

Observations on Idaho Power Company's Updated Draft 2026 All Source Request for Proposals for Peak Capacity and Energy Resources: Second Independent Evaluator Assessment Report



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List of acronyms

AEO	Annual Energy Outlook
AS	All Source
BEF	Bid Entry Form
BSA	Battery Storage Agreement
BTA	Build-Transfer Agreement
COD	Commercial Operations Date
EIA	Energy Information Administration
ELCC	Effective Load Carrying Capability
IE	Independent Evaluator
IPC	Idaho Power Company
IPUC	Idaho Public Utilities Commission
IRP	Integrated Resource Plan
ISL	Initial Shortlist
LCOC	Levelized Cost of Capacity
LCOE	Levelized Cost of Energy
LEI	London Economics International LLC
LTCE	Long Term Capacity Expansion
NIPPC	Northwest & Intermountain Power Producers Coalition
NREL	National Renewable Energy Laboratory
OAR	Oregon Administrative Rules
OPUC	Oregon Public Utilities Commission
PPA	Power Purchase Agreement
PVRR	Present Value Revenue Requirement
RFP	Request for Proposals
ROFO	Right of First Offer
RTE	Round-Trip Efficiency
SMM	Scoring and Modeling Methodology

1 Executive Summary

London Economics International LLC (“LEI”) was retained to serve as the Independent Evaluator (“IE”) of Idaho Power Company’s (“IPC” or “the Company” or “Idaho Power”) 2026 All Source (“AS”) Request for Proposals (“RFP”) for Peak Capacity and Energy Resources (“2026 AS RFP”). This report is the second deliverable of this engagement, in which LEI provides its observations and recommendations to the updated draft 2026 AS RFP (“updated draft RFP”) filed by IPC with the Oregon Public Utilities Commission (“OPUC” or “the Commission”) in Docket UM 2255 on April 5, 2023.

Although IPC incorporated some of LEI’s recommendations from the first IE Assessment Report¹ (“first IE Report”) in this updated version of the RFP, LEI finds that there are still a few outstanding comments and recommendations that were not reflected in the filed updated draft RFP. These outstanding comments and recommendations are enumerated in Figure 1 and discussed in detail in Section 3.

Figure 1. List of LEI’s outstanding recommendations to the updated draft RFP

1) Preferred resources	State clearly that resource needs are subject to change based on OPUC’s approval of the upcoming 2023 Integrated Resource Plan (“IRP”)
2) Benchmark bids	Disclose the number of prospective benchmark bids IPC intends to submit in the 2026 AS RFP and provide more information about these bids, such as fuel type, size, and substation they will be connected to
3) RFP schedule	Amend the RFP schedule to provide the IE with sufficient time to perform the various analyses and draft the remaining reports
4) Bid evaluation process	Provide more information in the final RFP on the following: model that will be used to evaluate the bids, and potential changes to the methodology (that is based on the 2021 IRP) as a result of the upcoming 2023 IRP
5) Contract term normalization	Provide more details on the approach to contract term normalization
6) Imputed debt	Remove imputed debt from the bid evaluation process and the financial model
7) Draft power purchase agreements (“PPAs”)	Modify several provisions in the draft PPAs, such as delay damages, right to terminate, facility operations requirements, performance guarantee, and round-trip efficiency requirement Delete some provisions in the draft PPAs, such as the right of first offer clause, references to OPUC approvals, solar forecasting costs, and references to special contract and Idaho Power’s customer
8) Draft Build-Transfer Agreements (“BTAs”)	Provide more clarity on the length and substantive requirements of the BTA’s duration and essential prerequisites Incorporate performance guarantees
9) Scenario analysis	Incorporate a sensitivity analysis wherein the Boardman to Hemmingway transmission line (“B2H”) project experiences an extended delay

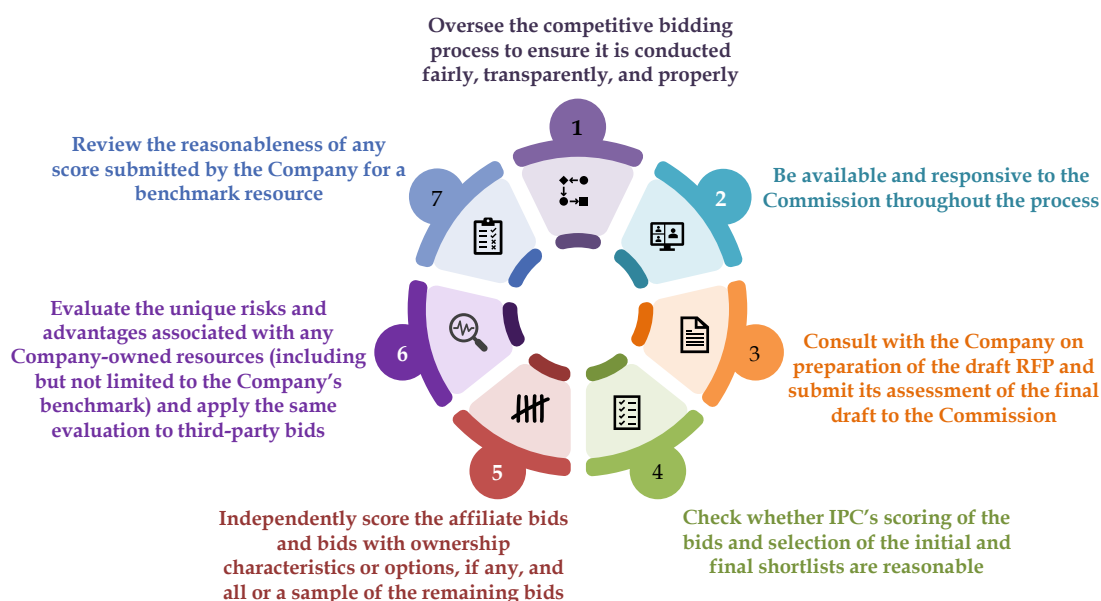
¹ The first Independent Evaluator Assessment Report was issued on March 1, 2023.

2 Introduction

IPC issued its updated draft RFP on April 5, 2023, through which it seeks to procure up to 1,100 megawatts (“MW”) of variable energy resources and at least 350 MW of peak capacity. This RFP is a response to the resource needs identified in IPC’s 2021 Integrated Resource Plan (“IRP”) and its 2026 and 2027 incremental needs, as provided in its application in Docket UM 2255.

The Company, through this RFP, is soliciting bids for two types of products, namely (i) energy and capacity delivered from electric resources such as solar PV, wind, geothermal, battery energy storage, long duration storage, and gas-fired units convertible to hydrogen,² and (ii) firm energy that meets the eligibility requirements of the Western Resource Adequacy Program.³ Resources can be existing or new; new resources must have a target commercial operations date (“COD”) on or before June 1, 2026 or June 1, 2027. In addition to the bids expected to be submitted by developers, the Company will also submit one or more benchmark bids, which will be evaluated using the same bid scoring criteria that apply to third-party bids.

Figure 2. Duties of the IE



Source: OAR 860-089-0450

² Idaho Power Company. *Draft 2026 All Resource Request for Proposals*. February 22, 2023. Tables 3-1 and 3-2. p. 15-16.

³ Idaho Power Company. *Draft 2026 All Resource Request for Proposal*. February 22, 2023. p. 13.

This RFP process will be overseen by the IE to ensure that it is conducted in a fair and reasonable manner. LEI,⁴ through a competitive bidding process, was selected to be the IE for this RFP process. Per the Oregon Administrative Rules (“OAR”) 860-089-0450, the IE’s duties include the items enumerated in Figure 2 above.

This report is the second IE report and one of several reports that the IE will be filing with the OPUC as part of its responsibilities. This report focuses on LEI’s observations and recommendations on the updated draft RFP that was posted on the Company’s RFP website⁵ on April 5, 2023, and additional information received via email from the Company as of May 8, 2023.

⁴ “IE” and “LEI” are used interchangeably throughout this report.

⁵ See: zsn.zycus.com/zsp/guest/genericRegister/IDA822

3 LEI's observations on the updated draft RFP and recommendations

The IE conducted a comprehensive review of the updated draft RFP for Idaho Power's Draft 2026 All-Source RFP, dated April 5, 2023, which was published on the IPC RFP 2026 website⁶ (a web page on the Company's website dedicated to this RFP) and on an RFP portal (the Company's solicitation platform called Zycus).⁷ Additional feedback and inquiries on the draft RFP were conveyed by LEI to the Company through email correspondences dated April 5, 2023, April 12, 2023, and April 26, 2023. Idaho Power provided responses to these comments and questions posed by LEI on April 7, 2023, April 14, 2023, and May 8, 2023.

3.1 IE's recommended adjustments to the final RFP

IPC incorporated into the draft RFP several of LEI's suggestions from the first IE Report. However, LEI finds that some major comments were not reflected in the updated draft RFP filed on April 5, 2023. The IE recommends that IPC incorporate in the final RFP these improvements to several areas of the document; these improvements are described in detail in the following subsections.

3.1.1 Resource needs

In the first IE Report, LEI proposed two recommendations aimed at clarifying the Company's resource needs: (i) adding the Company's preferred portfolio of resources from its 2021 IRP into the body of the RFP and (ii) updating the resource needs provided in "EXHIBIT E - Proposed Market Purchase Volumes" of the final RFP based on available 2023 IRP data.

Regarding the first suggestion, IPC chose not to include a preferred portfolio in the RFP document because the Company does not have any specific resource preferences. Instead, IPC is open to all bidder proposals and prefers to evaluate each type of resource that is bid into the solicitation.⁸ LEI does not have any issue with this strategy.

Regarding the second suggestion, in line with its suggestion in the first IE Report, LEI still expects IPC to update its resource needs in the final RFP based on the 2023 IRP. If the 2023 IRP is not finalized or acknowledged before the submission of the final RFP, IPC should clearly state in the RFP that resource needs are subject to change based on the upcoming 2023 IRP. The Company should likewise provide as much information as possible regarding the anticipated changes.⁹

⁶ See: <https://idahopower.com/about-us/doing-business-with-us/request-for-resources/>

⁷ See: zsn.zycus.com/zsp/guest/genericRegister/IDA822

⁸ IPC's responses to LEI's comments dated April 5, 2023, shared via email communication on April 12, 2023.

⁹ LEI understands that IPC's ultimate portfolio selection will be dependent on the makeup of the submitted bids and will thus be different from the preferred portfolio listed in the Company's IRP. However, LEI believes that the preferred portfolio described in the Company's 2021 IRP provides stakeholders with an understanding of

3.1.2 Benchmark bids

In the first IE Report, LEI noted that the draft RFP provides limited information about the characteristics of the benchmark bid. Accordingly, LEI recommended that IPC include in the final RFP an additional exhibit listing IPC's proposed benchmark resources, including but not limited to the following information, which has been provided in past RFPs held by other utilities under the oversight of the OPUC:¹⁰

- the number of prospective benchmark bids IPC intends to submit in the 2026 AS RFP;
- the size (in MW) of the bids;
- status of the resource (newbuild vs. existing facility);
- target commercial operations date;
- technology type;
- expected facility life;
- expected facility efficiency;
- type of product (resource-based or market purchase);
- interconnection status; and
- location.

IPC, OPUC Staff, and the IE discussed this matter during a meeting held on March 22, 2023. According to IPC, a separate and independent division within the Company will oversee the preparation of the benchmark bids, and as a consequence, the IPC RFP team is not aware of the specifics of these bids. IPC noted that the benchmark bid(s) will be evaluated in the same manner as any other submitted bid.

However, the disclosure of benchmark bids in the RFP is required by the bidding rules stipulated in OAR 860-089-0450 6c and also adheres to established precedents, such as the approach employed by PacifiCorp in its 2022 All-Source RFP. Consequently, LEI strongly advises IPC to incorporate the relevant information listed above.

Finally, should IPC choose not to make available the elements of the benchmark resource(s) such as site transmission rights, among other factors, to all bidders, it is imperative for the Company to present a comprehensive analysis justifying this decision, in compliance with the requirements set forth in OAR 860-089-0300.

the technology/resource types that IPC's system currently lacks. As a result, such portfolio is most likely to be selected by IPC in the evaluation process to fulfill system needs.

¹⁰ LEI specifically has in mind the precedent set by PacifiCorp in its most recent RFP ("PacifiCorp 2022 All-Source RFP"), in which it provided the level of information requested of IPC by LEI.

3.1.3 RFP schedule

In the first IE Report, LEI identified two issues in the draft RFP schedule proposed by IPC. First, LEI observed that IPC had set a deadline for bidders to submit their proposals two weeks prior to the start of IPC's review process. The IE recommended extending the bid submission deadline from May 31, 2023 to June 13, 2023 to allow bidders more time to prepare their submissions. The IE noted that this scheduling change would also put the RFP bid due date right after the filing of the IE's review of the benchmark bids, which aligns with OAR 860-089-0350¹¹ and helps to ensure that submitted bids are only opened after the benchmark bids have been fully evaluated and filed. In response, IPC revised the bid submission deadline to June 12, 2023, the same day that the IE is due to submit its benchmark bids review. Although this is not exactly what was suggested, the IE is satisfied with this compromise.

IPC, OPUC Staff, and the IE also discussed the docket schedule in the context of the submission of the benchmark bids report. OPUC Staff noted that, according to Oregon bidding rules, it is IPC—not the IE—that is tasked with submitting a benchmark bid report. As specified in the bidding rules, the IE is responsible for reviewing the benchmark bid(s) filed by IPC and providing feedback. LEI concurs with OPUC Staff on this matter.

Also relevant to the discussion of benchmark bids is LEI's recommendation in the first IE Report to allocate a minimum of three weeks for the benchmark bid analysis; this additional time in the schedule would allow the IE to carry out its independent review thoroughly and accurately. Though IPC previously stated that it would likely be able to move up the benchmark bids due date by one week, ultimately the due date as provided in the updated draft RFP was only moved up by two days, while the completion date for benchmark bid evaluation remains unchanged. LEI remains of the view that the time allocated for the benchmark bids review process is insufficient. As such, it has proposed to IPC that, if the benchmark bids report due date cannot be adjusted, then the benchmark bids submission deadline and benchmark bids evaluation should be rescheduled. LEI also noted that May 29, 2023, the proposed deadline for the submission of the benchmark bids, is a federal holiday.

Finally, during several meetings with IPC and OPUC Staff, LEI voiced concerns regarding the compressed schedule of the RFP. Especially in light of the number of bidders and bids expected to participate in the RFP, the IE proposes that the RFP timeline be adjusted accordingly. For example, LEI finds the current three-day window allotted for bid eligibility screening following the opening of the solicitation to be inadequate. Similarly, the IE has only been allotted four business days to review IPC's initial shortlist ("ISL") and prepare its analysis thereof. The IE requires a minimum of seven business days to conduct and five business days to write up its analysis. Additionally, only one day has been designated for the IE to complete its review of the ISL and for IPC to notify selected bidders that their bids have made it into the ISL; this timing

¹¹ OAR 860-089-0350(1) states: "Prior to the opening of bidding on an approved RFP, the electric company must file with the Commission and submit to the IE, for review and comment, a detailed score for any benchmark resource with supporting cost information, any transmission arrangements, and all other information necessary to score the benchmark resource. The electric company must apply the same assumptions and bid scoring and evaluation criteria to the benchmark bid that are used to score other bids."

assumes that there are no discrepancies between the ISL rankings prepared by the IE and IPC. To ensure a thorough evaluation process, the IE recommends that IPC add at least 5 business days between IE's filing of the initial shortlist and IPC notification of shortlisted bidders. This would give the IE and IPC time to consider and discuss ISL results as well as to address any discrepancies in respective rankings.

Thus, the IE proposes that IPC reassesses the indicative RFP timeline and allocates additional time for conducting in-depth analyses and preparing of reports. Additionally, the IE requests that it be included in IPC's deliberations around RFP schedule updates.

3.1.4 Bid evaluation process

The proposed scoring and modeling methodology ("SMM") was neither approved nor acknowledged through Docket UM 2255 prior to the opening of the 2026 AS RFP. Therefore, the SMM must be approved through the RFP process itself.¹²

In the first IE Report, LEI recommended providing clarity on the following key sections of the draft RFP:

- i. non-price scoring model;
- ii. price scoring model;
- iii. contract term normalization; and
- iv. ISL selection.

LEI's main concern with the proposed non-price scoring model (item (i)) was its broad and binary structure, which could entice bidders to score themselves favorably. As a solution, LEI suggested providing greater specificity to the non-price scoring methodology through the drafting of guiding questions or criteria. Subsequently, on April 14, 2023, IPC provided LEI with a new non-price scoring file named "Exhibit B-C-D - Bid Entry Form 3.22.23_v2.xlsm." This new file made the following improvements: it provided greater specificity to the non-price scoring questions and introduced three potential answers from which bidders could choose for each question (previously, bidders would simply self-score with a "yes" or "no" to each more broadly phrased question).

LEI appreciates IPC's effort to improve the non-price scoring methodology and at this point only recommends that IPC provide a numerical score for each potential answer to each question in the non-price scoring file.

Regarding the price scoring model (item (ii)), LEI acknowledges the high-level description of the price scoring methodology in the updated draft RFP. While it was recommended that Idaho

¹² The Commission granted a partial waiver of OAR 860-089-250(2)(a) to allow concurrent consideration of both scoring and modeling methodologies and the draft RFP. Source: *In re Idaho Power Company, Approval of Independent Evaluator Selection for 2026 All-Source Request for Proposal and Request for Partial Waiver of OAR 860-0890250(2)(a)*. Docket No. UM 2255. Order No. 22-495. December 29, 2022.

Power expand on the description of the model, no further explanations or commentary were included in the latest version of the draft RFP. Nevertheless, IPC did furnish LEI with the models and assumptions applicable to the SMM and ISL selection process. For the benefit of stakeholders—who have not had the same level of access to verbal, written, or numerical clarifications on the price scoring methodology that the IE was granted—LEI’s review and observations of the financial model and its assumptions are provided in Section 4 of this report.

In relation to the normalization of contract terms (item (iii)), LEI suggested in its initial IE Report that IPC incorporate additional details in the RFP outlining its methodology for evaluating power purchase agreements (“PPAs”) with varying contract terms (i.e., number of years) on an equal footing. In response to LEI’s suggestion and OPUC Staff’s information request dated April 14, 2023, IPC produced a detailed sample normalization calculation. LEI found the example to be highly instructive and pertinent to the queries raised. Consequently, it is recommended that IPC offer similar information to prospective bidders in the final RFP.

Finally, similar to the concern on the price scoring model, LEI finds the description of the shortlist selection in the draft RFP (item (iv)) to be too general. LEI is of the opinion that bidders would benefit from a more expanded description of how the AURORA modeling tool will be used to evaluate and select bids during the final shortlist selection process.¹³ IPC clarified that “Idaho Power will rely on the established and acknowledged IRP methodology to select economic portfolios and points stakeholders to that information directly.”¹⁴ While LEI is satisfied with the implementation of a methodology that is consistent with the acknowledged 2021 IRP, IPC should – as soon as available – disclose in the final RFP any potential changes expected as a result of the upcoming 2023 IRP.

3.1.5 Imputed debt impact of PPAs

In the first IE Report, LEI briefly discussed IPC’s intention to incorporate the cost of imputed debt into the bid evaluation process, specifically as part of the price-score assessment of bids. IPC would do this by estimating the cost of imputed debt for all submitted bids and adding this estimated cost on top of each project’s respective total cost.¹⁵ IPC argues that this step is necessary as imputed debt is a type of financial obligation that impacts the Company’s cost of debt and – potentially – its credit rating. LEI’s recommendation was to exclude imputed debt in the bid evaluation process for three main reasons:

¹³ Following multiple conversations between IPC, OPUC Staff, and the IE, it was agreed that the initial shortlist will be selected using only the results of the non-price and price scoring assessments. The levelized cost of capacity (“LCOC”) output of the price scoring model, described in detail in Section 4 of this report, is a cost metric input to the AURORA model, which will only be used in the final shortlist selection process.

¹⁴ Idaho Power Reply Comments. Oregon Docket No. UM2255. Filed March 24, 2023. p. 5. <<https://edocs.puc.state.or.us/efdocs/HAC/um2255hac145552.pdf>>.

¹⁵ Idaho Power Company. *Draft 2026 All Resource Request for Proposal*. February 22, 2023. p. 29.

1. there are other financial and risk factors that IPC will not be analyzing as part of the bid evaluation process;¹⁶
2. the inclusion of imputed debt would require the involvement of a utility accounting expert in this proceeding; and
3. the application of an imputed debt calculation methodology lacks transparency.¹⁷

Following several discussions with both IPC and OPUC Staff, LEI continues to maintain its position on imputed debt. While IPC's concerns are recognized, evidence suggests that the imputed debt associated with newly acquired PPAs, battery storage agreements ("BSAs"), and third-party assets does not definitively result in an increase in a company's debt and debt-related costs that would, in turn, lead to a downgrade by credit rating agencies. Furthermore, an all-source solicitation may not be the appropriate venue to address the impact of imputed debt on the Company's finances. LEI's primary concern with the inclusion of imputed debt into the bid evaluation process is that—in addition to the aforementioned concerns—it may unintentionally favor utility builds over submitted bids, or put submitted bids at a comparative disadvantage.

In recent years, US jurisdictions have taken different approaches to the treatment of imputed debt in the context of the resource procurement process. Some of the relevant arguments made by utilities, market stakeholders, and regulators can be summarized as follows:

- Utilities are concerned that the treatment of PPAs as debt obligations could increase the cost of borrowing, impacting the utility's credit rating and—ultimately—consumer rates. As such, utilities have proposed solutions such as the implementation of cost recovery mechanisms (where the utility would recover costs through adders or surcharges on ratepayer bills) or even having the regulator or other state agency (as opposed to the utility itself) act as the counterparty to the relevant PPA.
- Market stakeholders have questioned the extent to which PPAs do, in fact, impact a utility's debt equivalence.¹⁸ These stakeholders argue that utilities presume—without providing any supporting evidence—the treatment of PPAs by credit rating agencies as debt obligations. Moreover, utilities have been criticized for not providing any evidence that imputed debt, if indeed taken into consideration, would have a real, material impact on their balance sheets.¹⁹

¹⁶ For example, IPC has not expressed its intent to assess the risk factors associated with utility-built options, or the risks and benefits of utility-built options as compared to those of PPAs. By only including imputed debt as part of the bid evaluation process, IPC would not be treating fairly all resources bid into the solicitation.

¹⁷ Fagan, Marie, Ma. Cherrylin Trinidad, Sayad Moudachirou, Barbara Porto, Bat-Erdene Baatar, and Hannah Braun. *Observations on Idaho Power Company's Draft 2026 all Source Request for Proposals for Peak Capacity and Energy Resources: Independent Evaluator Assessment Report*. March 1, 2023. p. 14-15.

¹⁸ Debt equivalence is a term that describes the debt-like quality of long-term contracts. Source: Kahrl, Fredrich. *All-Source Competitive Solicitations: State and Electric Utility Practices*. Grid Modernization Laboratory Consortium, US Department of Energy. March 2021. p. 53.

¹⁹ For example, the regulator in Indiana did not allow Southern Indiana Gas and Electric Company's request for the inclusion of an adder to the solar PPA payment to offset the cost of imputed debt over the life of the contract.

- Regulators and regulatory staff have expressed concern about the impact of imputed debt on customer rates. Additionally, they have also expressed concern with the potential misinterpretation by utilities of the imputed debt calculation methodologies applied by credit rating agencies.

In a paper prepared by the Grid Modernization Laboratory Consortium of the US Department of Energy, debt equivalence is described as one of “the most important comparability challenges” for competitive procurements into which both utility and non-utility-owned assets are bid.²⁰ Specifically, “Because debt equivalence and other utility financial impact metrics have the potential to influence procurement decisions, their use in bid evaluation requires care to mitigate their effect on the competitiveness of the solicitation.”²¹ To this end, some jurisdictions have allowed the inclusion of debt equivalence in the bid evaluation process, but only under certain conditions. For instance, California utilities cannot apply adders for imputed debt when self-build options are bid into the solicitation process.²² In other states, utilities were asked to provide justification for the inclusion of imputed debt in their respective procurement processes.

Finally, there are several examples of regulatory proceedings in which the regulator opted against allowing for imputed debt considerations in the resource procurement process -- either because the utility was unable to deliver the requested evidence or because the procurement process was found to be an inappropriate venue for imputed debt discussions.²³

3.1.6 Draft PPAs and BSAs

In its RFP, IPC included contract forms (Exhibit H) for solar-specific PPAs, a battery-specific grid-charged tolling agreement (the BSA), and a battery-specific build transfer agreement (“BTA”). IPC did not provide contract forms or summary term sheets applicable to other technology types that may bid into the RFP. IPC should provide, at a minimum, term sheets relevant to other types of technologies (e.g., wind, solar-plus-battery solutions, etc.).

An intervenor—the Northwest & Intermountain Power Producers Coalition (“NIPPC”)—provided feedback on IPC’s contract terms.²⁴ For the reader’s convenience, where applicable, LEI

The regulator stated, “We find it is not prudent to approve an adder when its necessity is in question and the benefits were not demonstrated. We are also reluctant to approve the proposed adder based on speculation upon the impact in the future to Petitioner’s credit metrics.” Order of the Commission, October 27, 2021. (Cause No. 45501)

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

²³ District of Columbia FC1017-2019-E952 and FC1017-2020-E-867; Indiana Case No. 45501; and Michigan Case No. U-20165.

²⁴ Oregon Public Utilities Commission. *Northwest & Intermountain Power Producers Coalition’s Comments on Draft Request for Proposals*. Docket No. UM 2255. March 17, 2023.

notes where its feedback aligns with that of NIPPC. Where necessary, LEI provides additional observations. LEI is not a legal expert, therefore the comments in the subsections that follow should not be taken as legal advice.

The following comments apply to provisions of Exhibit H, the PPA template, and the BSA template.

3.1.6.1 Right of first offer (“ROFO”)

IPC’s ROFO clauses (PPA Sections 8.1-8.8 and 9.4) are not reasonable. The OPUC Staff report concurs on this matter, specifying (as Condition 7) that IPC remove §8.5 “Negotiation of Facility Purchase” from all Draft Form Agreements in which it appears.²⁵ IPC is in the process of drafting alternative language.

3.1.6.2 Delay damages

LEI agrees with NIPPC that delay damages, at \$400/MWac (PPA Section 1.25), are unreasonably high.²⁶ LEI believes IPC’s damages should fall within the range of damages provided in other RFPs cited by NIPPC, i.e., \$150/MWac to \$200/MWac. Also, LEI agrees that the PPA form should reduce delay damages for cases in which an operating facility is partially completed, as is already stipulated in the BSA form (Section 1.28).

3.1.6.3 Development security

LEI agrees with NIPPC that IPC should clearly state that development security may be established with cash.²⁷ LEI finds that the security amounts required by IPC (\$90,000 per MW for development security and \$45,000 per MW for default security) are reasonable, as they are within the broad ranges contained in a variety of other PPAs.

3.1.6.4 Idaho Public Utility Commission (“IPUC”) approval

LEI agrees with NIPPC that there should be a day-for-day extension to the Scheduled Commercial Operation date if IPUC approval of the contract takes more than 6 months, as well as a right to terminate without damages payable by the Seller for longer delays. The reference to OPUC approvals should also be removed.²⁸

²⁵ Oregon Public Utility Commission. *Public Utility Commission of Oregon Staff Report*. Docket No. UM 2255. May 3, 2023. p. 2. <<https://edocs.puc.state.or.us/efdocs/HAH/um2255hah11921.pdf>>.

²⁶ Oregon Public Utility Commission. *Northwest & Intermountain Power Producers Coalition’s Comments on Draft Request for Proposals*. Docket No. UM 2255. March 17, 2023. p. 28.

²⁷ *Ibid.* p. 29.

²⁸ *Ibid.*

3.1.6.5 Limitation of Idaho Power Transmission liability

NIPPC argued that the provisions in PPA Sections 1.145, 7.2.1, and 15.1 could eliminate the Seller's ability to cite Idaho Power's interconnection delays as justification for the inability to perform under the PPA or BSA. As such, these provisions should be removed.²⁹

LEI generally agrees with NIPPC and has the following recommendations:

- Section 1.145 (under Definitions, Rules of Interpretation) of IPC's PPA provides that: *"Notwithstanding any other provision in this Agreement, nothing in the Generation Interconnection Agreement, nor any other agreement between Seller on the one hand and Transmission Provider or Interconnection Provider on the other hand, nor any alleged event of default thereunder, shall alter or modify the Parties' rights, duties, and obligation hereunder."* LEI agrees with NIPPC that this is unfair to the Seller, as the actions taken by a Transmission Provider are outside of the reasonable control of the Seller.
- Section 7.2.1 (under Standard of Facility Operation) provides that: *"Seller acknowledges that it shall have no claims hereunder against Idaho Power with respect to any requirements imposed by or damages caused by (or allegedly caused by) the Transmission Provider. Seller will have no claims against Idaho Power under this Agreement with respect to the provision of station service."* Furthermore, *"Seller acknowledges that Idaho Power, acting in its merchant capacity function as purchaser hereunder, has no responsibility for or control over Interconnection Provider or Transmission Provider, and is not liable for any breach of agreement or duty by Interconnection Provider or Transmission Provider."* LEI finds these provisions to be acceptable only if other provisions of the PPA make it clear that the Seller will not be held responsible for delays that were caused by the Interconnection Provider and/or the Transmission Provider.
- Section 15.1 (under Force Majeure) includes the following provision in the description of what Force Majeure is not: *"(vii) any delay, alleged breach of contract, or failure by the Transmission Provider, Network Service Provider or Interconnection Provider unless due to a Force Majeure event."* LEI does not take issue with this language, as it is much like provisions of other PPAs that LEI has encountered. However, as noted above, LEI finds these provisions to be acceptable only if other provisions of the PPA make it clear that the Seller will not be held responsible for delays that were caused by the Interconnection Provider and/or the Transmission Provider.

3.1.6.6 Qualified operator

Lastly, LEI agrees with NIPPC that facility operations requirements (PPA Section 1.105 and BSA Section 1.108) should be reduced to align with the maturity and size of the relevant industry.³⁰

²⁹ Ibid. p. 31.

³⁰ Ibid.

Whatever such requirements are, they should apply to utility-owned bids as well as to third-party PPAs and BSAs.

3.1.7 Draft solar PPA (Exhibit H)

LEI agrees with NIPPC that the solar PPA (Section 7.7) should not include IPC's portfolio-wide near-term solar forecasting costs, i.e., the Idaho Power administered solar forecasting model should not be applied to all solar projects that are under contract to provide energy to Idaho Power.³¹ Other PPAs that LEI has reviewed in its previous work for other clients generally do not require this type of payment; some Buyers accept the solar producer's (Seller's) forecast.

With regards to the performance guarantee, LEI agrees with NIPPC that the confusing language in Section 12.1.2.8 should be clarified. As noted by NIPCC *"The language contains a default and termination provision designed for an annual delivery guarantee structured entirely differently from the form's monthly guarantee and liquidated damage structure. It states that a default for two consecutive years of annual performance criteria, while monthly performance criteria are specified in the previous failing to meet the performance guarantee will result in termination. This is confusing and appears to be a hold-over from a prior form using an annual delivery guarantee."*³²

Finally, multiple references to "special contract" and "Idaho Power's customer" should be deleted, as the RFP makes no other reference to a special contract customer.³³

3.1.8 Draft BSA (Exhibit H)

Round-trip efficiency ("RTE") is the ratio of useful energy output to useful energy input. NIPPC argues that the contract's 87% RTE requirement (BSA Sections 1.52, 4.5.3, and 12.1.2.8) is too high.³⁴

LEI notes that the proposed RTE is on the high end of current and recent technology. In 2019, the utility-scale battery fleet in the United States operated with an average monthly round-trip efficiency of 82%.³⁵ In 2021, the National Energy Renewable Laboratory ("NREL") adopted 86%

³¹ Ibid. p. 32.

³² Ibid.

³³ Ibid. p. 33.

³⁴ Ibid. p. 34.

³⁵ Mey, Alex. "Utility-scale batteries and pumped storage return about 80% of the electricity they store." US Energy Information Administration. February 12, 2021. <<https://www.eia.gov/todayinenergy/detail.php?id=46756#:~:text=Round%2Dtrip%20efficiency%20is%20the,lost%20in%20the%20storage%20process>>.

as its Annual Technology Baseline.³⁶ In addition, as noted by NIPPC, RTE can decline over the life of the battery. For these reasons, LEI would prefer to see the RTE requirement be negotiable.

Similar to NIPPC, LEI suggests that Section 7.7 should provide a reasonable deadline for complying with charging/discharging instructions.³⁷

3.1.9 BTA (Exhibit H)

3.1.9.1 Requirements of foundational contracts

Unlike a PPA, in which the developer retains ownership of the project and may expect to benefit from any value remaining at the end of the PPA term, in a BTA, the developer gains no upside beyond the sale price it charges when it transfers the project to the utility (the buyer). In addition, it is standard industry practice for the BTA developer to price all cost contingencies into its bid, which contributes to a higher price tag than if the utility were to engage an engineering, procurement, and construction (“EPC”) contractor on its own.³⁸ The contracts that provide the foundation of a BTA (the EPC contract, operations and maintenance agreements, long-term service agreements, and warranties) are therefore crucial to the balance of risk taken on by the utility versus the developer. Therefore, LEI agrees with NIPPC that the BTA must provide more clarity on the length and substantive requirements of such foundational contracts.³⁹

3.1.9.2 Performance guarantees

LEI agrees with NIPPC that the BTA must contain ongoing performance guarantees equivalent to those in the BSA, including:⁴⁰

1. penalties and termination risk for non-performance;
2. a specified level of guaranteed RTE upon project completion before transfer of ownership; and
3. ongoing contractual warranties with damages and termination rights (for the life of the resource over which the levelized cost of energy (“LCOE”) is calculated for the price score) or contingency cost risk adders.

³⁶ “Utility-Scale Battery Storage.” National Renewable Energy Laboratory. <https://atb.nrel.gov/electricity/2021/utility-scale_battery_storage>.

³⁷ Oregon Public Utilities Commission. *Northwest & Intermountain Power Producers Coalition’s Comments on Draft Request for Proposals*. Docket No. UM 2255. March 17, 20. p. 35.

³⁸ Lazaroff, Mark A. and Neeraj Arora. “Key Considerations for Utility-Scale Energy Storage Procurements.” Morgan Lewis. March 8, 2023. <<https://www.morganlewis.com/pubs/2023/03/key-considerations-for-utility-scale-energy-storage-procurements>>.

³⁹ Ibid. p. 35.

⁴⁰ Ibid.

3.2 Summary of proposed improvements expected in the final RFP

In summary, LEI recommends the following improvements to be incorporated in the final RFP and its accompanying exhibits. These adjustments will make the solicitation process clearer and more transparent to all stakeholders:

- i. add to the body of the RFP the Company's target procurement mix based on the latest acknowledged IRP and disclose if resource needs are expected to change during the course of the 2026 AS RFP process;
- ii. incorporate a new exhibit disclosing the suggested additional information on the prospective benchmark bids;
- iii. adjust the RFP schedule and extend the time allocated for conducting in-depth analyses and preparing of reports;
- iv. include numerical scores for each answer to each question in the non-price score file;
- v. provide more detailed information on as well as an example of IPC's approach to contract normalization;
- vi. disclose any potential changes to the SMM and assumptions adopted from the acknowledged 2021 IRP as a result of the upcoming 2023 IRP;
- vii. exclude the cost of imputed debt in the evaluation of bids;
- viii. provide summary term sheets for all technology types;
- ix. adjust the following in the draft PPA and/or BSA:
 - a. delay damages should be reduced to \$150-200/MWac in both the PPA and BSA;
 - b. add day-for-day extension to the Scheduled Commercial Operation date if IPUC approval of the contract takes more than 6 months;
 - c. add right to terminate without damages by the Seller for longer delays;
 - d. add a provision in the PPA stating that the Seller will not be held responsible for delays caused by the Interconnection Provider and/or the Transmission Provider;
 - e. adjust facility operations requirements to align with the maturity and size of the relevant technology's industry;
 - f. adjust confusing language on performance guarantees in the draft solar PPA (Section 12.1.2.8); and
 - g. revise the RTE requirement in the draft BSA to be negotiable (not fixed).
- x. remove the following from the draft PPA:
 - a. ROFO clause;
 - b. references to OPUC approvals;
 - c. IPC's portfolio-wide near-term solar forecasting costs; and
 - d. references to "special contract" and "Idaho Power's customer" in the solar PPA.

- xi. provide more clarity on the length and substantive requirements of the BTAs as well as ongoing performance guarantees equivalent to those in the BSA;
- xii. enhance the transparency of the BTAs by providing further elaboration on their duration and essential prerequisites; and
- xiii. ensure that comparable ongoing performance guarantees featured in the BSA are also incorporated in the BTA.

4 Comments on AURORA assumptions and modeling

In response to an IE information request, on April 14, 2023 IPC provided its key assumptions to its financial model. These include load forecast, supply (new entry and retirements), fuel prices, and planned key scenarios. In addition, IPC also provided the IE with the draft financial model that it will use to evaluate bids. The comments in this section of the report pertain to the updated financial model provided to the IE; LEI expects that an updated financial model will be provided by IPC before the actual evaluation of bids.

4.1 Assumptions used in the model

4.1.1 Load forecasts

As stated by IPC, the load forecast for the 2026 AS RFP will be derived from the load forecast underlying the 2023 IRP, which is currently under revision.⁴¹ While LEI acknowledges the importance of incorporating an up-to-date load forecast, potential issues arise from the fact that the 2023 IRP has not yet been approved. LEI recommends that IPC should communicate transparently with bidders about any potential issues or uncertainties related to the load forecast utilized for the purpose of the 2026 AS RFP and provide regular updates on any changes or revisions to the forecast as they become available.

4.1.2 Resources

According to IPC, power generating facilities that are currently operational and included in the AURORA model align with the portfolio of resources provided in the acknowledged 2021 IRP. The AURORA model only incorporates into the system existing and contracted resources, as well as resources that align with announced and/or assumed customer clean energy goals. Any further new entry additions are determined through so-called Long-Term Capacity Expansion (“LTCE”) modeling. Similarly, retirements are modeled in accordance with the 2021 IRP: retirement decisions are based on either the plant’s economic feasibility or end-of-life date. LEI finds IPC’s approach to modeling new entries and retirements to be in line with established industry practice and therefore deems it to be an appropriate and consistent approach.

4.1.3 Fuel prices

Fuel costs are a key driver in the selection and optimization of resources by the AURORA model. Most fuel forecasts utilized by IPC are from well-known third-party vendors. Below is a list of sources associated with each of IPC’s fuel assumptions to be applied in bid evaluation modeling exercises:

- *natural gas (base case)*: Platt’s long-term Henry Hub gas price forecast as of June 2023;

⁴¹ IPC. Response to LEI’s questions on AURORA assumptions. Shared via email communication on April 14, 2023.

- *natural gas (low case)*: Henry Hub gas price from the US Energy Information Administration's ("EIA's") 2023 Annual Energy Outlook ("AEO") High Oil & Gas Supply forecast;
- *natural gas (high case)*: Henry Hub gas price from the EIA's 2023 AEO Low Oil & Gas Supply forecast;
- *clean gas (hydrogen)*: NREL;⁴²
- *biomass*: NREL 2022 Annual Technology Baseline;
- *coal*: IPC's own forecast, as per its 2021 IRP; and
- *uranium (small modular reactor)*: NREL's 2022 Annual Technology Baseline.

LEI understands that the fuel forecasts used in this RFP process will be aligned with the upcoming 2023 IRP. IPC will also provide LEI with all fuel forecast assumptions once they are available and prior to running AURORA.

4.1.4 Calculation of the Effective Load Carrying Capability ("ELCC")

The ELCC is a reliability-based metric used to assess the ability of a resource to meet load when it is most needed by the system. Technically, the ELCC measures the contribution of a resource to system reliability. LEI understands that IPC will calculate the ELCC for each resource bid into this solicitation based on the ELCC calculation methodology of the acknowledged 2021 IRP. This methodology was further elaborated upon in IPC's presentation to the Integrated Resource Plan Advisory Council.⁴³ According to these sources, IPC calculates the ELCC for variable and energy-limited technology types, including run-of-river hydropower, demand resources, wind, solar, and storage (standalone or in combination with a renewable resource).

In the 2021 IRP, IPC adopted the concept of "last-in ELCC," in which individual future resources are added to the system one at a time (as opposed to all at once). The ELCC of each resource is calculated upon their addition to the system. This is essentially a marginal ELCC methodology, which measures the incremental capacity value of a resource type (or a combination of resources), evaluated relative to an existing portfolio of the same resource type. Marginal ELCC is useful for comparing new resource options against one another at the margin. This is the methodology chosen by IPC to estimate ELCC for future resources; LEI does not have a critique of this choice.

4.1.5 Scenarios

As part of the final shortlist process, IPC stated its plan to conduct a series of sensitivity analyses consistent with the upcoming 2023 IRP (see Figure 3 below).

⁴² Denholm, Paul et al. *Examining Supply-Side Options to Achieve 100% Clean Electricity by 2035*. National Renewable Energy Laboratory. 2022. <<https://www.nrel.gov/docs/fy22osti/81644.pdf>>.

⁴³ IPC. *Reliability & Capacity Methodologies Overview, 2023 Integrated Resource Plan*. March 9, 2023.

Figure 3. IPC’s proposed sensitivities

1) Base case	Gas: Platts Henry Hub natural gas price forecast as of June 2023
	Includes a carbon price forecast and total emissions constraints on some coal units as well as state-level carbon policies and RPS standards
	B2H operations starting in 2026
2) High gas and high carbon	Gas: Based on EIA’s 2023 Annual Energy Outlook Low Oil and Gas Supply forecast
	Carbon: 2023 IRP high carbon price forecast
3) Low gas and zero carbon	Gas: EIA’s 2023 high oil/gas supply forecasts
	Carbon: Assumes no federal or state legislation that would require a tax or fee on carbon emissions and therefore zero carbon costs
4) B2H delayed until 2027	Base case with B2H starting operations in 2027, instead of 2026

Note: “B2H” refers to the Boardman to Hemmingway transmission line, currently under construction.

Source: Idaho Power’s responses to LEI’s comments dated April 5, 2023

In addition, IPC will conduct a stochastic analysis to evaluate the impact on portfolio costs when certain variables deviate from their established planning-case levels. As outlined in the RFP, the stochastic analysis will consider variations in hydrologic conditions, load/demand, natural gas prices, and carbon prices, all of which will be based on the forthcoming 2023 IRP. According to IPC, the following is the expected range of values for the fuel variable in the stochastic analysis:

- **natural gas:** the stochastic spread will allow natural gas prices to swing within a range of \$1.35/MMBtu to \$20.48/MMBtu; and
- **carbon price:** price adder will range between \$0/ton and \$412/ton.

Hydrology and electricity demand variables for the stochastic analysis will be provided to LEI once the 2023 IRP is finalized.

It is LEI’s understanding that IPC will furnish LEI with the final 2023 IRP sensitivities and stochastic inputs once they become available. Upon receiving these inputs, LEI will conduct a thorough review of the data (and bid rankings) in compliance with the requirements stipulated

in OAR 860-089-0400. Subsequently, LEI will submit a comprehensive written evaluation to the Commission before IPC seeks acknowledgment of the final shortlist.

In addition to the sensitivities proposed by IPC, LEI recommends incorporating a sensitivity analysis wherein the Boardman to Hemmingway (“B2H”) project experiences an extended delay, i.e., an operational start year of 2030. A one-year delay such as proposed by IPC may have little impact on which projects comprise the optimal resource portfolio; a longer delay will provide a more stringent test.

4.2 Draft financial model

IPC will use its proprietary Excel-based model to conduct a financial analysis and subsequently prioritize bids to form the ISL. This model will serve as an initial screening tool that calculates the levelized cost of capacity (“LCOC”) of each bid, whether for a single or bundled project (e.g., solar plus storage). It computes the cost of a bid's resources over the project's lifetime in terms of present value revenue requirement (“PVRR”) per megawatt hour (“MWh”). The LCOC is the monthly cost per kilowatt that customers would incur for each project selected by IPC (Figure 4).

Figure 4. LCOC formula

$$LCOC = \frac{PVRR / \text{plant size} \times 1,000}{12 \text{ months}}$$

The LCOC calculation uses project-specific information provided in “EXHIBIT B – Bid Entry Form,” as well as underlying internal assumptions developed by IPC.

IPC operational and financial input assumptions are the same across different technology types. Assumptions are based on the latest information available for the upcoming 2023 IRP and are similar to the assumptions found in the acknowledged 2021 IRP (see Figure 5 below). LEI will review these assumptions again during the ISL process to check for any changes.

Figure 5. IPC’s key financial assumptions

Table 9.1 Financial Assumptions	2023 IRP	2021 IRP	2019 IRP	Δ
Plant operating (book) life		Expected Life of Asset		
Discount Rate weighted average cost of capital	7.12%	7.12%	7.12%	0.000% Per Bruce MacMahon, no change.
Composite tax rate	25.74%	25.74%	25.74%	0.000% Per Gene Marchioro, no change.
Deferred rate	21.30%	21.30%	21.30%	0.000% Per Gene Marchioro, no change.
General O&M escalation Rate	2.60%	2.30%	2.20%	0.300% Based on a forecast of headline CPI from the Oct 2022 vintage forecast run.
Annual property tax rate (% of Investment)	0.44%	0.47%	0.49%	-0.030% Idaho Tax levies declined due to market value shift
Property tax escalation rate	3.00%	3.00%	3.00%	0.000% Idaho tax budget growth is restricted to 3%.
Annual insurance premiums (% of Investment)	0.046%	0.049%	0.308%	-0.003% Actual 2022 increase for renewal - Jeff Pleimann
Insurance escalation rate	5.00%	3.00%	2.00%	2.000% Property renewal we used Factory Mutual Insurance Company development factor
AFUDC Rate (annual)	7.50%	7.45%	7.65%	0.050% Email from Micheal White with AFUDC. Also pulled from 2021 10-K. Bond refinances contributed to the increase
Current Year PTC Credit	\$ (27.50)			Per Gene Marchioro, PTC is \$27.50 MWh for 2022 and inflation adjusted each year thereafter
PTC Term	10.00			
ITC Credit	30.00%			
Discount Delay	0.50			
Financing:				
Composition				af-tax
Debt	50.10%	50.1%		0.000%
Preferred	0.00%	0.0%		0.000%
Common	49.90%	49.9%		0.000%
Cost				
Debt	5.73%	5.7%		0.000%
Preferred	0.00%	0.0%		0.000%
Common	10.00%	10.0%		0.000%
Incremental Borrowing Rate	5.50%			

Source: “2026 RFP Financial Models 04.13.23.xlsx” as of April 14, 2023

In addition to the key financial assumptions listed above, IPC has tax and economic (book) project life assumptions for each technology type (see Figure 6 below), which are used to calculate production tax credit amounts. Project life assumptions are also based on the upcoming 2023 IRP.

Figure 6. IPC’s project life assumptions

Project Lives	Tax	Book
Solar	5	35
Wind	5	30
BESS	5	20
SMR	20	60
Biomass	20	30
Geothermal	5	30
Clean Gas	20	35
SCCT	20	35
CCCT	20	30

Source: “2026 RFP Financial Models 04.13.23.xlsx” as of April 14, 2023

LEI analyzed the methodology employed by IPC to determine the LCOC for each bid using the Excel-based financial model entitled "2026 RFP Financial Models 04.13.23.xlsx" submitted via email on April 14, 2023. The model differentiates between LCOC calculations for ownership offers, such as BTA offers, and those for third-party-owned assets, such as PPA or BSA offers.

IPC included an estimated imputed debt cost in the LCOC computation for third-party-owned asset bids. However, as outlined in Section 3.1.5, LEI recommends excluding imputed debt from the bid evaluation process.

Aside from the matter of imputed debt, LEI considers the LCOC computation in IPC's draft financial model to be a sound and justifiable approach for ranking bid proposals.