Based on the material filed in the docket, including those reasons discussed above, the Board finds that IPL has demonstrated that any adverse impacts attendant to the construction, maintenance, and operation of the projects have been reduced to a reasonable and acceptable level.

b. Site Selection.

Subparagraph 24.10(2)(b)(2) directs the Board to consider whether the proposed site selected "represents a reasonable choice among available alternatives."

IPL states that it uses several general site criteria when selecting project sites, including lower cost transmission access, the existence of landowners who are willing to lease or sell land for use with the project, support from local government and authorities having jurisdiction, and site suitability for a particular project. With respect to this proposed solar facility site in particular, IPL states one of the key site selection criteria was the interconnection point at ITC Midwest's Wever substation, which has available interconnection capacity.

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Further, in selecting the site for the proposed project, IPL states it considered archaeological, cultural, and historical resources. Finally, IPL states it considered environmental factors, including threatened and endangered species, wetlands, waterways, trees, and critical habitats. According to IPL, the project site exhibits few of these factors and, to the extent the factors do exist, IPL asserts it will avoid or minimize any adverse impacts through its proposed infrastructure placement.

In her testimony, Intervenor Deck raised concern regarding IPL's siting of the BESS component of the proposed project.⁸ (Intervenor Deck Direct Testimony, pp. 7-8.) More specifically, Intervenor Deck expressed concern regarding the proximity of the proposed BESS facility siting to the Iowa Fertilizer Company plant. (*Id.*) Without supporting evidence, Intervenor Deck asserts that "[i]t is well known that [the] batteries in BESS are susceptible to fire and explosion" and that she does not believe local first responders could handle an event. (*Id.* at 8.)

In response, IPL filed the rebuttal testimony of Dave Galarowicz and Mr. Foss. Mr. Galarowicz, who earned a Master of Engineering degree, is the lead technical author of specifications for the proposed utility-scale lithium-ion battery projects at Alliant Energy. (IPL Galarowicz Rebuttal Testimony, pp. 1-2.) In his testimony, Mr. Galarowicz interpreted Intervenor Deck's concern "as relating to the possible risk that a thermal runaway event at the BESS location could cause damage or cascading risk to the Iowa Fertilizer Company's fertilizer production facility." (*Id.* at 6.) In responding to

⁸ As noted above, Intervenor Brown and Deck also opposed IPL installing solar panels on the western portion of a field that adjoined their properties to the east. However, as shown in its rebuttal testimony, IPL agreed to modify the proposed project boundary by excluding the western portion of the field.

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Intervenor Deck's concern, Mr. Galarowicz testified that the design of the battery installation is intended to meet the standards imposed by NFPA (National Fire Protection Association) 855, which governs the distance battery energy storage facilities may be built from stored combustible materials, and UL (Underwriters Laboratories) 9540, which "ensures that thermal runaway in the battery cell will be contained to either the rack, or enclosure and will not continue to propagate." (*Id.*)

IPL also submitted the rebuttal testimony of Mr. Foss, a certified Project Management Professional working on IPL's Iowa-based solar and storage projects. (IPL Foss Rebuttal Testimony, p. 1.) In response to Intervenor Deck's concerns regarding local first responders, Mr. Foss testified as follows:

IPL has an operations building located in the nearby cities of Fort Madison and Burlington. The employees here routinely work directly with first responders for training on various utility infrastructure related issues. As it relates to the proposed Wever Solar and Storage project, in 2022, I personally contacted the Lee County Emergency Management department as well as the major fire departments in the Wever area to explain the project and express the intent that IPL will reach out as the project develops to ensure proper awareness, communication and training are provided.

(*Id.* at 3.) Furthermore, as explained in its Application, IPL has committed to work with local first responders and the local fire department to define appropriate response measures based on final decisions regarding facility equipment. IPL has also committed to training local responders and indicated the training will include: explaining the site location and layout; identifying potential hazards; explaining fire suppression techniques; and identifying evacuation, medical, and communication protocols. (Application, pp. 43-44.)

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The Board finds IPL's proposed site location, including the siting of the BESS component, is based on reasoned and rational grounds and constitutes reasonable choices. The Board further finds that IPL's siting of the BESS component within the proposed project area is reasonable given IPL's commitment to ensure that the battery energy storage facility will comply with applicable safety standards and its commitment to work with local responders.

c. Local Zoning.

Finally, 199 IAC 24.10(2)(b)(3) permits the Board to consider whether the proposed projects are compliant with local zoning requirements. While Lee County does not have a utility-scale solar or BESS ordinance, IPL and the county have entered into an agreement covering the construction, operation, and decommissioning of the facility.

In its Application, IPL identified other state and local approvals and permits that may be needed for the proposed project; however, IPL anticipates that based on the final project design, some of the approvals and permits will be unnecessary. The Board finds that IPL has satisfied this requirement.

d. Conclusion.

Based on the above-discussion and review of the information provided by IPL, the Board finds the proposed facilities meets the third Iowa Code § 476A.6 factor subject to additional conditions discussed below.

The Board will grant IPL's Application for a certificate of public convenience, use and necessity with the following conditions:

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1. The Board will require IPL to file in this docket final design plans as soon as they exist. If any portion of the project is ultimately sited in a floodplain, IPL shall file with the Board a report identifying any additional regulatory permits required, along with copies of any such permits, and a report analyzing flood risks, with a proposed flood mitigation plan. IPL shall not construct in a floodplain until the affected entity has obtained all necessary floodplain permits. As this requirement is established herein by the Board, IPL may not rely on Iowa Code § 476A.8 as to negate the requirement to obtain any required floodplain development permits.
2. The Board will require IPL to file in this docket the final glint and glare study report along with any glint and glare mitigation measures IPL intends to implement.
3. The Board will require IPL to file in this docket a copy of its road use agreement with Lee County, once it is executed.
4. Per OCA's request and IPL's agreement to the same, the Board will require IPL to make an informational filing in this docket that updates the Board on total project costs, the final status of the BESS interconnection, the final safety and emergency response plans for the BESS.
5. The Board will require IPL to obtain all necessary zoning approvals and other permits. IPL shall not begin construction until it has obtained all necessary permits, and IPL shall file all permits obtained in this docket. As this requirement is established herein by the Board, IPL may not rely on Iowa Code § 476A.8 to negate the requirement to obtain authorizations from other state, city, or county regulatory agencies.
6. The Board will require IPL to file status reports in this docket every six months until project completion, with updates on its progress in obtaining the necessary permits and construction progress.
7. If construction of the project is not completed within two years from the date the generation certificate is issued, the certificate will expire, and IPL will need to submit a new application to the Board if it wants to continue to develop the project, or obtain an extension of the two-year requirement from the Board.

Based on the information provided, the Board finds IPL presented sufficient information to establish the third § 476A.6 element. The construction, operation, and maintenance of the projects will be consistent with reasonable land use and

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environmental policies and consonant with the reasonable use of air, land, and water resources.

CONCLUSION

Having found that the criteria in § 476A.6 are met, the Board will approve IPL's application for a certificate of public convenience, use and necessity, subject to the conditions described above. The certificate will be limited to the 150 MW solar generating facility and the 75 MW BESS proposed by IPL. Any increase to the total generation capacity or the addition of a storage facility will require IPL to file for an amendment to the certificate. Additionally, a transfer of the certificate to another entity will require Board approval in accordance with Iowa Code § 476A.7(2).

ORDERING CLAUSES

IT IS THEREFORE ORDERED:

1. A Certificate of Public Convenience, Use and Necessity for a Solar Generating Facility in Docket No. GCU-2022-0003, attached to this order and incorporated herein, is issued to Interstate Power and Light Company.
2. Prior to starting construction, Interstate Power and Light Company shall file a report describing the project's final design, including whether portions of the project are sited in floodplain areas; identifying the additional regulatory permits obtained due to the floodplain, if any; and analyzing the flood risks to the project with a proposed flood mitigation plan. Interstate Power and Light Company shall also file a copy of its executed decommissioning agreement with Lee County, Iowa.

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3. Upon the creation or execution of the following, Interstate Power and Light Company shall file in this docket:

- a. a copy of the final glint and glare study report along with an informational filing that identifies any glint and glare mitigation measures Interstate Power and Light Company intends to implement;
- b. a copy of the road use agreement with Lee County, Iowa;
- c. an informational filing that details the final status of the BESS interconnection and a statement concerning total project costs; and
- d. a copy of the final safety and emergency response plans for the BESS.

4. Interstate Power and Light Company shall acquire and maintain all necessary zoning and other permits. Interstate Power and Light Company may not rely on the issuance of the attached Certificate of Public Convenience, Use and Necessity and Iowa Code § 476A.8 to obtain authorizations from other state, city, or county regulatory agencies or zoning authorities. Interstate Power and Light Company shall not begin construction until it has obtained all necessary permits. For all permits obtained, Interstate Power and Light Company shall file the permits with the Utilities Board in this docket within 10 days of receipt of such permits.

5. Within 180 days of the date of this order, Interstate Power and Light Company shall file a status report in this docket regarding its progress toward completion of the project. Interstate Power and Light Company shall submit additional status reports at least every 180 days thereafter until its project is complete.

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6. If construction of either project is not completed within two years of the date of issuance of the certificate, the certificate will expire and Interstate Power and Light Company will be required to submit a new petition with the Utilities Board if it wants to continue to develop its project, unless the two-year period is extended by order of the Utilities Board.

UTILITIES BOARD

Geri Huser Date: 2023.04.26
15:54:34 -05'00'

Richard Lozier Date: 2023.04.26
16:04:05 -05'00'

ATTEST:

Keetah Horras 2023.04.26
16:41:06 -05'00'

Joshua Byrnes Date: 2023.04.26
15:02:14 -05'00'

Dated at Des Moines, Iowa, this 26th day of April, 2023.