STATE OF IOWA

DEPARTMENT OF COMMERCE

UTILITIES BOARD

IN RE: INTERSTATE POWER AND LIGHT COMPANY	DOCKET NO. RPU-2021-0003

FINAL ORDER

PROCEDURAL BACKGROUND

On November 2, 2021, Interstate Power and Light Company (IPL) filed with the Utilities Board (Board) an application for advance ratemaking principles, waiver of reorganization requirements, and limited waiver of energy adjustment clause requirements (Application), and direct testimony seeking advance ratemaking principles for a proposed 475-megawatt (MW) solar and battery energy storage system (BESS) project, which includes the Duane Arnold Solar projects.

The parties to this case are IPL; the Office of Consumer Advocate (OCA), a division of the Iowa Department of Justice; the Environmental Law & Policy Center and the Iowa Environmental Council (Environmental Intervenors); the Iowa Business Energy Coalition (IBEC); and the Large Energy Group (LEG).

On January 25, 2022, the Board issued an order establishing a procedural schedule for parties to file prepared testimony and setting a hearing for May 10 and 11, 2022. On April 5, 2022, IPL filed a motion to extend the procedural schedule.

On April 20, 2022, the Board issued an order rescheduling the hearing to August 8, 2022. An evidentiary hearing was held on August 8 and 9, 2022.

The federal Inflation Reduction Act of 2022 (IRA), containing many provisions applicable to energy production, was enacted by Congress and signed by President Joe Biden on August 16, 2022. On August 17, 2022, IBEC, LEG, and OCA filed a joint motion to reopen the evidentiary record and a request to delay the post-hearing briefing schedule in order to respond to new provisions of the IRA. On August 18, 2022, IPL filed a response to the joint motion to reopen the record and to delay the post-hearing briefing schedule. On August 19, 2022, IBEC, LEG, and OCA filed a joint reply.

On August 24, 2022, the Board issued an order granting the motion to reopen the record, setting dates for post-hearing prepared testimony, and establishing a revised briefing schedule.

On September 9, 2022, IPL filed updated testimony and exhibits. On September 16, 2022, IBEC, LEG, and OCA filed responsive testimony and exhibits. On September 21, 2022, IBEC filed a post-hearing brief. Briefs were filed by IPL, OCA, the Environmental Intervenors, and LEG on September 28, 2022.

STATUTORY REQUIREMENTS

Iowa Code § 476.53(1) states that this section was enacted by the General Assembly to "...attract the development of electric power generating and transmission facilities within the state in sufficient quantity to ensure reliable electric service to Iowa consumers and provide economic benefits to the state." Iowa Code § 476.53(2)(a) states that the generating facilities developed pursuant to subsection 1 "shall be implemented in a manner that is cost-effective and compatible with the environmental policies of the state, as expressed in this Title XI." Iowa Code § 476.53(2)(b) states that the reliability of electric service "shall be implemented by considering the diversity of the

types of fuel used to generate electricity, the availability and reliability of fuel supplies, and the impact of the volatility of fuel costs."

Iowa Code § 476.53(3)(a) states that the Board shall specify in advance and in a contested case proceeding the ratemaking principles that will apply when the costs of the electric generating facility are included in rates. Subsection 476.53(3) then sets out the types of generating facilities that are eligible for advance ratemaking principles. Rate-regulated utilities may request ratemaking principles for baseload generating facilities with a nameplate capacity of at least 300 MW or a combined-cycle electric power generating facility, or alternate energy production facilities as defined in Iowa Code § 476.42. Iowa Code § 476.53(3)(1)(a). Solar generating facilities are included in the definition of alternate energy production facilities in Iowa Code § 476.42, and battery storage located at the site of a solar facility meets the requirements of Iowa Code § 476.42(1)(a)(2).

Iowa Code § 476.53(3)(b) states the Board is not limited to traditional ratemaking principles or traditional cost recovery mechanisms in determining applicable advance ratemaking principles. Iowa Code § 476.53(3)(c) requires the Board to make two findings prior to considering the proposed advance ratemaking principles. First, the utility must have in effect a Board-approved energy efficiency plan. Second, the utility must demonstrate that it has considered other sources for long-term electric supply and that the proposed facility is reasonable when compared to other feasible alternative sources of supply.

The primary provisions of Iowa Code 476.53 described above were enacted during the 2001 legislative session and since that time, the Board has approved multiple advance rate making principles for multiple utility projects. Those approvals have

resulted in more that 11,000 MW of wind generation and 275 MW of utility-scale solar generating facilities in Iowa. The Board stated in Docket No. RPU-01-9, advance ratemaking decisions have a more long-term impact than perhaps any other decision made by the Board. (MidAmerican Energy Company, "Order," Docket No. RPU-01-9, p. 3 (May 29, 2002).) In the May 29, 2002 order in Docket No. RPU-01-9, the Board stated that because the advance ratemaking principles approved by the Board cannot be revisited in a general rate case proceeding, and they will be applicable for the life of the generating facilities, it is important for both the utility and customers that the Board's decision in these cases be carefully considered. (Id. pp. 3-4.) The Board went on to state that, although one of the goals of Iowa Code § 476.53 is to encourage the development of renewable generating facilities, "...the legislative intent is not that this generation be built at any cost" and that requested advance ratemaking principles must be balanced with the impact on ratepayers. (Id.)

The first proposed advance ratemaking principles were requested by MidAmerican Energy Company (MidAmerican) in Docket No. RPU-01-9. Since the Board issued the final order in that docket approving advance ratemaking principles for the Greater Des Moines Energy Center, the Board has approved advance ratemaking principles for MidAmerican projects, including Wind I through Wind XII, and Walter Scott Jr. Energy Center IV, and is now considering proposed advance ratemaking principles for Wind PRIME in Docket No. RPU-2022-0001. The Board has also approved advance ratemaking principles for IPL projects, including the Marshalltown Generating Station, New Wind I, and New Wind II, and IPL has filed for advance ratemaking treatment for solar facilities and a BESS in this docket.

Construction of renewable generation facilities is an important goal for the State of Iowa as stated in Iowa Code §476.53; however, approving ratemaking principles that will be binding for the life of the assets must be properly analyzed given the impact. The federal government, with the enactment of the IRA, has expanded and adopted significant tax incentives targeting the energy transition to renewable energy, and Iowa has had success with the amount of renewable generating facilities constructed in the state.

COMPLIANCE WITH STATUTORY REQUIREMENTS

As part of determining applicable advance ratemaking principles, the Board must address IPL's compliance with the statutory requirements in Iowa Code § 476.53(3)(c).

A. Iowa Code 476.53(3)(c)(1)

Iowa Code § 476.53(3)(c)(1) requires IPL to have in effect a Board-approved energy efficiency plan required pursuant to Iowa Code § 476.6(15). IPL asserts that it has the required Board-approved energy efficiency plan. IPL states the plan was approved March 26, 2019, for years 2019-2023. (Application, p. 9.) IPL's plan was approved in Docket No. EEP-2018-0003. Compliance with this statutory requirement was not contested, and the condition has been met.

IPL's energy efficiency plan for 2024-2028 was filed on November 1, 2022. The Board finds that IPL has complied with Iowa Code § 476.53(3)(c)(1).

B. Iowa Code § 476.53(3)(c)(2)

The second finding the Board is required to make is whether IPL has demonstrated that it has considered other sources for long-term electric supply and that the proposed generating facilities are reasonable when compared to other feasible

alternative sources of supply. The Board discusses the major considerations regarding this statutory requirement in turn.

1. Consideration of Alternative Sources of Supply

IPL, in its testimony, has relied primarily on its 2020 Clean Energy Blueprint (Blueprint) analysis to support its decision to construct 400 MW of solar generation, and on the analysis conducted by Astrapé Consulting to support its decision to build 75 MW of battery storage. IPL witness Farlinger testified that the Blueprint analysis modeled portfolios to assess a variety of generation options across a range of planning metrics, including cost and financial analyses. (IPL Farlinger Direct pp. 9-10.)

The evidence presented in testimony raises an issue of whether IPL's analysis adequately considered other supply sources for electricity and whether the proposed project is reasonable when compared to other sources of supply. The evidence regarding IPL's consideration of alternative sources of supply shows that IPL did not consider other generation resources or power purchase agreements (PPA) fully during the Blueprint process or in preparing its application in this docket. OCA witness Munoz provided data request responses with his testimony in which IPL did not provide any evidence about the fixed price PPA options it asserted were considered. (OCA Munoz Direct Exhibit 1.) Mr. Munoz argues that IPL's failure to produce PPA offers does not allow the Board or other parties to evaluate whether IPL considered a full range of solar sources of supply. (OCA Munoz Direct pp. 27-35.)

LEG witness Vognsen also testified that IPL failed to consider alternatives such as entering into a PPA for solar generation with the option to purchase the solar facilities in the future. (LEG Vognsen Direct p. 14.) Mr. Vognsen testified that entering into a

PPA, which allows IPL ownership at a later date, would provide the same benefits as IPL ownership described by IPL witness Kitchen. (*Id.*)

IPL witness Lipari testified that IPL considered entering into PPAs for the Duane Arnold Solar projects rather than acquiring them, but that option was rejected in light of the benefits of long-term ownership of projects for IPL, such as mitigating cost risks through design and equipment supply, taking advantage of future technology developments, and cost reductions expected during the life of the projects. Benefits also include a future option to repower the facilities to enable lower costs and more efficient generation. (IPL Lipari Rebuttal pp. 17-18.)

IPL ownership of the facilities may provide some benefits over other sources of supply, in addition to allowing recovery of a return on those facilities. However, not being able to compare those benefits to potential cost savings to other generation resources or PPAs either with or without a later ownership option, does not satisfy the requirements of Iowa Code § 476.53(3)(c)(2). At the hearing, IPL witness Carroll testified that she looked only at solar PPAs in reviewing whether there are PPAs available to provide the needed capacity, and looked at what would be available in the time frame that is required to support the solar and storage capacity. (Tr. at 356.) Mr. Lipari testified that to his recollection, NextEra Energy Resources, LLC (NextEra), was open to various transaction structures and did not hesitate to support IPL's request to see cost estimates. (Tr. at 256.)

Mr. Lipari also testified that he does not believe IPL got a price from NextEra under a PPA structure because IPL was focused on ownership of the projects. (*Id.*) IPL appears not to have considered the possibility of negotiating with NextEra or another provider for a PPA or other generation resources, with or without an ownership option at

some later date. Mr. Vognsen suggested that a PPA with an ownership option would provide the same benefits as outright ownership, including long-term ownership of projects, and would avoid the complicated financial arrangement such as the tax equity partnership initially proposed by IPL. According to Mr. Vognsen, if IPL had pursued a PPA with ownership at a later date, IPL would be able to track the efficiencies of new technology to determine what is in the best interest of customers. (LEG Vognsen Direct p. 14.)

In addition, IPL did not issue a request for proposal (RFP) to see what responses it might receive from the electric market to provide the needed capacity. (Tr. at 80 and 129.) Due to IPL not issuing an RFP, neither IPL nor the Board, nor other parties, have any market comparison to the costs proposed to be deemed prudent. The lack of market comparisons is another example of IPL not satisfying the statutory requirements for consideration of other sources of electric supply. Any comparison of feasible alternative sources of supply must consider not only the type of generating asset for which advance ratemaking principles are requested, but also the cost profile and manner in which the utility receives the desired energy and capacity.

2. Project Economics

The evidence shows that IPL needs to replace capacity no longer available from the buyout of the remaining years of the Duane Arnold Energy Center (DAEC) PPA and the decision to close the Lansing coal fire generating facility (Lansing) at the end of 2022. The baseload capacity at the DAEC facility was only partially replaced and only with wind PPAs that have an accreditation factor well below that of the DAEC facility. Lansing also provides baseload capacity that needs to be replaced. In the order approving the buyout of the DAEC PPA, the Board raised concerns about the effect that

the buyout could have on the reliability and capacity reserve of IPL's system. (Interstate Power and Light Company, "Order Approving Settlement, Granting Waiver, and Granting Request for Confidential Treatment Filed October 25, 2018," Docket No. SPU-2018-0008, (December 11, 2018).)

Regardless of whether IPL's proposed projects are to replace some of the capacity resulting from the buyout of the DAEC PPA and the closing of Lansing, the issue being addressed by the Board in this docket is whether IPL satisfied the statutory requirement to consider other alternative sources of electric supply. IPL did not provide resource-neutral comparative cost analysis to either build or buy other generating facilities.

OCA witness Bents testified that the Blueprint was a useful tool for resource planning. (OCA Bents Direct pp. 6-7.) However, Mr. Bents testified that the rapid change in economics of electricity generation means the status quo cannot be assumed to be the most cost-effective proposal for meeting additional generation requirements, and that resource plans only remain useful if updated regularly based on new information that comes to light. (*Id.*) Mr. Bents proposed that the Board require IPL to rerun the Blueprint using more current costs, asset types, and quantities. Mr. Bents testified that the 2020 Blueprint had become outdated due to drastically changing conditions. (OCA Bents Rebuttal p. 3.) LEG and IBEC also argued that the Blueprint should have been updated.

The changing conditions of the electric generation market are evidenced by IPL's motion to allow IPL to file updated cost information based upon recent global supply disruptions and an increase in commodity prices and shipping costs. On June 21, 2022, IPL filed rebuttal testimony providing (1) an overview of the changes in global

and domestic economic conditions that are influencing the increase in solar and battery storage project costs, (2) IPL's efforts to mitigate those cost increases, and (3) updates to the Cost Cap Advance Ratemaking Principle that are needed to reflect current economic conditions. According to IPL, these issues have caused solar and storage markets to be subject to cost pressures, which impact the cost of developing and constructing the solar and battery projects.

The Board finds that a proper consideration of other sources of supply should have included an analysis of other generation resources or PPAs to replace the capacity lost with the buyout of DAEC and the closing of Lansing. In addition, IPL could have issued an RFP to see what other options were available in addition to ownership of the solar projects. An RFP would have provided IPL information about the electric generation market and would have provided valuable information about other sources of electric supply to replace the capacity lost by the DAEC buyout and the closing of Lansing. This information would allow the Board and other parties to fully review IPL's consideration of other sources of supply.

OCA argues in its brief that IPL has not fully satisfied the requirements in Iowa Code § 476.53(3)(c). OCA contends that IPL declined to update the Blueprint in response to increased costs and has not meaningfully investigated other resource options through an RFP or considering PPAs for a part of its needs. (OCA Brief p. 4.) LEG argues in its brief that the information provided by IPL in support of advance ratemaking treatment for the proposed projects is incomplete with much information still unknown. (LEG Brief p. 6.)

IPL and the Environmental Intervenors argue the Blueprint demonstrates that the proposed projects are reasonable when compared to alternative sources of supply. (Environmental Intervenors Brief p. 4; IPL Brief p. 20.) As discussed above, the

evidence does not support the arguments of the Environmental Intervenors and IPL on this issue.

The Board is not convinced that IPL complied with the statutory requirement to consider other long-term sources of electric supply in the Blueprint or in the record for this docket. IPL did not issue an RFP to find out what other sources were available in the market during the Blueprint process or before filing this advance ratemaking principle docket and did not consider a PPA with NextEra, other independent power producers, or any other potential sources. As pointed out by the other parties, the costs and market for construction of solar facilities have significantly changed since the Blueprint was developed. Those changes raise issues regarding IPL's consideration of other sources of electric generation. This is especially important with the passage of the IRA and the increased amount of planned generation facilities in the Midcontinent Independent System Operator, Inc. (MISO), footprint. In addition, there is no analysis by IPL comparing the cost of the energy and capacity from the projects with the cost of procuring that same energy and capacity in the market, even without a PPA.

The renewable energy market has the potential to significantly change with the enactment of the IRA. The IRA has changed the available incentives for construction of solar and battery facilities and has changed the economic analysis regarding the tax equity partnership. The Board issued the August 24, 2022 order reopening the record to allow for updated analyses based upon the IRA.

In response to the August 24, 2022 order, IPL witness Michek testified that the incentives provided in the IRA have changed IPL's plan to use tax equity partnerships to finance the generating facilities. However, IPL requests the flexibility to determine the optimum tax credit monetization strategy at a later date as an advance ratemaking

principle. (IPL Michek Post-Hearing p. 4.) Mr. Michek also testified that the IRA is not fully implemented and that the Internal Revenue Service (IRS) will need to adopt additional rules and guidance. That further guidance, interpretations, and markets will develop over time and may impact IPL's strategy. (IPL Michek Post-Hearing p. 7.)

Mr. Michek testified that provisions included in the IRA will impact the projects and potential alternatives. (IPL Michek Post-Hearing pp. 2-3.) The provisions Mr. Michek listed are: (1) the new availability of Production Tax Credits for solar generation, (2) the transferability of tax credits to another entity in exchange for a cash payment, (3) a new 30 percent Investment Tax Credit (ITC) for stand-alone energy storage, (4) the ability to elect out of ITC normalization for the BESS, (5) extension of the 30 percent ITC for solar generation, and (6) enhancements to tax credits for facilities located in an Energy Community. (*Id.*) Mr. Michek testified that IPL is still evaluating the impact of the IRA on the cost of the projects and that IPL needs the flexibility to determine the optimum tax credit monetization strategy in the event that guidance from the IRS implementing the IRA fundamentally alters IPL's supplemental economic analysis of the projects. (*Id*. p. 4.)

In his post-hearing testimony, Mr. Vognsen testified that it is LEG's understanding of the IRA that the full 30 percent ITC is now available for stand-alone battery storage projects, and there is no requirement that battery storage be paired with solar to be eligible for the tax credit. (LEG Vognsen Post-Hearing p. 6.) Mr. Vognsen testified that previously, a battery could only receive the ITC if it was 75 percent charged directly from a solar array, and now a battery could be sited at a different location. Mr. Vognsen testified that IPL should be required to evaluate locations for battery storage in which

transmission constraints or low load conditions have curtailed the output of IPL's wind facilities. (*Id.*)

The Board understands the argument that the IRA may exacerbate overall supply issues for parts needed to build generation resulting in an increase in generation costs, but the IRA will also subsidize the building of generation and should put downward pressure on market, other generation resources, and PPA prices. IPL acknowledged at the hearing that it expects market prices to be lower over time as more renewable resources come online and supplant higher cost generation. These are just a few of the changes resulting from the IRA that impact the analysis of the Blueprint and IPL's decision to construct and own the projects.

BOARD DECISION

IPL made complex business decisions to buy out the DAEC PPA and to close Lansing at the end of 2022. Both of these complex decisions left IPL with a shortfall of capacity to meet the needs of its customers. IPL has made the decision to replace the baseload capacity of the DAEC PPA and Lansing with renewable generation, such as the solar projects in this docket.

Based upon the evidence discussed above, the Board finds that at this time IPL has not demonstrated it has adequately considered other sources for long-term electric supply, or that the solar and BESS projects are reasonable when compared to other feasible alternative sources of electric supply. The Board finds that changing circumstances in the electric generation market, such as increased costs and supply issues, bring into question the project economics presented and the 2020 Blueprint analysis. In addition, IPL is planning to update the Blueprint at the end of 2022 or early

2023, which will provide more current analyses (Tr. at 145), and the IRA presents IPL with other potential sources of electric supply. The analysis of the economics of the proposed project compared to other sources of supply provided in the record in this docket does not meet the requirements of Iowa Code § 476.53(3)(c)(2).

The evidence shows that IPL made the decision to own the solar facilities early in the review process and then limited its consideration of other sources based upon that decision. Without the full consideration of other sources, the Board is not convinced that IPL ownership of the facilities is reasonable based upon the anticipated market for electric supply that will result from the IRA, especially given the proposed project's high net levelized customer costs provided in IPL witness Michek's exhibits. Consideration of other alternative sources, such as PPAs or issuing an RFP, would have provided support for IPL's decision or would have provided a more reasonable alternative source of supply. Since the enactment of the IRA, the electric market has the possibility of significant change, and the Board therefore needs full consideration of alternative sources of supply.

Based upon the lack of analysis in IPL's evidence, the lack of an analysis of alternative sources in the Blueprint, and changed market circumstances, the Board finds that IPL has not demonstrated that it has considered other sources for long-term electric supply and that the proposed projects are reasonable when compared to other feasible alternative sources of supply. The Board understands that a decision had to be made about replacing the loss of baseload capacity; however, the costs and economics of owning the facilities require IPL to ensure that the other alternative sources were fully analyzed. The Board finds that because IPL did not consider fixed PPAs, with or without an ownership option, did not issue an RFP to determine what alternatives the

market offers, did not consider any other alternatives that may be available, and due to the significant changes in the market that result from the IRA, weigh against IPL meeting the statutory requirement. The Board considers it necessary for a utility to meet the statutory requirement to analyze feasible alternatives and the Board finds that under the circumstances in this case IPL did not meet this statutory requirement.

Without the guidance and rules from the IRS or U.S. Department of Treasury, and without knowing the impacts the IRA will have on the electric generation market, comparison of IPL ownership as a reasonable alternative is speculative at best. Without additional analysis, including consideration of other generation resources or PPAs and issuance of an RFP, and more certainty in how the electric generation market will function after the IRA, the Board finds that IPL has not met the requirements in Iowa Code § 476.53(3)(c)(2) for consideration of advance ratemaking principles for the projects proposed in this docket.

The decision that IPL has not met the statutory requirements for considering advance ratemaking principles for the solar and BESS projects is not a determination that IPL should not go forward with the projects, or that the projects are not reasonable. After completion of a full consideration of alternative sources of electric supply in the current market, the decision to own the solar facilities may be reasonable. The decision made by the Board is that advance ratemaking principles for these projects, which lock costs into future rates, should not be considered until there is a full analysis of alternative sources of supply, or until the projects are presented to the Board in a general rate case where the prudency of IPL's decisions can be considered in a traditional review.

ORDERING CLAUSE

IT IS THEREFORE ORDERED:

The application for advance ratemaking principles filed by Interstate Power and Light Company on November 2, 2021, is not in compliance with Iowa Code § 476.53(3)(c)(2), and is therefore denied.

UTILITIES BOARD

Geri Huser Date: 2022.11.08 20:59:29 -06'00'

Richard Lozier Date: 2022.11.08 17:49:09 -06'00'

ATTEST:

Kerrilyn Russ Date: 2022.11.09 13:49:12 -06'00'

Josh Byrnes Date: 2022.11.09 08:44:38 -06'00'

Dated at Des Moines, Iowa, this 9th day of November, 2022.