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December 4, 2023

## VIA E-MAIL TO

Public Utility Commission of Oregon Filing Center 201 High Street SE, Suite 100 Salem, Oregon 97301-3398

## Re: Docket UM 2255 - In The Matter if Idaho Power Company, Application for Approval of 2026 All-Source Request For Proposals To Meet 2026 Capacity Resource Need

Attached for filing in the above-referenced matter, please find Idaho Power Company's Request for Acknowledgement of Final Shortlist of Bidders in the 2026 All-Source Request for Proposals. Confidential copies of this filing will be distributed to persons qualified under Protective Order No. 22-337, entered on September 16, 2022.

Please contact this office with any questions.

Sincerely,

Cole Alber

Cole Albee Paralegal McDowell Rackner Gibson PC

## BEFORE THE PUBLIC UTILITY COMMISSION

## OF OREGON

UM 2255

In the Matter of

IDAHO POWER COMPANY,

Application for Approval of 2026 All-Source Request for Proposals to Meet 2026 Capacity Resource Need.

## REQUEST FOR ACKNOWLEDGMENT OF FINAL SHORTLIST OF BIDDERS IN THE 2026 ALL-SOURCE REQUEST FOR PROPOSALS

# I. INTRODUCTION

In accordance with OAR 860-089-0500, Idaho Power Company (IPC or Company) requests that the Public Utility Commission of Oregon (Commission) acknowledge the final shortlist of bidders in IPC's 2026-2027 All-Source Request for Proposals for peak capacity and energy resources (2026 RFP or RFP).

In this filing, IPC is seeking acknowledgment of the 2026 RFP final shortlist to meet the energy and capacity needs outlined in the acknowledged 2021 Integrated Resource Plan (2021 IRP)<sup>1</sup>, and further defined in the Company's recent filing of the 2023 Integrated Resource Plan (2023 IRP)<sup>2</sup> on September 29, 2023. While IPC is maintaining these procurement targets consistent with prior filings, in this filing IPC further provides analysis reviewing the costs and risks associated with different procurement scenarios including the procurement of resources in excess of the need identified in the acknowledged 2021 IRP and filed 2023 IRP.

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<sup>&</sup>lt;sup>1</sup> Integrated Resource Plan (idahopower.com)

<sup>&</sup>lt;sup>2</sup> <u>https://docs.idahopower.com/pdfs/AboutUs/PlanningForFuture/irp/2023/2023-irp-final.pdf</u>

#### II. IDAHO POWER RESOURCE NEED

In this RFP, IPC is pursuing energy and capacity resources to meet customers' needs and ensure the Company can continue to reliably meet the growing demands on its electrical system. IPC was generally resource-sufficient since the addition of the Langley Gulch natural gas-fired power plant nearly a decade ago. However, since 2021 and based on the most up-to-date load and resource buildout, the Company has identified near-term and mid-term capacity deficiencies for each year starting in 2023.<sup>3</sup> This rapid change in resource position is caused by several dynamic and evolving factors including: (1) third-party transmission constraints and changes to the buildout assumptions regarding available transmission capacity following the retirement of coal plants; (2) the unavailability of import transmission capacity on the market; (3) the incorporation of the Loss of Load Expectation (LOLE) reliability metric; (4) increasing population, new large customers in the service area, and associated emergent load demands on the Company's system; (5) and the diminishing demand response (DR) resource and lower generation effectiveness of variable resources during critical demand hours.<sup>4</sup> These factors and the dynamic energy landscape in which the Company is operating are driving the need for additional resources, which the Company is seeking in this RFP. Specifically related to large customers in the service area, the Company continues to see substantial interest from large industrial customers that wish to site, or expand operations, in the IPC area. Incremental needs associated with hypothetical large customers is not part of the

<sup>&</sup>lt;sup>3</sup> Idaho Power 2021 IRP at 168. The 2021 IRP was acknowledged by the Commission on December 6, 2022.in Docket LC 78.

<sup>&</sup>lt;sup>4</sup> Idaho Power 2021 IRP at 168-70.

Company's current load forecast and could increase resource needs in the near term substantially.

## A. The 2021 IRP identified significant incremental capacity needs.

The 2021 IRP identified capacity deficiencies of approximately 101 MW in 2023, 186 MW in 2024, 311 MW in 2025, 560 MW in 2026, and 665 MW in 2027.<sup>5</sup> The Company expects to meet its 2023-2025 needs through previously released Requests for Proposals;<sup>6</sup> therefore, the incremental capacity needs in 2026 and 2027 from the 2021 IRP, beyond what was already required to meet needs in 2023-2025, were 249 MW and 354 MW, respectively.<sup>7</sup> These identified needs did not include any capacity associated with the Boardman to Hemingway (B2H) transmission line; B2H is discussed later in this application.

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<sup>&</sup>lt;sup>5</sup> Idaho Power 2021 IRP at 142 (Table 10.7).

<sup>&</sup>lt;sup>6</sup> In June 2021, the Company issued an RFP for approximately 80 MW of capacity. This RFP was exempt from the Oregon competitive bidding rules due to its size, and the Company conducted a competitive solicitation through an RFP seeking to acquire Idaho Power-owned resources, to be online by June 2023. The procurement process resulted in the acquisition of least-cost, least-risk resources necessary to fill the 2023 capacity deficiency. The Company performed a qualitative and quantitative evaluation of the project proposals submitted through the RFP process as well as a parallel investigation into different configurations of Company-owned and constructed battery storage systems, which culminated in the acquisition of 120 MW of dispatchable energy storage as well as a 20-year power purchase agreement for the output of a planned third-party solar facility. In December 2021, the Company issued an RFP to meet the resource deficiencies identified in 2024 and 2025. The procurement process resulted in the acquisition of least-cost, least-risk resources necessary to fill the 2024 and 2025 deficiencies. The Company performed a qualitative and quantitative evaluation of the project proposals submitted through the RFP process which culminated in the acquisition of 120 MW of Idaho Power owned dispatchable energy storage as well as a 20-year battery solar facility, the acquisition of 173 MW of Idaho Power owned dispatchable energy storage as well as a 20-year battery services agreement for the capacity of a 150-MW battery storage system owned and operated by a third-party.

<sup>&</sup>lt;sup>7</sup> Idaho Power 2021 IRP at 142 (Table 10.7).

With the Company's resource procurement efforts for 2023-2025 advancing, the Company filed its initial application in this proceeding in September 2022 to address resource needs beginning in 2026. The Company continues to experience high load growth across its service territory, including major new large loads. Assuming adequate resources are identified to meet 2023-2025 needs, at the time of the filing of the initial Application in this proceeding, the Company expected to need significant incremental capacity by the summer of 2026 and 2027. As a result of these findings and ongoing evaluation of the Company's resource position, this RFP initially sought bids for a combination of capacity and energy resources that provide a minimum of approximately 350 MW of peak capacity and up to 1,100 MW of variable energy resources.

## B. The 2023 IRP continues to identify incremental capacity needs.

The Company continually refines and refreshes its resource position and needs analysis as new information becomes available to ensure decisions are based on the most up to date data. The Company's 2023 IRP, which was filed on September 29, 2023, reflected current information on the expected timing of major new loads, the resource procurements the Company has made to date, and other updates. The incremental capacity needs identified in the 2023 IRP were 22 MW in 2026 and 44 MW in 2027, with the need continuing to grow into the future.<sup>8</sup> The incremental capacity need was calculated based on a July 2026 online date for B2H and other transmission capacity.

<sup>&</sup>lt;sup>8</sup> IPC 2023 IRP, Table 11.15, p. 174. B2H has been identified as needed in IRPs since 2006. *Id.* at 83.

# C. Different B2H online dates change the identified incremental capacity needs.

The 2023 IRP included a scenario that assumed a November 2026 online date for B2H. The November 2026 online date for B2H changes the Company's incremental capacity needs, as compared to a July 2026 online date, to 332 MW in 2026 and 44 MW in 2027, with the need continuing to grow into the future.

# D. B2H Increases IPC's Transmission Capacity and Enables the Company to Purchase Energy to Meet Its Resource Capacity Needs.

B2H was identified and acknowledged as a cost-effective resource in the Company's 2021 IRP preferred resource portfolio with a current planned in-service date of summer of 2026.<sup>9</sup> B2H will provide the Company with 750 MW of capacity in the west-to-east direction for market purchases for load service and transmission service to third-party transmission customers under IPC's Open Access Transmission Tariff.<sup>10</sup> An asset exchange between PacifiCorp and IPC, in complement with B2H, will provide the Company with 200 MW of bidirectional transmission capacity between southern power markets (Mona and Four Corners) and the IPC system. This capacity also has the potential to be leveraged for market purchases.

The 2023 IRP continued to confirm the cost-effectiveness of B2H and the associated asset exchange and its inclusion in the IRP's Preferred Portfolio. Because B2H, with the associated transmission asset exchange, increases transmission capacity, enables access to the Mid-C and southern markets, and is cost effective for customers,

 <sup>&</sup>lt;sup>9</sup> IPC 2021 IRP at 146; Idaho Power 2023 IRP at 85.
<sup>10</sup> IPC 2023 IRP at 85.

this RFP sought market energy resources to associate with all available transmission, including B2H. Through the RFP, the Company solicited the acquisition of energy resources to associate with available transmission capacity to meet a portion of the forecasted need for 2026, when B2H becomes operational, and beyond.

In its evaluation of the bids received in this RFP, IPC has also evaluated the possibility that the B2H in-service date could occur beyond July 2026 due to a delay in receiving permits, supply chain constraints, or other unforeseen events. The RFP was structured to allow IPC to evaluate other transmission capacity or alternative resources to address capacity needs for varying potential B2H in-service dates.

#### III. RFP DEVELOPMENT

To ensure a fair and transparent procurement process that was compliant with the Commission's competitive bidding rules, on September 15, 2022, IPC filed an application to open an independent evaluator (IE) selection docket to oversee the RFP process. Following a stakeholder process, IPC conducted a competitive solicitation in collaboration with Staff and stakeholders issuing the IE Request for Proposals (IE RFP) on November 1, 2022, and ultimately selected London Economics International LLC, (LEI). On December 8, 2022. IPC sought Commission approval to engage LEI as the IE, and on December 29, 2022, that approval was granted. LEI's final closing report is attached as "Attachment 1 – LEI Closing Report – Dec 1" to this filing.

In addition, as required by OAR 860-089-0300, the Company identified a separate team of IPC staff and retained consultants (Internal Bid Team) to submit resource-based product bids or benchmark bids. As such, IPC instituted a Separation of Functions protocol where, the evaluation of bids would be performed by a separate team of IPC staff and retained consultants with relevant subject matter expertise (Evaluation Team) to work directly with the IE. This Separation of Functions protocol was developed with the purpose to define specific roles and responsibilities and outlined policies and procedures to be maintained as a living document to ensure the Evaluation Team and Internal Bid Team operate separately, and no access to any non-public information is shared.

The RFP solicited bids for two types of electric energy and capacity products, including electric resources that employ certain technologies—a resource-based product—and firm energy (WSPP Schedule C or equivalent) that meets the eligibility requirements of the Western Resource Adequacy Program (WRAP) — a market purchase product. IPC holds (or expects to hold) transmission rights on various paths that could be used for the delivery of various products, including capacity from B2H.

As such, this RFP targeted resource procurements that could provide a minimum of approximately 350 MW of peak capacity and up to 1,100 MW of variable energy resources. The eligible products included asset purchases, power purchase agreements, and battery storage agreements with exclusive ownership by IPC of any and all environmental attributes associated with the energy generated. The Company accepted bids for energy or capacity incremental to its system beginning in the summer of 2026 and beyond from both resource-based products and market purchase products.

The RFP is designed to support IPC's reliability and cost-effective acquisition of resources in a manner and timeframe that supports appropriate planning and construction timelines, particularly when construction is necessary. IPC also continues to source needed energy/capacity products through alternate permissible means as well, including but not limited to bilateral wholesale energy market transactions. In particular, IPC plans

for more near-term reliability needs (looking within the current year as well as multiple years into the future) and makes purchases through the bilateral wholesale energy market to acquire energy or capacity to associate with available transmission for reliability needs. These purchases may vary in length from less than a year to multiple years. These purchases, in conjunction with RFPs such as this, ensure that Idaho Power has the necessary energy and capacity to meet its needs, both in the short-term and in the longer-term.

## IV. COMMISSION REVIEW AND APPROVAL OF THE RFP

IPC hosted an introductory stakeholder workshop on February 21, 2023, to introduce the draft 2026 RFP solicitation to stakeholders, present the Company's resource need, and solicit feedback. After the introductory stakeholder workshop, IPC made alterations to the draft RFP and formally filed the draft RFP and associated SMM on February 22, 2023. On March 2, 2023, the IE filed its initial report based on its review of the Company's draft RFP and scoring and modeling methodology (SMM).

During this time, the Company worked to review comments from Staff, stakeholders, and the IE to respond to comments and concerns. In collaboration with IPC, Staff filed its initial comments March 17, 2023. Additionally, stakeholder comments were filed on the same date. Subsequently, and with oversight from the IE, IPC filed reply comments on March 24, 2023

On May 2, 2023, Staff filed its recommendation to approve IPC's final 2026 RFP and the associated SMM, LEI filed the Second IE Assessment of the Company's RFP and SMM on May 10, 2023.

The Commission considered the RFP at its May 16, 2023, public meeting but did not make any decisions and instead scheduled a subsequent public meeting for June 7, 2023, to allow Staff an opportunity to respond to LEI's May 10, 2023, recommendations. In collaboration with Staff and LEI, the Company incorporated additional recommendations into its draft RFP and SMM. The Commission approved the RFP at its June 7, 2023, public meeting, subject to certain modifications, and IPC formally issued the 2026 RFP on June 8, 2023.

## V. RFP BID RESULTS

The 2026 RFP was well received by the market. On June 23, 2023, the Company received 192 bids from 31 different bidders across 47 resource sites, summing to more than 15 GW of resources.<sup>11</sup> Over 75 percent of the bids incorporated solar photovoltaic resources (Solar PV) within their portfolios, and over 60% incorporated energy storage. A summary of the bids by resource type is provided below in *Table 1: Bids by Resource Type*.

Resource Type	Number of Bids
Wind	14
Wind + Solar PV	2
Wind + Battery Energy Storage System (BESS)	3
Wind + Long-Duration Energy Storage (LDES)	1
Wind + Solar PV + BESS	3

## Table 1: Bids by Resource Type

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<sup>&</sup>lt;sup>11</sup> This data includes Benchmark bids received on June 9, 2023 (three bids across three sites from the Internal Bid Team). The evaluation of the benchmark bids was completed prior to the Evaluation Team opening the third-party bids on June 26, 2023.

Resource Type	Number of Bids
Solar PV	51
Solar PV + BESS	78
Solar PV + LDES	13
BESS	21
Geothermal	1
G2H	1
Market Purchase	4
Total	192

Approximately 40 percent of the bids reflected a Commercial Operation Date (COD) by June 1, 2026, the remaining 60 percent of the bids reflected a projected COD after June 1, 2026. A summary of the bids by COD year is provided below in *Table 2: Bids by COD Year*.

COD	Number. of Bids
2026	82
2027	110
Total	192

## Table 2: Bids by COD Year

The bids included a variety of ownership structures, including many bids that would result in bidder-owned resources (i.e., power purchase agreements, and battery storage agreements). A summary of the bids by ownership structure is provided below in *Table 3: Bids by Ownership*.

Owner	Number of Bids
Bidder	160
IPC	25
Mix	7
Total	192

## Table 3: Bids by Ownership

On June 9, 2023, before third-party bids were due, IPC received three (3) benchmark bids across three sites from the Internal Bid Team. Consistent with OAR 860-089-0350, Idaho Power reviewed the benchmark bids for conformity with minimum bid eligibility requirements and scored and filed the benchmark bid evaluations on June 13, 2023. The review and evaluation of the benchmark bids was completed prior to the Evaluation Team opening the third-party bids on June 26, 2023.

## VI. Bid Eligibility

Following IPC's scoring and submittal of the benchmark bids, third party bids were screened against the specified minimum requirements as described in Section 4.1 of the RFP and further defined in Exhibit C to the RFP (Bid Eligibility Checklist). Accordingly, and with IE oversight, requests for clarification and/or additional information were solicited from the bidders (including the IPC Internal Bid Team). With review and input from the IE, IPC identified certain bids were non-conforming and failed to meet the 2026 RFP's initial bidder eligibility requirements. IPC issued a notice dated July 17, 2023, notifying bidders with non-conforming submittals, and provided the opportunity for bidders to correct their bid within five (5) business days. Bidders unable to resolve the eligibility concerns were removed from further consideration. Concluding the eligibility screen on July 27, 2023,

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the number of conforming bids totaled 146, across 28 eligible bidders, 43 resources sites, and over 12 GW of resources<sup>12</sup>.

The below *Table 4 – Bid Eligibility* further summarizes the Company's nonconformance rationale as it relates to the specific eligibility factors defined in Exhibit C – of the RFP<sup>13</sup>.

Bidder [REDACTED]	Proposal (s)	Rationale for Non-Conformance
	4 Proposals	Non-conforming factor(s): 2 and 4 Bidder submitted self-score of "No" with no documentation to support deliverability via the transmission system into IPC's balancing authority (IPC agrees with the assessment), including any applicable transmission service requests. Additionally, the bid did not acknowledge or provide redlines to the applicable technical specifications as outlined in Exhibit K- IPC Wind Technical Specifications.
	2 Proposals	Non-conforming factor(s): 6 Bidder was unable to provide sufficient documentation that demonstrates timely viability of the project inclusive of any pending, actual, or threatened administrative legal, legislative, procedural, and other actions (federal, state, or local) as defined for factor #6, and in support of a commercial operation date on or before June 1, 2027.
	40 Proposals	Non-conforming factor(s): 2

<sup>12</sup> This data includes all three of the submitted Benchmark bids.

<sup>13</sup> 2021 All-Source Request for Proposals (RFP) for Peak Capacity Resources (idahopower.com)

Bidder [REDACTED]	Proposal (s)	Rationale for Non-Conformance
		Bidder was unable to provide documentation to support deliverability via the transmission system into IPC's balancing authority, including any applicable transmission service requests.

# VII. Bid Evaluation and Determination of Initial Shortlist

The bid evaluation process is designed to identify the combination and size of the proposed resources that will maximize the customer benefits while ensuring the Company meets its energy and capacity needs.

Eligible bids were evaluated pursuant to the process described in section 7.2 Phase 1 – Initial Shortlist of the RFP to identify a subset of bids that would be advanced to further evaluation. Each bid was ranked within the respective technology group based on its pricing and non-pricing scores. The scoring methodology was consistent and prescriptive as described in the RFP. Based on the diversity of the technology of the bids, and to ensure fair and equitable evaluation of the bids, IPC identified the need to group bids by their specific technology. As such, the Company utilized the following considerations to develop the initial shortlist within each disparate technology group.

- 1. All eligible bids were evaluated, and a combined price and nonprice score was established for each technology grouping.
- In general, IPC desired a reasonable and diversified quantity of projects that represent each technology category meeting the following principles:

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- a. Minimum of three bidders/projects where sufficient bids were included,
- Sufficient capacity/energy quantity to meet the stated needs of the RFP,
- c. Technology categories that only had one bid were automatically moved forward to the initial shortlist, and
- d. Step increases to price and total score were utilized as a natural cutoff.

For purposes of clarity, the highest ranking and relatively lowest cost bids within each technology category moved forward to the initial shortlist.

Additionally, during the Phase 1 - Initial Shortlist evaluations, the Company identified pertinent information for the following proposals that were removed from further evaluation and excluded from the initial shortlist. *Table 5 – Additional Screening Summary* below highlights the information regarding the decision.

Bidder	Proposal Number	Screening Summary
	135PVPP12526 136PVBEPP1257526 137PVBEPP1257526	These bids were formally withdrawn on July 26, 2023.
	137PVBEPP1257526	Bid did not provide an all- inclusive Asset Purchase price.
	197PVBEPP20020027	Bid was submitted as a surplus interconnection and therefore limited to the existing capacity of the POI. Due to the limited incremental capacity, the bid will not provide sufficient benefit.

# Table 5: Additional Screening Summary

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Bidder	Proposal Number	Screening Summary
	55PVBEPP2506327 56PVBEPP2506327 57PVBEPP2506327 58PVBEPP2506327 59PVBEPP2506327 60PVBEPP2506327 61PVBEPP2506327 62PVBEPP2506327 63PVBEPP1503827 64PVBEPP1503827 66PVBEPP1503827	These bids were formally withdrawn on August 9, 2023.
	99PVBEAP35035027 100PVLDAP25025027	Bid assumes IPC would procure the BESS and the cost proposed included installation of the BESS system and was not competitive.

IPC provided its updated bid eligibility and confidential initial shortlist report to the IE on July 27, 2023. IPC received the confidential review of eligibility and initial shortlist report from the IE documenting initial evaluation and scoring of conforming bids on August 2, 2023. After conducting these evaluations and determining the initial shortlist as outlined in Section 7.2 of the RFP, on August 3, 2023, IPC notified 10 bidders whose projects did not rank in the pool for further consideration to make the initial shortlist. IPC also notified bidders whose proposed bids had been ranked in the pool for further consideration to make the initial changes to overall projects (including schedule modifications, interconnection study results, or any other material changes), and 2) firm cost inputs (including any changes or modifications to project pricing) as defined in Section 7.3 Phase 2 - Final Shortlist of the RFP. Bidders receiving this notification of the best and final offer opportunity are considered to comprise

the initial shortlist. IPC's initial shortlist included all projects found to be conforming by IPC and the IE and included 51 projects and 15 bidders across 11 technologies.

## VIII. Development of Final Short List

Consistent with the bid evaluation and selection process outlined in the 2026 RFP, IPC performed the following additional analyses and due diligence of the initial shortlist to identify and select projects on the final shortlist.

## A. Wind and Solar Performance Factors

In accordance with OAR 860-089-0400(5)(a), IPC retained the services of Hendrickson Renewables, LLC (Hendrickson) to provide an independent third-party review of site-specific critical performance factors for wind and solar resources, including but not limited to; i) an evaluation of the Variable Energy Resource (VER) assessments submitted with each applicable proposal, ii) quantification of any potential impact on energy production, and iii) adjustment (if any) to the P50 Net Capacity Factor (NCF) including the associated confidence level where differences are identified. IPC incorporated Hendrickson's proposed adjusted NCF's, as applicable, into the models for the wind and solar resource types, as part of the final shortlist selection process.

## B. Aurora Modeling Scenarios

The Company created the following ten AURORA scenarios used to help create the Final Shortlist. The ten scenarios were created to capture a wide range of B2H online dates, inclusion or exclusion of SWIP-North transmission, natural gas price futures, carbon price futures, and large load demand futures. These scenarios were discussed and developed with the IE and Staff prior to their use in final shortlist modeling. Projects selected across the ten AURORA scenarios were considered for inclusion on the final shortlist. Below is a brief description of the assumptions included with each scenario. For further information regarding the AURORA modeling process, see Attachment 2 – Aurora Modeling.

## Scenario #1 – July 2026 B2H with SWIP-North

The "July 2026 B2H With SWIP-N" AURORA scenario is consistent with the general base assumptions used in the filed 2023 IRP with the addition of the SWIP-North (SWIP-N) transmission line. In this scenario, a July 2026 online date is assumed for the B2H transmission line and includes a January 2027 online date for the SWIP-N transmission line. As stated in the 2023 IRP, IPC analyzed SWIP-N as providing a 500 MW resource equivalent capacity from the Desert Southwest, in the winter months beginning in January 2027. The Company assumed that SWIP-N could provide 50 MW of resource equivalent summer capacity in 2029, and 100 MW starting in 2030 through the remainder of the IRP, given the anticipated solar buildout in the southwest.

# Scenario #2 – November 2026 B2H with SWIP-N

The "November 2026 B2H With SWIP-N" AURORA scenario is consistent with the general base assumptions used in the filed 2023 IRP, with the addition of the SWIP-N transmission line. In this scenario, a November 2026 online date is assumed for B2H to assess how an alternate B2H online date would affect the Company's resource needs and includes a January 2027 online date for the SWIP-N transmission line. Additional SWIP-N assumptions are noted in description of Scenario #1 above.

# Scenario #3 – June 2027 B2H with SWIP-N

The "June 2027 B2H With SWIP-N" AURORA scenario is consistent with the general base assumptions utilized in IPC's 2023 IRP with the addition of the SWIP-N

transmission line and includes an alternate B2H online date that was not contemplated in IPC's filed 2023 IRP. In this scenario, a June 2027 online date is assumed for B2H to assess how an alternate B2H online date would affect the company's resource needs and includes a January 2027 online date for the SWIP-N transmission line. Additional SWIP-N assumptions are noted in description of Scenario #1 above.

# Scenario #4 – July 2026 B2H without SWIP-N

The "July 2026 B2H Without SWIP-N" AURORA scenario is consistent with the general base assumptions utilized in the 2023 IRP. In this scenario, a July 2026 online date is assumed for B2H.

# Scenario #5 – November 2026 B2H without SWIP-N

The "November 2026 B2H Without SWIP-N" AURORA scenario is consistent with the general base assumptions utilized in the 2023 IRP. In this scenario, a November 2026 online date is assumed for B2H to assess how an alternate B2H online date would affect the Company's resource needs.

# Scenario #6 – June 2027 B2H without SWIP-N

The "June 2027 B2H Without SWIP-N" AURORA scenario is consistent with the general base assumptions utilized in the 2023 IRP and an alternate B2H online date not included in the filed 2023 IRP. In this scenario, a June 2027 online date is assumed for B2H to assess how an alternate B2H online date would affect the Company's resource needs.

# <u> Scenario #7 – High Gas High Carbon</u>

The "High Gas High Carbon" AURORA scenario is consistent with the high gas high carbon assumptions utilized in IPC's 2023 IRP, in agreement with the IRP Advisory Council. In this scenario, a July 2026 online date is assumed for B2H, and the SWIP-N transmission line is not included. The high gas high carbon scenario adjusts the natural gas price and carbon adder price forecasts as shown below:

- <u>Natural Gas Price Forecast</u><sup>14</sup> EIA Low Oil and Gas Supply (2023 Annual Energy Outlook)
- <u>Carbon Price Adder Forecast</u> Social Cost of Carbon, Methane, and Nitrous Oxide, Interim Estimates under Executive Order 13990

# <u> Scenario #8 – Low Gas Zero Carbon</u>

The "Low Gas Zero Carbon" AURORA scenario is consistent with the low gas zero carbon assumptions utilized in IPC's 2023 IRP, in agreement with the IRP Advisory Council. In this scenario, a July 2026 online date is assumed for B2H, and the SWIP-N transmission line is not included. The low gas zero carbon scenario adjusts the natural gas price and carbon adder price forecasts as shown below:

- <u>Natural Gas Price Forecast<sup>15</sup></u> EIA High Oil and Gas Supply (2023 Annual Energy Outlook)
- <u>Carbon Price Adder Forecast</u> Consistent Zero Dollars per Ton

# <u> Scenario #9 – 100 MW Large Load</u>

The "100 MW Large Load" AURORA scenario is based on the "100 MW large load" scenario utilized in IPC's 2023 IRP. In this scenario, a November 2026 online date is assumed for B2H, and the SWIP-N transmission line is not included. Additionally, a

<sup>&</sup>lt;sup>14</sup> <u>https://www.eia.gov/outlooks/aeo/</u>

<sup>&</sup>lt;sup>15</sup><u>https://www.eia.gov/outlooks/aeo/</u>

100 MW large load is added, with the load forecast increased above the base load forecast as shown in *Table-6 – 100 MW Large Load Ramp* below:

Year	Peak Load Ramp	Average Load Ramp
2025	-	-
2026	65	43
2027	100	86
2028	100	91
2029	100	92

Table-6: 100 MW Large Load Ramp

# Scenario #10 - 200 MW Large Load

The "200 MW Large Load" AURORA scenario is based on the "200 MW large load" scenario utilized in IPC's 2023 IRP. In this scenario, a November 2026 online date is assumed for B2H, and the SWIP-N transmission line is not included. A 200 MW large load is added, with the load forecast increased above the base load forecast as shown in *Table-7 – 200 MW Large Load Ramp* below.

Year	Peak Load Ramp	Average Load Ramp
2025	-	-
2026	65	43
2027	143	120
2028	200	176
2029	200	177

Table-7: 200 MW Large Load Ramp

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The projects selected at least once across the ten AURORA scenarios and considered for inclusion on the final shortlist as shown below in *Table 8 - Projects Selected in AURORA Modeling Scenarios.* 

Delivery Year	Bidder/Project	Resource
2026		Market Contract: 5 Years
		200 MW Solar + 100 MW
		200 MW Solar
		150 MW BESS
		150 MW BESS
		50 MW BESS
		100 MW BESS
		100 MW Solar + 100 MW
		200 MW Solar + 50 MW
		10 MW Geothermal
2027		600 MW Wind
		350 MW Wind + 250 MW
		350 MW Wind
		330 MW Solar
		123 MW Solar

Table 8: Projects Selected in AURORA Modeling Scenarios

After compiling the full list of projects selected from the ten AURORA scenarios for the final shortlist, certain projects selected in the AURORA scenarios were not included in the final shortlist due to cost and timing uncertainty related to interconnection. Pursuant to Order 2023, issued by the Federal Energy Regulatory Commission (FERC) on November 6, 2023, four of the projects selected through the AURORA scenarios will be included in the transition cluster study that IPC is required to implement for all early-stage generation interconnection queued projects. The transition cluster is a 360-day study starting on January 1, 2024; therefore, IPC does not anticipate having results, including interconnection network upgrade costs, until the end of the fourth quarter of 2024. Another project was not advanced because it is not currently in the generation interconnection

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queue at all, and thus presents significant uncertainty regarding deliverability and potential network upgrade costs.

Following the analysis described in this summary, IPC recommends the following projects identified in Table *9* – *Final Shortlist Recommendation* for inclusion in the final shortlist for the Company's 2026 RFP.

Delivery Year	Bidder/Project	Resource
2026		Market Contract: 5 Years
		200 MW Solar + 100 MW BESS
		200 MW Solar
		150 MW BESS
		100 MW Solar + 100 MW BESS
		200 MW Solar + 50 MW BESS
2027		600 MW Wind
		350 MW Wind + 250 MW Solar
		350 MW Wind
		330 MW Solar

Table 9: Final Shortlist Recommendation

# C. Final Shortlist Portfolio Sensitivities

After the final shortlist of projects was derived from the AURORA Scenarios described above and after exclusion of the projects presenting significant interconnection cost or timing risk, IPC performed a portfolio sensitivity analysis on the final shortlisted projects. The intention of the portfolio sensitivity process is to assess the various mixes of final shortlisted projects and how their portfolio costs compare to each other in potential variable futures. This sensitivity analysis informs the comparative ranking of final shortlist projects to each other.

The 'November 2026 B2H without SWIP-N' transmission scenario assumptions were used as the basis for final shortlist portfolio sensitivity modeling. The November 2026 B2H online date was selected because a late-2026 date results in a greater need for a resource in 2026, and therefore impacts the development of a 2026 final shortlist projects. IPC intends to pursue 2026 resources until it gains sufficient certainty around a likely B2H in-service date. Regarding SWIP-N, given discussions with the developer are still in progress, the no SWIP-N scenario is the base assumption for the AURORA shortlist runs. This base SWIP-N assumption matches the assumption utilized for the recent 2023 IRP analysis.

More details and results of the final shortlist portfolio sensitivity analysis was provided to LEI and can be found in LEI's Closing Report attached.

#### IX. CONTRACT NEGOTIATION STRATEGY

IPC plans to contact all projects or bids on the final short list immediately to inform them of their inclusion on the list and offer draft contracts. As contract discussions progress, IPC will prioritize negotiation efforts with the bids that ranked highest on the final shortlist first. As time allows or as circumstances change with the higher-ranked projects, IPC will then proceed with negotiations with lower-ranked projects.

In the course of contract negotiations with projects on the final shortlist, various deal parameters may be subject to change, with mutual agreement of the parties. Certain components of the transaction may not have been addressed in the bid proposals and other components may ultimately vary somewhat from what was initially proposed or identified in the final shortlist based on the overall negotiation, potential changed circumstances, and economic opportunity. IPC will work with bidders and projects on the

final shortlist throughout negotiations to determine the most cost-effective, reliable, and prudent transactions given the circumstances at the time. In the negotiation process, IPC may consider alternative contract arrangements (for example, Power Purchase Agreements vs. Build-Transfer Agreements), contract term lengths (for example, five vs. 10 years or 20 vs. 25 years), or other variations proposed by the shortlisted projects, to come to the most cost-effective and reliable final transaction.

## X. COMPLIANCE WITH THE RULES

## A. OAR 860-089-0100 Applicability of Competitive Bidding Requirements

OAR 860-089-0100 requires an electric company issue an RFP for all major resource acquisitions with durations greater than five years and quantities greater than 80 MW. The Company's filing in this case, based on its acknowledged 2021 IRP resource needs called for the acquisition of a minimum of approximately 350 MW of peak and up to 1,100 MW of variable energy resources. The RFP solicited bids intended to fulfill this energy or capacity need incrementally to its system beginning June 1, 2026, and beyond. As discussed in this filing, IPC's development and issuance of the RFP satisfies OAR 860-089-0100.

## B. OAR 860-089-0200 Engaging an Independent Evaluator

As described in OAR 860-089-0200, prior to issuing an RFP, the electric company must engage the services of an IE. The IE will oversee the competitive bidding process to ensure it is administered fairly and in accordance with the competitive bidding rules. IPC filed a request to open an IE selection docket on September 15, 2022, and working with regulatory stakeholders to finalize an IE RFP prioritizing the IE qualifications outlined in OAR 860-089-0200(2)(b-e), issued a final IE RFP on November 1, 2022. After

evaluating bids in conjunction with regulatory stakeholders, on December 8, 2022, IPC filed a request for Commission approval to engage an IE. Commission Staff evaluated IPC's IE selection process and following its own independent review of the IE bids, recommended that the Commission approve LEI to serve as IE. The Commission adopted Staff's recommendation and approved LEI as the IE on December 29,2022 (later memorialized through Order No. 22-495).

## C. OAR 860-089-0250 Design of Request for Proposals

IPC prepared a proposal for scoring and methodology and a draft request for proposals for review by the Commission and stakeholders in accordance with OAR 860-089-0250. IPC held a stakeholder workshop on its scoring and modeling methodology and RFP solicitation process on February 21, 2023, and filed its Final Draft 2026 AS RFP on February 22, 2023. The IE filed its initial report on the Draft Final RFP on March 2, 2023. On May 3, 2023, Commission Staff issued a memo recommending the approval, with conditions, of the scoring and modeling methodology and Draft Final RFP. On May 10, 2023, LEI filed its Second IE Assessment Report. Staff's recommendation and the Second IE Assessment Report were discussed at the May 16, 2023, public meeting. Following that meeting Staff then filed a report for the special public meeting held June 7, 2023, where Staff's recommendation, with modifications, was adopted by the Commission. On June 8, 2023, IPC then issued a final RFP based on the Commission's decisions at the special public meeting.

## D. OAR 860-089-0300 Resource Ownership

Under OAR 860-089-0300, an electric company may submit bids in response to its RFP, which must be treated in the same manner as other bids. IPC submitted benchmark bids into this RFP and took precautions to ensure that the benchmark development and bid process was kept distinctly separate from the development of the RFP, evaluation of bids, or scoring of bids, consistent with OAR 860-089-0300. IPC prepared a personnel list of company employees who were assigned to either the "Internal Bid Team" or the "RFP Evaluation Team" and shared that list with the IE to demonstrate the clear separation of functions.

Under OAR 860-089-0300, the electric company may make elements of the benchmark resource owned or secured by the electric company available for use in third-party bids, and if not made available, the electric company must provide analysis explaining that decision. All elements owned or secured by the benchmark bid team were outlined and noted in Exhibit S of the 2026 RFP, which is posted publicly on IPC's 2026 RFP webpage<sup>16</sup>.

Under OAR 860-089-0300(5), the electric company must allow independent power producers to submit bids with and without an option to renew and may not require that bids include an option for transferring ownership of the resource. The 2026 RFP allowed for these options as outlined in the "Product Specifications" section on pages 8-10 of IPC's main RFP document.

<sup>&</sup>lt;sup>16</sup> <u>https://docs.idahopower.com/pdfs/AboutUs/businessToBusiness/2026\_IPC\_AllSource\_RFP.pdf</u>

## E. OAR 860-089-0350 Benchmark Resource Score

OAR 860-089-0350 directs that prior to the opening of bidding on an approved RFP, IPC 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. As part of this RFP, IPC applied the same assumptions and bid scoring and evaluation criteria to the benchmark bid that are used to score other bids consistent with OAR 860-089-0350.

IPC made the filing required under OAR 860-089-0350(1)-(3) on June 13, 2023, before opening bids in this RFP. In accordance with the RFP design and as required by Commission rules, IPC did not open bids for review and scoring until the benchmark bid scores were filed. No updates have been made to the benchmark scores other than the opportunity to provide best and final offer price updates, consistent with the opportunity offered simultaneously to all other bids in the RFP.

# F. OAR 860-089-0400 Bid Scoring and Evaluation by Electric Company

OAR 860-089-0400 states that the utility must provide all proposed and final scoring criteria and metrics in its draft and final RFPs filed with the Commission. The scoring of bids and selection of the initial shortlist must be based on price and non-price factors with non-price factors converted to price factors where practicable. As discussed above, the Company complied with this rule through its stakeholder process preceding Commission approval of the RFP.

As discussed above, IPC's RFP initial shortlist was identified using both price and non-price scoring. Non-price scoring was based on the following factors: 1) contracting

progress and viability, and 2) project readiness and deliverability. IPC converted all nonprice criteria that were better suited as minimum requirements to the "minimum bidder requirements" as outlined in IPC's RFP documents.

The non-price criteria selected by IPC was based on overall risk and was consistent with the Company's 2021 IRP. The non-price criteria were selected due to their focus on the 2026 capacity shortfall date, contribution to capacity need, ability to procure transmission, and providing a least-risk option for IPC customers. IPC took steps to ensure that the non-price criteria was reasonably able to be self-scored by potential bidders.

IPC's price scoring was consistent with 2021 IRP analysis as it used the same economic models and methodology to evaluate system impact and cost associated with each bid.

Per OAR 860-089-0400(6), the IE had full access to all price and non-price scoring, including any production models, cost models, and sensitivity analyses.

## G. OAR 860-089-0450 Independent Evaluator Duties

Consistent with OAR 860-089-0450(1), the IE oversaw the 2026 RFP process to ensure it was conducted fairly, transparently, and properly. The IE participated in review meetings, workshops, and filed assessments as part of the RFP structure process. The IE attended a pre-RFP workshop focusing on scoring methodology and the draft RFP. Consistent with OAR 860-089-0450(3), the IE consulted with IPC during IPC's preparation of the draft 2026 RFP and filed its assessment of the final draft RFP to the Commission. The IE also reviewed "mock bids" to test the integrity of the evaluation models and reviewed final scoring and evaluation criteria.

In accordance with OAR 860-089-0450, the IE had access to all IPC scoring documents and models, was included on communications as IPC sought additional information and clarification from bidders, scored all benchmark bids, and was consulted as IPC determined bidder conformance and selected the initial and final shortlists. The IE separately evaluated and scored IPC's Benchmark bids. The IE also reviewed all bids to ensure conformance with the 2026 RFP's identified requirements, reviewed all correspondence between bidders and the RFP evaluation team, and reviewed all memoranda sent to bidders of non-complaint bids. The IE independently scored all bids to determine whether the selections for the initial and final shortlists were consistent with the bid evaluation criteria and compared the results of the IE's scoring with IPC's scoring to determine whether IPC's scoring of the bids and selection of the initial and final shortlists were reasonable. The IE prepared a Final Closing Report for the Commission after IPC selected the final shortlist. The IE's Final Closing Report provides its assessment of the solicitation process and the IE's involvement, including detailed bid scoring and evaluation results. The IE Closing Report is included in this filing as Attachment 1.

Under OAR 860-089-0450(6), the IE must "evaluate the unique risks and advantages associated with any company owned resources (including but not limited to the electric company's benchmark), and may apply the same evaluation to third-party bids," including an evaluation of certain issues. The IE discusses these factors as part of the Closing Report. Specifically, in the attached Closing Report, LEI states; "As IE, LEI attests to the reasonableness of IPC's approach in identifying bids for the final AS RFP shortlist. The process was conducted with the utmost fairness and impartiality, upholding the integrity of the selection process."

Under OAR 860-089-0450(7), the IE reviews the reasonableness of any score submitted by IPC for a benchmark resource and once IPC and the IE have both scored and evaluated the competing bids and any benchmark resource, the IE and the Company must file their scores with the Commission. The IE and Company must compare results and attempt to reconcile and resolve any scoring differences. Here, as discussed above, the IE reviewed scores submitted by IPC for the benchmark prior to IPC filing scores on June 13, 2023.

Under OAR 860-089-0450(8), the IE is required to review the Company's sensitivity analysis of the bid rankings required under OAR 860-089-0400 and file a written assessment with the Commission before the Company requests acknowledgment of the final shortlist. Here, the Company provided its sensitivity analysis of the bid rankings to the IE on October 31, 2023, and the IE filed its written closing report on December 1, 2023.

## H. OAR 860-089-0500 Final Shortlist Acknowledgement

IPC's final shortlist is consistent with IPC's 2021 IRP Action Plan and IPC seeks acknowledgment of the final shortlist. IPC requests Commission acknowledgment of this final shortlist by January 17, 2024, to enable IPC to timely finalize negotiations with final shortlist bidders [and ensure capture of expiring federal tax credits for the benefit of IPC's customers].

OAR 860-089-0500 directs utilities to request acknowledgement of the final shortlist before negotiations may begin with bidders. "Acknowledgement" is defined as

"finding by the Commission that an electric company's final shortlist of bid responses appears reasonable at the time of acknowledgment and was determined in a manner consistent with the rules in this division."

In accordance with OAR 860-089-0500, IPC's request for acknowledgement includes the IE's Final Closing Report (attached), IPC's final shortlist of responsive bids, the sensitivity analyses performed, and a discussion of the consistency between the final shortlist and IPC's last acknowledged IRP Action Plan or acknowledged IRP Update. Consistent with this rule, IPC will begin contract negotiations with bidders after filing this request for acknowledgment.

## XI. ATTACHMENTS

The following documents are attached to this filing and incorporated herein by this reference.

Attachment 1 – LEI Closing Report Attachment 2 – Aurora Modeling

## XII. CONCLUSION

The Commission's acknowledgment of IPC's final shortlist will enable IPC to secure long-term value for customers, fill the 2026 and 2027 capacity shortfall identified in the 2021 and 2023 IRP processes. IPC is committed to continuing to provide safe, reliable, affordable, and increasingly clean electricity to our customers. The 2026 RFP had robust participation and provided IPC a competitive selection process.

The final shortlist included in this Request represents resources with the best combination

of cost and risk for customers to implement the 2021 IRP Action Plan.

DATED: December 4, 2023,

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## BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UM 2255

In the Matter of the Application of IDAHO POWER COMPANY REQUEST FOR ACKNOLWEDGEMENT OF FINAL SHORTLIST OF BIDDERS IN THE 2026 ALL SOURCE REQUEST FOR PROPOSALS

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Attachment 1

2026 All Source Request for Proposals for Peak Capacity and Energy Resources

December 4, 2023

# Closing Report 2026 All Source Request for Proposals for Peak Capacity and Energy Resources



Ma. Cherrylin Trinidad Sayad Moudachirou Marie Fagan Barbara Porto Hannah Braun

# London Economics International LLC

717 Atlantic Avenue, Suite 1A Boston, MA 02111

December 1, 2023

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## List of Acronyms

AEO	Annual Energy Outlook
AP	Asset purchase
AS	All-Source
B2H	Boardman to Hemingway transmission line
BA	Balancing Area
BEF	Bid Entry Form
BESS	Battery energy storage systems
BTA	Build-transfer ownership
COD	Commercial online date
EIA	Energy Information Administration
ELCC	Effective load carrying capability
FOM	fixed operations and maintenance costs
FOR	Forced outage rate
FSL	Final Shortlist
G2H	Gas-fired system convertible to hydrogen
GIA	Generator Interconnection Agreement
IE	Independent Evaluator
IPC	Idaho Power Company
IRP	Integrated Resource Plan
ISL	Initial Shortlist
LCOC	Levelized cost of capacity
LCOE	Levelized cost of energy
LDES	Long duration energy storage
LEI	London Economics International LLC
LTCE	Long-term capacity expansion
MVE	Magic Valley Energy
NPV	Net Present Value
NREL	National Renewable Energy Lab
OPUC	Oregon Public Utilities Commission
PPA	Power purchase agreement
RA	Resource adequacy
RFP	Request for Proposals
SWIP-N	Southwest Intertie Project-North
WECS	Wind Energy Conversion System
WRAP	Western Resource Adequacy Program
WSPP	Western Systems Power Pool

### 1 Executive Summary

In this Independent Evaluator ("IE") report, London Economics International LLC ("LEI") – IE for the 2026 All Source ("AS") Request for Proposals ("RFP") for Peak Capacity and Energy Resources (together, "2026 AS RFP" or "AS RFP") prepared by Idaho Power Company ("IPC" or "Company") – provides an overview and assessment of the eligibility and shortlist evaluations for submitted third party bids.

The 2026 AS RFP seeks to procure energy to meet system needs identified for 2026/2027; third party bidders interested in providing this energy submitted their proposals to IPC by June 7, 2023. The first phase of the bid evaluation process entailed (1) screening for qualified bids and (2) ranking qualified bids based on non-pricing and pricing factors. The objective of this evaluation and initial selection process was to "identify the combination and size of proposed resources (the Portfolio) that will maximize customer benefits and will satisfy projected resource capacity and energy needs while maintaining reliability."<sup>1</sup>

A total of 192 proposals were submitted for consideration by 32 companies. Among these, 188 proposals were resource bids, encompassing a collective proposed capacity exceeding 64,000 MW. The submissions covered a wide spectrum of technologies, ranging from solar, wind, and geothermal to long-duration energy storage ("LDES"), gas-fired systems convertible to hydrogen and battery energy storage systems ("BESS"). Furthermore, the resource capacity bids presented varied in structure, featuring power purchase agreements ("PPAs"), battery storage agreements ("BSAs"), and asset purchases ("AP"). Section 4 provides more information on the bids received.

Before opening the third-party bids, the IE evaluated the three benchmark bids from IPC. These three benchmark bids consisted of two BESS projects and one wind project. The two BESS projects—Hemingway Storage 3 and Boise Bench Battery Storage—are proposed APs while Jackalope Wind is split under a build-transfer ownership ("BTA") and PPA arrangement with **Example 1**. The IE assessed the eligibility of these benchmark bids as well as their advantages and unique risks to ratepayers. The IE determined that these three benchmark bids were eligible to proceed with the RFP process. The identified advantages and unique risks of the benchmark bids are discussed in Section 3.

Following a comprehensive eligibility screening process, 144 proposals were determined to meet the minimum requirements outlined in the RFP and as such proceeded to the initial shortlist bid evaluation (Phase 1). The IE meticulously assessed and scored these resource bids based on established price and non-price scoring criteria. A maximum of 75 points were allocated to price scoring and a maximum of 25 points to non-price scoring, for a total maximum score of 100 points. The non-price and price criteria for market purchase products differed from those for resourcebased bids. In this case, the market purchase products' pricing was evaluated and ranked by IPC

<sup>&</sup>lt;sup>1</sup> Idaho Power Company. 2026 All Source Request for Proposals (RFP) for Peak Capacity and Energy Resources. June 8, 2023. p. 23.

based on the price structure submitted and forwarded to the IRP Planning Team for further analysis; the IE monitored this process to ensure fairness in the process.

Subsequently, the proposals were ranked within their respective technology groups, and the highest-scoring bids in each group were selected for the Initial Shortlist. Through this evaluation process, 63 bids from the eligibility pool were identified as part of the Initial Shortlist. This selection encompassed 58 resource-based products and all 4 market purchase bids. The Initial Shortlist reflected a diverse range of technologies, ensuring that all technologies offered during the RFP process were duly considered. Bidders were notified through the Company's Portal (Zycus) that they were selected for the Initial Shortlist. Phase 1 Initial Shortlist process is described in detail in Section 6.

Bidders on the Initial Shortlist were invited to submit updates to their bids, incorporating pertinent price or schedule modifications, interconnection study results, or any other significant changes that could influence the IRP product cost model or RFP minimum requirements. These updates were meticulously reviewed and incorporated into the Company's cost models. In alignment with the treatment of capital revenue requirements in IPC's integrated resource plan ("IRP") modeling, IPC converted any calculated revenue requirement associated with capital costs to first-year real levelized costs. Similarly, all other bid costs were levelized and formatted for input into the Company's long-term capacity expansion ("LTCE") model, AURORA. Projected renewable resource performance data<sup>2</sup> and projected effective load carrying capability ("ELCC") for each bid were also processed for input into the IRP models. Section 8.1.1 provides a summary of the key assumptions used in the AURORA modeling.

To comprehensively evaluate the Initial Shortlist bids under a range of potential environmental and policy-price scenarios, a rigorous scenario analysis was conducted as part of Phase 2. A total of ten scenarios were independently simulated using AURORA LTCE, encompassing varying configurations of the commercial online date for the Boardman to Hemmingway ("B2H") transmission line (July 2026, November 2026, and June 2027) and the inclusion or exclusion of the Southwest Intertie Project-North ("SWIP-N") transmission line. Additionally, scenarios incorporating diverse gas prices, carbon prices, and demand conditions were evaluated, including: (i) a high gas and high carbon price scenario, (ii) a low gas and zero carbon price scenario, (iii) a scenario with 100 MW of large load, and (iv) a scenario with 200 MW of large load. The different scenarios employed in the scenario analysis are discussed in Section 8.1. A total of 11 bids were selected for the Preliminary Final Shortlist based on their performance and costs under each of the scenarios; five projects were eliminated mainly due to concerns over uncertainty of upgrades and interconnection costs (see Section 8.1.3).

<sup>&</sup>lt;sup>2</sup> IPC hired Henrickson Renewables, LLC to independently review site-specific critical performance factors for wind and solar resources, including but not limited to i) an evaluation of the variable energy resource assessments submitted with each applicable proposal, ii) quantification of any potential impact on energy production, and iii) adjustment (if any) to the P50 Net Capacity Factor, including the associated confidence level where differences are identified.

To supplement the scenario analysis, IPC conducted a portfolio stochastic (sensitivity) analysis on the Preliminary Final Shortlist to assess the performance of bids under dynamic market conditions and comprehend the range of Net Present Value ("NPV") portfolio costs under a broad spectrum of stochastic shocks. The portfolio stochastic analysis was a two-step process: (i) portfolio analysis and (ii) stochastic analysis. IPC utilized the AURORA LTCE to create 11 portfolios based on the following criteria: (i) energy and capacity needs, (ii) inclusion of every bid in at least one portfolio, and (iii) consideration of at least one market-based bid.

Subsequently, IPC performed a stochastic risk analysis on these 11 portfolios. Four stochastic variables were incorporated: (i) natural gas prices, (ii) load, (iii) hydroelectric generation, and (iv) carbon prices. The stochastic risk analysis employed aligns with the methodology used in IPC's 2023 IRP development process and conforms with discussions held during public meetings with the 2023 IRP Advisory Council. Utilizing the stochastic analysis, IPC calculated the NPV costs of each portfolio using different key statistics (P25, P50, and P75) to identify the specific least-cost, least-risk bids. These statistical measures provided valuable insights into the distribution of NPV costs and the potential range of outcomes under varying sensitivities.

Finally, IPC ranked the bid resources that were most consistently selected across the sensitivity runs. Based on this analysis, 10 out of 11 bids were identified for the Final Shortlist for contract negotiations. A detailed discussion of this process is provided in Section 0. The diagram below provides a summary illustration of the RFP process and table below shows the number of bids for each key stage of the RFP process.



gure 2. Summary of total number of bids for each key RFP stage					
Procurement stage	Total number of bids/projects	Total combined capacity of bids (MW)	Total number of project owners		
Bids submitted	192	64,000 MW	32		
Bids that are eligible	144	40,000 MW	29		
Initial shortlist	63	18,800 MW	16		
Preliminary Final Shortlist	11	3,610 MW	7		
Final Shortlist	10	3,430 MW	7		

As IE, LEI attests to the reasonableness of IPC's approach in identifying bids for the final AS RFP shortlist. The process was conducted with the utmost fairness and impartiality, upholding the integrity of the selection process.

### 2 Overview of the procurement process

On June 7, 2023, IPC published its 2026 AS RFP for Peak Capacity and Energy Resources. LEI was retained to serve as the IE for this solicitation process. The purpose of this RFP is to support the Company in meeting resource needs identified in the acknowledged 2021 IRP as well as incremental needs anticipated for 2026-2027 that are to be confirmed in the upcoming 2023 IRP, as provided in its application in Docket UM 2255. In total, the Company seeks a minimum of about 350 MW of peak capacity and a maximum of 1,100 MW of variable energy to be delivered by either June 1, 2026 or June 1, 2027. The Company, through this RFP, solicited bids for two types of products, namely:

- 1. the first category encompasses energy and capacity generated from specific electric resources, referred to as "resource-based products." These products utilize technologies such as solar, wind, geothermal, LDESS, BESS, and gas-fired systems convertible to hydrogen ("G2H"). It is essential that all these resource-based products are either located within the IPC Balancing Area ("BA") or demonstrate transmission rights to the IPC BA;<sup>3</sup> and
- 2. the second category consists of firm energy, with a preference for Western Systems Power Pool ("WSPP") Schedule C or an equivalent option. These products must meet the eligibility requirements of the Western Resource Adequacy Program ("WRAP") in terms of resource specificity, transmission capabilities, and other necessary criteria.

The RFP also includes a provision in which IPC acknowledges the possibility of considering other products that satisfy the ownership and electrical functionality criteria stated in the RFP Product Tables. Bidders that propose a product not explicitly listed in the RFP must provide a comprehensive description of how their product aligns with the overall objectives and intentions of the Product Table.

Third party bidders submitted their proposals to IPC by June 23, 2023 and on June 26, 2023, three days following the RFP bid submittal deadline, IPC initiated the bid opening process. However, due to technical issues with the bidding platform, on June 26, 2023 IPC contacted bidders to ensure that all attachments were successfully submitted and that their responses were marked as "submitted" on the Zycus bidding platform. By June 28, 2023, all bids had been successfully submitted.

After a thorough review of eligibility and scoring and ranking of the bids, an Initial Shortlist was determined. IPC also reached out to bidders with bids that were incomplete or required clarification, providing them with a 5-day cure period. A total of 63 bids (inclusive of the market purchase products) were selected in the ISL. The bidders were informed about their status via email on August 4, 2023.

Following the Initial Shortlist selection, bidders were granted an opportunity to provide updates to their bids, including modifications to pricing, timelines, interconnection study results, or any

<sup>&</sup>lt;sup>3</sup> Idaho Power Company. 2026 All Source Request for Proposals (RFP) for Peak Capacity and Energy Resources. June 8, 2023. p. 8.

other significant changes that could impact the IRP product cost model or RFP minimum requirements. These updates were thoroughly reviewed and integrated into the product cost models.

To comprehensively evaluate the initial shortlist bids under a range of potential environmental and policy-price scenarios, a rigorous scenario analysis was conducted under Phase 2. LEI, Oregon Public Utility Commission ("Oregon PUC," "OPUC," or "Commission") Staff, and IPC discussed potential scenarios for the scenario analysis. A total of 10 scenarios were agreed upon and were independently simulated using AURORA LTCE. Based on the scenario analysis, a total of 11 bids were selected based on their performance and costs under each of the scenarios.

To complement the scenario analysis, IPC conducted a comprehensive portfolio stochastic analysis of the Preliminary Final Shortlist bids. Throughout this process, IPC engaged in multiple discussions with the IE and Oregon PUC Staff to refine the methodology and approach to the portfolio stochastic analysis. IPC considered and incorporated the insights provided by the IE and Oregon PUC Staff during these discussions.

Subsequently, IPC presented the results of the portfolio stochastic analysis to the IE and Oregon PUC Staff for further review and discussion. After addressing a few uncertainties, IPC and IE reached consensus regarding the Final Shortlist. This collaborative approach ensured that the Final Shortlist selection was performed in a transparent and fair manner. A total of 10 projects were selected as the Final Shortlist bids.

### 3 Review of the benchmark bids

As implied by its name, one of the main objectives of implementing Competitive Bidding Guidelines is to ensure the unbiased procurement of resources by a state's regulated utilities. This is specifically necessary when utility-owned assets are bid into the same procurement process as third-party contract structures, such as PPAs, tolling agreements, or lease agreements. Bias may occur because – due in part to the ratemaking process – utilities earn a return on their assets but not on contracts like PPAs. As such, in Order No. 14-149 of Docket UM 1182 (filed April 30, 2014), the Oregon PUC revised Guideline 10(d), which instructs the IE to independently assess the fairness of the score assigned to any utility benchmark bid submitted in the RFP process.

IPC submitted three benchmark bids: two BESS projects and one wind project. The two BESS projects – Hemingway Storage 3 and Boise Bench Battery Storage – are proposed asset purchases while Jackalope Wind is split under a BTA and PPA arrangement with **Example**.

LEI evaluated the reasonableness of IPC's submitted benchmark bids on the basis of three overarching factors: (i) bid eligibility, (ii) non-pricing score, and (iii) advantages and unique risks of the benchmark bids to ratepayers. Each factor is discussed in the succeeding subsections.

### 3.1 Bid eligibility

With respect to bid eligibility, LEI first wanted to ensure that all submitted bids were indeed qualified to take part in this procurement process. Following a thorough review, LEI assessed the benchmark bids against the established eligibility requirements and determined that all submitted bids fully comply with the stipulated criteria, thereby rendering them eligible and suitable for participation in the procurement process.

#### 3.2 Non-pricing score

The non-pricing score was meant to help understand the likelihood that submitted bids would agree to IPC-approved contract terms and be delivered by the required commercial online date ("COD"). IPC broke down the scoring assessment into 13 total questions under two umbrella factors: *contracting progress and viability* and *project readiness and deliverability*. This is discussed in detail in Section 6.1. Although LEI and the IPC Evaluation Team were in agreement on the non-pricing score for both the Hemingway Storage 3 and the Boise Bench Battery Storage projects, LEI disagreed with the Evaluation Team's rating of Jackalope Wind, specifically with respect to the question of zoning, with LEI grading the project "yellow" compared to the IPC Evaluation Team "green." IPC claimed that it had secured the commercial Wind Energy Conversion System ("WECS") facility permit, but in Exhibit P of its submission said that this permit was still pending.<sup>4</sup> LEI's assessment was based on its understanding of the scoring criteria. According to IPC's Excel-based scoring sheet, a "yellow" rating means that "documentation indicates that Bidder has submitted applicable applications to the appropriate land zoning jurisdiction with a

<sup>&</sup>lt;sup>4</sup> Idaho Power Company. Response to 2026-2027 All Source Request for Proposals for Peak Capacity & Energy Resources. Jackalope Wind Benchmark Bid Proposal. June 2023. p. 20.

schedule that supports the commercial operation date with a pending decision." In contrast, a "green" rating means "documentation indicates that has appropriate non-appealable zoning approval or confirmed no zoning authority is required (i.e., – federal land)."

#### 3.3 Advantages and unique risks to the ratepayers

Per Oregon Administrative Rule ("OAR") 860-089-0450, the IE is required to "evaluate the unique risks and advantages associated with any company-owned resources." More specifically, the IE must evaluate the following items:

- a. construction cost over-runs (considering contractual guarantees, cost and prudence of guarantees, remaining exposure to ratepayers for cost over-runs, and potential benefits of cost under-runs);
- b. reasonableness of forced outage rates;
- c. reasonableness of any proposal or absence of a proposal to offer electric company-owned or benchmark resource elements (e.g., site, transmission rights, or fuel arrangements) to third-party bidders as part of the draft and final RFP;
- d. end effect values;
- e. environmental emissions costs;
- f. reasonableness of operation and maintenance costs;
- g. adequacy of capital additions costs;
- h. reasonableness of performance assumptions for output, heat rate, and power curve; and
- i. specificity of construction schedules or risk of construction delays.

LEI found that Jackalope Wind's proposed forced outage rate ("FOR"), power output, and power curve were reasonable, as they align with industry standards. In addition, **strategic** company structure and contractual agreements with suppliers effectively mitigate the potential risk of construction delays and support a reliable and efficient supply chain. However, it is important to note that under the BTA arrangement, there are some risks associated with potential construction cost overruns, and the potential need for additional capital investment and fixed operations and maintenance ("FOM") costs beyond costs captured in the bid price.

Furthermore, the Hemingway Storage 3 and the Boise Bench projects offer several advantages to ratepayers, including lower FOR compared to studies reviewed by LEI, as well as the absence of environmental emissions costs. Additionally, the bidder's assumptions regarding the performance of these units were found to be reasonable and in alignment with industry standards. Moreover, the proposals demonstrated sufficient specificity regarding the construction schedules, which are consistent with observed timelines in comparable BESS projects. However, it is important to acknowledge certain risks associated with potential

construction cost overruns, FOM costs, and additional capital costs. These risks necessitate careful monitoring and mitigation strategies to ensure that ratepayers are not negatively impacted:

- *potential construction cost overruns*: The Hemingway Storage 3 and Boise Bench projects included pricing information for BESS equipment based on a quote issued on April 26, 2023 with a validity period of 30 days. The quoted pricing had expired at the time this assessment had been conducted, the bidder will potentially revise the offer. IPC did not revise its price offer for the BESS equipment. As stated in the proposal, the battery-storage market, particularly the lithium carbonate index, has exhibited significant volatility. Consequently, pricing adjustments may occur not only during the RFP evaluation period but also in the period leading up to equipment purchase. With this, there was a risk that construction costs provided in the submitted proposal would change (more specifically, they may be higher than the costs provided in the proposal).
- *FOM costs*: The estimated FOM costs for the Hemingway Storage 3 and Boise Bench projects are lower than the FOM costs provided in the documents that LEI reviewed from reputable sources as well as the 2021 IPC IRP. .<sup>5</sup> While a lower FOM cost is advantageous to ratepayers, LEI notes the FOM cost includes basic services only and therefore does not include the optional costs such as (i) installation costs for capacity augmentation, (ii) extended warranty (beyond year five), (iii) extended warranty for the Power System Controller, and (iv) capacity performance guarantees. It is imperative to recognize the potential for higher final FOM prices particularly if IPC opts to include additional optional services at the later stage of project development. It is important to highlight that the battery manufacturer's quote, presented as one of the bid documents, had already lapsed, leading to uncertainties surrounding the final price.
- *potential additional capital costs:* The capital costs provided in the proposal do not seem to include decommissioning costs. It is important to consider decommissioning costs upfront when planning a BESS project, as they are an integral part of the project's financial analysis and overall lifecycle considerations. By incorporating decommissioning costs into the capital budget, ratepayers can be assured that the necessary funds are set aside to cover the eventual removal and mitigate the environmental impact of the BESS facility when it reaches the end of its useful life.

Finally, IPC stated that it would not offer its electric company-owned or benchmark resource elements to third-party bidders. LEI found this to be reasonable based on IPC's explanation. IPC stated in the RFP that the two BESS benchmark bids, "are located on Idaho Power-owned property and are intended to be incorporated into existing substations. Therefore, these sites are only available to third-party bidders proposing a Build Transfer Agreement (Asset Purchase) based on access control and ongoing utility operations."<sup>6</sup> Jackalope Wind is also located on IPC

<sup>&</sup>lt;sup>5</sup> The IE looked at the following sources: (i) National Renewable Energy Laboratory Annual Technology Baseline 2022 v3, 2023 Lazard Levelized Cost of Energy+, and the Energy Information Administration Annual Energy Outlook.

<sup>&</sup>lt;sup>6</sup> Idaho Power Company. 2026 All Source Request for Proposals for Peak Capacity and Energy Resources. June 8, 2023. Exhibit S.

property and "has no current rights directly and is relying on partnership site control and thus cannot offer site access as Idaho Power has no authority to do so."<sup>7</sup> The IPC Evaluation Team further added that, "To the extent that any of the Benchmark Bids has or obtains transmission capacity and is ultimately not the successful bid(s) in the RFP, that transmission capacity may become available to other requestors or successful bids consistent with Transmission Provider and Open Access Transmission Tariff requirements."<sup>8</sup>

7 Ibid.

<sup>8</sup> Ibid.

### 4 Overview of proposals received<sup>9</sup>

The IPC AS RFP saw participation from a total of 32 companies, collectively submitting 192 proposals.<sup>10</sup> Out of these total submissions, 188 proposals were resource-based bids<sup>11</sup> while the remaining four were market purchase bids. Notably, five companies submitted more than 10 resource product bids, with the highest number of bids from a single company reaching 40, as illustrated in Figure 3.



<sup>&</sup>lt;sup>9</sup> The terms "bids" and "proposals" are used interchangeably throughout this report.

<sup>&</sup>lt;sup>10</sup> This number includes the three benchmark bids from IPC.

<sup>&</sup>lt;sup>11</sup> This number already excludes the bids that answered "no" to some of the eligibility questions or those that did not have any answers to the eligibility, pricing, and non-pricing questions—which rendered this projects ineligible for the AS RFP.

A combined total of over 64,000 MW of resource-based proposals were submitted, with solar power accounting for 56% of this capacity.<sup>12</sup> More than a third of the proposed capacity is attributable to BESS, while the rest is composed of wind, LDES, G2H, and geothermal resources, as illustrated in Figure 4. These proposals (wind, LDES, G2H, and geothermal) encompass 45 facilities, with a collective capacity of 15,043 MW.<sup>13</sup> The breakdown of the fuel mix of these facilities is also presented in Figure 4. In addition, a total capacity of 960 MW from four market purchase bids was proposed with contract terms of five and 10 years.



Regarding the structure of the resource capacity bids, a significant portion -37% of submissions – presented a combination of PPA and BESS BSA arrangements. Additionally, 25% of the proposals focused solely on solar PPAs. Figure 5 shows this breakdown of the structure of the resource capacity proposals.

In terms of the COD of the proposals, more than 40% of all the bids is expected to be online before June 2026 while the remaining will be online before June 2027, as depicted in Figure 6.

<sup>&</sup>lt;sup>12</sup> This capacity (MW) value was calculated for all proposals; therefore, this value double counts the capacity of the facilities. For example, a facility may have solar capacity of 50 MW and a BESS of 20 MW. However, the bidder may have proposed two bids: namely, Bid A consisting of a solar PPA of 50 MW and Bid B consisting of a solar PPA of 50 MW with BESS of 20 MW. The total capacity proposed by this bidder is thus 120 MW.

<sup>&</sup>lt;sup>13</sup> This is the capacity of all the facilities, as opposed to the capacity of all the proposals.



### 5 Assessment of bid eligibility

In the first part of the bid evaluation process, IPC and LEI evaluated bids to ensure that they were qualified to take part in the RFP process. This initial step was meant to screen out submissions that have not met IPC's minimum eligibility requirements so that only bids that are found to qualify for this RFP would be advanced into subsequent steps of the assessment process: namely, the non-pricing and pricing scoring assessments (discussed in Section 6.1).

The following are the eligibility requirements for resource-based products, as listed in Bid Entry Form ("BEF"):

- 1. the bid is submitted on or before the submittal deadline, with all applicable forms completed;
- 2. the proposed product will be delivered to a point of delivery on IPC's transmission system or — if the product will interconnect to a third-party transmission system — the bidder has provided documentation that demonstrates it has submitted applicable transmission service requests to the relevant Transmission Provider to establish transmission rights to deliver to IPC's point of delivery;
- 3. the bidder has provided redlines or confirmed no redlines to draft form agreements for the resource-based product;
- 4. the bidder has provided redlines or confirmed no redlines to applicable technical specifications;
- 5. evidence of wire transfer was provided prior to the bid deadline in the correct amount for the correct number of bids;
- 6. the documentation submitted indicates the viability of COD (for resource-based proposals) or a Contract Effective Date (for market purchase proposals) on or before June 1, 2027, and matches the COD submitted; and
- 7. documentation may include, as applicable, generator interconnection agreement ("GIA") status and timely interconnection capability; federal, state, and local permitting requirements and decisions; land-use and site control requirements and decisions; construction plans and schedules; procurement documentation; financing capability and sources; and other relevant documentation necessary to demonstrate timely viability of the proposed project. The IPC Evaluation Team will also consider (and the bidder must identify) pending, actual, or threatened administrative, legal, legislative, procedural, and other actions (federal, state, or local) that could impact timely viability.

### 5.1 Non-conforming bids and cure period

Following a rigorous evaluation of all submitted proposals, IPC identified a total of 64 resource capacity proposals from five companies as non-compliant with the bid eligibility requirements. Specifically, IPC determined that the bids submitted by **sectors**, located within the PacifiCorp system, were ineligible due to the absence of secured transmission acquisition or any initiated studies.

Furthermore, some asset purchase proposals lacked crucial technical specifications. , which submitted four proposals, indicated that its GIA is contingent on the Gateway West Segment 8 facility, which is not scheduled to commence operations until 2028.

proposals were also deemed ineligible due to the absence of evidence supporting timely interconnection; specifically, the Transmission Service Request and study failed to corroborate the timely interconnection required for delivery from Valmy into IPC BA at the Rogerson Switching Station. Lastly, **Security**, with six bids, submitted incomplete proposals lacking comprehensive pricing, commercial feedback, and an anticipated project schedule (COD identification), which were essential to evaluate the feasibility of timely interconnection, permits, and GIA execution.

In addition to the aforementioned findings, LEI informed IPC that five companies, collectively having submitted 25 bids, were missing the mandatory Exhibit N (financial questionnaire) or financial statements. IPC, however, clarified that despite this omission, they considered these proposals to be eligible as the companies had provided sufficient information addressing the Exhibit N questions within the narrative proposal (or Exhibit P). Regarding the single bidder that failed to submit the requested financial statements, IPC acknowledged that the company had explained in its narrative the confidential nature of the financial information and had requested to provide the information directly to IPC's credit department for review. IPC also noted the absence of a currently valid Mutual Non-Disclosure Agreement with this particular bidder.

In compliance with the bidding rules, on July 21, 2023, IPC duly notified the five companies mentioned above via email regarding the non-conformity of their bids with the eligibility requirements. These companies were given a five-business-day window to rectify the identified issues. Following the cure period, IPC determined that **Companies** successfully addressed the eligibility concerns, leading to their inclusion in the pool of eligible proposals.



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Furthermore, during evaluation of the bids, IPC determined that two of **sector** bids assumed that IPC would cover the costs associated with the installation of the proposed BESS system. IPC said that it believes that "the installation cost and balance of plant can be accomplished at a much lower cost than provided in the two bids. The costs of \$423/kw and \$527/kw, respectively, are much higher than Idaho Power's recent experience installing BESS systems at approximately \$250/kw."<sup>19</sup> Consequently, the IPC Evaluation Team decided to exclude this bid from further consideration, categorizing it as non-conforming with eligibility requirements. A summary of eliminated bids is provided in Figure 7 below.

# Figure 7. Proposals that IPC deemed to be non-conforming with the bid eligibility requirements following the end of the cure period

Bidder	No. Proposals	Rationale for Non-Conformance
	4	Located on PacifiCorp system, and no firm transmission acquired or study initiated. No detail on technical specifications provided for Asset Purchase proposal.
	2	
	40	Bidder did not provide evidence for timely interconnection, specifically a TSR and NVE study for delivery from Valmy (POI) into IPC BA at RGGS.
Total	46	

Source: IPC.

17 Ibid.

<sup>19</sup> Idaho Power Company. 2026-2027 All-Source Request for Proposals Eligibility and Phase 1 – Initial Short-List Evaluation Review. July 27, 2023. p. 16.

<sup>&</sup>lt;sup>16</sup> London Economics International LLC. Review of Eligibility and Initial Shortlist - 2026 All Source Request for Proposals for Peak Capacity and Energy Resources. August 2, 2023. P. 33.

<sup>&</sup>lt;sup>18</sup> Email from Ma. Cherrylin Trinidad, LEI Project Manager, to Eric Hackett, IPC Senior Manager, Projects and Design on July 31, 2023.

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#### 5.2 Eligible proposals

IPC identified a total of 146 proposals from 29 companies as eligible for the Initial Shortlist ("ISL"). This included all four market purchase bids from one company. Figure 8 shows the number of eligible bids by each bidder. The resource-based proposals have a total combined bid value of more than 40,000 MW.<sup>20</sup> These proposals consist of 41 facilities, with a collective capacity of more than 13,000 MW.



60% of the eligible resource-based bids feature a solar component, while over a quarter of them include BESS. The remaining proposals consist of wind, LDES, G2H, and geothermal, as shown in Figure 9. When examining the facilities involved, solar installations constitute more than half of the total, while BESS accounts for nearly 40% of the capacity, as shown in Figure 10.

In terms of the structure of the resource-based products, solar PPAs dominate the eligible bids with 45 proposals. Notably, all bids for solar PPAs align with the minimum requirements. However, there was a notable decline in the number of eligible solar PPA with BESS BSA bids, plummeting by 89% from 68 bids to only 32 bids. The non-compliant bids primarily consist of proposals involving wind AP, wind PPAs, and combinations such as (i) solar PPA with LDES BSA and (ii) solar PPA with BESS BSA, as shown in Figure 11.

<sup>&</sup>lt;sup>20</sup> This is the capacity of all the eligible proposals; therefore, there is double counting of capacity. See footnote 12.





### 6 Bid evaluation and scores for the Initial Shortlist

To assess the bids submitted as part of this RFP process, IPC developed a two-step evaluation methodology. The first step – or Phase 1 – entails the creation of an initial shortlist of bids, or a list of bids that have been screened for further analysis in a subsequent round of evaluation. The ISL is based on bidder eligibility to participate in this RFP (discussed in Section 7), which is followed by a ranking of bids based on both non-pricing and pricing considerations. According to the RFP, lowest cost bids are identified for inclusion in the Initial Shortlist.<sup>21</sup>

This section covers IPC's ranking methodology used in this RFP, and specifically the non-pricing and pricing scoring models underpinning bid ranking. This step follows the elimination of bids (if any) in the bid eligibility assessment. As explained in Section 6.1, bidders could earn up to 25 points for the non-pricing scoring component of the scoring methodology. Section 6.2 covers the pricing scoring component of the scoring methodology, for which bidders could earn up to 75 points. In total, each bid could earn up to 100 points; the sum of the non-pricing and pricing scores were then used to rank and compare bids, as covered in Section 7.1.

#### 6.1 Non-pricing scoring methodology

#### 6.1.1 Description of the scoring methodology for resource-based products

After evaluating bid eligibility, both IPC and LEI assessed the non-pricing factors of the bids submitted. IPC prepared questions in the BEF that were meant to provide an understanding of each bid's key attributes. Factors were split into two categories of different scoring weights: (i) *contracting progress and viability*, at a 20% weighting and (ii) *project readiness and deliverability*, at a weighting of 80%. Together, all factors and their respective weightings build the non-pricing score for each bid, as shown in Figure 12. Bidders could earn up to 25 total points in the non-pricing scoring component of the scoring methodology – up to 5 points for *contracting progress and viability* and up to 20 points for *project readiness and deliverability*.

Figure 12 graphically depicts the different non-pricing scoring factors taken into consideration by IPC in the bid evaluation process:

- *contracting progress and viability* assesses **contract risk**, or the extent to which bidders seek to deviate from IPC's draft form agreements (on contract terms like product, price, term, performance guarantees, damages, payments, etc.). Bidders could earn up to 5 points on this non-pricing factor;
- project readiness and deliverability covers an additional pool of factors meant to give IPC an
  understanding of whether proposed projects will be able to achieve commercial
  operations by COD: site control, zoning, easements, permits, GIA, NRIS/ERIS,
  experience, safety, financing, development schedule, material/EPC, and existing
  conditions. At a high level, through descriptions of each factor provided in the BEF,

<sup>&</sup>lt;sup>21</sup> Idaho Power Company. 2026 All Source Request for Proposals (RFP) for Peak Capacity and Energy Resources. June 8, 2023. p. 23.

bidders were prompted to indicate the extent to which they have site access, zoning approval, executed land agreements, permits, interconnection approval, industry experience, safe working conditions, project financing, construction milestones, and materials for construction. Bidders could earn up to 20 points for these non-pricing factors.



Bidders were required to self-score their performance on various non-pricing factors using the BEF form. For certain factors, bidders were asked to assign themselves a score of either "red" or "green" — indicating whether or not the proposed project possesses the requisite documentation to substantiate a particular attribute. For example, a self-score of "green" for financing signifies that the proposed project has the necessary documentation to demonstrate a viable financing plan; conversely, a self-assessment of "red" indicates that the project lacks the documentation to verify a financing plan is in place. In the case of other factors, bidders were also permitted to self-score as "yellow" for items where progress is being made. For instance, a bidder should self-score as "yellow" for the GIA if the proposed project does not yet have an executed interconnection agreement but can provide completed interconnection studies. Furthermore, for several factors, a "not applicable" option was also available.

In calls with OPUC and LEI, IPC has explained that the element of subjectivity in this scoring was intentional to give bidders the opportunity to provide relevant information that would not be captured adequately in a strict (inflexible) non-pricing score methodology.

With respect to readiness and deliverability factors, bidders were not required to have all required factors in place (i.e., bidders were not all expected to have executed interconnection agreements), though more advanced projects would receive a comparatively higher non-pricing score (i.e., bidders with executed interconnection agreement would receive more points than those that have only received completed interconnection studies). The greater the number of

"green" self-scored factors, the higher the bidder's non-pricing score (based on the weighting shown in Figure 12). Bidders provided their self-scores in the BEF and provided additional context for their scores in their respective bid narratives (Exhibit P) and supplemental attachments.

#### 6.1.2 Description of the scoring methodology for market purchase products

The non-pricing evaluation methodology for market purchase products mirrors that of resourcebased products, with the key distinction lying in the specific criteria and weightings employed for each factor. These attributes, along with their corresponding weightings, are depicted in Figure 13. Like resource-based products, bidders could achieve a maximum score of 25 points by receiving a "green" rating across all non-pricing factors. The pricing factors (or attributes) do, however, differ from those of resource-based products.



#### 6.1.3 LEI's assessment of the non-pricing scores

In accordance with the methodology outlined in Sections 6.1.1 and 6.1.2, both IPC and LEI independently evaluated the non-pricing factors of each submitted bid. LEI's evaluation was guided by its understanding of IPC's descriptions of each non-pricing factor, as detailed in the BEF and RFP. Specifically, LEI assessed all submitted documents and used the content provided in each submission to fill out the non-pricing tab of the BEF for each project. IPC employed a similar approach to assess the non-pricing factors of each bid. The results of IPC Evaluation Team's score and the IE's score are provided in Figure 14.

While the non-pricing scores calculated for each bid by IPC and LEI generally aligned, there were several bids for which scores diverged. Generally, the discrepancy in scores relates to IPC's and LEI's differing views on whether bidders submitted sufficient documentation (or other written evidence) to support their self-scores. After reviewing IPC's justification for their non-pricing scores of bids, for resource-based products, there were 49 bids with the same scores and a

remaining 92 bids with differing scores. On average, the non-pricing score difference for resourcebased bids varied by 0.4 points. For market purchase products, there were four differing scores for a total of four bids, with scores differing by 4.5 points on average.

Bidder Score	IPC Evaluation Team Score	LEI Score	Difference between IPC's and LEI
21.8	20.8	19.6	1.2
24.4	22.2	22.2	0.0
24.4	22.2	<u> </u>	0.0
24.4	10.4	15.2	0.0
25	19.4	15.0	3.0
25	19.4	17.0	2.4
25	19.4	17.0	2.4
25	19.4	17.0	2.4
25	19.1	17.0	2.1
25	19.4	17.0	2.4
25	19.4	17.0	2.4
25	19.4	17.0	2.4
25	19.4	17.0	2.4
25	10 /	17.0	24
25	19.4	17.0	2.4
19.4	18.2	18.2	0.0
19.4	18.2	18.2	0.0
19.4	18.2	18.2	0.0
19.4	18.2	18.2	0.0
19.4	18.2	18.2	0.0
20.8	16.4	16.4	0.0
20.8	16.4	16.4	0.0
20.8	16.4	16.4	0.0
20.8	16.4	16.4	0.0
20.8	16.4	16.4	0.0
22.6	21.4	21.0	0.4
19	17.4	16.5	0.9
19	17.4	16.5	0.9
19	17.4	16.5	0.9
19	17.4	16.5	0.9
19	17.4	16.5	0.9
19	17.4	16.5	0.9
19	17.4	16.5	0.9
19	17.4	16.5	0.9
16	13.4	15.0	-1.6
16	13.4	15.0	-1.6
16	13.4	15.0	-1.6
16	13.4	15.0	-1.6
21.8	21.2	18.8	2.4
21.6	19.6	19.6	0.0
21.6	19.6	19.6	0.0
21.6	19.6	19.0	0.6
21.6	19.6	20.6	-1.0
19	18.4	18.4	0.0
19	18.4	18.4	0.0
19	18.4	18.4	0.0

27 London Economics International LLC 717 Atlantic Avenue, Suite 1A Boston, MA 02111 <u>www.londoneconomics.com</u>

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			Difference
Bidder Score	The Evaluation	LEI Score	between IPC's
	Team Score		and LEI
21.8	20.0	18.6	1.4
21.8	20.0	18.6	1.4
21.8	20.0	18.6	1.4
21.8	20.0	16.6	3.4
21.8	20.0	16.6	3.4
21.8	20.0	16.6	3.4
22.2	18.4	20.0	-1.6
22.2	18.4	20.0	-1.6
22.2	18.0	18.0	0.0
22.2	18.0	18.0	0.0
22.2	18.0	18.0	0.0
17.4	19.4	15.4	4.0
17.4	19.4	15.4	4.0
17.4	19.4	15.4	4.0
17.4	19.4	15.4	4.0
17.4	19.4	15.4	4.0
17.4	19.4	15.4	4.0
17.4	19.4	15.4	4.0
20.8	19.6	20.8	-1.2
20.8	19.6	20.8	-1.2
20.8	19.0	20.8	-1.8
20.8	19.0	20.8	-1.8
20.8	19.6	20.8	-1.2
19	18.4	18.4	0.0
19	18.4	18.4	0.0
19	18.4	18.4	0.0
19	18.4	18.4	0.0
19	18.4	18.4	0.0
19	18.4	18.4	0.0
20	19.4	19.4	0.0
20	19.4	19.4	0.0
20	19.4	19.4	0.0
20	19.4	19.4	0.0
19	18.4	18.4	0.0
19	18.4	18.4	0.0
19	18.4	18.4	0.0
19	18.4	18.4	0.0
20	19.4	19.4	0.0
20	19.4	19.4	0.0
20	19.4	19.4	0.0
20	19.4	19.4	0.0
24.4	19.6	20.2	-0.6
24.4	19.6	20.2	-0.6
24.4	19.6	20.2	-0.6
24.4	19.6	20.2	-0.6
18.2	16.6	15.6	10
22 22	22.0	19.6	2.4
25	20.0	21.0	-1 /
25	18.8	21.4	-1.4
25	18.8	20.2	-1.4
23.4	20.2	19.2	1.1

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	IPC Evaluation		Difference
Bidder Score	Team Score	LEI Score	between IPC's
19	13.8	13.8	and LEI
19	13.2	13.8	-0.6
19	13.2	13.8	-0.6
19	13.2	13.8	-0.6
19	13.2	13.8	-0.6
18.6	17.0	17.0	0.0
18.6	17.0	17.0	0.0
18.6	15.8	16.4	-0.6
18.6	15.8	16.4	-0.6
20.6	19.4	20.6	-1.2
20.6	18.4	20.6	-2.2
22.2	21.6	21.0	0.6
22.2	21.6	21.0	0.6
23.4	22.2	22.8	-0.6
23.4	22.2	22.8	-0.6
23.4	22.2	22.8	-0.6
23.4	22.2	22.8	-0.6
21.8	19.0	19.0	0.0
21.8	19.0	19.0	0.0
25	19.6	19.0	0.6
22.2	21.6	21.6	0.0
22.2	21.6	21.6	0.0
22.2	21.6	21.6	0.0
21	20.0	19.0	1.0
21	19.4	19.0	0.4
21	19.4	21.0	-1.6
21	19.4	21.0	-1.6
21	19.4	21.0	-1.6
21	19.4	21.0	-1.6
20	16.4	18.0	-1.6
20	16.4	18.0	-1.6
16.2	15.6	13.4	2.2
16.2	15.6	13.4	2.2
16.2	15.0	12.8	2.2
23.8	15.4	16.0	-0.6
23.8	15.4	16.0	-0.6
23.8	15.4	16.0	-0.6
23.8	15.4	16.0	-0.6
23.8	15.4	16.0	-0.6
23.8	15.4	16.0	-0.6
21.6	17.0	17.0	0.0
21.6	17.0	17.0	0.0
21.6	17.0	17.0	0.0
25	25.0	20.5	4.5
25	25.0	20.5	4.5
25	25.0	20.5	4.5
25	25.0	20.5	4.5

Sources: IPC and LEI analyses based on submitted BEFs.

#### 6.2 Pricing scoring methodology

#### 6.2.1 Description of the scoring methodology

After reviewing eligibility and the non-pricing factors, IPC and LEI evaluated the pricing scores. Bids could earn up to 75 total points under the pricing evaluation. For this part of the assessment, IPC prepared a pricing (financial) model in Excel format. As part of the pricing assessment, IPC sought to understand the delivered revenue requirement per kilowatt cost of each bid. Bidders were asked to provide supplemental pricing information, including tax credit benefits, carrying costs, and interconnection (upgrade) costs (if known), among others if applicable.

According to the pricing methodology provided in the RFP, for each technology group, the bid with the highest relative score receives the full maximum 75 points and the bid with the lowest relative score receives a score of zero. All remaining bids receive a score of between zero and 75 based on the "relative relationship" of their relative pricing score to the scores of the highest and lowest scored bids.

#### 6.2.2 IPC's pricing score

The figures below show IPC's pricing scores for stand-alone resource-based bids that are scheduled to come online in 2026 and 2027 and present the pricing scores for contingent bids. These pricing scores are based on IPC's model, which LEI evaluated (discussed in Section 6.2.3).

Standalo	one - BESS 2026					
	Bidder	Facility Name	Master Project	MW	Sum of LCOC (\$/kW/Month)	Score
				150	\$12.48	75.0
				200	\$13.09	66.5
				100	\$14.52	46.6
				150	\$14.56	46.0
				200	\$14.60	45.5
				50	\$14.64	44.9
				330	\$14.82	42.3
				180	\$15.17	37.5
				100	\$15.24	36.6
				330	\$15.87	27.8
				180	\$16.10	24.6
				100	\$17.78	1.1
				65	\$17.86	-
Standalo	one - Solar 2026					
	Bidder	Facility Name	Master Project	MW	Sum of LCOE (\$/mwh)	Score
				400	\$45.79	75.0
				400	\$46.57	71.9
				125	\$47.71	67.3
				200	\$47.75	67.2
				200	\$50.71	55.2
				200	\$50.80	54.9
				53	\$64.48	-

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Standalone - Gas H2 2026					
Bidder	Facility Name	Master Project	MW	Sum of LCOE (\$/mwh)	Score
			120	\$148.21	75.0
Standalone - Wind 2026					
Bidder	Facility Name	Master Project	MW	Sum of LCOE (\$/mwh)	Score
			179	\$64.67	75.0
Standalone - Geothermal 2026					
Bidder	Facility Name	Master Project	MW	Sum of LCOE (\$/mwh)	Score
			10	\$78.66	75.0

## Figure 16. IPC's pricing score for stand-alone bids with 2027 COD

Standalone - BESS 2027					
Bidder	Facility Name	Master Project	MW	Sum of LCOC (\$/kW/Month)	Score
			200	\$12.91	75.0
			240	\$13.06	73.6
			200	\$14.68	59.7
			100	\$15.39	53.5
			250	\$17.07	38.9
			500	\$17.67	33.7
			75	\$21.55	-

Standalone - Wind 2027					
Bidder	Facility Name	Master Project	MW	Sum of LCOE (\$/mwh)	Score
			350	\$57.32	75.0
			350	\$59.45	70.8
			100	\$65.70	58.6
			100	\$67.72	54.7
			100	\$70.93	48.4
			329	\$95.75	-

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Biddor	Facility Name	Master Project	N/147	Sum of LCOE	Score
bluder	Facility Name	Master Project	IVIVV	(\$/mwh)	Score
			123	\$37.03	75.0
			123	\$37.51	74.4
			330	\$38.52	73.2
			123	\$38.67	73.0
			330	\$39.13	72.5
			330	\$39.31	72.3
			325	\$39.91	71.6
			325	\$41.57	69.6
			250	\$42.23	68.8
			250	\$42.23	68.8
			450	\$43.25	67.6
			200	\$43.99	66.8
			175	\$44.59	66.0
			325	\$44.67	65.9
			200	\$45.64	64.0
			140	\$40.04	64.
			200	\$47.30	62.0
			200	\$47.49	62.
			140	\$47.58	62.
			140	\$48.10	61.
			200	\$48.43	61.
			200	\$40.43 \$40.42	61.
			525	\$49.43 \$40.45	60.
			200	\$49.43 \$50.07	50.
			200	\$50.07	59.
			140	\$50.25 \$50.60	59.
			200	\$50.69 ¢E1.70	56.
			200	\$51.70 \$52.61	57.
			200	\$52.01 ¢52.91	56.
			200	\$53.01 ¢E4 E4	55.
			300	\$34.34 ¢55.24	54.
			300	\$55.30	50
			200	\$50.57	48
			200	\$59.57 \$50.75	40.
			225	\$59.75	40.
			120	\$00.30 \$62.36	47.
			130 E00	\$64.07	43.
			500	\$64.07	43.
			145	\$64.23	42.
			145	\$64.44	42.
			145	\$66.51	40.
			145	\$67.58	38.8
			145	\$68.79	37.4
			329	\$100.34	-

Figure 17. IPC's pricing	3 score for contingent b	ids with 2026 COB			
Contingent - Solar/BESS 2026					
Bidder	Facility Name	Master Project	Sum of Combined MWs	Sum of Combined LCOC	Score
			250	\$10.68	75.0
			200	\$11.01	70.5
			300	\$11.85	58.9
			200	\$12.19	54.2
			300	\$12.30	52.6
			300	\$12.70	47.1
			300	\$13.16	40.8
			265	\$13.21	40.1
			58.25	\$13.66	33.9
			84	\$14.10	27.8
			180	\$16.11	-
Contingent - Wind/Solar/BES	S 2026				
Bidder	Facility Name	Master Project	Sum of Combined MWs	Sum of Combined LCOC	Score
			444	\$12.83	75.0

### Figure 18. IPC's pricing score for contingent bids with 2027 COB

Contingent - Wind BTA plus	Wind PPA 2027				
Bidder	Facility Name	Master Project	Sum of Combined MWs	Sum of Combined LCOC	Score
			600	\$16.18	75.0
<b>Contingent - Wind plus BESS</b>	5 2027				
Bidder	Facility Name	Master Project	Sum of Combined MWs	Sum of Combined LCOC	Score
			400	\$14.15	75.0
			400	\$14.29	74.1
			379	\$24.41	7.8
			429	\$25.61	-
<b>Contingent - Wind plus Solar</b>	plus BESS 2027				
			Sum of	Sum of	
Bidder	Facility Name	Master Project	Combined	Combined	Score
			MWs	LCOC	
			800	\$12.19	75.0
			800	\$12.28	75.0
Contingent - Wind plus Solar	2027				
Bidder	Facility Name	Master Project	Sum of Combined MWs	Sum of Combined LCOC	Score
			600	\$11.60	75.0
			600	\$11.72	75.0

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Bidder	Facility Name	Master Project	Sum of Combined MWs	Combined	Score
			900	\$9.43	75.0
			312.5	\$9.57	74.2
			312.5	\$9.64	73.9
			312.5	\$9.70	73.
			312.5	\$9.77	73.
			187.5	\$9.79	73.
			312.5	\$9.79	73.
			312.5	\$9.86	72
			312.5	\$9.88	72
			312.5	\$9.95	72
			187.5	\$9.96	72
			187.5	\$10.09	71
			500	\$10.10	71
			400	\$10.10	71
			187.5	\$10.15	71
			300	\$10.25	70
			400	\$10.25	70
			400	\$10.52	69
			340	\$10.58	68
			425	\$10.66	68
			340	\$10.70	68
			340	\$10.92	66
			255	\$11.23	65
			400	\$11.39	64
			340	\$11.90	6
			255	\$12.27	59
			300	\$12.34	59
			255	\$12.56	58
			255	\$12.71	57
			600	\$12.90	56
			600	\$13.79	51
			260	\$13.80	51
			255	\$13.90	50
			1000	\$14.98	44
			379	\$19.26	21
			379	\$21.69	8
			429	\$23.20	

#### 6.2.3 LEI's assessment of the financial model

IPC's financial model consolidates information provided by all bids in the BEF regarding pricing and operational details specific to each bid, as well as IPC's financial assumptions, to calculate the delivered revenue requirement per kilowatt cost of each bid. IPC's financial model determines the levelized cost to support each bid's relative score within each technology category (wind, solar, BESS, etc.) using the levelized cost of capacity ("LCOC") for battery storage units and the levelized cost of energy ("LCOE") for all the other technology types. IPC also had to make its own assumptions on certain model inputs, such as inflation, discount rate, tax rate, asset life, allowance for funds used during construction rates, integration costs, owner costs, etc. LEI confirms that these assumptions made by IPC were applied uniformly across all bids, ensuring fairness in the assessment process. LEI also understands that all assumptions in the model were based on the assumptions of the upcoming 2023 IRP.

LEI reviewed the financial model to understand the model structure, utilization of data by IPC, assumptions relied upon by IPC (methodology and sources), and how each bid price score was calculated based on its technology type.

Based on LEI's understanding, below are the assumptions used for the financial model:

- sources for O&M assumptions used:
  - o *solar:* NREL 2022 assumptions, less property tax and insurance;
  - *natural gas:* EIA 2022 Annual Energy Outlook internal combustion engine Peaking Gas – Reciprocating Gas Engine assumptions, less property tax and insurance;
  - BESS: based on IPC's 2023 negotiated contracts for 80 MW and 40 MW BESS projects; and
  - *wind:* based on IPC's submitted benchmark bid.
- *PA network upgrade costs:* only takes into account the reimbursable share of the cost identified in the interconnection cost studies, which results in a cost impact to IPC customers;
- *fuel cost assumptions for clean gas:* short-term forecast based on NREL, including cost of the hydrogen fuel and transportation/storage, reaching natural gas cost parity by 2050;
- *financial assumptions:* insurance, taxes and tax credits, financing composition, and project life (tax and book values) were based on the 2023 IRP;
- *evaluation of bids based on ownership type:* same methodology used for the different ownership type and ranked in the same category;
- *scoring methodology:* three-step approach first aggregating the total levelized payments of the technologies making up the hybrid bid, then aggregating the capacity of the relevant technologies, and lastly dividing aggregate levelized payments by total capacity (LCOC in \$/kW) or total energy (LCOE in \$/kWh).

After thoroughly evaluating the financial model and assumptions, the IE concluded that IPC provided a robust and justifiable methodology for ranking bid proposals. Additionally, the IE confirmed that this approach would not unfairly disadvantage any particular ownership type. The IE's review of the model revealed its accuracy and fairness in extracting and analyzing pricing information submitted by bidders for each bid. Therefore, the IE upholds the consistency and reasonableness of IPC's pricing scores as aligned with the described process.

### 7 Phase I – Initial shortlist

### 7.1 Ranking methodology

The ranking resulting from the sum of the non-pricing and pricing scores determined for each bid was meant to indicate the completeness and competitiveness of bids for each resource technology group. A ranking of bids within each individual technology group was also meant to ensure that like bids were assessed against one another before being compared with bids of resource types with differing physical characteristics and associated costs. The technology-specific rankings were used by IPC to develop its narrowed down Initial Shortlist for Phase 1 of the bid assessment process; this process is described in Section 7.2 below.

According to the 2026 AS RFP, "the highest ranking and relatively lowest cost bids within each technology category will become the Initial Shortlist."<sup>22</sup> The Initial Shortlist is the result of (1) bid eligibility screening results, (2) the non-pricing and pricing scores and subsequent ranking by technology type, and (3) the "identification of the lowest cost bids."<sup>23</sup>

IPC's Initial Shortlist development process went further than what was provided in the RFP. Based on meetings attended by representatives of OPUC, IPC, and LEI, IPC took several additional steps to narrow down the list of bids that would be advanced into Phase 2—"Final Shortlist"—of the bid evaluation process.<sup>24</sup> At a high level, IPC first chose to advance projects that were the only bids submitted for a particular technology type. Next, if IPC advanced any one particular bid (i.e., a solar project), then it automatically also advanced all submitted combinations of that bid (i.e., a proposal consisting of the same solar project combined with BESS), even if those alternative bid combinations did not themselves make the Initial Shortlist. IPC also advanced bids with pricing proposals that were viewed as more attractive than those of other bids of the same technology type.

Furthermore, IPC explained in its ISL report that it "desired a reasonable and diversified quantity of projects that represent each technology category that met the following principles:

- a. minimum of three bidders/projects where sufficient bids were included;
- b. sufficient capacity/energy quantity to meet the stated needs of the RFP;
- c. technology categories that only had one bidder were automatically moved forward; and

<sup>23</sup> Ibid. p. 23.

<sup>&</sup>lt;sup>22</sup> Idaho Power Company. 2026 All Source Request for Proposals (RFP) for Peak Capacity and Energy Resources. June 8, 2023. p. 27.

<sup>&</sup>lt;sup>24</sup> In Phase 2, information submitted by bidders was used to run the AURORA production cost model. For more, please see pages 27-29 of the 2026 AS RFP.

d. step increases to price and total score were utilized as a natural cutoff."25

LEI discusses this initial shortlist process in the subsections that follow.

#### 7.2 IPC's Initial Shortlist

IPC's ISL is comprised of the highest-ranking scores for each vintage/delivery year (2026 or 2027) and technology category. First, IPC divided the bids per project year-in date (2026 and 2027). In other words, 2026 and 2027 projects were not in competition. Then, IPC created categories based on technology type, separating standalone from combined bids—categories were created separately for each technology for standalone bids (i.e., solar only or wind only bids) and for each combination of combined resources (i.e., solar with BESS). Then, within each category, IPC ended up with a total of fifteen sub-categories, as depicted in Figure 19.



In each sub-category, IPC ranked bids from the lowest to the highest price offer, with the lowest price receiving the highest number of points (75 points) and the lowest score being awarded zero points. The rest of the scoring was determined using a formula that examined the variance between the bid price and the lowest bid price. The greater the difference between a given price and the lowest price, the lower the score; conversely, the smaller the difference, the higher the score.

The ISL consisted of a total selected 63 bids with over 18,000 MW of aggregate capacity (inclusive of market purchase products). Notably, this selection encompassed a diverse range of technologies, ensuring representation from all the technologies offered during the RFP process, as depicted in Figure 20. Solar capacity dominated the initial ISL's resource-based bids,

<sup>&</sup>lt;sup>25</sup> Idaho Power Company. 2026-2027 All-Source Request for Proposals Eligibility and Phase 1 – Initial Short-List Evaluation Review. July 27, 2023. p. 12.

constituting over 50% of the total, while BESS accounted for nearly a quarter of the capacity. The remaining portion of the shortlisted resource-based capacity was derived from wind, G2H, and geothermal sources.



In terms of the structure of the bids, solar PPAs still dominated the initial shortlisted bids, with 16 total bids. This is followed 10 solar PPA with BESS BSA bids and seven BESS BSA bids, as shown in Figure 21.



The shortlist bids are listed in the tables below.

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Bidder	Facility Name	Master Project	Total Phase I Score (Price/Non-Price)
Resource Based Pro	ducts		
a. Standalone BE	ESS - 2026		
			ç
			86
			68
			69
			65
			61
. Standalone So	olar PV - 2026		
			91
			88
			86
			77
			74
. Standalone Ga	as H2 - 2026		
l. Standalone W	ind - 2026		
			94
. Standalone Ge	eothermal - 2026		
			91
. Contingent W	ind + Solar + BESS – 2026		
			94
. Contingent So	lar PV + BESS - 2026		
			97
			89
			78
			66
			60
			59

idder	Facility Name	Master Project	Total Phase I Scor (Price/Non-P <u>rice)</u>
esource Based Proc	ducts		
Standalone BE	SS - 2027		
			ç
			5
Standalone Sol	ar PV - 2027	•	
Standalone Wi	nd - 2027	-	4
Contingent Sol	lar PV + BESS - 2027		
Contingent Wi	nd BTA + Wind PPA - 2027		

m. Contingent Wind + BES	S - 2027	
		94.4
		94.4
n. Contingent Solar + Wine	d - 2027	
		94.4
		94.4
o. Contingent Wind + Sola	r + BESS – 2027	
		94.4
		94.4
Source: IPC.		

Below, LEI provides IPC's rationale for its choice of resource-based bids for each technology type, as excerpted from the Company's ISL report.

- **Standalone BESS 2026:** The top three bidders amongst four different resource sites and contract structures accounting for 600 MW were selected based on price and total score.
- **Standalone Solar PV 2026:** All bids were advanced except for a single bid (BLU43PVPP5326) as the price was approximately 25% higher than the more tightly clustered remaining two bidders and three resource sites accounting for 800 MW.
- **Standalone Gas H2 2026:** The only bid that was submitted was advanced.
- **Standalone Wind 2026:** The only bid that was submitted was advanced.
- **Standalone Geothermal 2026:** The only bid that was submitted was advanced.
- **Contingent Wind + Solar + BESS 2026:** The only bid that was submitted was advanced.
- Contingent Solar PV + BESS 2026: The top four bidders amongst four resource sites and contract structures accounting for over 1,000 MW were selected based on price and total score. The fourth bidder, **Example 1**, was included as their total score was very close to the top three bidders and their resource site is being selected in other technologies, thus updated pricing and adding this technology to the LTCE model is easily accommodated.
- **Standalone BESS 2027:** The top three bidders amongst three different resource sites and contract structures accounting for over 1,850 MW were selected based on price and total score.
- Standalone Solar PV 2027: The top six bidders amongst seven different resource sites and contract structures accounting for 1,600 MW were selected based on price and total score. The price and scores were tightly clustered and therefore five bidders were chosen instead of three. Furthermore, the next ten best prices and total scores were from the same top five bidders.
- **Standalone Wind 2027:** Only two bidders and two resource sites were bid and thus all bids were advanced.

- **Contingent Solar PV + BESS 2027:** The top four bidders amongst four resource sites and contract structures accounting for over 2,100 MW were selected based on price and total score. The next two best prices and total scores were from the same top four bidders.
- **Contingent Wind BTA + Wind PPA 2027:** The only bid that was submitted was advanced.
- **Contingent Wind + BESS 2027:** Only one bidder and one resource site was offered and thus all bids were advanced.
- **Contingent Solar + Wind 2027:** Only one bidder and one resource site was offered and thus all bids were advanced.
- **Contingent Wind + Solar + BESS 2027:** Only one bidder and one resource site was offered and thus all bids were advanced.

With respect to the market-based bids, IPC noted these bids were not screened at this time but would move forward into the Initial Shortlist given that the bids are from a single supplier and provided various options.

Bidder	Facility Name	Master Project	Total Phase I Score (Price/Non-Price)
p. Market Based	Product		
			N/A

# 7.3 Bids withdrawn

On July 26, 2023, formally communicated its decision to the IPC Evaluation Team to withdraw all bids submitted concerning the **Evaluation**. The reason cited by **Evaluation** for this withdrawal was its pursuit of contracts with other entities, leading the company to reassess its involvement in IPC's AS RFP.

Similarly, also notified the IPC Evaluation Team of its withdrawal from all bids associated with the second second

Both the **Example 1** withdrawals were officially recorded and acknowledged by the IPC Evaluation Team as part of the ongoing bid evaluation process.

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# 7.4 IE's assessment of the Initial Shortlist



Following a review of IPC's proposed ISL, LEI affirmed that the approach undertaken was reasonable and the process was executed in a fair and impartial manner. IPC's ISL identified a pool of top-ranking scores for each vintage and technology category, demonstrating consideration for bidder diversity. It is worth noting that LEI's independent non-price scoring exhibited a slight deviation from IPC's non-pricing scores; nevertheless, this discrepancy did not alter the rank order of the highest-ranking bids.

# 8 Phase 2 – Final Shortlist

IPC ran a three-step process to arrive at the final selection of bids it would recommend for contract discussion ("Final Shortlist"). The selection process started with the ISL bids (from Phase 1), which was further refined via a scenario analysis to derive a Preliminary Final Shortlist of bids (or projects).<sup>26</sup> Next, IPC performed a performance stochastic analysis to further test the projects identified in the Preliminary Final Shortlist under various market conditions to identify the best performing, resilient, and least cost projects. The resulting Final Shortlist bids were then ranked based on the least cost to guide the contracting process. Figure 25 depicts this Phase 2 final shortlist process.



<sup>26</sup> In this section, the IE refers to bids and projects interchangeably.

# 8.1 Scenario analysis

IPC carried out a scenario analysis to assess the performance of ISL projects under various market conditions and form an opinion on the best performing projects – with the purpose of narrowing down bids into the Final Shortlist of projects. To be more specific, IPC used AURORA to simulate 10 "States of the World" with variable market conditions. The scenarios tested are describe in Figure 31; they include testing the impact of a change in the commissioning timelines of the B2H and SWIP N lines, changes in load conditions, and changes in gas and carbon prices. Each scenario was run independently to isolate the impact of a given scenario on project performance. Projects were selected based on performance (i.e., ability to fill energy and capacity gaps in all hours) and cost. Below, the IE describes in detail each of the scenarios considered.

# 8.1.1 Assumptions used in the AURORA model

The ISL included resource-based products and market purchase bids. The two products have distinct characteristics and as such were evaluated differently.

For resource-based bids, IPC applied three resource-specific components in the AURORA model: resource characteristics (nameplate capacity, generation profile, fixed/variable costs, ramp rates, and ancillary services), costs, and capacity value/benefit.

The cost metrics input into the AURORA model included the resource specific LCOC and LCOE values calculated in the financial model, described in Section 6.1.3.

The capacity value/benefit was calculated using the ELCC reliability metric to assess the contribution to peak of resources selected in the ISL. ELCC is based on each individual generator's contribution to overall system reliability given an existing/modeled portfolio of assets.

The ELCC of a resource is determined by first calculating the perfect generation required to achieve a minimum electricity deficit without the evaluated resource—set at a Loss of Load Expectation of 0.1 event-days per year. Then, every individual resource being evaluated was added to the system one at a time, and the perfect generation required was calculated once again. The ELCC of the evaluated resource is the difference in the size of the perfect generators from the two runs divided by the resource's nameplate capacity (see Figure 26).

# Figure 26. ELCC calculation methodology

$$ELCC = \frac{PG_1 - PG_2}{Resource_{MW}} \times 100$$

Where:

- *PG*<sub>1</sub>: *the perfect generation required to achieve a 0.1 LOLE without including the evaluated resource* 

- PG<sub>2</sub>: the perfect generation required to achieve the same 0.1 LOLE with the evaluated resource included

- Resource <sub>MW</sub>: the nameplate of the evaluated resource

Figure 27 below compares the ELCC values calculated for ISL resources to the ELCC values provided in the 2021 and 2023 IRPs. The ELCC of future resources depends on the resources built

	AS RFP	2021 IRP	2023 IRP
	(summer ELCC)*	(approved)	(under review)
Natural gas	90.9%	n/a	n/a
Geothermal	90.5%	n/a	n/a
Stand-alone solar	9.7% on avg	10.2% on avg	27.7%
	5.0% to 24.5%		
BESS (4hrs)	59.5% on avg	87.5% on avg	38.5%
	47.0% to 85.2%		
BESS (8hrs)	n/a	97% on avg	79.2%
Wind	15.7% on avg	11.2 on avg	Idaho: 15.5%
	11.8% to 18%		Wyoming: 20.8%
Solar + BESS (4hrs)	62.9% on avg	97% on avg	61.2% to 85.1%
	28.2% to 91.3%		
Solar + Wind + BESS (4hrs)	81.6% on avg	n/a	n/a
	80.0% to 83.1%		

before them and are specific to the contribution of each resource; therefore, ELCC values for the specific ISL resources are expected to be different than the ones provided in the IRPs.<sup>27</sup>

Notes: n/a = not available

Source: IPC, 2021 IRP and 2023 IRP.

Other key non-project specific assumptions used in AURORA include load forecasts, supply (new entry, retirements, and transmission capacity), fuel and carbon prices, and planned key scenarios.

A different approach was taken to evaluating market-purchased bids. Specifically, this approach emphasized two resource-specific component assumptions in the AURORA model: cost and ELCC. IPC evaluated four different market products in the AURORA model – two were modeled as "Resource Adequacy Market" contract products and the other two were modeled as "eighthour battery" products. Below is a brief description of the AURORA assumptions for these products:

• *RA market products:* The product allows IPC to purchase energy from the market up to the selected MW nameplate value in any hour of the day.

<sup>&</sup>lt;sup>27</sup> ELCC values from the IRPs are developed by IPC for informational purposes. More information about how the ELCC is calculated, please refer to IPC's 2023 IRP: <a href="https://www.idahopower.com/energy-environment/energy/planning-and-electrical-projects/our-twenty-year-plan/">https://www.idahopower.com/energy-environment/energy/planning-and-electrical-projects/our-twenty-year-plan/</a>>

- *Cost:* fixed monthly capacity fee, as provided by the developer, as well as a variable \$/MWh wheeling charge for any energy purchased on the Mid-C market.
- *ELCC:* 100% for the months of June-September (0% for all other months).
- *Eight-hour battery products:* The product allows IPC to utilize the resource for up to eight hours a day up to the selected MW nameplate value of the product. The product is modeled as an eight-hour battery, where IPC sends eight hours of its own energy to the project developer to "charge" the "eight-hour battery" product.
  - *Cost:* fixed monthly capacity fee, as provided by the developer, as well as a variable \$/MWh wheeling charge for any energy used.
  - *ELCC:* 100% for the months of April-October (0% for all other months).

#### 8.1.2 Description of the scenarios and the outcomes of each scenario run

A scenario analysis was carried out to comprehensively assess the performance of the shortlisted bids under a range of potential environmental and policy-price scenarios. This analysis involved simulating ten different scenarios, each with varying assumptions on the commercial online date for the B2H transmission line (July 2026, November 2026, and June 2027) and the inclusion or exclusion of the SWIP-N transmission line. Additionally, scenarios incorporating diverse gas prices, carbon prices, and demand conditions were evaluated, including: (i) a high gas and high carbon price scenario, (ii) a low gas and zero carbon price scenario, (iii) a scenario with 100 MW of large load, and (iv) a scenario with 200 MW of large load. A detailed discussion of these scenarios is provided below.

#### SCENARIO #1 – July 2026 B2H with SWIP-N

#### Description

The "July 2026 B2H With SWIP-N" AURORA scenario is consistent with the general base case assumptions used in the filed 2023 IRP with the addition of the SWIP-N transmission line. In this scenario, a July 2026 online date is assumed for the B2H transmission line, as well as a January 2027 online date for the SWIP-N transmission line. As noted in the 2023 IRP, Idaho Power assessed SWIP-N as providing 500 MW of resource-equivalent capacity from the Desert Southwest in the winter months beginning in 2027. Given the expected very high solar buildout in the southwest, the company assumed SWIP-N could also provide 50 MW of resource equivalent summer capacity in 2029, and 100 MW starting in 2030 through the remainder of the IRP.

*Results:* The AURORA LTCE results for this scenario are provided below:

- <u>2026</u>:
  - 275 MW market contract:
- <u>2027</u>:
   350 MW wind + 250 MW solar:

• 123 MW solar:

# SCENARIO #2 - November 2026 B2H with SWIP-N

# Description:

The "November 2026 B2H With SWIP-N" AURORA scenario is consistent with the general base case assumptions used in the filed 2023 IRP with the addition of the SWIP-N transmission line. In this scenario, a November 2026 online date is assumed for the B2H transmission line to help assess how an alternate B2H online date would affect the number of resources needed from the RFP, as well as a January 2027 online date for the SWIP-N transmission line. Additional SWIP-N assumptions are noted in the description of Scenario #1.

*Results:* The AURORA LTCE results for this scenario are provided below:

<u>2026</u>:

 125 MW market contract:
 175 MW market contract:
 150 MW BESS:
 200 MW solar:
 200 MW solar + 50 MW BESS:

 <u>2027</u>:

 350 MW wind:

#### SCENARIO #3 - June 2027 B2H with SWIP-N

## Description:

The "June 2027 B2H With SWIP-N" AURORA scenario is consistent with the general base case assumptions used in the filed 2023 IRP with the addition of the SWIP-N transmission line and an alternate B2H online date not included in the filed 2023 IRP. In this scenario, a June 2027 online date is assumed for the B2H transmission line to help assess how an alternate B2H online date would affect the number of resources needed from the RFP. It also assesses the market impact of a January 2027 online date for the SWIP-N transmission line. Additional SWIP-N assumptions are noted in description of Scenario #1.

*Results:* The AURORA LTCE results for this scenario are provided below:

- <u>2026</u>:
  - 250 MW market contract:
    25 MW market contract:
  - 150 MW BESS:
  - 200 MW solar + 100 MW BESS:
- <u>2027</u>:
  - 350 MW wind:

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# SCENARIO #4 - July 2026 B2H without SWIP-N

# Description:

The "July 2026 B2H Without SWIP-N" AURORA scenario is consistent with the general base case assumptions used in the filed 2023 IRP. In this scenario, a July 2026 online date is assumed for the B2H transmission line.

*Results:* The AURORA LTCE results for this scenario are provided below:

- <u>2026</u>:
  - 225 MW market contract:
  - 200 MW solar:
- <u>2027</u>: • 350 MW wind + 250 MW solar:

## SCENARIO #5 - November 2026 B2H without SWIP-N

#### Description:

The "November 2026 B2H Without SWIP-N" AURORA scenario is consistent with the general base case assumptions used in the filed 2023 IRP. In this scenario, a November 2026 online date is assumed for the B2H transmission line to help assess how an alternate B2H online date would affect the number of resources needed from the RFP.

*Results:* The AURORA LTCE results for this scenario are provided below:

- <u>2026</u>:
  - 250 MW market contract:
  - 25 MW market contract:
  - 150 MW BESS:
  - 200 MW solar + 100 MW BESS:
- <u>2027</u>:
   350 MW wind + 250 MW solar:

## SCENARIO #6 - June 2027 B2H without SWIP-N

#### Description:

The "June 2027 B2H Without SWIP-N" AURORA scenario is consistent with the general base case assumptions used in the filed 2023 IRP; the alternate B2H online date is not included in the filed 2023 IRP. In this scenario, a June 2027 online date is assumed for the B2H transmission line to help assess how an alternate B2H online date would affect the number of resources needed from the RFP.

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*Results:* The AURORA LTCE results for this scenario are provided below:

- <u>2026</u>:
  - 200 MW market contract:
  - 75 MW market contract:
  - 150 MW BESS:
  - $\circ$  200 MW solar + 100 MW BESS:
  - 10 MW geothermal:
- <u>2027</u>:
  - 350 MW wind + 250 MW solar:

# SCENARIO #7 - High gas, high carbon

## Description:

The "High Gas High Carbon" AURORA scenario is consistent with the high gas, high carbon assumptions applied in the filed 2023 IRP, which were presented to and agreed upon by the IRP Advisory Council. In this scenario, a July 2026 online date is assumed for the B2H transmission line; the SWIP-N transmission line was not included. The high gas, high carbon scenario adjusts the natural gas price and carbon adder price forecasts as described below:

- natural gas price forecast: EIA low oil and gas supply (2023 Annual Energy Outlook); and
- *carbon price adder forecast:* social cost of carbon, methane, and nitrous oxide, interim estimates under Executive Order 13990.

*Results:* The AURORA LTCE Results for this scenario are provided below:

- <u>2026</u>:
  - 225 MW market contract:
     200 MW solar:
     2027:
     350 MW wind + 250 MW solar:

## SCENARIO #8 - Low gas, zero carbon

## Description:

The "Low Gas Zero Carbon" AURORA scenario is consistent with the low gas, zero carbon assumptions applied in the filed 2023 IRP, which were presented to and agreed upon by the IRP Advisory Council. In this scenario, a July 2026 online date is assumed for the B2H transmission line; the SWIP-N transmission line was not included. The low gas, zero carbon scenario adjusts the natural gas price and carbon adder price forecasts as described below:

- *natural gas price forecast:* EIA high oil and gas supply (2023 Annual Energy Outlook); and
- *carbon price adder forecast:* consistent zero dollars per ton.

*Results:* The AURORA LTCE Results for this scenario are provided below:

- <u>2026</u>: 250 MW market contract:
- <u>2027</u>: 350 MW wind + 250 MW solar:

#### SCENARIO #9 - 100 MW large load

#### Description:

The "100 MW Large Load" AURORA scenario is based on the "100 MW large load" scenario used in the filed 2023 IRP. In this scenario, a November 2026 online date is assumed for the B2H transmission line; the SWIP-N transmission line was not included. The 100 MW large load scenario load forecast is increased above the base load forecast, as shown in Figure 28:

# Figure 28. 100 MW large load breakdown

Year	Peak Load Ramp	Avg. Load Ramp
2025	-	-
2026	65	43
2027	100	86
2028	100	91
2029	100	92

*Results:* The AURORA LTCE Results for this scenario are provided below:

- <u>2026</u>:
  - 150 MW market contract:
  - 150 MW market contract:
  - 150 MW BESS:
  - 200 MW solar + 50 MW BESS:
  - 100 MW solar + 100 MW BESS:
  - $\circ$  10 MW geothermal:
- <u>2027</u>:
  - $\circ$  350 MW wind + 250 MW solar:

#### SCENARIO #10 - 200 MW Large Load

#### Description

The "200 MW Large Load" AURORA scenario is based on the "200 MW large load" scenario used in the filed 2023 IRP. In this scenario, a November 2026 online date is assumed for the B2H transmission line; the SWIP-N transmission line was not included. The 200 MW large load scenario load forecast is increased above the base load forecast, as shown in Figure 29.

Figure 29. 200 MW	large load breakdo	wn	
	Year	Peak Load Ramp	Avg. Load Ramp
	2025	-	-
	2026	65	43
	2027	143	120
	2028	200	176
	2029	200	177

*Results:* The AURORA LTCE Results for this scenario are provided below:

- <u>2026</u>:
  - 300 MW market contract:
  - 150 MW BESS:
  - 100 MW BESS:
  - 50 MW BESS:
  - 200 MW solar + 50 MW BESS:
  - 10 MW geothermal:
- <u>2027</u>:
  - 350 MW wind + 250 MW solar:
  - $\circ$  600 MW wind:

## 8.1.3 Preliminary Final Shortlist based on the scenario analysis

A total of 11 projects were selected in the Preliminary Final Shortlist based on their performance and costs under each of the scenarios (see Figure 30).

Five projects were rejected mainly due to concern over uncertain upgrade and interconnection costs. Out of these five projects, four were rejected because of the uncertainty on overall interconnection costs triggered by their participation in the 360-day cluster study under FERC Order 2023. The projects rejected due to FERC Order 2023 include:

- 50 MW BESS:
- 150 MW BESS:
- 100 MW BESS:

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• 123 MW solar:

Also, pursuant to FERC Order 2023,<sup>28</sup> these four projects will be included in the transition cluster study process that Idaho Power is required to implement for all early-stage generation projects in the interconnection queue. The transition cluster is a 360-day study starting on March 1, 2024; therefore, IPC does not anticipate having results – including interconnection network upgrade costs – until the end of the first quarter of 2025. Including these projects in the Final Shortlist could prove risky if upon completion of the cluster study, the upgrade and interconnection costs determined for the project prove to significantly change the financial viability of the proposed project. In other words, IPC runs the risk of selecting projects that will not reach COD by June 2026 or 2027.<sup>29</sup>

e 30. List of a	Ill projects selected t	hrough the AURORA	scenario process
Year	Bidder	Project	Project description (capacity and fuel type)
			Market contract (varying amounts) for 5 years
			Market contract (varying amounts) for 5 years
			150 MW BESS
2026			200 MW Solar + 50 MW BESS
			200 MW Solar
			200 MW Solar + 100 MW BESS
			100 MW Solar + 100 MW BESS
			350 MW Wind + 250 MW Solar
2027			350 MW Wind
			600 MW Wind
			330 MW Solar

Furthermore, IPC did not select the 10 MW geothermal project because it is not currently in the generation interconnection queue and thus presents significant uncertainty regarding deliverability and potential network upgrade costs. The IE reviewed the

<sup>&</sup>lt;sup>28</sup> FERC approved Order 2023 in July 2023 (Docket No. RM22-14-000; Order No. 2023). The order initiates the "first-ready, first-served cluster study process," which replaces the current process whereby interconnection requests are reviewed individually on a "first-come, first-served" basis. Transmission providers are now required to study yearly interconnection requests for multiple generating facilities in a group (cluster) and grant interconnection requests based on projects' achieved milestones rather than on order of submission.

<sup>&</sup>lt;sup>29</sup> Note that due to the timing of FERC Order 2023's approval, affected projects were not eliminated from the AS RFP 2023 during the eligibility assessment stage of this process.

project's BEF; the initial scores given by the IE and IPC confirm its low GIA factor rating. Though the project's overall scoring during the initial shortlist stage was high enough for inclusion in the ISL, the IE concurs with IPC's assessment of the uncertainties associated with the project's deliverability and potential network upgrade costs.

In summary, the IE reviewed the merits of the causes behind the non-selection of various projects and concurs with IPC's assessment of the risks posed by the given projects with regards to costs and deliverability.

U	, I	2
Scenario	Description	Scenario results
1) July 2026 B2H with SWIP-N	<ul> <li>July 2026 online date for B2H</li> <li>January 2027 online date for SWIP-N</li> <li>SWIP-N provides 500 MW during winter months beginning January 2027 and 50 MW during summer starting in 2029 and 100 MW starting in 2023</li> </ul>	<ul> <li>2026 - 275 MW Market Contract:</li> <li>2027 - 350 MW Wind + 250 MW Solar:</li> <li>2027 - 123 MW Solar:</li> </ul>
2) November 2026 B2H with SWIP-N	<ul> <li>November 2026 online date for B2H</li> <li>January 2027 online date for SWIP-N</li> <li>SWIP-N provides 500 MW during winter months beginning January 2027 and 50 MW during summer starting in 2029 and 100 MW starting in 2023</li> </ul>	<ul> <li>2026 - 125 MW Market Contract:</li> <li>2026 - 175 MW Market Contract:</li> <li>2026 - 150 MW BESS:</li> <li>2026 - 200 MW Solar:</li> <li>2026 - 200 MW Solar + 50 MW BESS:</li> <li>2027 - 350 MW Wind + 250 MW Solar:</li> </ul>
3) June 2027 B2H with SWIP-N	<ul> <li>June 2027 online date for B2H</li> <li>January 2027 online date for SWIP-N</li> <li>SWIP-N provides 500 MW during winter months beginning January 2027 and 50 MW during summer starting in 2029 and 100 MW starting in 2023</li> </ul>	<ul> <li>2026 - 250 MW Market Contract:</li> <li>2026 - 25 MW Market Contract:</li> <li>2026 - 150 MW BESS:</li> <li>2026 - 200 MW Solar + 100 MW BESS:</li> <li>2027 - 350 MW Wind + 250 MW Solar:</li> <li>2027 - 330 MW Solar:</li> </ul>
4) July 2026 B2H without SWIP-N	• July 2026 online date for B2H	<ul> <li>2026 - 250 MW Market Contract:</li> <li>2026 - 200 MW Solar:</li> <li>2027 - 350 MW Wind + 250 MW Solar:</li> </ul>
5) November 2026 B2H without SWIP-N	• November 2026 online date for B2H	<ul> <li>2026 - 250 MW Market Contract:</li> <li>2026 - 25 MW Market Contract:</li> <li>2026 - 150 MW BESS:</li> <li>2026 - 200 MW Solar + 100 MW BESS:</li> <li>2027 - 350 MW Wind + 250 MW Solar:</li> </ul>
6) June 2027 B2H without SWIP-N	• June 2027 online date for B2H	<ul> <li>2026 - 200 MW Market Contract:</li> <li>2026 - 75 MW Market Contract:</li> <li>2026 - 150 MW BESS:</li> <li>2026 - 200 MW Solar + 100 MW BESS:</li> <li>2026 - 10 MW Geothermal:</li> <li>2027 - 350 MW Wind + 250 MW Solar:</li> </ul>

Figure 31. Scenario analysis - description and results summary

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Scenario	Description	Scenario results
7) High Gas High Carbon	<ul> <li>July 2026 online date for B2H</li> <li>SWIP-N not included</li> <li>Natural gas price and carbon adder price forecast according to:         <ul> <li>EIA Low Oil and Gas Supply (2023 Annual Energy Outlook)</li> <li>Social Cost of Carbon, Methane, and Nitrous Oxide, Interim Estimates under Executive Order 13990</li> </ul> </li> </ul>	<ul> <li>2026 - 225 MW Market Contract:</li> <li>2026 - 200 MW Solar:</li> <li>2027 - 350 MW Wind + 250 MW Solar:</li> </ul>
8) Low Gas Zero Carbon	<ul> <li>July 2026 online date for B2H</li> <li>SWIP-N not included</li> <li>Natural gas price and carbon adder price forecast according to: <ul> <li>EIA High Oil and Gas Supply (2023 Annual Energy Outlook)</li> <li>Consistent Zero Dollars per Ton</li> </ul> </li> </ul>	<ul> <li>2026 - 225 MW Market Contract:</li> <li>2027 - 350 MW Wind + 250 MW Solar:</li> </ul>
9) 100 MW Large Load	<ul> <li>November 2026 online date for B2H</li> <li>SWIP-N not included</li> <li>Load forecast is increased above the base load forecast as shown below:</li> </ul>	<ul> <li>2026 - 150 MW Market Contract:</li> <li>2026 - 150 MW Market Contract:</li> <li>2026 - 150 MW BESS:</li> <li>2026 - 200 MW Solar + 50 MW BESS:</li> <li>2026 - 100 MW Solar + 100 MW BESS:</li> <li>2026 - 10 MW Geothermal:</li> <li>2027 - 350 MW Wind + 250 MW Solar:</li> </ul>
10) 200 MW Large Load	<ul> <li>November 2026 online date for B2H</li> <li>SWIP-N not included</li> <li>Load forecast is increased above the base load forecast as shown below:</li> </ul>	<ul> <li>2026 - 300 MW Market Contract:</li> <li>2026 - 150 MW BESS:</li> <li>2026 - 100 MW BESS:</li> <li>2026 - 50 MW BESS:</li> <li>2026 - 200 MW Solar + 50 MW BESS:</li> <li>2026 - 10 MW Geothermal:</li> <li>2027 - 350 MW Wind + 250 MW Solar:</li> <li>2027 - 600 MW Wind:</li> </ul>

# 8.2 Determining the Final Shortlist using a portfolio sensitivity analysis

After the Preliminary Final Shortlist of projects was derived from the scenario analysis using the AURORA LTCE, IPC performed a portfolio sensitivity analysis on the aforementioned Preliminary Final Shortlisted projects. The overarching purpose of this analysis was to further understand the range of NPV portfolio costs over a wide range of stochastic shocks (i.e., across the full set of 60 stochastic iterations performed) and consequently the range of difference in portfolios costs. The portfolio sensitivity analysis used in this process is consistent with the stochastic risk analysis methodology used in IPC's 2023 IRP and in alignment with discussions during public meetings and the 2023 IRP Advisory Council.

The portfolio sensitivity analysis employed a two-step approach. The initial step involved conducting a portfolio analysis to generate the portfolios that will serve as the input for the subsequent stochastic risk analysis. The second step entailed performing the stochastic risk analysis, which involves running 60 iterations using four stochastic variables: natural gas prices, load, hydroelectric generation, and carbon prices. These two steps are discussed in detail below.

#### 8.2.1 Assumptions and portfolio selection

"November 2026 B2H without SWIP-N" transmission scenario (Scenario 5 – see Figure 31) assumptions were used as the basis for Final Shortlist portfolio sensitivity modeling. IPC is currently exploring interest in 500 MW of south-to-north capacity with SWIP-N project developer Great Basin Transmission. If discussions with GBT are successful, IPC will seek appropriate regulatory review and approval to execute definitive agreements. Given that discussions with the developer are still in progress, the "no SWIP-N scenario" was selected by IPC as the base assumption for the AURORA shortlist runs. This base SWIP-N assumption matches the assumption utilized in the recent 2023 IRP analysis. The November 2026 B2H online date was selected as the base case assumption as opposed to July 2026, consistent with the 2023 IRP – not only does this reflect IPC's understanding of project progress but, according to IPC, a late-2026 date also results in a greater need for resources in 2026, and therefore impacts the development of a final shortlist of 2026 projects. IPC intends to pursue 2026 resources until it gains sufficient certainty around a likely in-service date for B2H.

The shortlist portfolio sensitivity process started with the creation of 11 unique AURORA portfolios (created specifically for the sensitivity process) based on the following criteria, and using the AURORA LTCE model:

- selected resources must meet identified energy and capacity needs once optimized by the AURORA LTCE model;
- every final shortlisted resource (Figure 30) must be represented in at least one portfolio. To this end, building a portfolio started with first "force-selecting"<sup>30</sup> a resource; AURORA LTCE was then relied upon to find the optimal additional resources that would allow the portfolio to address all the energy and capacity needs;
- for each portfolio considered, the AURORA LTCE model was also allowed to select from the two types of market contract bids included in the Final Shortlist.

Figure 32 shows the list of resources in each of the portfolio.

<sup>&</sup>lt;sup>30</sup> The 200 MW solar + 100 MW BESS: resource was the only physical project not force-selected in the model, mainly because the project is already present in seven of the portfolios (selected via AURORA LTCE's optimization process).

re 32. List of poi	rttollos
	PORTFOLIO SUMMARY
	PORTFOLIO 1
DELIVERY YEAR	PROJECT
2026	200 MW Solar + 100 MW BESS:
2027	• 600 MW Wind:
DELIVERYYEAR	PROJECTS PORTFOLIO 2
2026	· 300 MW Market Contract:
2020	200 MW Solar + 100 MW BESS:     350 MW Wind + 250 MW Solar
2027	PORTFOLIO 3
DELIVERY YEAR	PROJECTS
2026	300 MW Market Contract:     200 MW Solar + 100 MW BESS:
2027	· 350 MW Wind:
DELIVERVVEAR	PROJECTS PROJECTS
2026	300 MW Market Contract:
2020	200 MW Solar + 100 MW BESS:
2027	PORTFOLIO 5
DELIVERY YEAR	PROJECTS
2026	300 MW Market Contract:     150 MW BESS
2020	· 200 MW Solar:
2027	· 350 MW Wind + 250 MW Solar:
DELIVERY YEAR	PROJECTS
2026	300 MW Market Contract:
2026	· 200 MW Solar:
2027	· No Selection
DELIVERYYEAR	PROJECTS PORTFOLIO 7
	· 300 MW Market Contract:
2026	• 200 MW Solar + 50 MW BESS:
2027	· 350 MW Wind:
	PORTFOLIO 8
DELIVERYYEAR	300 MW Market Contract:
2026	• 150 MW BESS:
2027	200 MW Solar:     600 MW Wind:
2027	PORTFOLIO 9
DELIVERY YEAR	PROJECTS
2026	300 MW Market Contract:     200 MW Solar:
	• 100 MW Solar + 100 MW BESS:
2027	· 350 MW Wind + 250 MW Solar:
DELIVERY YEAR	PROJECTS
2026	300 MW Market Contract:
	200 MW Solar + 100 MW BESS:     350 MW Wind + 250 MW Solar:
2027	• 600 MW Wind:
	PROJECTS PORTFOLIO 11
	· 300 MW Market Contract:
2020	• 200 MW Solar + 100 MW BESS:
2027	· 330 MW Solar:

#### 8.2.2 Variables used in the stochastic risk analysis

The 11 portfolios were then subject to stochastic risk analysis (sensitivity analysis) in the AURORA model. IPC identified four selected stochastic variables that are key drivers of variability in year-to-year power-supply costs and therefore provide suitable stochastic shocks to

allow differentiated results in the analysis. The variables selected for the stochastic risk analysis included (i) natural gas prices, (ii) customer load, (iii) hydroelectric generation, and (iv) carbon prices. These are discussed in the subsections below. The selection of these variables aligns with IPC's 2023 IRP, ensuring consistency and coherence in the analytical framework.

As mentioned earlier, IPC performed a total of 60 risk iterations. Based on the sample size, IPC used the Latin Hypercube sampling technique over a pure Monte Carlo method. The Latin Hypercube technique samples the distribution range with a relatively smaller sample size, allowing for a reduction in simulation run times. The Latin Hypercube method does this by sampling at regular intervals across the distribution spectrum. This differs to the Monte Carlo method, where samples are taken randomly from the distribution range. The random Monte Carlo draw requires far more than 60 iterations to ensure a good distribution of draws. Once the stochastic elements were drawn, IPC then calculated the 20-year NPV portfolio cost for each of the 60 iterations for all Final Shortlist portfolios.

# 8.2.2.1 Natural gas sampling (nominal \$/MMBtu)

Based on the historical Henry Hub natural gas prices, it was determined that the natural gas price variance around the trend approximates a log-normal distribution with a year-to-year correlation factor of 0.55. The graph provided in Figure 33 below shows the planning case average annual price in the black dashed line; the remaining-colored lines reflect the 60 unique stochastic iterations for Henry Hub gas prices.



# 8.2.2.2 Customer load sampling (annual MWh)

Customer load follows a normal distribution and is adjusted around the planning case load forecast, which is shown as the black dashed line in Figure 34 below. To assess the reasonableness

of the stochastic error bounds as they relate to customer load, the upper and lower bounds were compared to the load forecast 90/10 error bounds. For both the upper and lower bound, the stochastic values were found to fall slightly outside of the 90/10 bounds, which is to be expected.



# 8.2.2.3 Hydroelectric generation sampling (annual MWh)

Hydroelectric generation variability was found to approximate a uniform distribution based on historical generation. Figure 35 shows that — although an unexpected result was identified based on the non-uniform distribution of rainfall across the Snake River Basin — the regulation of streamflow likely explains the difference between rainfall and generation distributions. The black dashed line represents the base case planning forecast.



#### 8.2.2.4 Carbon price sampling (annual MWh)

Though historical carbon price adder prices have always been zero, a wide range of possible values were modeled into the future. As reflected in Figure 36 below, the black dashed line represents the base case planning forecast. The stochastic lower bound was set near zero and the upper bound was set to roughly approximate the social cost of carbon<sup>31</sup> curve; this aligns with IPC's discussions with IRPAC during the 2023 IRP process. Stochastic values were then produced such that the average of all the values approximated the planning carbon price adder case.

<sup>&</sup>lt;sup>31</sup> US Environmental Protection Agency. Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances. National Center for Environmental Economics, Office of Policy and Climate Change Division, Office of Air and Radiation. September 2022. p. 67. <epa.gov/system/files/documents/2022-11/epa\_scghg\_report\_draft\_0.pdf>



## 8.2.3 Results of IPC's portfolio sensitivity analysis

For each portfolio, IPC calculated key statistics from the stochastic risk analysis, including Mean, P25, Median, and P75 to assess the impact of various uncertainties on each portfolio's NPV costs. These statistical measures provided valuable insights into the distribution of NPV costs and the potential range of outcomes under different sensitivities.

To effectively evaluate the portfolios, IPC employed the Mean NPV as the primary ranking criterion. This approach prioritizes portfolios with consistently lower NPV costs, indicating their overall cost-effectiveness. In simpler terms, a lower mean NPV implies that the portfolio is less susceptible to unfavorable cost fluctuations compared to its counterparts.

Selecting the portfolio with the lowest NPV costs provides the least cost option for ratepayers by ensuring that the utility procures electricity at the most affordable price. NPV is a common financial metric used to evaluate the profitability of an investment over its entire lifespan. It considers all expected cash inflows and/or outflows, discounted to their present value using an appropriate discount rate. Lower NPV costs translate to lower costs of utility service. This, in turn, directly impacts electric ratepayers, who ultimately bear the cost of electricity generation and transmission. By selecting the project with the lowest NPV cost, IPC can minimize the financial burden on ratepayers and keep electricity costs as low as possible.

Figure 37 provides the results of the sensitivity analysis and Figure 38 lists the resulting ranking of bids from best (lowest cost) to worst (highest cost). Portfolio #10 had the lowest mean NPV of

\$8,985,760, and as such was ranked "best"; Portfolio #6 had the highest mean NPV of \$9,388,999 and as such was ranked "worst."

Figure 37. Stochastic sensitivity portfolio summary								
		St	tochas	tic Sensitivity P	ortfol	lio NPV Costs (\$	000)	
Portfolio #		Mean		P25		Median		P75
1	\$	9,108,973	\$	8,739,626	\$	9,068,714	\$	9,432,164
2	\$	9,208,501	\$	8,847,575	\$	9,171,823	\$	9,534,717
3	\$	9,247,998	\$	8,888,919	\$	9,208,305	\$	9,562,131
4	\$	9,358,291	\$	9,015,487	\$	9,313,794	\$	9,694,373
5	\$	9,242,040	\$	8,886,425	\$	9,205,323	\$	9,561,072
6	\$	9,388,999	\$	9,046,262	\$	9,343,504	\$	9,708,014
7	\$	9,239,015	\$	8,873,367	\$	9,201,131	\$	9,575,950
8	\$	9,134,625	\$	8,765,169	\$	9,108,221	\$	9,462,752
9	\$	9,235,826	\$	8,885,773	\$	9,196,556	\$	9,551,756
10	\$	8,985,760	\$	8,611,433	\$	8,951,208	\$	9,316,543
11	\$	9,346,137	\$	8,999,965	\$	9,299,096	\$	9,659,806

#### Figure 38. Portfolio rankings

Portfolio NPV Cost Rank	Portfolio #	Mean Portfolio NPV Cost (\$000)
1	10	\$ 8,985,760
2	1	\$ 9,108,973
3	8	\$ 9,134,625
4	2	\$ 9,208,501
5	9	\$ 9,235,826
6	7	\$ 9,239,015
7	5	\$ 9,242,040
8	3	\$ 9,247,998
9	11	\$ 9,346,137
10	4	\$ 9,358,291
11	6	\$ 9,388,999

Out of the 11 Preliminary Final Shortlist bids, all projects were recommended for contract negotiation except \_\_\_\_\_\_ which was

never selected in AURORA LTCE's optimization process.

however, was selected in each of the 11 portfolios. Figure 39 shows the Final Shortlist and the ranking of each bid.

The ranking of bids is determined by the ranking of the portfolios in which they are included. The Market Contract: **Sector** 5 years holds the highest position due to its

selection as the sole market-based bid across all 11 stochastic (sensitivity) analysis portfolios. Similarly, the **second** bid is ranked second as it was selected in the first, second, and fourth ranked portfolios generated through the stochastic (sensitivity) analysis.



Finally, it is LEI's understanding that IPC will contact all owners of the projects selected regardless of their ranking (position) to maximize their chance of securing enough contracts to fulfill their needs.

# 8.3 IE's assessment of the Final Shortlist

## 8.3.1 Methodology

The IE finds the scenario analysis carried out to test the performance of projects under various market conditions to be sensible and a reasonable way to assess resource performance and resilience in the face of uncertain market conditions. The IE concurs with IPC's decision to reject five projects from its Preliminary Final Shortlist selection; the duration and uncertainty surrounding the outcome of the cluster study are sources of risks that could endanger the ability of IPC to secure the amount of resources it needs for 2026 and 2027. The IE also agrees with removing the geothermal plant from consideration, which is currently not in the generation interconnection queue--in fact, the IE had given a low score on this project on the GIA criteria as early as the qualification round over similar concerns.

#### 8.3.2 Other concerns

The IE is concerned by IPC's approach (as discussed thus far) to enter into simultaneous contact negotiations with all project owners. The IE specifically raises the potential for reduced transparency and efficiency in the process when engaging all project owners concurrently. Additionally, negotiating contracts with all project owners simultaneously, rather than following the project ranking order, renders the entire portfolio sensitivity analysis moot. While the IE acknowledges IPC's motivation to engage with a wide pool of bidders to mitigate attrition risk, it recommends a more phased approach. Under this approach, IPC would engage with project owners starting from the highest to the lowest ranked projects, proceeding down the list as contract negotiations conclude unsuccessfully. This method would allow for a more focused and efficient negotiation process while still providing IPC with the flexibility to adapt to changing circumstances.

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

# UM 2255

In the Matter of the Application of IDAHO POWER COMPANY REQUEST FOR ACKNOLWEDGEMENT OF FINAL SHORTLIST OF BIDDERS IN THE 2026 ALL SOURCE REQUEST FOR PROPOSALS

Attachment 2

Aurora Modeling

December 4, 2023

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# **AURORA Modeling**



Idaho Power Company



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# What RFP Project Info Goes Into AURORA?



- Nameplate Capacity
- Solar/Wind Shapes
- Fixed/Variable Costs
- Ramp Rates
- Ancillary Services

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# **RFP Initial Shortlist Modeling**



#### Get Updated:

- Project Pricing
- COD/Schedule
- Interconnection
   Study Results
- ➤ Etc.



AURORA LTCE Scenarios

- July 2026 B2H No SWIP
- July 2026 B2H SWIP
- November 2026 B2H No SWIP
- November 2026 B2H SWIP
- June 2027 B2H No SWIP
- June 2027 B2H SWIP
- High Gas Price + High Carbon Price
- Low Gas Price + Zero Carbon Price
- Large Load 100 MW
- Large Load 200 MW

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# **RFP Initial Shortlist Modeling: Example**

# AURORA LTCE Scenarios

- July 2026 B2H
- November 2026 B2H
- June 2027 B2H

5

- High Gas + High Carbon
- Low Gas + Zero Carbon
- SWIP Transmission Runs

AURORA LTCE Scenarios: Project Selections

- Project 1 (2026 COD), Project 7 (2027 COD)
- Project 1 (2026 COD), Project 2 (2026 COD), Project 3 (2026 COD), Project 6 (2027 COD)
- Project 1 (2026 COD), Project 2 (2026 COD), Project 4 (2026 COD), Project 7 (2027 COD)
- Project 1 (2026 COD), Project 2 (2026 COD), Project 7 (2027 COD), Project 8 (2027 COD)
- Project 9 (2026 COD), Project 8 (2027 COD), Project 10 (2027 COD)
- Project 1 (2026 COD), Project 7 (2027 COD)

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# **RFP Initial Shortlist Modeling: Example**

RFP Initial Shortlist AURORA LTCE AURORA LTCE Scenarios

- July 2026 B2H No SWIP
- July 2026 B2H SWIP
- November 2026 B2H No SWIP
- November 2026 B2H SWIP
- June 2027 B2H No SWIP
- June 2027 B2H SWIP
- High Gas Price + High Carbon Price
- Low Gas Price + Zero Carbon Price
- Large Load 100 MW
- Large Load 200 MW

RFP Final Shortlist

- Project 1 (2026 COD)
- Project 7 (2027 COD)
- Project 2 (2026 COD)
- Project 3 (2026 COD)
- Project 6 (2027 COD)
- Project 4 (2026 COD)
- Project 8 (2027 COD)
- Project 9 (2026 COD)
- Project 10 (2027 COD

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# **RFP Final Shortlist: Sensitivities**



- Project 1 (2026 COD)
- Project 7 (2027 COD)
- Project 2 (2026 COD)
- Project 3 (2026 COD)
- Project 6 (2027 COD)
- Project 4 (2026 COD)
- Project 8 (2027 COD)
- Project 9 (2026 COD)
- Project 10 (2027 COD



AURORA LTCE Final Shortlist Portfolios (Example)

# Portfolio A

- Project 1 (2026 COD)
- Project 2 (2026 COD)
- Project 6 (2027 COD)

# Portfolio B

- Project 1 (2026 COD)
- Project 2 (2026 COD)
- Project 7 (2027 COD)

# Portfolio C

- Project 4 (2026 COD)
- Project 2 (2026 COD)
- Project 10 (2027 COD)

# Portfolio D

- Project 9 (2026 COD)
- Project 3 (2026 COD)
- Project 8 (2027 COD)



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# **RFP Final Shortlist: Sensitivities**

AURORA LTCE Final Shortlist Portfolios (Example)

- Portfolio A
  - Project 1 (2026 COD)
  - Project 2 (2026 COD)
  - Project 6 (2027 COD)
- Portfolio B
  - Project 1 (2026 COD)
  - Project 2 (2026 COD)
  - Project 7 (2027 COD)
- Portfolio C
  - Project 4 (2026 COD)
  - Project 2 (2026 COD)
  - Project 10 (2027 COD)

## Portfolio D

- Project 9 (2026 COD)
- Project 3 (2026 COD)
- Project 8 (2027 COD)

# **AURORA Sensitivities (Stochastic Modeling)**



# 60 Stochastic Iterations

- Varying: Hydro, Load, Natural Gas Price and Carbon Price

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### **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that on December 4, 2023 a true and correct copy of Idaho Power Company's Request for Acknowledgement of Final Shortlist of Bidders in the 2026 All-Source Request for Proposals on the dates indicated by email addressed to said person(s) at his or her last-known address(es) indicated below.

### <u>UM 2255</u>

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