

1 Q. Please state your name, business address, and
2 present position with Idaho Power Company ("Idaho Power" or
3 "Company").

4 A. My name is Jared L. Ellsworth and my business
5 address is 1221 West Idaho Street, Boise, Idaho 83702. I
6 am employed by Idaho Power as the Transmission,
7 Distribution & Resource Planning Director for the Planning,
8 Engineering & Construction Department.

9 Q. Please describe your educational background.

10 A. I graduated in 2004 and 2010 from the
11 University of Idaho in Moscow, Idaho, receiving a Bachelor
12 of Science Degree and Master of Engineering Degree in
13 Electrical Engineering, respectively. I am a licensed
14 professional engineer in the State of Idaho.

15 Q. Please describe your work experience with
16 Idaho Power.

17 A. In 2004, I was hired as a Distribution
18 Planning engineer in the Company's Delivery Planning
19 department. In 2007, I moved into the System Planning
20 department, where my principal responsibilities included
21 planning for bulk high-voltage transmission and substation
22 projects, generation interconnection projects, and North
23 American Electric Reliability Corporation's ("NERC")
24 reliability compliance standards. I transitioned into the
25 Transmission Policy & Development group with a similar

1 role, and in 2013, I spent a year cross-training with the
2 Company's Load Serving Operations group. In 2014, I was
3 promoted to Engineering Leader of the Transmission Policy &
4 Development department and assumed leadership of the System
5 Planning group in 2018. In early 2020, I was promoted into
6 my current role as the Transmission, Distribution and
7 Resource Planning Director. I am currently responsible for
8 the planning of the Company's wires and resources to
9 continue to provide customers with cost-effective and
10 reliable electrical service.

11 Q. What is the purpose of your testimony in this
12 case?

13 A. The purpose of my testimony is to inform the
14 Idaho Public Utilities Commission ("Commission") of the
15 Company's need for new generation capacity by 2024 based
16 upon the load and resource balance utilized in the 2021
17 Integrated Resource Plan ("IRP") and subsequently further
18 enhanced as part of the development of the 2023 IRP. I will
19 describe the modifications to the load and resource inputs
20 of the load and resource balance and the resulting
21 identification of Idaho Power's 2024 capacity deficit.
22 Finally, I will provide support for the acquisition of new
23 resources to address identified near-term peak capacity
24 needs in 2024.

25

1 **I. BACKGROUND**

2 Q. What is the goal of the IRP?

3 A. The goal of the IRP is to ensure: (1) Idaho
4 Power's system has sufficient resources to reliably serve
5 customer demand and flexible capacity needs over a 20-year
6 planning period, (2) the selected resource portfolio
7 balances cost, risk, and environmental concerns, (3)
8 balanced treatment is given to both supply-side resources
9 and demand-side measures, and (4) the public is involved in
10 the planning process in a meaningful way. For reliability
11 purposes, in the 2021 IRP the Company planned its resource
12 portfolio to have a Loss of Load Expectation ("LOLE") of
13 0.05 event-days per year or better (i.e. less than one
14 resource adequacy related outage event-day in 20 years).

15 Q. Please explain the Loss of Load Expectation.

16 A. The LOLE is a statistical measure of a
17 system's resource adequacy, describing the expected number
18 of days per year that a system would be unable to meet
19 demand. In the 2021 IRP, Idaho Power planned to meet a
20 reliability threshold of 0.05 event-days per year, or
21 better, which represents one resource adequacy related
22 outage event-day, or less, in 20 years. The Company
23 utilizes test years, based on historical data, to calculate
24 the LOLE of any given year. Given Idaho Power's dependence
25 on its hydro system, which fluctuates with annual water

1 conditions, and the increased frequency of extreme events,
2 in the 2021 IRP the Company aligned its resource adequacy
3 methodology with the Northwest Power and Conservation
4 Council ("NWPCC"). The calculation of a system LOLE is
5 complex, and many forecasting modeling software do not take
6 a LOLE value as a direct input; therefore, the Company
7 developed an internal tool which utilizes the LOLE
8 methodology to produce outputs that can be converted and
9 applied to a tabulated load and resource balance for the
10 purposes of long-term planning.

11 Q. Please explain the "load and resource
12 balance."

13 A. The load and resource balance is the Company's
14 tabulated plan that identifies resource deficiencies during
15 the 20-year IRP planning horizon. It helps ensure Idaho
16 Power has sufficient resources to meet projected customer
17 demand including a margin to account for extreme
18 conditions, reserves, and resource outages, and is checked
19 against, and derived to adhere to, the LOLE threshold of
20 0.05 days per year. It is critical when comparing future
21 resource portfolios that each plan achieves at least a base
22 reliability threshold.

23 Q. How is the resulting resource sufficiency or
24 deficiency determined through the load and resource
25 balance?

1 A. At a high level, the load and resource balance
2 incorporates the expected availability of Idaho Power's
3 existing resources, comparing the total output to the
4 Company's forecasted load, and illustrates the resulting
5 capacity length or deficit. This will identify the
6 Company's first resource need date, or the point at which
7 Idaho Power's reliability requirements may not be met.

8 Q. How is the expected availability of the
9 Company's existing resources determined?

10 A. The availability of existing resources,
11 including Public Utility Regulatory Policies Act ("PURPA")
12 projects, Power Purchase Agreements ("PPA"), hydro, coal,
13 gas, demand response, and market purchases, is determined
14 using a number of factors such as expected stream flows,
15 plant run times, forced outages, historical performance,
16 and transmission import capability, among other
17 considerations.

18 Q. How is the load forecast determined?

19 A. Each year, the Company prepares a forecast of
20 sales and demand of electricity based on a combination of
21 historical system data and trends in electricity usage
22 along with numerous external economic and demographic
23 factors. The anticipated average load and anticipated
24 peak-hour demand forecast represent Idaho Power's most
25 probable outcome for load requirements during the planning

1 period. The difference between the expected availability
2 of the Company's existing resources and the forecasted load
3 is the resulting capacity length or deficit.

4 Q. What have previous load and resource balance
5 results indicated with respect to Idaho Power's resource
6 sufficiency?

7 A. The Company has been generally resource-
8 sufficient since the addition of the Langley Gulch natural-
9 gas fired power plant almost a decade ago until recently.
10 The load and resource balance from the Second Amended 2019
11 IRP did not show a capacity deficiency occurring until the
12 summer of 2028. However, several converging factors,
13 including limited third-party transmission capacity, load
14 growth, and a decline in the peak serving effectiveness of
15 certain supply-side and demand-side resources have caused
16 Idaho Power to rapidly move to a near-term capacity
17 deficiency starting in 2023. These dynamic circumstances
18 led the Company to immediately file a request for a
19 Certificate of Public Convenience and Necessity ("CPCN") to
20 acquire resources to be online in 2023¹, and Idaho Power
21 expects to acquire additional resources each year
22 thereafter through (at least) 2027, as discussed in the
23 Company's request in this case.

24

¹ Case No. IPC-E-22-13.

1 **II. 2021 IRP LOAD AND RESOURCE BALANCE**

2 Q. When did Idaho Power identify that there was a
3 resource deficiency starting in 2023?

4 A. The Company first identified a resource
5 deficiency beginning in 2023 in the spring of 2021 while
6 refreshing the load and resource balance during the
7 development of a Valmy Unit 2 exit analysis, as directed by
8 the Commission in Order No. 34349, Idaho Power's request to
9 update rates to reflect the accelerated depreciation
10 associated with an early exit from coal-fired operations at
11 Valmy, Case No. IPC-E-19-08. Following the filing of the
12 Second Amended 2019 IRP, in the first quarter of 2021,
13 Idaho Power began preparing the required Valmy Unit 2 exit
14 analysis, which included an evaluation of system
15 reliability. This analysis was performed simultaneously
16 with preparation of the 2021 IRP, and the refreshed load
17 and resource balance was further refined through the
18 remainder of the development of the 2021 IRP.

19 Q. What drove the rapid shift from resource
20 sufficiency to a resource deficiency at this time?

21 A. Several factors contributed to the change in
22 the load and resource balance at this time, including
23 significant current third-party transmission constraints
24 limiting wholesale market import purchases at peak, the
25 ability of demand response programs to meet load during the

1 highest peak hours, planning reserve margin determinations
2 and methodology modernization, and load growth exceeding
3 previously forecasted expectations. The net change between
4 the Second Amended 2019 IRP and the updated load and
5 resource balance utilized for the Valmy Unit 2 exit
6 analysis was a reduction in over 500 MW in available
7 capacity each July during the 2022 through 2025 period.

8 Q. Were similar adjustments made to the load and
9 resource balance used in the 2021 IRP?

10 A. Yes. The load and resource balance used for
11 the 2021 IRP was updated to include the most up-to-date
12 resource and load inputs, as is standard when developing
13 the load and resource balance as part of the IRP process.
14 On the resource side, the Company applied the adjusted
15 transmission assumptions and made further enhancements to
16 the capacity contribution of variable energy resources
17 utilized to meet reliability requirements, using the LOLE
18 method.

19 Q. What were the adjusted transmission
20 assumptions used in preparation of the load and resource
21 balance prepared for the 2021 IRP?

22 A. As I mentioned earlier, the Company identified
23 market purchase assumptions that required changes,
24 primarily as a result of new and evolving market conditions
25 due to a constrained transmission market. The changes

1 resulted in a net reduction to transmission capacity
2 availability. Because the transmission market continues to
3 be constrained, and is expected to remain constrained, the
4 load and resource balance used in the 2021 IRP included
5 adjusted transmission assumptions to reflect those new
6 market conditions.

7 Q. You indicated Idaho Power made enhancements to
8 the capacity contribution of variable energy resources
9 utilized to meet reliability requirements as part of the
10 load and resource balance update for the 2021 IRP. What
11 enhancements were made?

12 A. For reliability purposes, in the 2021 IRP the
13 Company planned its resource portfolio to have a LOLE of
14 0.05 event-days per year or better (i.e. less than one
15 resource adequacy related outage event-day in 20 years).
16 Aside from taking a more granular hourly approach, the LOLE
17 method can also be used to evaluate the capability of
18 existing resources to meet capacity need through the
19 determination of Effective Load Carrying Capability
20 ("ELCC").

21 Q. Did the application of ELCC values result in
22 any significant changes to the contributing capacity of
23 Idaho Power's existing resources?

24 A. Yes. When analyzing Idaho Power's system on a
25 probabilistic hour-by-hour basis, the results indicated

1 that the capacity contribution of the demand response
2 programs under the changing dynamics of Idaho Power's
3 system was significantly lower than previously assumed.
4 This is primarily the result of increased solar resources
5 on the Company's system pushing net peak load hours outside
6 the longstanding demand response program dispatch window of
7 1 PM to 9 PM. As a result, Idaho Power filed a request for
8 modifications to its demand response programs that are
9 designed to make the programs more effective at meeting
10 system needs. On March 4, 2022, the Commission issued Order
11 No. 35336, approving Idaho Power's proposed modifications
12 to the demand response programs, effective for the 2022
13 demand response season.

14 Q. What resource potential did the Company assume
15 demand response provides as part of the load and resource
16 balance used in the 2021 IRP?

17 A. With an assumed reduction in participation
18 beginning in 2022 as a result of the demand response
19 program modifications, the 380 MW nameplate capacity was
20 adjusted to 300 MW beginning in 2022 for IRP modeling
21 purposes. The estimated 2021 IRP ELCC of the modified
22 demand response portfolio was 58.5 percent, or
23 approximately 176 MW. For comparison, in Case No. IPC-E-21-
24 32, Idaho Power calculated the increase in capacity
25 contribution from the prior demand response portfolio

1 parameters to the modified demand response portfolio
2 parameters to be 148 MW.

3 Q. What was the resulting capacity deficiency
4 identified in the load and resource balance prepared for
5 the 2021 IRP?

6 A. The resulting capacity deficiency was
7 approximately 101 MW in 2023, 186 MW in 2024, and 311 MW in
8 2025, which led to Idaho Power's request for a CPCN in Case
9 No. IPC-E-22-13 for the 2023 resource procurement.

10 **III. LOAD AND RESOURCE UPDATE**

11 Q. Since the completion of the 2021 IRP, has the
12 Company continued to monitor other factors that could
13 influence the load and resource balance, and by extension,
14 Idaho Power's resource need?

15 A. Yes. While the load and resource balance
16 prepared for an IRP is the primary source of information
17 used to inform resource procurement decisions, the Company
18 also recognizes that during the near-term resource
19 decision-making phase, the capacity deficit period can be
20 very fluid. As a result, Idaho Power continually evaluates
21 the load and resource balance to consider near-term known
22 changes, operational enhancements, limitations, or
23 constraints on the existing system, if any, to adequately
24 inform resource needs today. In the face of growing loads,
25 Idaho Power is also keenly focused on current supply chain

1 challenges, which requires Idaho Power to constantly
2 monitor resource needs and respond with added urgency.

3 Q. As part of this near-term evaluation, what
4 near-term known changes did the Company identify as having
5 the potential to impact the need for new resources in 2024?

6 A. First, Idaho Power included the most up-to-
7 date load and resource inputs. The Company's service area
8 continues to experience very high load growth; in response,
9 the load forecast was updated and implemented as soon as it
10 became readily available. In Case No. IPC-E-21-43,
11 Commission Staff requested that Idaho Power change the LOLE
12 threshold to 0.1 event-days per year and increase the load
13 forecast for future analyses; the Company has since
14 utilized a 70th percentile peak load forecast, which for
15 2024 shows an increase of an expected 33 MW as compared to
16 the 50th percentile peak load forecast utilized in the 2021
17 IRP. The increase is partially due to recent economic
18 activity.

19 Q. What modifications were made to the resource
20 inputs included in the revised load and resource balance?

21 A. Changes to the resource inputs both increased
22 and decreased the resulting capacity deficiency of the
23 revised load and resource balance. There were four
24 resource additions anticipated in 2023 that reduce the
25 previously identified capacity deficit in 2024: (1) the

1 addition of battery storage resources, (2) new distribution
2 substation battery storage systems, (3) upgrades at the
3 Company's peaking gas plants, and (4) the impact of the
4 demand response program modifications to its effectiveness
5 at meeting the Company's capacity need.

6 First, the Company added as new resources the Black
7 Mesa project, a 40 MW solar photovoltaic ("PV") PPA in
8 combination with a 40 MW of four-hour duration battery
9 storage, and the Hemingway project, a Company-owned 80 MW
10 four-hour duration battery storage facility, both of which
11 are expected to be in service in 2023. In addition, the
12 Company is installing a total of 11 MW of four-hour
13 duration battery storage beginning in summer 2023 at
14 various distribution substations that will defer
15 transformer upgrades and coincidentally effectively reduce
16 system demand during peak hours. Next, an approximate 20 MW
17 of capacity was added to Idaho Power's existing resources
18 to reflect the cost-effective upgrades at two gas plants,
19 which is expected to occur prior to the beginning of the
20 summer of 2023. Finally, utilizing participation data from
21 the 2022 demand response season, Idaho Power increased the
22 nameplate of the demand response portfolio by 20 MW.

23 Q. What updates to the resource inputs increased
24 the 2024 capacity deficiency?

1 A. There was one adjustment to the resource
2 inputs that increased the 2024 capacity deficiency: a
3 planned refurbishment of one hydro unit at the American
4 Falls facility will reduce the overall resource
5 availability by approximately 30 MW during the summer of
6 2024.

7 Q. Were any adjustments made to the transmission
8 or market purchase assumptions to reflect changes since
9 preparation of the load and resource balance for the 2021
10 IRP?

11 A. Yes. First, as explained in Case No. IPC-E-22-
12 13, in late 2021, an opportunity arose for the Company to
13 purchase energy. On December 16, 2021, Idaho Power
14 executed an agreement for the delivery of 76 MW to Idaho
15 Power's border, for the months June through September 2022
16 through 2024, seven days a week during heavy load hours,
17 reducing the projected capacity deficit identified in the
18 load and resource balance for 2023 and 2024. This short-
19 term purchase only has the effect of deferring, not
20 eliminating, the growing resource need. In addition, the
21 Company reduced the resource availability associated with
22 the capacity benefit margin ("CBM") of 330 MW to 200 MW.

23 Q. What is CBM?

24 A. The North American Electric Reliability
25 Corporation ("NERC") defines CBM as:

1 “The amount of firm transmission transfer
2 capability preserved by the transmission
3 provider for Load-Serving Entities (“LSEs”),
4 whose loads are located on that Transmission
5 Service Provider’s system, to enable access by
6 the LSEs to generation from interconnected
7 systems to meet generation reliability
8 requirements. Preservation of CBM for an LSE
9 allows that entity to reduce its installed
10 generating capacity below that which may
11 otherwise have been necessary without
12 interconnections to meet its generation
13 reliability requirements.”

14 Including CBM within the load and resource balance
15 recognizes this held transmission capacity allows Idaho
16 Power to reduce its installed generation capacity to meet
17 reliability requirements under emergency conditions. As an
18 example, if an energy emergency is declared following the
19 loss of multiple Idaho Power network resources, CBM
20 transmission capacity could be utilized to fill the
21 resource capacity need via market purchases. Effectively,
22 Idaho Power considers CBM a reserve resource and applies
23 credit in the load and resource balance.

24 Q. Why did the Company reduce CBM’s capacity
25 availability as part of the load and resource balance
26 computation?

27 A. There were two primary reasons for the
28 reduction in CBM: (1) the Company is preparing for its
29 future non-binding participation in the Western Resource
30 Adequacy Program (“WRAP”) and CBM will not have similar
31 value in that program, and (2) conducted evaluation of the

1 ability to acquire transmission to the market during
2 emergency conditions.

3 Q. What is the WRAP?

4 A. The WRAP will deliver a region-wide approach
5 for assessing and addressing resource adequacy and is an
6 important step forward for reliability in the region. It
7 started at the request of many in the industry who were
8 concerned about the issue of resource adequacy in the west.

9 Q. How does the WRAP affect the Company's
10 transmission assumption associated with CBM?

11 A. When evaluating resource adequacy planning
12 requirements under the WRAP, quantification of firm
13 resources will not allow for the inclusion of CBM to
14 demonstrate adequacy. For Idaho Power to meet the WRAP
15 forward showing requirements, have access to the program,
16 and avoid penalties, the Company must acquire firm
17 resources on firm transmission well in advance of each
18 season. CBM, by definition, is only available as firm
19 transmission when the Company is in an energy emergency,
20 and therefore cannot be utilized for WRAP forward showing
21 purposes. However, the Company believes participation in
22 the WRAP will benefit Idaho Power and its customers. With
23 coordination and visibility across participants, the WRAP
24 paints a more accurate, regional picture of resource needs
25 and supply. Participants in the WRAP benefit from

1 reliability assurance through collaboration, taking
2 advantage of operating efficiencies, diversity, and the
3 sharing of pooled resources.

4 Q. If CBM cannot be used in the WRAP, why is
5 Idaho Power reducing CBM from 330 MW to 200 MW instead of
6 reducing CBM from 330 MW to 0 MW?

7 A. The Company is taking an incremental approach
8 to changing assumptions associated with the reliability
9 benefits provided by CBM. As discussed earlier, the WRAP is
10 only one of two major considerations. The WRAP program will
11 not be binding until approximately the summer of 2027, and
12 there remains uncertainty related to the load obligations
13 Idaho Power will be required to meet in the WRAP program,
14 and the credit the Company will receive for its resources
15 in the WRAP program. Idaho Power will continue to consider
16 the transmission assumptions associated with CBM in the
17 load and resource balance as the WRAP program matures.

18 The second major consideration to CBM is whether it
19 enhances the Company's ability to recover from a major
20 unplanned disturbance. Following such a disturbance, the
21 Company can utilize its CBM capacity to bring in reserves
22 for one hour, and in that hour, Idaho Power must acquire
23 capacity from the market, and the transmission between the
24 capacity resource or market hub and the Company's
25 transmission system, to continue to utilize CBM.

1 Q. What are the results of Idaho Power's
2 evaluation of transmission acquisition under emergency
3 conditions?

4 A. The Company believes that acquiring 330 MW in
5 an emergency situation may not be possible with current
6 transmission constraints, especially during regional
7 extreme weather events. As evidenced during recent energy
8 emergency events resulting from extreme weather in the
9 region, increased demand that cannot be met with local
10 generation results in strain on the interconnected
11 transmission system. Understanding the importance of
12 transmission availability during times of high electricity
13 demand, entities have reserved transmission capacity across
14 the west, including just outside the Company's border,
15 significantly limiting Idaho Power's access to market hubs.

16 The Company's own transmission service queue was
17 flooded with multi-year requests with third-party marketing
18 firms looking to move energy from Mid-C across Idaho
19 Power's transmission system to the south. These
20 transmission service requests at the Company's borders have
21 added to an already constrained transmission market
22 limiting the Company's access to Mid-C. Last minute
23 transmission acquisition under emergency conditions between
24 the market and Idaho Power's border have not been

1 consistently available providing further support that an
2 adjustment to CBM is appropriate.

3 Put another way, in the event of an energy
4 emergency, the Company will be able to utilize available
5 transmission within its borders; however, there may not be
6 available transmission between Idaho Power's border and the
7 Mid-C market given the new transmission constraints. The
8 transmission constraint issue may be short term. Because
9 the Boardman to Hemingway project will create incremental
10 transmission capacity between Idaho Power and the Mid-C
11 market, Idaho Power will continue to evaluate CBM benefits
12 as part of resource planning in the future.

13 Given Idaho Power's movement towards WRAP, the
14 certainty that the WRAP program will assign no resource
15 adequacy value to CBM, and the uncertainty of being able to
16 access emergency capacity resources when the Company is in
17 an energy emergency (the purpose of CBM), Idaho Power has
18 decided to reduce its reliance on CBM from 330 MW to 200 MW
19 for resource adequacy planning purposes. The Company will
20 continue to evaluate CBM's reliability benefits and
21 effectiveness in future IRPs.

22 Q. Were there any additional updates made to the
23 load and resource inputs?

24 A. No. However, additional enhancements were made
25 to the Company's reliability evaluation in preparation for

1 the 2023 IRP, currently under development. First, Idaho
2 Power adjusted the Company's resource capacities to account
3 for Equivalent Forced Outage Rates during Demand ("EFORd")
4 using a 5-year rolling average from the NERC Generation
5 Availability Data System ("GADS"). The updated 5-year
6 rolling average EFORd values will better reflect industry
7 average generation resource performance data and resulting
8 outage rates. Second, the Company adjusted the LOLE
9 threshold from the 2021 IRP's 0.05 event-days per year to
10 0.1 event-days per year, following Commission Staff's
11 recommendation in their comments filed in Case No. IPC-E-
12 21-43, which recommended a change in both the LOLE
13 threshold and load forecast percentile. These enhancements
14 are being made as part of the load and resource balance
15 being developed for the 2023 IRP.

16 Q. Based on your evaluation of the near-term
17 factors having the potential to impact the load and
18 resource balance for 2024, what is your estimate of the
19 resulting capacity length or deficit?

20 A. While procurement of 120 MW of dispatchable
21 energy storage addressed the 2023 capacity deficits, and
22 reduced the 2024 deficit, a 2024 capacity deficit still
23 exists. Following updates to the load and resource inputs,
24 including the new 2023 resources, and enhancements to the
25 calculation of reliability thresholds since completion of

1 the load and resource balance used for the 2021 IRP, the
2 2024 capacity deficiency has decreased from 186 MW to
3 approximately 103 MW.

4 **IV. MEETING THE CAPACITY DEFICIENCY**

5 Q. Has Idaho Power taken any actions to acquire
6 resources to meet the 2024 capacity deficit?

7 A. Yes. Under Idaho law, Idaho Power has an
8 obligation to provide adequate, efficient, just, and
9 reasonable service on a nondiscriminatory basis to all
10 those that request it within its certificated service area.²
11 In order to meet its obligations to reliably serve customer
12 load, and given the extremely short turn-around to
13 construct a resource to meet the first deficit in the
14 summer of 2023, particularly in the midst of supply chain
15 disruption, ongoing COVID-19 impacts, and constraints in
16 the industry and in ancillary industries, on June 30, 2021
17 the Company conducted a competitive solicitation through a
18 Request for Proposals ("RFP") seeking to acquire up to 80
19 MW of peak capacity resources to meet the 2023 capacity
20 deficit - seeking projects to be online by June of 2023
21 ("2021 RFP"). As presented in Case No. IPC-E-22-13 for
22 which the Commission granted a CPCN with Order No. 35643,
23 the RFP process resulted in the procurement of 120 MW of
24 dispatchable four-hour duration energy storage as well as

² Idaho Code §§ 61-302, 61-315, 61-507.

1 execution of a 20-year PPA for 40 MW of solar, all of which
2 were necessary to adequately address 2023 capacity
3 deficits. However, the acquisition will not completely
4 satisfy the previously identified capacity deficiencies in
5 2024.

6 Q. What actions did Idaho Power take to satisfy
7 the 2024 capacity deficiency?

8 A. As indicated by in Order No. 35643, Idaho
9 Power is responsible for planning and managing its load and
10 resource portfolio and the Commission expects "the Company
11 to closely monitor its projected capacity needs going
12 forward and to act proactively to ensure a robust RFP
13 process can be completed."³ Therefore, similar to the RFP
14 issued to address the 2023 deficiency, given the short
15 turn-around to construct a resource to meet the deficit in
16 the summer of 2024, on December 30, 2021, the Company
17 conducted a competitive solicitation through an RFP seeking
18 to acquire energy and capacity to help meet Idaho Power's
19 previously identified capacity needs of 85 MW in 2024 and
20 an incremental 115 MW in 2025 ("2022 RFP"). As detailed in
21 Company witness Mr. Hackett's testimony, the RFP process
22 resulted in the selection of a 100 MW solar PV plus 60 MW
23 four-hour duration energy storage project, consisting of a
24 25-year PPA associated with a 100 MW solar PV facility that

³ Case No. IPC-E-22-13, Order No. 35643, p. 13.

1 supplies energy to the Company's system combined with an
2 Idaho Power-owned 60 MW four-hour duration battery storage
3 facility.

4 Q. Will the combined 100 MW solar PV plus 60 MW
5 four-hour duration energy storage project address the near-
6 term capacity deficit in 2024?

7 A. No. Evaluation of the reliability given 2024
8 forecasted load and generation, including the 100 MW solar
9 PV plus 60 MW four-hour duration energy storage project,
10 results in a remaining capacity deficit of 7 MW. To ensure
11 the Company is able to continue to provide safe, reliable
12 service to its customers in 2024, and as evidenced by the
13 fluidity of the load and resource balance recently, an
14 additional Idaho Power-owned 12 MW four-hour duration
15 energy storage project was least-cost/least-risk and
16 selected as part of the RFP process.

17 Q. Do you believe there is sufficient support for
18 the procurement of the PPA and the 72 MW of four-hour
19 duration battery storage resources to be online in 2024?

20 A. Yes, I do. The two acquisitions were pursued
21 and procured as a least cost/least risk method of meeting
22 the 2024 capacity deficits identified in the Company's 2021
23 IRP and subsequently with the results of the revised load
24 and resource balance. The fluidity of the load and resource

1 balance and continued high load growth further supports
2 this resource procurement.

3 **V. CONCLUSION**

4 Q. Please summarize your testimony.

5 A. Idaho Power's most recently updated load and
6 resource balance has identified a 2024 capacity need of 103
7 MW. In response to this resource need, the Company has
8 executed a 100 MW solar PV PPA and agreements to procure 72
9 MW of four-hour duration battery storage resources to
10 satisfy the identified capacity need in 2024.

11 Q. Does this complete your testimony?

12 A. Yes, it does.

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DECLARATION OF JARED L. ELLSWORTH

I, Jared L. Ellsworth, declare under penalty of perjury under the laws of the state of Idaho:

1. My name is Jared L. Ellsworth. I am employed by Idaho Power Company as the Transmission, Distribution & Resource Planning Director for the Planning, Engineering & Construction Department.

2. On behalf of Idaho Power, I present this pre-filed direct testimony in this matter.

3. To the best of my knowledge, my pre-filed direct testimony is true and accurate.

I hereby declare that the above statement is true to the best of my knowledge and belief, and that I understand it is made for use as evidence before the Idaho Public Utilities Commission and is subject to penalty for perjury.

SIGNED this 17th day of February 2023, at Boise, Idaho.

Signed:

