

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF IDAHO POWER )  
COMPANY'S APPLICATION TO COMPLETE ) CASE NO. IPC-E-22-22  
THE STUDY REVIEW PHASE OF THE )  
COMPREHENSIVE STUDY OF COSTS AND )  
BENEFITS OF ON-SITE CUSTOMER )  
GENERATION & FOR AUTHORITY TO )  
IMPLEMENT CHANGES TO SCHEDULES 6, )  
8, AND 84 FOR NON-LEGACY SYSTEMS )  
\_\_\_\_\_ )

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

GRANT T. ANDERSON

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 Grant T. Anderson. My business address  
5 is 1221 West Idaho Street, Boise, Idaho, 83702. I am employed by  
6 Idaho Power as a Regulatory Consultant in the Regulatory Affairs  
7 Department.

8 Q. Please describe your educational background.

9 A. In May of 2013, I received a Bachelor of Science  
10 degree in Microbiology from Oregon State University. In May of  
11 2015, I earned a Master of Business Administration degree from  
12 Boise State University. In addition, I have attended the  
13 electric utility ratemaking course The Basics: Practical  
14 Regulatory Training for the Electric Industry, a course offered  
15 through New Mexico State University's Center for Public  
16 Utilities.

17 Q. Please describe your work experience with Idaho  
18 Power.

19 A. In 2018, I was hired as a Regulatory Analyst in the  
20 Company's Regulatory Affairs Department. My primary  
21 responsibilities as a Regulatory Analyst included supporting the  
22 Company's Commercial and Industrial customer classes' rate  
23 design and general support of tariff rules and regulations. In  
24 2021, I was promoted to my current position as a Regulatory  
25 Consultant. My responsibilities expanded to include the

1 development of complex cost-related studies and support of the  
2 Company's Residential and Small General Service ("R&SGS") and  
3 on-site generation customer classes' rate design.

4 **I. OVERVIEW**

5 Q. What is the Company requesting in this case?

6 A. The Company is requesting the Idaho Public  
7 Utilities Commission ("Commission") initiate the study review  
8 and implementation phases of the comprehensive study of costs  
9 and benefits of on-site customer generation ("Study") as  
10 outlined by the Commission in Order No. 34509.<sup>1</sup> Specifically, the  
11 Company requests the Commission (1) establish a formal process  
12 and timeline for public review and comment on the Study; and (2)  
13 issue an order acknowledging that the Study satisfies the  
14 Commission directives outlined in Order Nos. 34046, 34509, and  
15 35284, and directing modifications to the Company's on-site  
16 generation service offerings be implemented. The Company  
17 envisions requests one and two would occur sequentially to first  
18 allow for public vetting of the Study before stakeholders,  
19 including the Company, take positions on recommended methods for  
20 implementing a successor service offering for non-legacy on-site  
21 customer-generator systems.

22 Q. Why is the Company proposing the Commission process  
23 the case in this manner?

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<sup>1</sup> *In the Matter of the Application of Idaho Power Company to Study the Costs, Benefits, and Compensation of Net Excess Energy Supplied by Customer On-Site Generation*, Case No. IPC-E-18-15, Order No. 34509 at 9-10 (Dec. 20, 2019).

1           A.       The Commission has previously found that before  
2 authorizing changes to the Company's on-site customer generation  
3 offerings, it must "have a credible and fair study in front of  
4 it before it can make a well-reasoned decision on the Company's  
5 net metering program design."<sup>2</sup> The Study itself does not advocate  
6 for a single position regarding potential modifications to the  
7 current net metering service, but rather explores several  
8 methods of valuing customer-owned generation energy exports and  
9 explores other important considerations.

10           While the Company ultimately intends to put forth a  
11 recommendation for modifications to its on-site generation  
12 service offerings as part of this case, the Company is first  
13 requesting the Commission initiate the study review process to  
14 allow the Commission Staff ("Staff"), intervenors, and members  
15 of the public to examine and comment on the Study. Upon  
16 completion of this Study review process, the Company intends to  
17 consider the comments received on the Study and put forth a  
18 recommendation for potential modifications to the on-site  
19 customer generation service offerings.

20           In its application in this case ("Application"), the  
21 Company has provided a proposed procedural schedule for the  
22 Commission's consideration that could allow for customers,  
23 installers, and other stakeholders to have certainty regarding

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<sup>2</sup> Case No. IPC-E-18-15, Order No. 34509 at 9.

1 changes to the Company's on-site generation offering by the end  
2 of 2022.

3 Q. Why does the Company believe the Commission should  
4 consider issuing an order outlining certain changes to the on-  
5 site generation service offering as part of this case?

6 A. Dating back to 2017, parties to on-site customer  
7 generation-related dockets in front of the Commission have cited  
8 concerns regarding uncertainty for customers who may be  
9 considering an on-site generation investment but do not have  
10 information about how a successor tariff may be scheduled.

11 Some of the comments submitted in Case No. IPC-E-17-13  
12 include:

- 13 • "An essential aspect of the City's ability to meet  
14 these goals is solar energy, and the viability of  
15 solar energy here in Boise City, relies on  
16 eliminating the uncertainty related to net metering  
17 and providing predictability for customers currently  
18 engaged or wishing to be part of Idaho Power's net  
19 metering program."<sup>3</sup>
- 20 • "If Idaho Power's proposal is accepted, Auric  
21 Solar's potential customers will be placed in an  
22 untenable position of incurring a known,

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<sup>3</sup> *In the Matter of Idaho Power Company's Application for Authority to Establish New Schedules for Residential and Small General Service Customers with On-Site Generation, Case No. IPC-E-17-13, City of Boise's Memorandum Joining in Support of, and Providing Comments to, Idaho Clean Energy Association's Motion to Dismiss at 5 (Oct. 27, 2017).*

1 substantial, up-front cost without knowing the long-  
2 term run." "Auric Solar urges the Commission to  
3 prevent this disruption" by ordering "that any  
4 future application be carried out in a future  
5 general rate case or other proceeding that will  
6 fully evaluate the costs and benefits of distributed  
7 energy generation, and that will provide certainty  
8 after it is over."<sup>4</sup>

- 9 • "The industry cannot sell a product that has such a  
10 high level of uncertainty and unknowns."<sup>5</sup>

11 Recently, the Clean Energy Opportunities for Idaho  
12 ("CEO") filed a petition seeking to modify the project  
13 eligibility cap for Schedule 84, Customer Energy Production/Net  
14 Metering Service ("Schedule 84") on-site generation systems.<sup>6</sup> In  
15 its response to Idaho Power's Answer filed in the case, CEO  
16 cites comments from agribusiness customers' "need for urgency  
17 and to address specific matters in 2022."<sup>7</sup>

18 By issuing an order addressing certain changes to the on-  
19 site customer generation offering, the Commission can provide

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<sup>4</sup> Case No. IPC-E-17-13, Auric Solar LLC's Joinder and Memo in Support of ICEA's Motion to Dismiss at 7 (Oct. 27, 2017).

<sup>5</sup> Case No. IPC-E-17-13, Direct Testimony of Kevin King on Behalf of Idaho Clean Energy Association, Inc. at 20 (Dec. 22, 2017).

<sup>6</sup> *In the Matter of Clean Energy Opportunities for Idaho's Petition for an Order to Modify the Schedule 84 100kW Cap & to Establish a Transition Guideline for Changes to the Schedule 84 Export Credit Compensation Values*, Case No. IPC-E-22-12, CEO Petition (Apr. 28, 2022).

<sup>7</sup> Case No. IPC-E-22-12, CEO Response to Idaho Power Company's Answer and Motion to Dismiss at 20 (Jun. 1, 2022).

1 more clarity to current and future customers considering an  
2 investment in on-site generation.

3 Q. How is your testimony organized?

4 A. My testimony begins with an overview of on-site  
5 customer generation and the pertinent case history related to  
6 the Commission's directive for the Company to comprehensively  
7 study the costs and benefits of on-site customer generation. I  
8 will provide a brief overview of the Study, which is included as  
9 Attachment 1 to the Company's Application. I will describe the  
10 stakeholder input that the Company received during the study  
11 design phase and the development of the Study. Last, I will  
12 describe key findings and implementation considerations.

13 **II. CUSTOMER ON-SITE GENERATION - CURRENT STATUS &**  
14 **STRUCTURAL CONSIDERATIONS**

15 Q. What is on-site generation?

16 A. The Company uses the term "on-site generation" to  
17 refer to its retail customers who choose to install equipment to  
18 generate electricity to meet some of their electric needs.  
19 Customers predominantly choose photovoltaic technologies - more  
20 commonly known as solar panels. Customers that install equipment  
21 to generate electricity remain connected to Idaho Power's  
22 electric grid and consume energy as needed from Idaho Power's  
23 system. The vast majority also export energy to the grid.

24 Q. Under which rate schedules do customers with on-  
25 site generation take service?

1           A.       Customers who install on-site generation can  
2     interconnect an exporting system under the terms of Schedule 6,  
3     Residential Service On-Site Generation ("Schedule 6"), Schedule  
4     8, Small General Service On-Site Generation ("Schedule 8"), and  
5     Schedule 84. Schedule 84 is the tariff schedule for the  
6     Company's commercial, industrial, and irrigation ("CI&I")  
7     customers to take net metering service.

8           In addition, customers who do not want their generation  
9     systems to export power to the electrical grid may elect to  
10    interconnect their non-exporting system, consuming all the  
11    energy generated on-site. These customers continue to take  
12    service under the retail rate schedule they qualify for based on  
13    the applicability of the Company's retail tariff schedules. Both  
14    exporting and non-exporting systems are subject to Schedule 68,  
15    Interconnections to Customer Distributed Energy Resources  
16    ("Schedule 68"), which applies to all systems connected in  
17    parallel and outlines the requirements and interconnection  
18    process.

19          Q.       How many customers currently have an exporting  
20    system interconnected to Idaho Power's grid?

21          A.       As of May 31, 2022, Idaho Power had 12,322 active  
22    and pending exporting systems under Schedules 6, 8, and 84.  
23    Collectively, these customer systems represent approximately 118  
24    MW of total nameplate capacity. Additional information regarding



1 existing participation is included on pages in Section 2.1 of  
2 the Study.

3 Q. What compensation and billing structure is  
4 currently applied to Schedules 6, 8, and 84?

5 A. The compensation structure currently applicable to  
6 these schedules is commonly called net energy metering or "net  
7 metering." The on-site customer generators' billing structure  
8 for Schedule 6 and Schedule 8 is identical to the standard  
9 service customer class - Schedule 1 and Schedule 7,  
10 respectively. Customers that take service under Schedule 84  
11 continue to take retail electric service under Schedule 9, Large  
12 General Service ("Schedule 9"), Schedule 19, Large Power Service  
13 ("Schedule 19"), or Schedule 24, Agricultural Irrigation Service  
14 ("Schedule 24").

15 Q. Please describe the elements of the net metering  
16 compensation structure and the billing structure applied to net  
17 usage.

18 A. In the context of on-site customer generation, the  
19 compensation structure refers to the measurement interval over  
20 which customers' consumption and excess net energy amounts are  
21 quantified and the method under which customers are credited for  
22 excess net energy. Under Idaho Power's existing net metering  
23 compensation structure, when customers billed under Schedules 6,  
24 8, and 84 generate more energy than they consume on-site, that  
25 energy is exported to the grid, and they earn an energy credit

1 for the excess energy produced in kilowatt-hours ("kWh"). The  
2 on-site customer-generator is billed for net energy consumption  
3 during a billing cycle (i.e., energy consumed during the billing  
4 cycle, less energy generated during the same period, each  
5 measured in kWh). In practice, the bi-directional meter "spins  
6 backward" when the system generates more than the customer-  
7 generator uses, decreasing the meter's measurement of the  
8 customer generator's net monthly kWh consumption.

9           Because on-site customer-generators receive an energy, or  
10 kWh, credit for any excess energy produced, any such credits are  
11 monetized at the applicable retail energy rate when applied  
12 against future energy consumption.

13           The billing structure (i.e., rate design) for Schedule 6  
14 and Schedule 8 includes a fixed charge intended to recover a  
15 portion of the customer and demand-related costs. Schedule 84  
16 customers' billing structure also includes demand charges under  
17 their standard retail service schedule (i.e., Schedule 9, 19, or  
18 24) to recover a portion of demand-related costs. For all  
19 customer classes, volumetric rates applied to monthly energy  
20 consumption recover all variable costs and the remaining fixed  
21 costs. Under the existing net metering compensation structure,  
22 the customer is billed for their net monthly energy use, which  
23 is the amount they use minus the amount they generate over the  
24 monthly billing period.

1 Q. Are Idaho Power's retail rates designed to consider  
2 the unique load characteristics of customers with on-site  
3 generation systems?

4 A. No. Idaho Power's current retail rates were  
5 designed to align with the load characteristics of customers  
6 with a single directional relationship with the electric grid.  
7 For example, historically R&SGS electric rate designs bundled  
8 nearly all electric services into kWh rates, charging customers  
9 based on the total amount of energy consumption over the course  
10 of the month. Larger non-residential rate designs also recover a  
11 portion of fixed costs through demand and basic load capacity  
12 charges. When applied to customers taking service only from the  
13 utility, this structure represented a fair and reasonable  
14 collection of service costs from customers.

15 A large portion of the Company's revenue requirement is  
16 collected through volumetric energy rates, including costs  
17 associated with all electrical system components, from  
18 investment in generation resources to the meters installed on  
19 customers' premises. Consequently, Idaho Power customers' energy  
20 rates include the variable energy-related components of the  
21 revenue requirement and fixed operations and maintenance and  
22 plant-related costs associated with the generation,  
23 transmission, distribution, and customer care.

24 Q. Does the existing net metering billing and  
25 compensation structure provide the Company a reasonable

1 opportunity to appropriately assign the costs associated with  
2 on-site generation to customer-generators?

3           A.       No. A customer who installs on-site generation does  
4 so with the intent to offset their energy usage and reduce or  
5 eliminate the volume of energy they consume from Idaho Power.  
6 Because fixed costs do not vary with changes in the amount of  
7 energy consumed from Idaho Power, the simplified rate design of  
8 recovering fixed costs through a volumetric rate results in the  
9 under-collection of fixed costs from these customers.

10           The Company's R&SGS customers have the most significant  
11 portion of fixed costs - 91 percent<sup>8</sup> - collected through the  
12 volumetric energy charge. The Company's irrigation, large  
13 general service (commercial), and industrial customer classes  
14 have 70, 60, and 39 percent of fixed costs collected through  
15 volumetric charges.

16           Q.       Are both compensation structure and billing  
17 structure at issue in this case?

18           A.       No. As more fully described below, the Commission  
19 has ordered the Company to study changes to the compensation  
20 structure, which will include the measurement interval and  
21 export credit rate. In Order No. 35284, the Commission found  
22 that "updates to current cost of service, new rate designs, and

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<sup>8</sup> Fixed costs collected through volumetric charges proportion is calculated from inputs sourced from the Company's most recent general rate case. See *In the Matter of the Application of Idaho Power Company for Authority to Increase its Rates and Charges for Electric Service to its Customers in the State of Idaho*, Case No. IPC-E-11-08.

1 transitional rates” are most appropriately implemented in a  
2 general rate case.<sup>9</sup> Therefore, only compensation structure for  
3 customer-generators is at issue in this case for potential  
4 modifications, or tweaks, to occur in advance of a general rate  
5 case.

6 Q. Will modifying the compensation structure alone  
7 ensure the Company has a reasonable opportunity address the  
8 collection of fixed costs from on-site generation customers?

9 A. No, but the Company believes modifying the  
10 compensation structure represents a meaningful step towards a  
11 more fair and sustainable service offering. A change in the  
12 compensation structure that includes a more granular measurement  
13 of usage will provide an improved opportunity to more equitably  
14 assign the costs necessary to provide service to on-site  
15 generation customers. A change in the measurement interval would  
16 also provide an opportunity to adjust the compensation for  
17 excess net energy from the fully bundled retail rate to an  
18 avoided cost rate. However, these two improvements are not a  
19 complete solution. By continuing to apply the existing rate  
20 design against the usage of customer-generators with exporting  
21 systems, the Company will continue to under-collect the cost to  
22 provide service from these customers.

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<sup>9</sup> *In the Matter of Idaho Power Company's Application to Initiate a Multi-Phase Collaborative Process for the Study of Costs, Benefits, and Compensation of Net Excess Energy Associated with Customer On-Site Generation, Case No. IPC-E-21-21, Order No. 35284 at 24 (Dec. 30, 2021).*

1                                   **III.    RELEVANT PROCEDURAL HISTORY**

2    **Case No. IPC-E-17-13**

3                   Q.       What did the Company request in its application in  
4 Case No. IPC-E-17-13?

5                   A.       In Case No. IPC-E-17-13, Idaho Power explained that  
6 the rates charged to net metering customers were not designed to  
7 reflect the value of the service being provided to them. The  
8 inaccuracies in pricing could result in cost-shifting between  
9 customers who choose to install on-site generation and those who  
10 do not. Idaho Power asked to first establish new customer  
11 classes for R&SGS customers with on-site generation and then  
12 establish a compensation structure for customer-owned  
13 distributed energy resources ("DER") that reflects both the  
14 benefits and costs that DER interconnection brings to the  
15 electric system.

16                  Q.       Did the Commission acknowledge the limitations of  
17 retail rate net metering?

18                  A.       Yes. In Order No. 34046, the Commission found:

19                               Our analysis of the history of the Company's  
20 on-site generation program reveals an unfairness in  
21 how current and future on-site generation customers  
22 avoid fixed costs. The ability these customers have  
23 to "net out" or net to zero their electricity use  
24 causes them to underpay their share of the  
25 Company's fixed costs to serve customers, and this  
26 inequity will only increase as more customers  
27 choose on-site generation.<sup>10</sup>  
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<sup>10</sup> Case No. IPC-E-17-13, Order No. 34046 at 16 (May 9, 2018).

1 The Commission also found that "the present netting of energy  
2 not only allows these customers to avoid paying their fair share  
3 of fixed costs but also prevents them from realizing presently  
4 unquantified benefits to the grid."<sup>11</sup>

5 Q. What was the outcome of Case No. IPC-E-17-13?

6 A. In Order No. 34046, the Commission removed R&SGS  
7 customers with exporting systems from Schedule 84 and created  
8 two new tariff schedules: Schedule 6 and Schedule 8.<sup>12</sup> Schedule  
9 84 continues to define the terms for CI&I customers with  
10 exporting systems. In order to more accurately assign the  
11 appropriate share of fixed costs and unquantified benefits of  
12 on-site customer generation, the Commission also directed the  
13 Company to "initiate a docket to comprehensively study the costs  
14 and benefits of on-site generation on Idaho Power's system, as  
15 well as proper rates and rate design, transitional rates, and  
16 related issues of compensation for net excess energy provided as  
17 a resource to the Company."<sup>13</sup> The Commission encouraged the  
18 parties to work through these issues together in compromise.

19 **Case No. IPC-E-18-15**

20 Q. Did the Company initiate a docket to  
21 comprehensively study the costs and benefits of on-site customer  
22 generation on Idaho Power's system?

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<sup>11</sup> *Id.* at 23 and 31.

<sup>12</sup> *Id.* at 30-31.

<sup>13</sup> *Id.*

1           A.       Yes. Pursuant to the Commission's request, Idaho  
2 Power initiated Case No. IPC-E-18-15 to study the costs,  
3 benefits, and compensation of net excess energy supplied by on-  
4 site customer generation on October 18, 2018.<sup>14</sup>

5           Q.       Did the Company perform any studies related to  
6 customers with on-site generation in that case?

7           A.       Yes. The Company, Staff, and various stakeholders  
8 evaluated the Company's on-site generation offering. Through  
9 this collaborative process, the parties reached a compromise on  
10 many critical elements of the Company's on-site generation  
11 offering ("Settlement Agreement").

12          Q.       If approved, would the Settlement Agreement have  
13 resulted in changes to the Company's net metering program?

14          A.       Yes. The proposed Settlement Agreement<sup>15</sup> would have  
15 changed several fundamental aspects of the Company's net  
16 metering offering. Of note, customer-generators would have  
17 netted energy production and consumption hourly instead of  
18 monthly, and Idaho Power would have paid customers an export  
19 credit rate for hourly net energy exported to the grid instead  
20 of net excess energy being compensated at a 1:1 kWh credit. The  
21 Settlement Agreement envisioned that R&SGS customers would

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<sup>14</sup> *In the Matter of the Application of Idaho Power Company to Study the Costs, Benefits, and Compensation of Net Excess Energy Supplied by Customer On-Site Generation, Case No. IPC-E-18-15, Petition to Initiate a Docket (Oct. 19, 2018).*

<sup>15</sup> *Case No. IPC-E-18-15, Motion to Approve Settlement Agreement (Oct. 11, 2019).*



1 transition from retail rate monthly net metering to hourly net  
2 billing at an export credit rate transition over eight (8)  
3 years. Net exports would have been compensated at roughly half  
4 the then current residential energy consumption rate.

5 Q. Did the Commission approve the Settlement  
6 Agreement?

7 A. No. In Order No. 34509, the Commission rejected the  
8 proposed Settlement Agreement.

9 Q. Why did the Commission reject the proposed  
10 Settlement Agreement?

11 A. While the Commission found that the parties had  
12 acted in good faith and pursuant to Commission Rules of  
13 Procedure, the Commission found the process did not satisfy the  
14 requirements established in Case No. IPC-E-17-13.<sup>16</sup>

15 Q. What guidance did the Commission provide regarding  
16 criteria for a fair study?

17 A. The Commission stated that it would consider no  
18 changes to the Company's net metering program until Idaho Power  
19 has prepared and filed a "credible and fair study" of the costs  
20 and benefits of distributed on-site customer generation meeting  
21 the following criteria: (1) the study must use the most current  
22 data possible and must be readily available to the public, and  
23 in the Commission's decision-making record; (2) the Company must  
24 design the study in coordination with the parties and the

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<sup>16</sup> Case No. IPC-E-18-15, Order No. 34509 at 6 (Dec. 20, 2019).

1 public, and the Commission will determine the final scope of the  
2 study; and (3) Idaho Power must write the study, so it is  
3 understandable to an average customer, but its analysis must be  
4 able to withstand expert scrutiny.<sup>17</sup>

5 Q. What process did the Commission establish for a  
6 study?

7 A. In its Order, the Commission outlined a "study  
8 design" phase and a "study review" phase. During the study  
9 design phase, Staff and the Company will both "host public  
10 workshops to share information and perspectives on net-metering  
11 program design with the public and to listen to customer  
12 concerns and input."<sup>18</sup> In the study review phase, the public will  
13 have the opportunity to comment on whether the study  
14 sufficiently addressed their concerns and opinions on what the  
15 study shows.<sup>19</sup>

16 Q. Did the Commission issue any other directives in  
17 Case No. IPC-E-18-15?

18 A. Yes. The Commission established criteria<sup>20</sup> to  
19 define legacy treatment for existing systems under Schedule 6  
20 and Schedule 8. The legacy systems would be subject to the rules  
21 in place as of the service date of Order No. 34509, December 20,  
22 2019.

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<sup>17</sup> *Id.* at 9.

<sup>18</sup> *Id.* at 9-10.

<sup>19</sup> *Id.*

<sup>20</sup> See Case No. IPC-E-18-15, Order No. 34509 at 14-15, and Order No. 34546 at 8-11 (Feb. 5, 2020).

1 Q. What criteria did the Commission outline for legacy  
2 systems?

3 A. A legacy system is defined as either an on-site  
4 generation system interconnected with Idaho Power's system as of  
5 the service date of Order No. 34509 or a customer with a binding  
6 financial commitment to install an on-site generation system  
7 that proceeds to interconnect their system on or before December  
8 20, 2020.<sup>21</sup>

9 Q. Are the rates and rate structure subject to change  
10 for legacy systems?

11 A. Yes. While legacy systems operate under the terms  
12 of Schedule 6 or Schedule 8 as those Schedules existed on  
13 December 20, 2019, rates and rate structure are subject to  
14 change for legacy systems until and after legacy status  
15 terminates on December 20, 2045.<sup>22</sup>

16 Q. How many legacy systems take service under Schedule  
17 6 and Schedule 8?

18 A. As of May 31, 2022, approximately 5,300 legacy  
19 R&SGS systems are interconnected to Idaho Power's system.

20 **Case No. IPC-E-19-15**

21 Q. Did the Company initiate a similar case for Idaho  
22 Power's Schedule 84 customer-generators?

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<sup>21</sup> Case No. IPC-E-18-15, Order No. 34509 at 14.

<sup>22</sup> Case No. IPC-E-18-15, Order No. 34546 at 9.

1           A.       Yes. Idaho Power initiated Case No. IPC-E-19-15<sup>23</sup>  
2 while the issues in Case No. IPC-E-18-15 were still under  
3 Commission review. The Company's application highlighted  
4 concerns that Schedule 84 customers were continuing to rely on  
5 the expectation of the ongoing application of the net monthly  
6 billing and compensation structure. Idaho Power asked the  
7 Commission to initiate the new docket to consider similar issues  
8 as to what was under review in Case No. IPC-E-18-15, but for  
9 CI&I customers taking service under Schedule 84.

10           Q.       How was Case No. IPC-E-19-15 processed?

11           A.       Over the next several months, the Company and  
12 parties engaged in similar settlement negotiations to those  
13 occurring simultaneously in Case No. IPC-E-18-15. After the  
14 Commission rejected the Settlement Agreement in Case No. IPC-E-  
15 18-15, Idaho Power withdrew its application, indicating the  
16 matters related to compensation structure and export credit rate  
17 for Schedule 84 would be appropriately considered in a future  
18 comprehensive study, as prescribed by Order Nos. 34509 and  
19 34546.

20       **Case No. IPC-E-20-26**

21           Q.       Did the Company initiate a separate case to  
22 determine if existing CI&I customer systems would receive legacy

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<sup>23</sup> *In the Matter of Idaho Power Company's Application for Authority to Study the Measurement Interval, Compensation Structure, and Value of Net Excess Energy for On-Site Generation Under Schedule 84 and to Temporarily Suspend Schedule 84 Net Metering Service to New Idaho Applicants*, Case No. IPC-E-19-15.

1 treatment before initiating the "study design" phase of the  
2 study?

3 A. Yes. The Company initiated Case No. IPC-E-20-26 for  
4 authorization to change Schedule 84's two-meter interconnection  
5 requirement to a single-meter requirement for new customer-  
6 generators and establish legacy treatment for existing customer-  
7 generators under the current rules as of December 1, 2020.<sup>24</sup> In  
8 its filing, the Company represented that modification of the  
9 metering requirement and transition to a single-meter  
10 requirement will enable the Company to holistically study the  
11 value of excess energy for all on-site generation in both the  
12 R&SGS and CI&I customer classes.

13 Q. What was the outcome of Case No. IPC-E-20-26?

14 A. The Commission ultimately established criteria  
15 similar to Case No. IPC-E-18-15 to provide legacy treatment to  
16 existing Schedule 84 systems under the rules in place as of the  
17 service date of Order No. 34854, December 1, 2020.<sup>25</sup> The  
18 Commission also acknowledged comments submitted regarding the  
19 100 kW project eligibility cap and meter aggregation rules, but  
20 ultimately declined to address them in that docket stating  
21 "there will be opportunities to address these issues during or  
22 after the forthcoming comprehensive study" and noted, "we look

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<sup>24</sup> *In the Matter of Idaho Power Company's Application for Authority to Modify Schedule 84's Metering Requirement and to Grandfather Existing Customers with Two Meters*, Case No. IPC-E-20-26.

<sup>25</sup> Case No. IPC-E-20-26, Order No. 34854 at 11 (Dec. 1, 2020).

1 forward to the forthcoming comprehensive study and continued  
2 engagement on these issues."<sup>26</sup>

3 Q. What criteria did the Commission outline for legacy  
4 treatment for Schedule 84?

5 A. The Commission's Order Nos. 34854 and 34892<sup>27</sup>  
6 delineated between legacy and new systems subject to future  
7 changes informed by a comprehensive study. A legacy system is  
8 defined as either an on-site customer generation system  
9 interconnected with Idaho Power's system as of the service date  
10 of Order No. 34854 or a customer with a binding financial  
11 commitment to install an on-site customer generation system that  
12 proceeds to interconnect their system on or before December 1,  
13 2021.<sup>28</sup>

14 Similar to Case No. IPC-E-18-15, the Commission  
15 determined that Schedule 84 systems that qualify for legacy  
16 treatment continue to be subject to changes in consumption rates  
17 but not to changes in the 1:1 monthly kWh retail rate  
18 compensation structure until legacy status terminates December  
19 1, 2045.<sup>29</sup>

20 Q. How many legacy systems take service under Schedule  
21 84?

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<sup>26</sup> *Id.* at 12.

<sup>27</sup> Case No. IPC-E-20-26, Order No. 34892 (Jan. 14, 2021).

<sup>28</sup> *Id.* at 9.

<sup>29</sup> Case No. IPC-E-20-26, Order No. 34854 at 11.

1           A.       As of May 31, 2022, there are approximately 390  
2 legacy Schedule 84 systems interconnected to Idaho Power's  
3 system.

4 **Case No. IPC-E-21-21**

5           Q.       Did the Company file to initiate the multi-phase  
6 process for a comprehensive study?

7           A.       Yes. On June 28, 2021, Idaho Power applied for the  
8 Commission to initiate a multi-phase process for a comprehensive  
9 study of the costs and benefits of on-site customer generation,  
10 as directed in Order No. 34046.<sup>30</sup>

11          Q.       Did the Company send communication to customers  
12 that it had filed to initiate the study?

13          A.       Yes. At the time of its filing, the Company sent a  
14 bill insert to all existing customers, including R&SGS customers  
15 (those taking service under Schedules 1, 6, 7, and 8) and CI&I  
16 customers (those taking service under Schedules 9, 19, 24, and  
17 84) notifying them of the Company's application in the matter  
18 and informing them how to participate in the docket. As part of  
19 that case, the customer notification was necessary to ensure all  
20 customer segments understood the Company was undertaking a study  
21 process that would ultimately impact the Company's on-site  
22 generation offering for all customer classes.

23          Q.       Was there broad representation of all customer  
24 segments?

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<sup>30</sup> Case No. IPC-E-21-21, Application (Jun. 25, 2021).

1           A.       Yes. In total, 14 separate petitions to intervene  
2 were submitted by parties. The parties represented individual  
3 customers, environmental interests, installer groups, irrigation  
4 customer interests, industrial customer interests, and a  
5 municipality.

6           Q.       What was the outcome of Case No. IPC-E-21-21?

7           A.       After considering more than 250 written public  
8 comments, oral testimony at a public hearing, and written  
9 comments filed by eleven parties to the proceeding, the  
10 Commission issued Final Order No. 35284 approving a Study  
11 Framework detailed therein. The Commission found that the Study  
12 Framework "meets our directive for a credible and fair study"  
13 and reminded Idaho Power to "use the most current data possible"  
14 that is readily available to the public and submitted to the  
15 Commission's decision-making record.<sup>31</sup>

16          Q.       When did the Commission order the Study to be  
17 completed?

18          A.       The Commission ordered that the Company "complete  
19 the study in 2022 as soon as feasible" and indicated that  
20 "persons and parties will have another opportunity to  
21 participate during the study review phase."<sup>32</sup>

22          Q.       Did the Commission's order address any other  
23 considerations?

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<sup>31</sup> Case No. IPC-E-21-21, Order No. 35284 at 9. See also Case No. IPC-E-18-15, Order No. 34509 at 9-10.

<sup>32</sup> Case No. IPC-E-21-21, Order No. 35284 at 32 and 10.





1 largely relied on data from 2021 and has developed appendices to  
2 the report that contain all data relied upon in development of  
3 the Study. Those appendices will be posted on the Commission's  
4 website, in their native file formats, which will enable the  
5 public to review, and if desired, perform analyses on the data.  
6 The information is also contained in the decision-making record.

7           Second, the Commission directed the Company to "design  
8 the study in coordination with the parties and the public, and  
9 the final scope of the study will be determined by the  
10 Commission."<sup>35</sup> Party and public comments received throughout Case  
11 No. IPC-E-21-21 were critical in shaping the Study Framework  
12 ultimately approved by the Commission. As I describe more fully  
13 below, the Company also solicited feedback from parties and the  
14 public while the Study was underdevelopment. The Company has  
15 also proposed a case schedule that envisions public workshops to  
16 be held by both the Company and Staff, as well as opportunities  
17 for public hearings.

18           Finally, the Commission found "the study must be written  
19 so it is understandable to an average customer, but its analysis  
20 must be able to withstand expert scrutiny."<sup>36</sup> In the public  
21 workshop held in May 2022, the Company asked members of the  
22 public to comment on the understandability of the concepts being  
23 described. The Company developed a glossary that is included in

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<sup>35</sup> *Id.*

<sup>36</sup> *Id.*

1 the Study and, where appropriate, utilized figures and images to  
2 further enhance understandability of technical concepts. While  
3 customer understandability was a high priority in the written  
4 report, the underlying analysis relies on a robust technical  
5 assessment of the costs and benefits of customer generation on  
6 Idaho Power's system.

7 As a result, I believe the Study has achieved the  
8 Company's primary objectives and has met the Commission's  
9 previous directives.

10 Q. How is the Study organized?

11 A. The Study is comprised of the following sections:  
12 (1) executive summary; (2) introduction; (3) measurement  
13 interval; (4) export credit rate; (5) frequency of export credit  
14 rate updates; (6) compensation structure; (7) cost-of-service;  
15 (8) recovering export credit rate expenditures; (9) project  
16 eligibility cap; (10) other areas of study; and (11)  
17 implementation considerations. The Study includes 31 appendices  
18 which contain the underlying data and supporting documentation  
19 for the information contained within the Study. To assist the  
20 public in reviewing the Study and enhancing customer  
21 understandability, it also includes a glossary that describes  
22 key terms and acronyms used within the Study.

23 Q. Please provide an overview of what is contained in  
24 each section of the Study.

1           A.       The Company was guided by the Commission's approved  
2 Study Framework in Order No. 35284. The Study includes the  
3 following:

4           Introduction: An overview of on-site customer generation.  
5 Section 2.1 provides a general background of on-site customer  
6 generation and a snapshot of active and pending systems on Idaho  
7 Power's system through May 31, 2022. Section 2.2 covers  
8 pertinent regulatory history related to on-site customer  
9 generation in Case Nos. IPC-E-17-13, IPC-E-18-15, IPC-E-19-15,  
10 IPC-E-20-26, and IPC-E-21-21. This section also provides the  
11 reader with an overview of the Commission-approved Study  
12 Framework issued in Order No. 35284.

13           Measurement Interval: Following the Commission's approved  
14 Study Framework, the Study evaluates and compares the base case  
15 (net energy metering) against hourly and real-time measurements.

16           Export Credit Rate: This section evaluates each export  
17 credit rate component as identified in the Study Framework. The  
18 export credit rate includes the following general categories:  
19 (1) avoided energy, (2) avoided generation capacity, (3) avoided  
20 transmission and distribution capacity, (4) avoided line losses,  
21 (5) avoided environmental costs, and (6) integration costs. Each  
22 of these components has varying assumptions and methodologies  
23 that have been evaluated within the Study and would result in  
24 different outcomes for the effective export credit rate.

1 Consistent with the Study Framework, the Study also considers a  
2 flat and time-variant export credit rate structure.

3 Frequency of Export Credit Rate Updates: This section  
4 considers the various data inputs to the export credit rate and  
5 how these might reasonably be updated. In addition to the data  
6 considerations, the Study also evaluates potential customer  
7 impacts due to different frequencies of updates to the export  
8 credit rate and how that might impact customers.

9 Compensation Structure: The compensation structure is the  
10 metering and billing arrangement for customer-generators with  
11 exporting systems. The Study evaluates bill impacts for an  
12 average residential and small-general customer and all active  
13 systems with 12 months of available data for 2021. The Study  
14 evaluates Net Energy Metering, and Net Billing measurement  
15 intervals with an export credit rate that falls within the range  
16 of values studied to analyze customer bill impacts.

17 Class Cost-of-Service: The primary purpose of the cost-  
18 of-service study prepared for the on-site customer generation  
19 study is to highlight the impact on cost-allocation between the  
20 studied measurement intervals for the on-site generation  
21 customer classes. The Study evaluates two cost-of-service  
22 studies with underlying data for cost allocation based on the  
23 two methods studied: hourly and real-time measurement.

24 Recovering Export Credit Rate Expenditures: The Study  
25 evaluates how compensation for net excess energy should be

1 accounted for and the potential applicability of the Power Cost  
2 Adjustment ("PCA"). The study also considers customer classes'  
3 cost recovery impact as directed by the Commission in the Study  
4 Framework.

5 Project Eligibility Cap: The Study first evaluates the  
6 existing project eligibility cap of 25 kW for R&SGS customers  
7 and 100 kW for CI&I customers. Second, the Study considers a  
8 modified cap at 100% and 125% of customer demand.

9 Other Areas of Study: First, the Study evaluates what  
10 bill components the credit can offset. The Study then reviews  
11 accumulated kWh credits and the potential for expiration and  
12 transfer of financial credit balances. Last, the Study examines  
13 customers' access to data to make informed decisions when  
14 implementing a new compensation structure.

15 Implementation: The Study presents several considerations  
16 for stakeholder and Commission consideration when evaluating the  
17 timing of implementing changes to the net metering service  
18 offering, including transitional rates.

19 Q. Will the Company notify customers that the Study  
20 has been completed?

21 A. Yes. Idaho Power will issue a news release to  
22 notify the public of its Application.

23 Idaho Power will also directly notify all existing  
24 customers, including R&SGS customers (those taking service under  
25 Schedules 1, 6, 7, and 8) and CI&I customers (those taking

1 service under Schedules 9, 19, 24, and 84) of the Application  
2 with a bill insert included with their next billing cycle. The  
3 bill insert will notify all customers that Idaho Power has filed  
4 a comprehensive study analyzing the benefits and costs of on-  
5 site customer generation within Idaho Power's service area. The  
6 customer notice also explains that the Study provides  
7 information that the Commission, Idaho Power, and other  
8 stakeholders will use to determine what changes to Idaho Power's  
9 existing customer generation offering should be implemented and  
10 the potential timing of that implementation.

11 A copy of the press release and customer bill insert are  
12 included as Attachment 2 to the Application.

13 Q. How will the Company notify existing and pending  
14 on-site generation customers of the filing?

15 A. In addition to receiving the bill insert, the  
16 Company will send direct-mail letters to all existing and  
17 pending on-site generation customers notifying them of the case.  
18 Legacy customers will receive a letter notifying them that the  
19 Company has filed the Study with the Commission, reminding them  
20 of legacy status and how to maintain legacy status, and will  
21 provide information on how they can participate in the  
22 proceeding. Non-legacy customers will receive a letter notifying  
23 them that Company has filed the Study with the Commission,  
24 informing them they may be impacted by the outcome of the case,  
25 and will provide information on how they can participate in the

1 proceeding. A draft of the letters is included as Attachment 3  
2 to the Application.

3 Q. Will the public have an opportunity to review the  
4 data contained within the Study?

5 A. Yes. The Company has proposed a schedule in its  
6 Application for consideration that seeks public input on the  
7 Study and public recommendations for methods to be implemented  
8 to a successor on-site generation offering. The Study is  
9 provided as Attachment 1 to the Application and can be found on  
10 the Company's website at [www.idahopower.com/study](http://www.idahopower.com/study). In addition  
11 to the Study, Idaho Power has made all supporting data  
12 available.<sup>37</sup>

13 **V. STAKEHOLDER INPUT**

14 Q. Did the Company seek stakeholder input regarding  
15 the Study following the Commission's order issued in Case No.  
16 IPC-E-21-21?

17 A. Yes. After receiving the Commission order, the  
18 Company began compiling data and completing the Study per the  
19 Commission's directives. On April 19, 2022, the Company issued a  
20 press release notifying the public of a public workshop to be  
21 held on May 2, 2022. The press release informed the public that  
22 "the workshop will focus on the export credit rate - the amount  
23 customers with on-site generation systems, such as rooftop solar  
24 panels, are credited for the excess energy they send back to

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<sup>37</sup> See Appendix Nos. 3.1-10.1 for supporting detail to the Study.



1 Idaho Power's grid." Additionally, the press release notified  
2 the public that during the workshop, Idaho Power would "share  
3 information on the possible methods for evaluating the export  
4 credit rate" and the workshop would be an opportunity for  
5 "customers and interested stakeholders to provide feedback to  
6 the Company."<sup>38</sup> A copy of the press release for the workshop is  
7 included as Exhibit 1 of my testimony. The Company also sent  
8 notice to all parties in Case No. IPC-E-21-21 informing them of  
9 the workshop and how to participate.

10 Q. Please provide an overview of the workshop.

11 A. In addition to several parties to previous cases,  
12 more than 40 members of the public attended the workshop, and a  
13 recording and copy of the presentation materials were made  
14 publicly available on Idaho Power's website following the  
15 workshop. At the workshop, the Company presented an overview of  
16 the methodologies identified within the Study Framework and  
17 asked for public feedback regarding the methods under Study for  
18 determining the value of excess net energy. The presentation is  
19 included as Exhibit 2 of my testimony.

20 Q. Why did the Company focus on the export credit rate  
21 components at the workshop?

22 A. Throughout Case No. IPC-E-21-21, most public  
23 comments and parties' interest in the case centered on the  
24 compensation for excess net energy. As a result, the Company

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<sup>38</sup> Exhibit 1

1 felt it was essential to provide an overview at a public  
2 workshop and seek to solicit feedback from the public and  
3 parties related to how the Company was addressing that specific  
4 part of the Study.

5 Q. What feedback did the Company receive from public  
6 comments after the Company's workshop?

7 A. The Company received five comments from the public  
8 and one comment from CEO, which are included as Exhibit 3 of my  
9 testimony. Generally, the public comments discussed the need for  
10 affordability and accessibility of solar generation and  
11 highlighted that environmental and societal benefits should  
12 drive Idaho Power to incentivize and promote customer  
13 generation. Two comments mentioned a perceived unfairness with  
14 "changing rates" for non-legacy customers. Comments also  
15 expressed a desire for a fair study and an understandable  
16 report.

17 Q. What comments did the Company receive from CEO  
18 after the workshop?

19 A. CEO provided comments on four topics that they  
20 suggest should be included within the study: (1) CEO suggests  
21 that Idaho Power consider the potential for customer-generator  
22 exports to allow Idaho Power to avoid costs associated with  
23 purchasing additional renewable energy credits ("REC"); (2) CEO  
24 proposed Idaho Power consider whether it could provide  
25 incentives to reduce the cost for customers to install on-site

1 generation to avoid distribution system upgrades; (3) CEO  
2 suggested that time-of-use ("TOU") rates would be better focused  
3 on incenting changes in consumption patterns than the export  
4 credit rate; (4) CEO believes the study should address the value  
5 of exports from customers with on-site generation in reducing  
6 fuel price risk.

7 Q. Does the Study address CEO's comment regarding the  
8 potential for customer exports to avoid costs associated with  
9 purchasing additional RECs?

10 A. Yes. Section 4.5.2 of the Study, *Crediting*  
11 *Customers for Value of Renewable Energy Credits*, addresses CEO's  
12 comment regarding avoiding costs associated with purchasing  
13 additional RECs. The Study explains the complexity involved in  
14 certifying and tracking generation in a manner that would allow  
15 for RECs to be issued for a customer's resource.

16 Q. Did Idaho Power consider alternative incentives for  
17 on-site customer generation systems interconnected in locations  
18 that avoid distribution system upgrades?

19 A. Yes. Section 4.3.1 of the Study, *Transmission and*  
20 *Distribution Capacity Cost: Method and Assumptions*, discusses  
21 this proposed alternative incentive. Such an incentive would  
22 depend on sufficient exported energy that coincides with the  
23 locational transmission or distribution peak load. Additionally,  
24 the Commission stated that for the "scope of this case, all

1 costs associated with on-site generator exports will be  
2 reflected in the ECR."<sup>39</sup>

3 Q. Has Idaho Power considered CEO's suggestion for TOU  
4 rates being better for incenting changes in consumption patterns  
5 than the export credit rate?

6 A. Yes. The Company is not opposed to evaluating TOU  
7 rates for consumption. However, the Commission stated that new  
8 rate designs are outside the scope of this Study.<sup>40</sup> For the  
9 Study, the Commission noted that the value of exported energy to  
10 the system varies at different times of the day, week, month,  
11 and year and that it would be appropriate to study peak-hour  
12 pricing or another variable pricing mechanism for the export  
13 credit rate. The Study considered both a flat and time-variant  
14 export credit rate.

15 Q. Did the Study evaluate the value from customer-  
16 generator exports related to fuel price risks?

17 A. Yes. As discussed in more detail in Section 4.1 of  
18 the Study, Avoided Energy Costs, this evaluation depends on the  
19 energy input selected for implementation. For example, actual  
20 market prices would account for the value of customer-generator  
21 exports related to fuel price risks - whereas forecasted prices  
22 would not. However, the Commission's decision for implementation  
23 will have to weigh the benefits of maximizing the value of the

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<sup>39</sup> Case No. IPC-E-21-21, Order No. 35284 at 14.

<sup>40</sup> *Id.* at 24-25.

1 export credit rate when market prices are high versus providing  
2 customer-generators stability and certainty.

3 **VI. KEY FINDINGS AND IMPLEMENTATION CONSIDERATIONS**

4 Q. Did the Company identify any key takeaways or  
5 findings from the Study?

6 A. Yes. There are several key findings supported by  
7 the Study. First, it is clear from the Study that the Company  
8 has the technical capability to reduce the measurement interval  
9 for on-site generation exports and that such a modification  
10 would improve the accuracy of cost assignment and compensation  
11 for on-site generation customers. Second, the Study presents  
12 multiple valid methods of valuing excess energy from on-site  
13 generators, each of which differ materially from current retail  
14 energy rates, suggesting consideration of modifications is  
15 warranted. Lastly, the Study presents several implementation  
16 considerations that can adequately inform the appropriate timing  
17 of transitioning to a successor service offering.

18 Q. Has the Company developed a recommendation for  
19 addressing these items as part of its Application in this  
20 matter?

21 A. No. The Company has not yet developed a  
22 recommendation for the Commission's consideration; however, it  
23 proposes to do so as part of this case. The Company believes its  
24 ultimate recommendation will be best guided and informed by

1 feedback and input received from parties to the case and members  
2 of the public.

3 Q. When does the Company propose it will make a  
4 recommendation for modifications to the on-site generation  
5 service offering?

6 A. As more fully described in the Company's  
7 Application, the Company has proposed a schedule for  
8 consideration that could facilitate the Company and other  
9 parties making recommendations to the Commission in the early  
10 fall of this year. That schedule could allow for a Commission  
11 order establishing changes to the service offering to be issued  
12 by the end of the year.

13 Q. Has the Company considered what aspects of the on-  
14 site generation service offering could be modified as part of  
15 this case?

16 A. Yes. The Company anticipates recommendations would  
17 address the following:

18 • Compensation Structure - Recommendations on (1) a  
19 proposed measurement interval; (2) export credit  
20 rate value and structure.

21 • Frequency of Updates - Recommendations on the  
22 appropriate frequency of export credit rate updates  
23 to balance customer stability and the need for  
24 regular updates to track avoided costs.

- 1 • Recovery of Export Credit Expenditures -  
2 Recommendations on the mechanism to recover export  
3 credit expenditures.
- 4 • Project Eligibility Cap - Recommendations related to  
5 the project eligibility cap for exporting systems.
- 6 • Transitional Rates - Recommendations on the need for  
7 a transitional period to a modified export credit  
8 rate, including the appropriate timing to  
9 transition.

10 Q. Does the Company anticipate potential modifications  
11 to the on-site generation service offering occurring  
12 concurrently with a Commission order issued at the end of 2022?

13 A. No. The Company has asked the Commission to allow  
14 for the implementation of potential changes over at least a 5-  
15 month period, meaning any Commission-approved changes to the on-  
16 site generation service offering would not occur before June 1,  
17 2023. This time would allow for the evaluation of actions  
18 necessary before implementation, including required system  
19 configurations, tariff updates, and customer and installer  
20 communication.

21 Q. What implementation considerations would need to be  
22 evaluated before the effective date of a successor service  
23 offering for non-legacy on-site customer-generator systems is  
24 ordered?

1           A.       If the Commission authorizes a successor service  
2 offering for non-legacy on-site customer-generators, the Study  
3 contemplates two primary areas of consideration: (1)  
4 transitional rates and (2) administrative updates and  
5 communication materials.

6           Q.       What would need to be considered as it relates to  
7 transitional rates?

8           A.       Section 11.1 of the Study, Transitional Rates,  
9 addresses this topic. The Study does not propose a specific  
10 proposal for implementation but recognizes that the Commission,  
11 with input from parties, the public, and the Company, can assess  
12 if a transition period is fair, just, and reasonable for on-site  
13 customer-generators with non-legacy systems once changes to the  
14 compensation structure are known.

15          Q.       What implementation considerations would need to be  
16 addressed regarding administrative updates and communication  
17 materials?

18          A.       Several considerations would need to be addressed  
19 before a Commission authorized effective date for changes to on-  
20 site customer generation offering. If the Commission issued an  
21 order by December 31, 2022, directing changes to the on-site  
22 customer generation offering, Idaho Power would plan to  
23 implement those changes as early as June 1, 2023. A five-month  
24 implementation schedule would allow for the following activities  
25 to be completed.



1           System Changes: Idaho Power's existing meters can measure  
2 consumption and excess net energy on a net hourly or a real-time  
3 basis, and its billing system can perform Net Billing. However,  
4 some configuration would be required to implement that  
5 functionality. Idaho Power would also need to re-design the bill  
6 and ensure customers can access billing data via the Company's  
7 online portal, My Account.

8           Tariff Changes: Idaho Power anticipates that  
9 modifications to the on-site customer generation offering may  
10 require changes to at least Schedules 6, 8, 68, and 84. Idaho  
11 Power anticipates holding technical workshops with Commission  
12 Staff, installers, and other interested stakeholders to discuss  
13 proposed tariff modifications necessary to incorporate the  
14 Commission's ultimate findings before submitting tariff changes  
15 for the Commission's review and approval. This process could  
16 occur over the first few months of 2023, with a compliance  
17 filing submitted before the Commission's ordered effective date.

18           Customer Communication: Robust customer communication  
19 will be necessary before implementing modifications to the on-  
20 site customer generation offering. Idaho Power would ensure  
21 customer service and other customer-facing employees are trained  
22 to respond to customer inquiries before customer communications  
23 detailing the changes are distributed and updated on Idaho  
24 Power's website.





**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-22-22**

**IDAHO POWER COMPANY**

**ANDERSON, DI**

**TESTIMONY**

**EXHIBIT 1**



## **Idaho Power Seeks Public Input on Customer Generation Study**

April 19, 2022

BOISE, Idaho — Idaho Power is currently developing a study related to the costs and benefits of customer-owned generation sources, such as rooftop solar, and is set to host a public workshop for customers and interested stakeholders to provide feedback to the company. The workshop is set for 6 p.m. Monday, May 2, and will be held virtually with WebEx and dial-in options.

In December 2021, the Idaho Public Utilities Commission (IPUC) issued an [order in case IPC-E-21-21](#) directing Idaho Power to complete a comprehensive study of the costs and benefits of on-site generation on the electrical grid. The workshop will focus on the export credit rate — the amount customers with on-site generation systems, such as rooftop solar panels, are credited for excess energy they send back to Idaho Power’s grid. During the workshop, Idaho Power will share information on the possible methods for evaluating the export credit rate. Participants can ask Idaho Power staff questions during the workshop.

As a reminder, the IPUC granted legacy status to existing Schedule 6 and 8 (residential and small general service) on-site generation systems as of December 20, 2019. Existing Schedule 84 (commercial, industrial and irrigation) systems received legacy status as of December 1, 2020. Customers who do not have legacy systems are subject to changes to the on-site generation offering, including changes to the billing structure and the value of the export credit. Customers are notified when applying that the value of excess energy is subject to change.

To participate in the workshop, visit [idahopower.webex.com](https://idahopower.webex.com) at 6 p.m. on May 2 and enter meeting number 2592 303 2170 when prompted. At the next window, enter your name, e-mail address and the password: VODER22. To participate over the phone, dial 1-650-479-3208 and enter meeting number 2592 303 2170 when prompted.

Idaho Power will accept informal written comments on the methods discussed for the export credit rate for two weeks after the workshop. To submit comments, visit [www.idahopower.com/cgworkshop](https://www.idahopower.com/cgworkshop) or email them to [cgworkshop@idahopower.com](mailto:cgworkshop@idahopower.com).

### **About Idaho Power**

Idaho Power, headquartered in vibrant and fast-growing Boise, Idaho, has been a locally operated energy company since 1916. Today, it serves a 24,000-square-mile area in Idaho and Oregon. The company’s goal to provide 100% clean energy by 2045 builds on its long history as a clean-energy leader that provides reliable service at affordable prices. With 17 low-cost hydroelectric projects at the core of its diverse energy mix, Idaho Power’s residential, business and agricultural customers pay among the nation’s lowest prices for electricity. Its 2,000 employees proudly serve more than 600,000 customers with a culture of safety first, integrity always and respect for all.

IDACORP Inc. (NYSE: IDA), Idaho Power's independent publicly traded parent company, is also headquartered in Boise, Idaho. To learn more, visit [idahopower.com](http://idahopower.com) or [idacorpinc.com](http://idacorpinc.com).

Jordan Rodriguez  
Communications Specialist  
[jrodriguez@idahopower.com](mailto:jrodriguez@idahopower.com)  
208-388-2460

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-22-22**

**IDAHO POWER COMPANY**

**ANDERSON, DI**

**TESTIMONY**

**EXHIBIT 2**

# Value of Distributed Energy Resources

## Export Credit Rate Public Workshop

*May 2, 2022*





# Introduction



**Tim Tatum**  
*Vice President  
Regulatory Affairs*



**Connie Aschenbrenner**  
*Senior Manager  
Regulatory Affairs*



**Grant Anderson**  
*Regulatory Consultant  
Regulatory Affairs*



**Jared Ellsworth**  
*Transmission, Distribution &  
Resource Planning Director*



**Andrés Valdepeña Delgado**  
*System Planning Engineer  
Planning, Engineering, & Construction*



**Marc Patterson**  
*Principal Engineer  
Planning, Engineering, & Construction*



# Agenda

01

## Regulatory Background

- ✓ Commission-approved Study Framework
- ✓ Highlight of Commission decisions

04

## Other Components

- ✓ Transmission and distribution capacity, avoided line loss, environmental benefits, and integration costs

02

## Avoided Energy

- ✓ What is avoided energy?
- ✓ Overview of price assumptions

05

## Wrap-up & Questions

- ✓ Summary of components and time-variant ECR
- ✓ Q&A session

03

## Avoided Generation Capacity

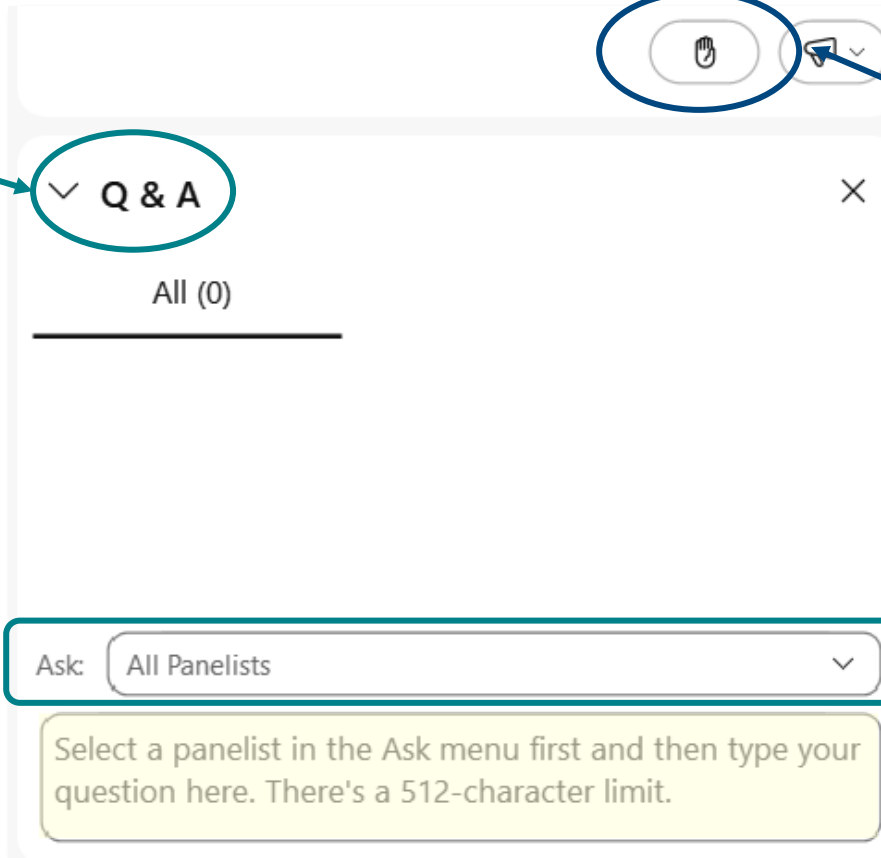
- ✓ What is avoided generation capacity?
- ✓ Overview of methods



# How to Ask Questions

1

Select the Q&A window



2

Select the raised hand icon to notify panelists you would like to ask a question

Select 'All Panelists'



# Request for Feedback

For more information visit  
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Please submit comments by  
**Monday, May 16, 2022**

## Public Workshop on Customer Generation

[Home](#) > [Energy and the Environment](#) > [Your Solar and Other Clean Choices](#) > [Solar Power Options and Customer Generation](#) > [Public Workshop on Customer Generation](#)

[Apply to Connect Your System](#)

[Beware of Misinformation and Scams](#)

[Investing in Solar](#)

[Pick the Right Solar Installer](#)

[Oregon Community Solar Program](#)

[Understanding Customer Generation](#)

**Public Workshop on Customer Generation**

Idaho Power is developing a study related to the costs and benefits of customer-owned generation sources, such as rooftop solar, and is set to host a public workshop for customers and interested stakeholders to provide feedback to the company. The workshop is set for 6 p.m. Monday, May 2, and will be held virtually with WebEx and dial-in options.

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As a reminder, the IPUC granted legacy status to existing Schedule 6 and 8 (residential and small general service) on-site generation systems as of December 20, 2019. Existing Schedule 84 (commercial, industrial, and irrigation) systems received legacy status as of December 1, 2020. Customers who do not have legacy status are subject to changes to the on-site generation offering, including changes to the compensation structure and the value of the export credit. Customers are notified when applying that the value of excess energy is subject to change.



# Regulatory Background

01

December 20, 2019

- IPUC rejected settlement agreement that would have modified compensation structure for customer-generators
- IPUC grandfathered, or provided legacy status, to existing residential and small general on-site generation systems

December 1, 2020

- IPUC provided legacy status to existing commercial, industrial, and irrigation systems

*Customers with legacy systems are not subject to changes in the on-site generation offering, including changes to the compensation structure and value of the export credit rate, until legacy status terminates in 2045*



# Regulatory Background

01

June 28, 2021

- Idaho Power filed to initiate the multi-phase process for a comprehensive study of the costs and benefits of on-site generation as directed in Order No. 34046 as outlined by the Idaho Public Utility Commission (“IPUC”) in Case No. IPC-E-18-15.

December 30, 2021

- IPUC approved the Study Framework in Order No. 35284.
- Idaho Power was ordered to complete the study in 2022, as soon as feasible.



# Highlight of Commission Decisions

01

## Commission Order No. 35284

**Export Credit Rate Value:** The ECR should be based on a **dollar value per kilowatt-hour** (“kWh”) and not a kWh credit.

**Non-Firm Energy:** The ECR must reflect that the energy received from on-site generators is currently **non-firm**.

**Energy Pricing Inputs:** Calculations and documentation for the value of exported energy should use energy price assumptions consistent with **Integrated Resource Planning (“IRP”)** model inputs and **market index** price assumptions.

**Peak-Hour Pricing:** It would be most appropriate to evaluate peak-hour pricing or another **variable pricing** mechanism so customers who invest in storage can realize the value when they export stored energy.

**Export Credit Rate Costs & Benefits:** The study should include an evaluation of all benefits and costs that are **quantifiable, measurable, and avoided costs that affect rates**.

Source: [20211230Final\\_Order\\_No\\_35284.pdf \(idaho.gov\)](#)



# Regulatory Background

01

## Study Framework

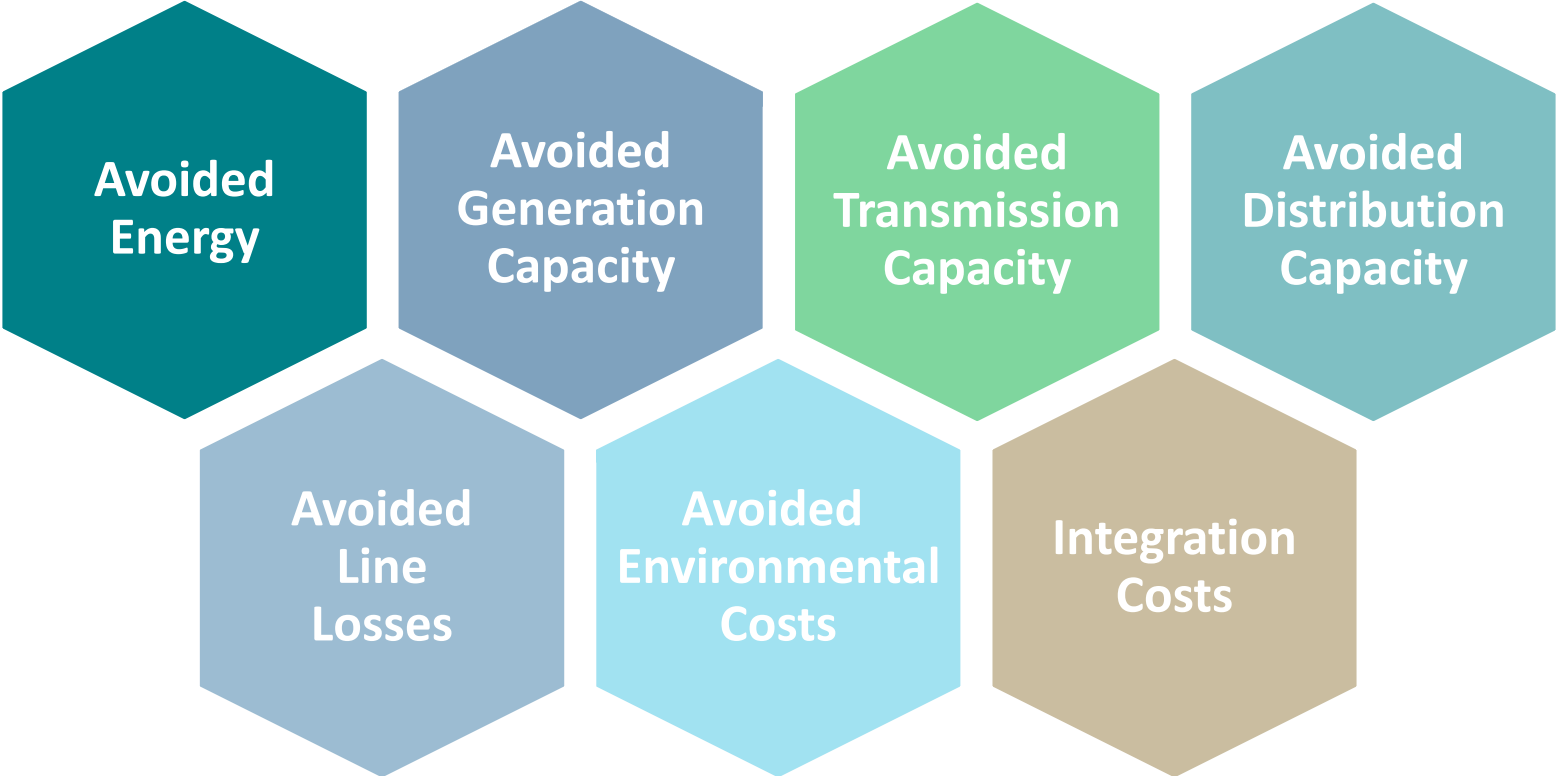
- 1) Measurement Interval
- 2) Export Credit Rate (“ECR”)
- 3) Recovering Export Credit Rate Expenditures
- 4) Cost-of-Service & Rate Design
- 5) Project Eligibility Cap
- 6) Implementation Issues

Tonight’s workshop will specifically focus on methods that Idaho Power has identified for the ECR components

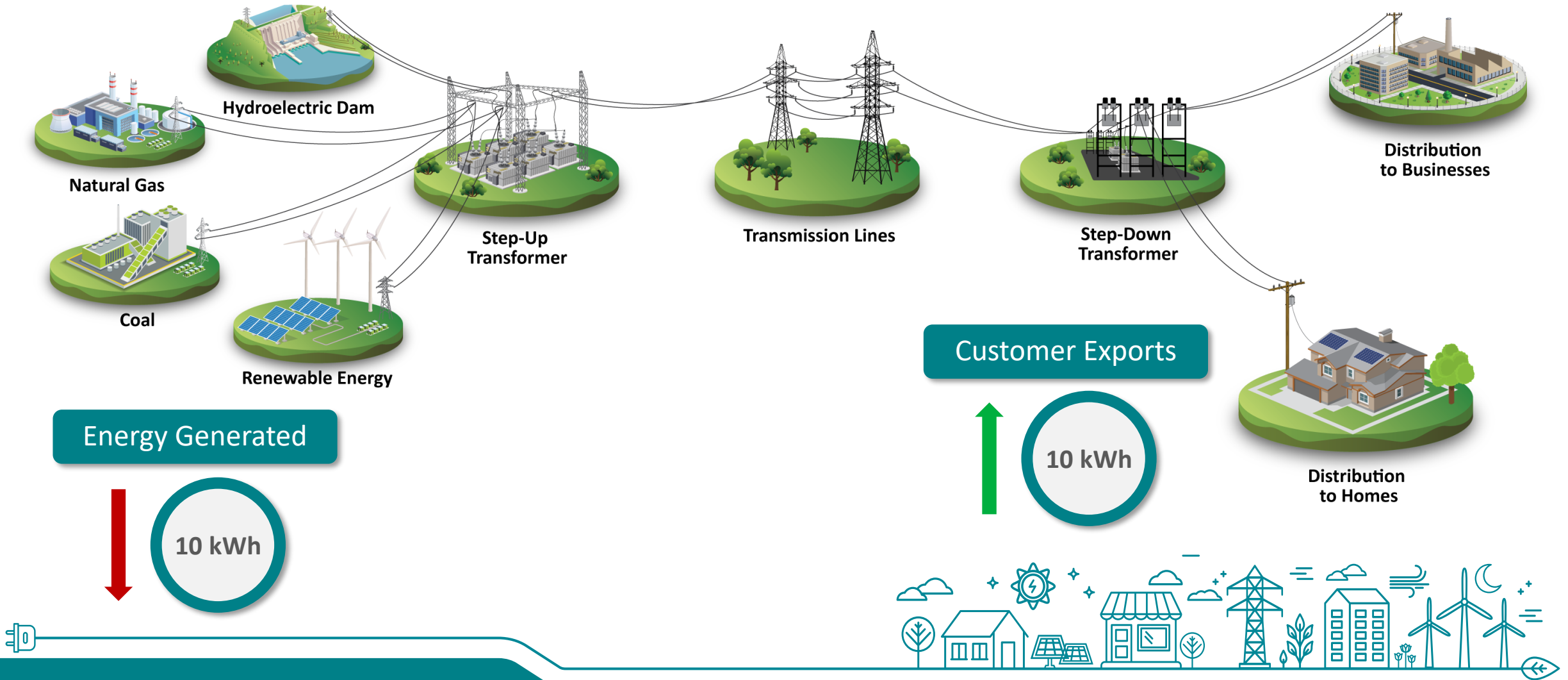




# Export Credit Rate Components to Study



# Avoided Energy



# Avoided Energy

02

## What is avoided energy?

- When a customer-generator exports a kilowatt-hour to the grid, Idaho Power can produce or purchase less energy.
- As a result, Idaho Power avoids the cost of producing or purchasing that kilowatt-hour.

## What price assumptions are used to value avoided energy?

- Forecasted Price: The marginal price forecast in Idaho Power's Integrated Resource Plan ("IRP") model inputs.
- Historical Price: Index prices for energy sold in day-ahead and real-time energy markets.



# Avoided Energy

02

## Forecasted Energy Prices

### Integrated Resource Plan

#### 1 IRP Energy Price Inputs

- Hourly market price derived from the Aurora model
- Market prices specifically output from the 2021 IRP preferred portfolio

*Resources:*

[Our 20-Year Plan - Idaho Power](#)

[ICE Report Center - Data \(theice.com\)](#)

[California ISO - Prices, Today's Outlook \(caiso.com\)](#)

## Historical Energy Prices

### Market Index

#### 2 ICE Mid-C Index

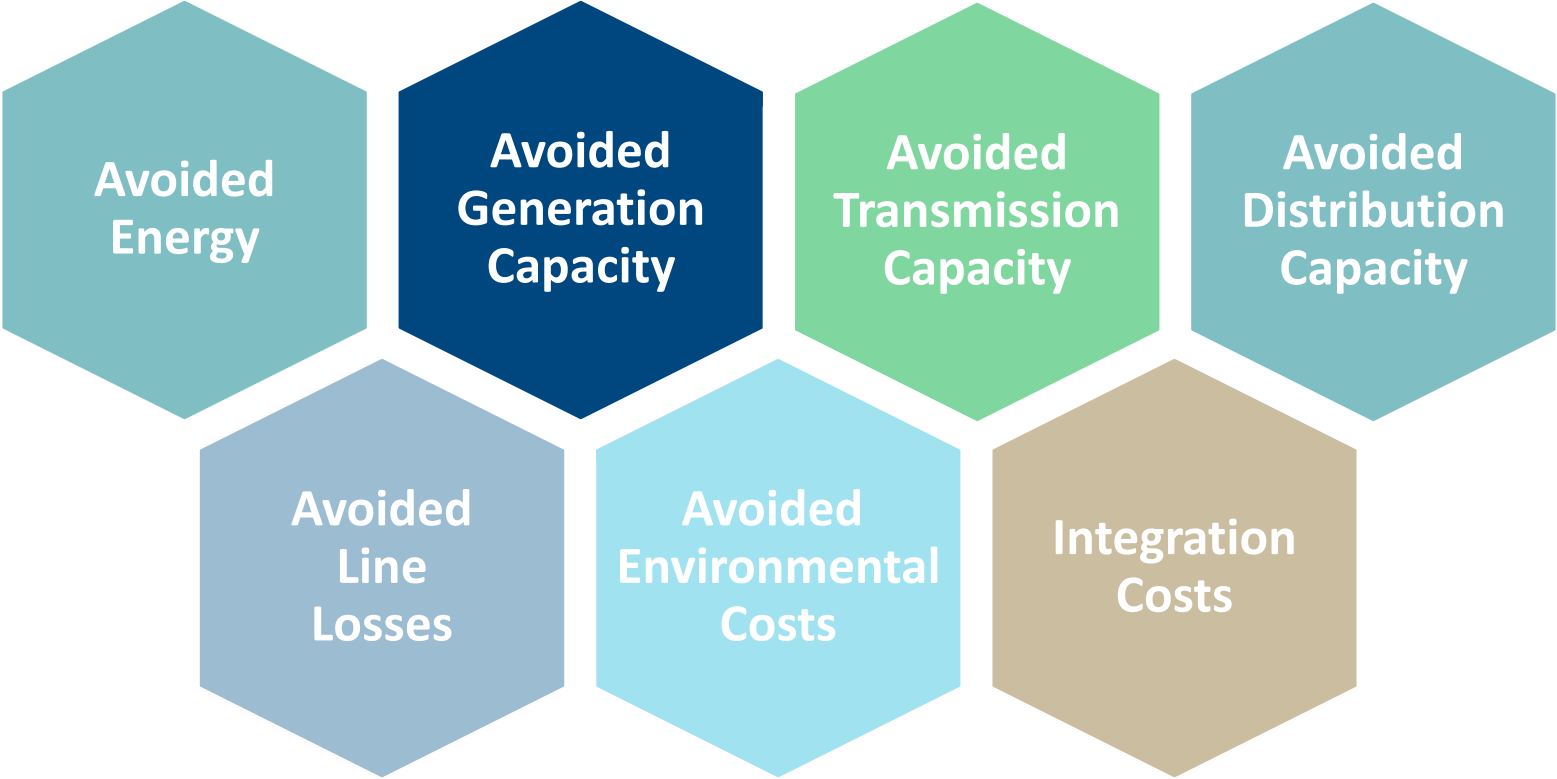
- Intercontinental Exchange (ICE) is a regulated global futures exchange
- Day-ahead settled power prices for the Pacific Northwest Mid-Columbia (Mid-C) trading hub
- Access to ICE Mid-C pricing requires a subscription

#### 3 Energy Imbalance Market

- A real-time market designed to balance fluctuations in energy supply and demand
- Hourly weighted average price of all Idaho Power points in the Energy Imbalance Market
- Pricing is publicly available

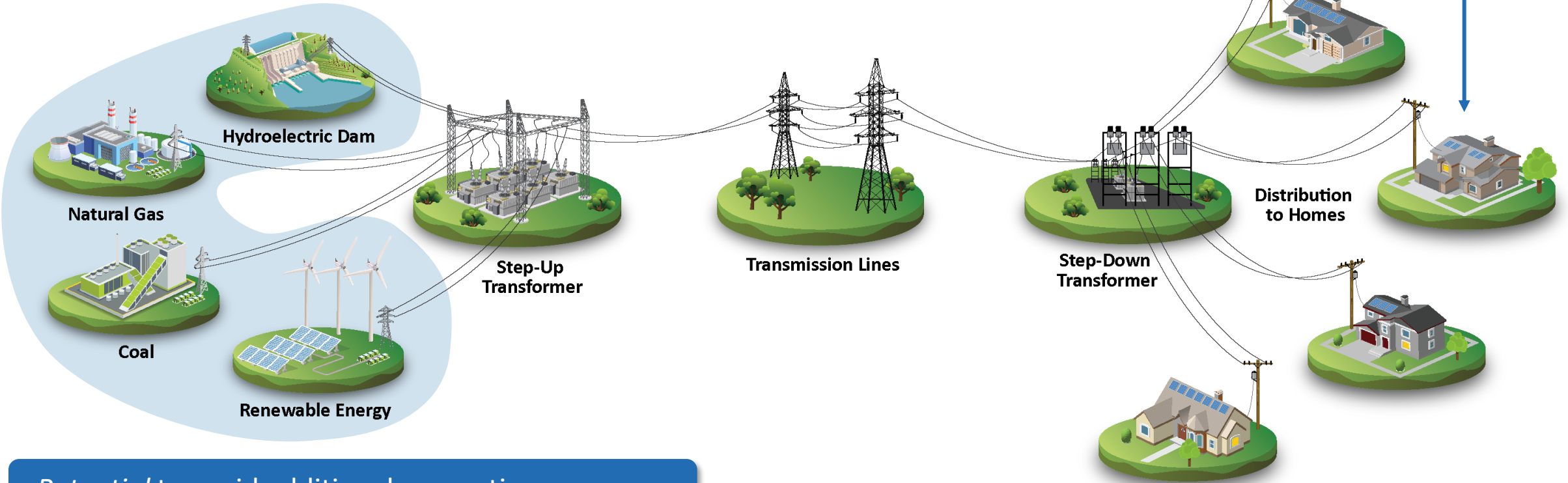


# Export Credit Rate Components to Study



# Avoided Generation Capacity

Addition of customer-generator exports



Potential to avoid additional generation resources



# Avoided Generation Capacity

03

## What is avoided generation capacity?

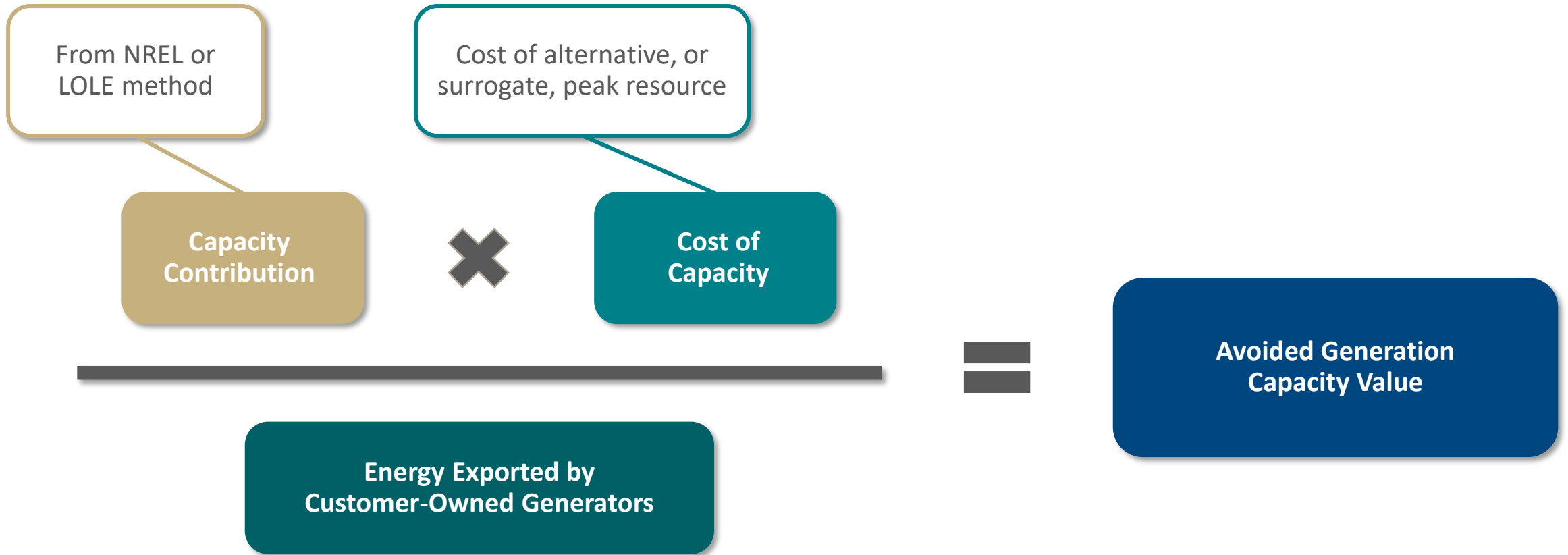
- When a customer exports a kilowatt-hour to the grid, it may delay or defer Idaho Power’s need to build additional peak resources.
- Avoided generation is dependent upon when the exported kilowatt-hour occurs.

## How is avoided generation capacity valued?

- Contribution to Capacity: Idaho Power first compares the contribution of customer-generator exports to a peak resource.
- Cost of Capacity: The contribution is then compared to the cost to otherwise build or procure the additional peak capacity.



# Avoided Generation Capacity



National Renewable Energy Laboratory ("NREL")  
Loss of Load Expectation ("LOLE")





# Avoided Generation Capacity

03

## How is contribution to capacity measured?

1

### Top 100 Hours (NREL)

- ✓ Method used in Idaho Power's 2019 Integrated Resource Plan
- ✓ Annual hourly method developed by NREL for their capacity expansion model
- ✓ Uses the top-100 net load hours as a proxy for the hours of highest risk
- ✓ Limited capability on handling storage
- ✓ Simplified approach to LOLE

2

### Loss of Load Expectation (LOLE)

- ✓ Method used in Idaho Power's 2021 Integrated Resource Plan
- ✓ Reliability metric; improvement from NREL Top 100 Hour method
- ✓ Industry standard to calculate capacity contribution
- ✓ Suitable to handle energy storage

#### Resources:

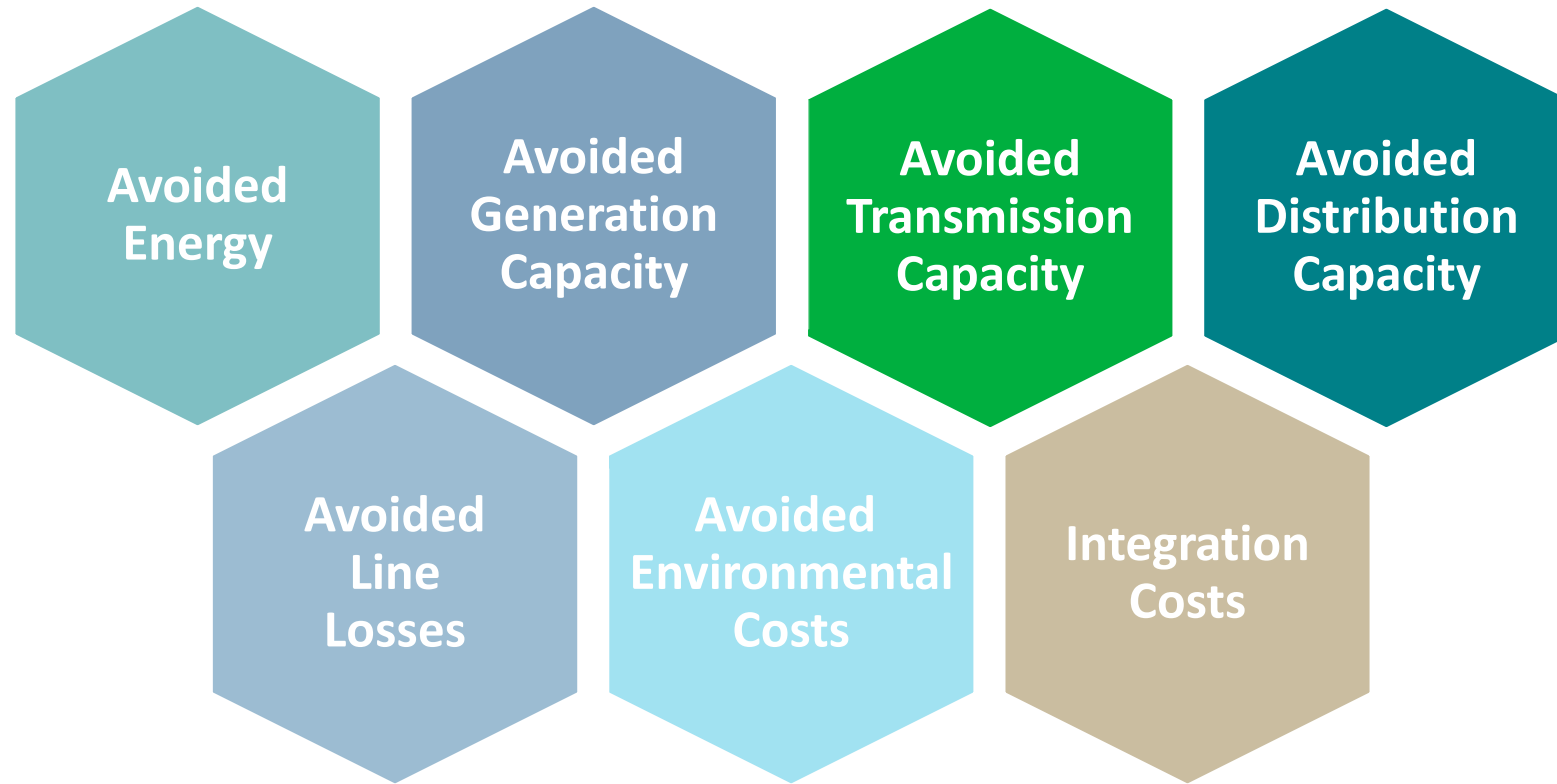
[Our 20-Year Plan - Idaho Power](#)

[8760-Based Method for Representing Variable Generation Capacity Value : Preprint \(nrel.gov\)](#)

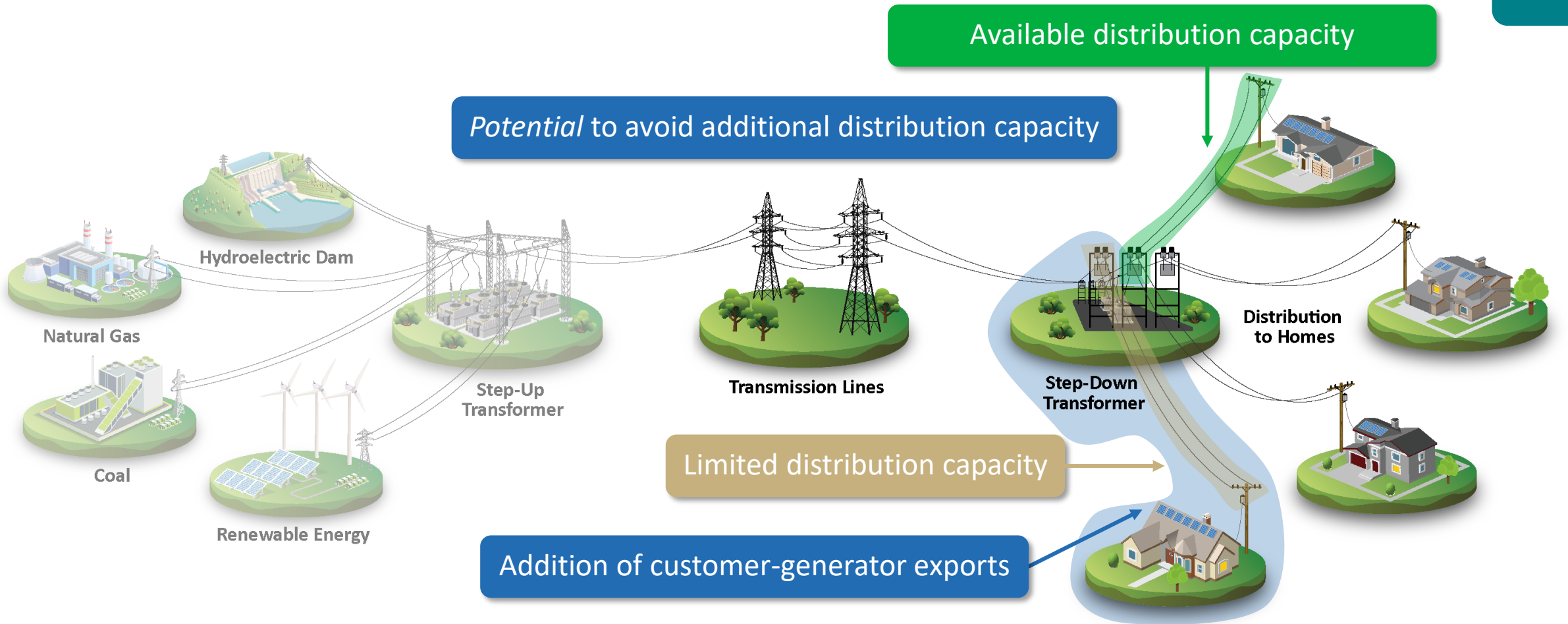


# Export Credit Rate Components to Study

04



# Avoided Transmission and Distribution Capacity



# Avoided Transmission & Distribution Capacity

04

## What is avoided transmission and distribution capacity?

- When a customer exports a kilowatt-hour to the grid, that energy may delay or defer its need to build additional capacity.
- Avoided transmission and distribution capacity is dependent upon both when and where the customer exports occur.

## How is avoided transmission and distribution capacity valued?

- Compare the contribution of customer-generator exports at the localized peak capacity needs.
- The contribution is then evaluated against the localized growth to determine how long specific capacity projects may be delayed.



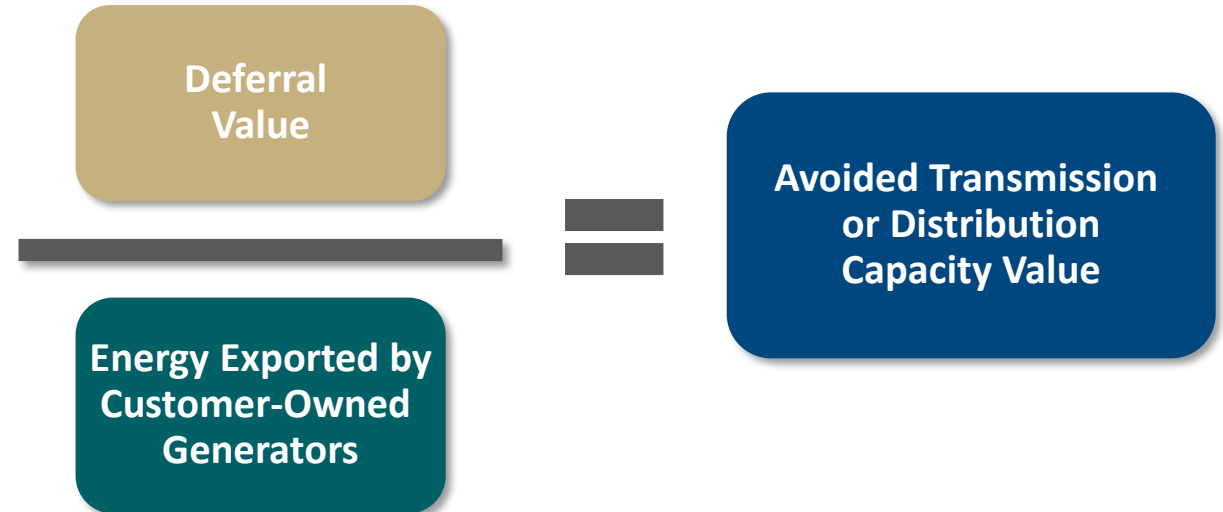
# Avoided Transmission & Distribution Capacity

04

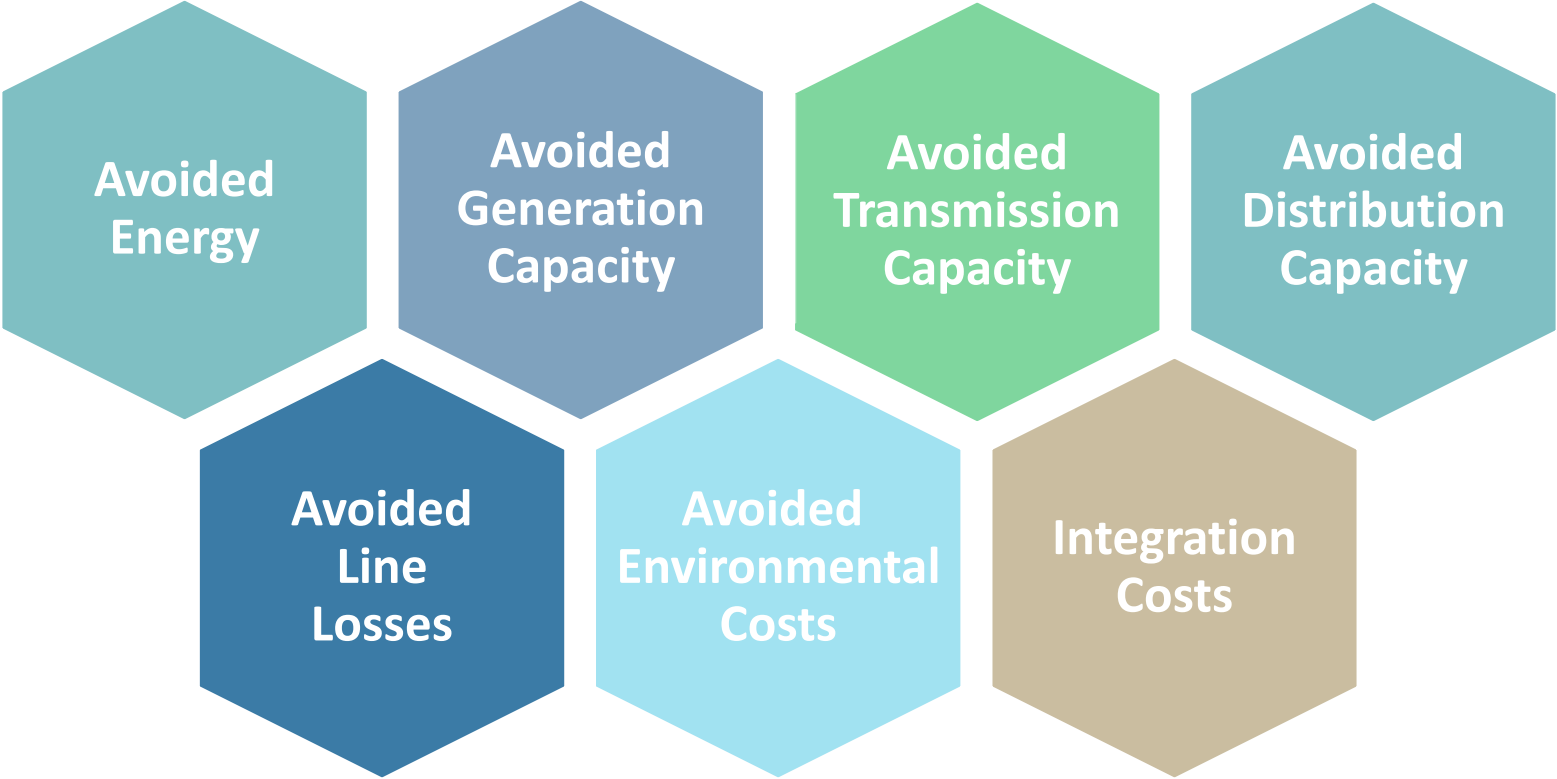
## How is it measured?

- ✓ Evaluate actual and planned capacity projects
- ✓ Compare exported energy at the specific time and location to meet the peak capacity needs for transmission and distribution capacity
- ✓ For locations with export contributions that exceed the peak capacity need, the respective project may be deferred
- ✓ Determine length of time a project can be deferred based on load growth in the area

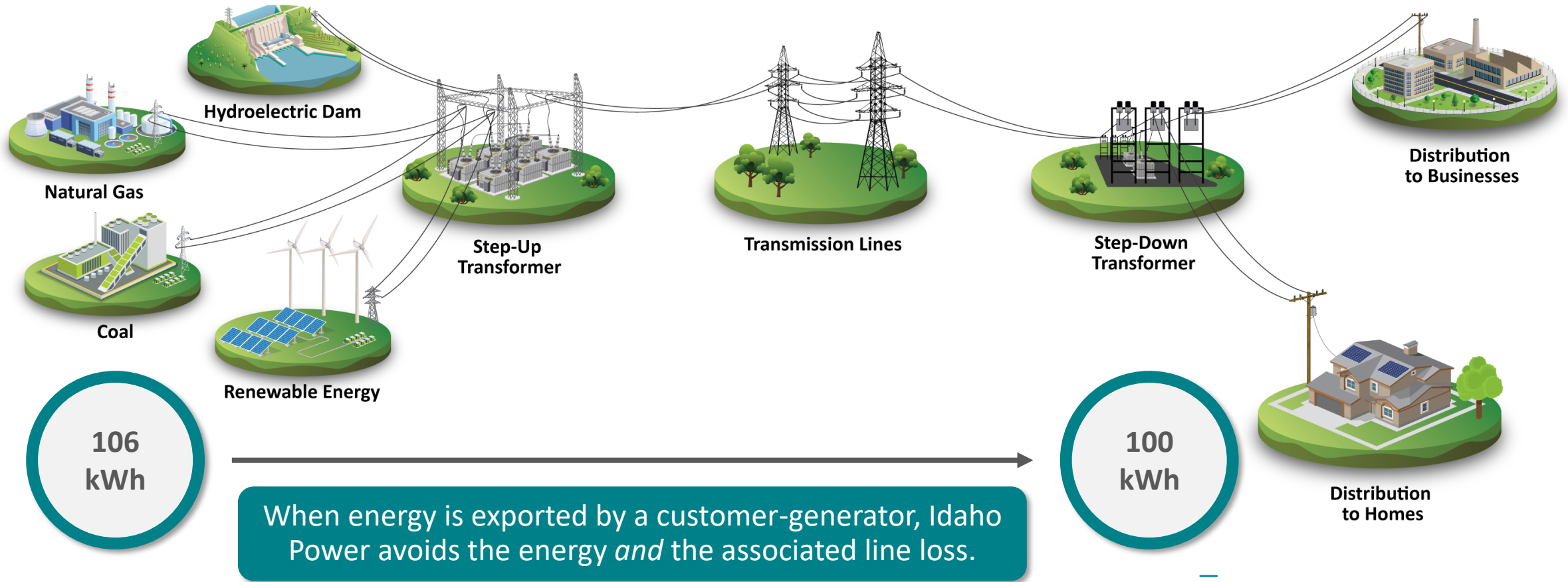
## How is it valued?



# Export Credit Rate Components to Study



# Avoided Line Losses



# Avoided Line Losses

04

## What are avoided line losses?

- When a customer exports a kilowatt-hour to the grid, that energy could reduce losses in the distribution system.
- Avoided line losses are dependent upon both when and where the customer exports occur.

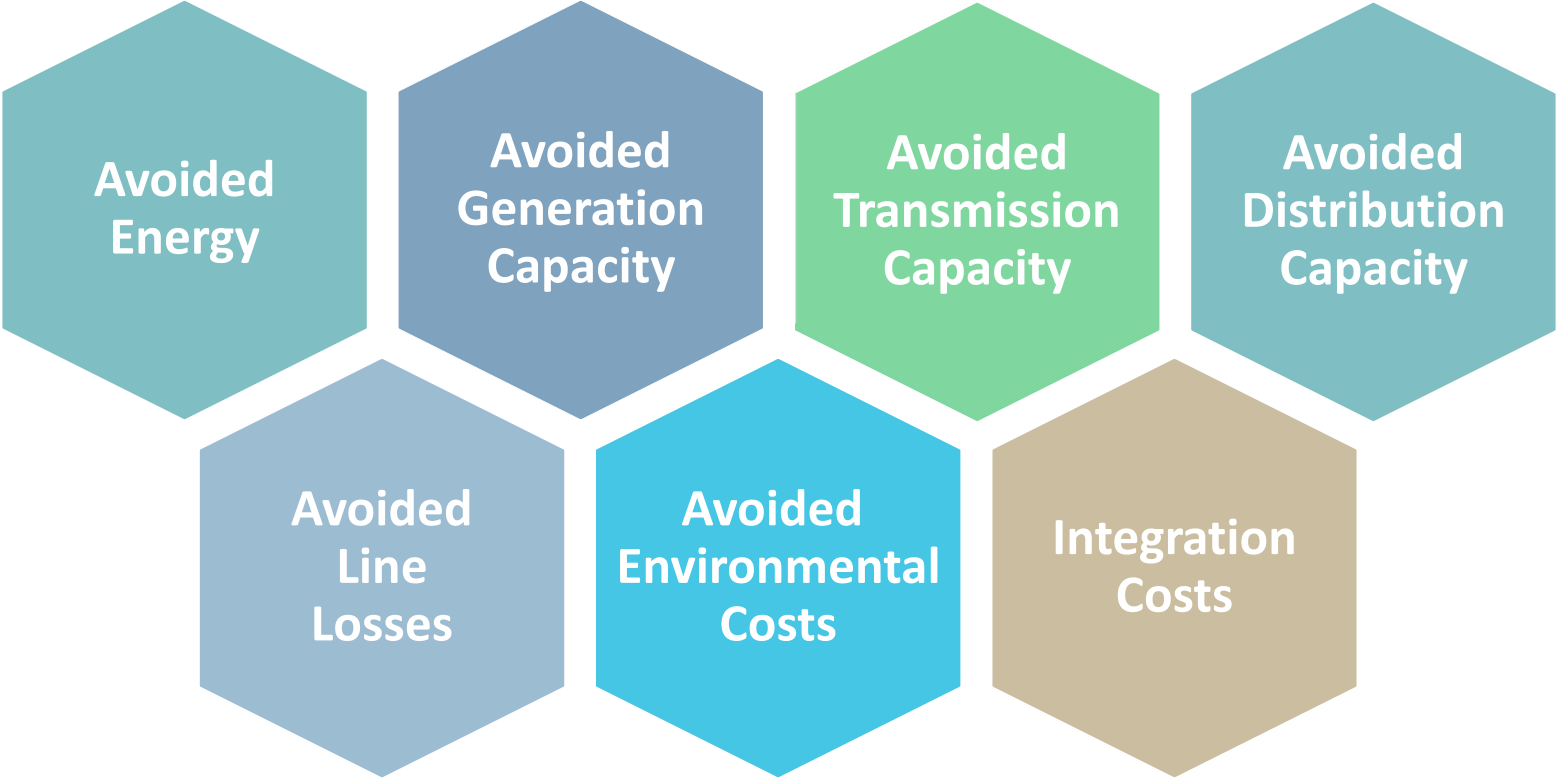
## How are avoided line losses valued?

- Losses avoided during peak load times can be valued similar to how avoided capacity is valued
- Losses avoided during off-peak hours can be valued similar to how avoided energy is valued.





# Export Credit Rate Components to Study



# Avoided Environmental Costs

04

**What are environmental benefits?**

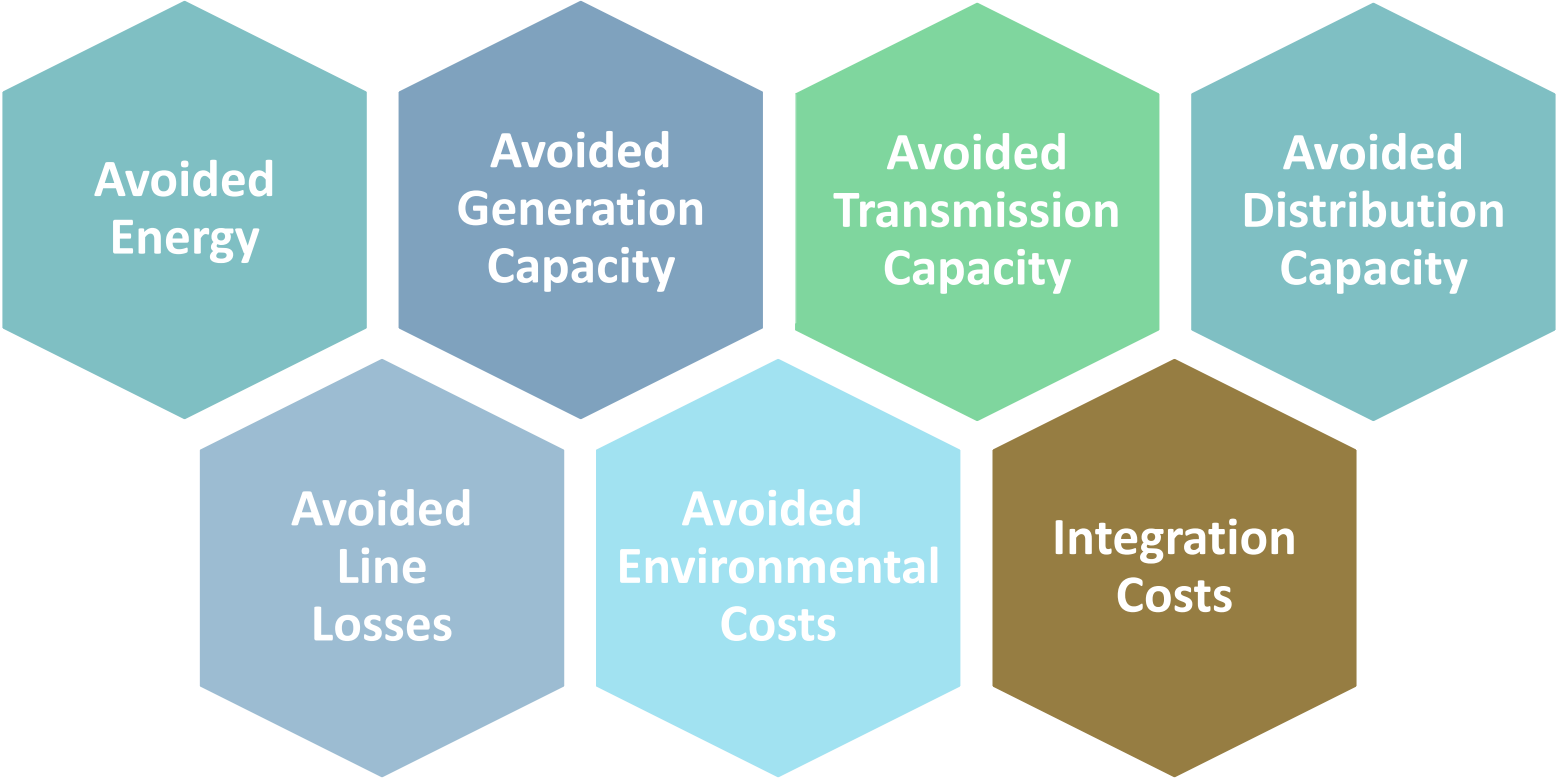
- When a customer exports a kilowatt-hour to the grid, that energy could avoid environmental-related costs.
- Avoided environmental costs are dependent upon avoiding costs that currently affect rates.

**How are avoided environmental costs valued?**

- If there are quantifiable environmental costs that could be avoided and reduce costs to provide utility service, Idaho Power would credit customer-generators for that energy exported.

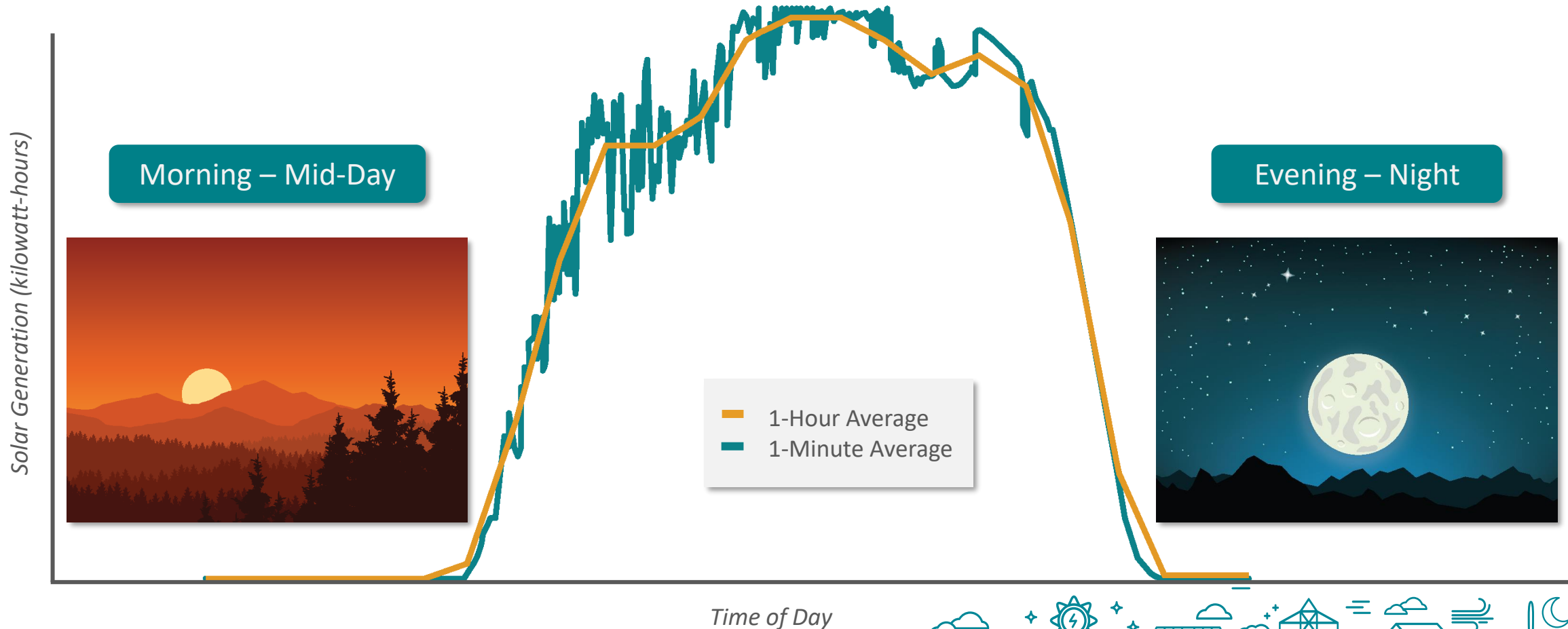


# Export Credit Rate Components to Study



# Integration Costs

Illustrative Example – 24 Hour Solar Output



# Integration Costs

04

## What are integration costs?

- Idaho Power must plan for inconsistent production from variable resources (e.g., solar and wind).
- Integration costs reflect the incremental costs associated with accommodating variable resources on the system.

## How are integration costs valued?

- Idaho Power periodically conducts studies based on the amount of variable resources on its system.
- The most recent study completed in 2020 and reflected the current level of intermittent generation on the system, and it determined the costs to integrate additional variable resources.

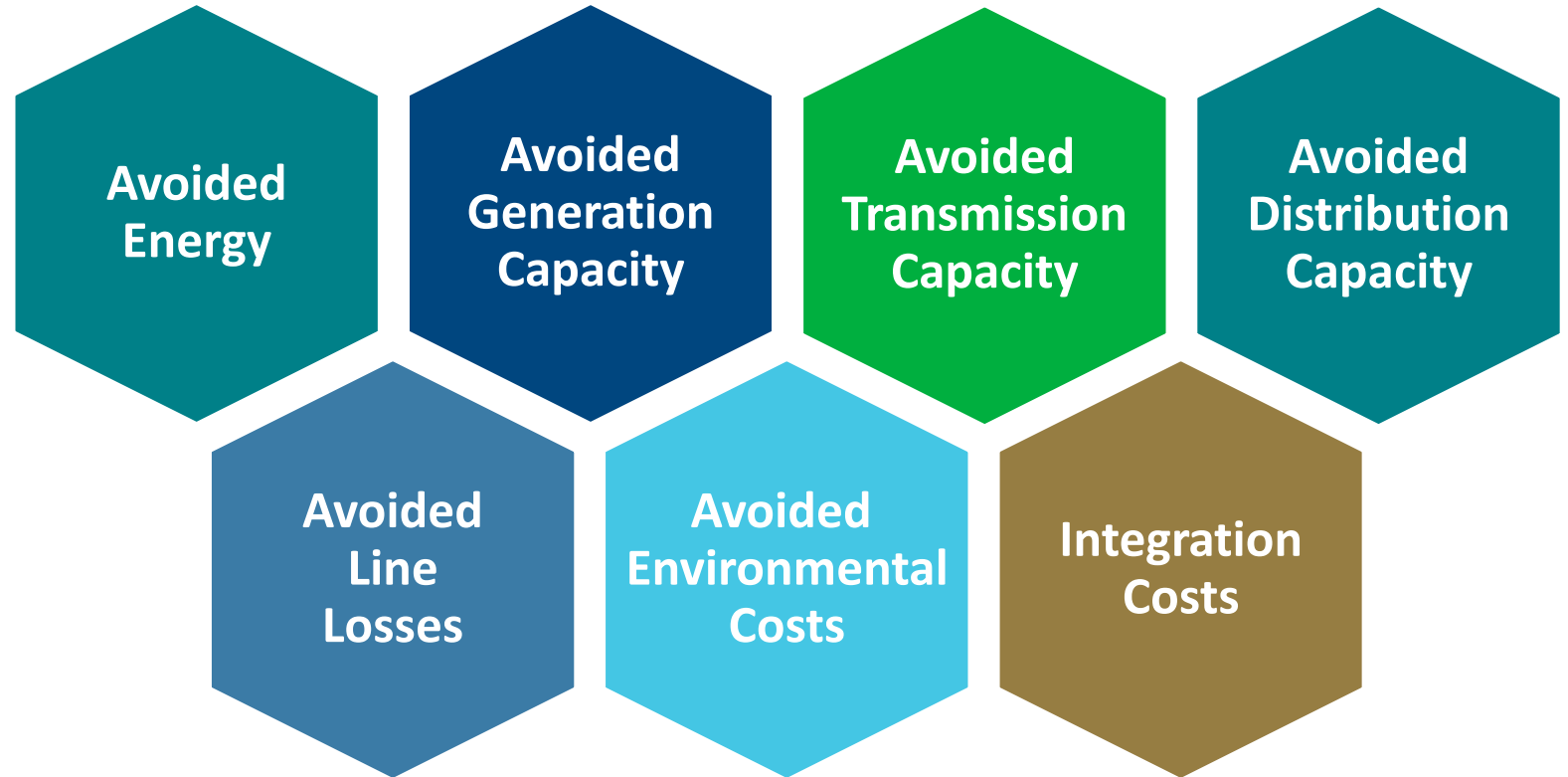


# Summary of Export Credit Rate Components

Avoided Energy

- + Avoided Generation Capacity
- + Avoided Transmission Capacity
- + Avoided Distribution Capacity
- + Avoided Line Losses
- + Avoided Environmental Costs
- Integration Costs

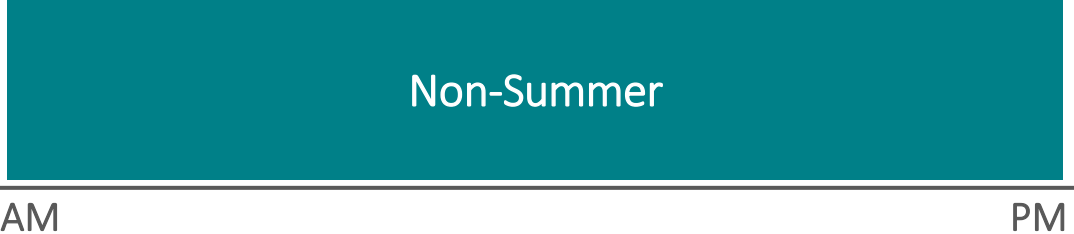
**Total Export Credit Value**



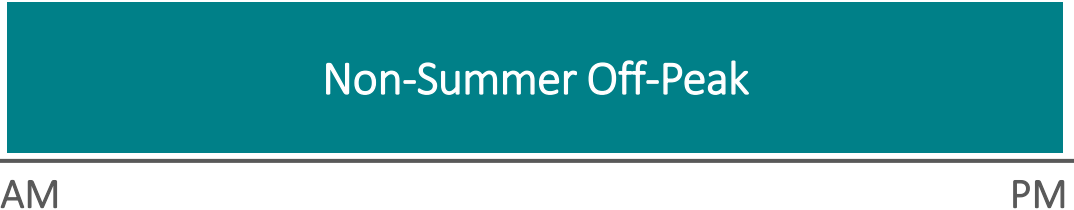
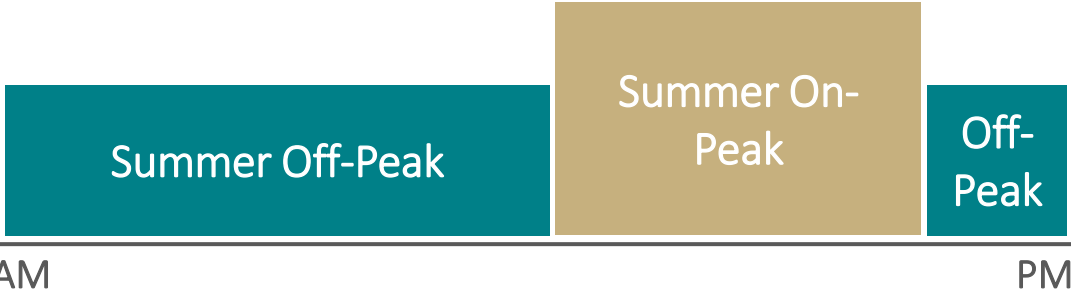
# Export Credit Rate Structure

Illustrative Examples

## 1 Flat Export Credit Rate



## 2 Seasonal Time-Variant Export Credit Rate



# How to Ask Questions

1 Select the Q&A window

The screenshot shows a user interface for asking questions. At the top right, there is a raised hand icon circled in blue. Below it, a 'Q & A' window is open, also circled in blue. The window title is 'Q & A' with a dropdown arrow on the left and a close 'X' on the right. Below the title, it says 'All (0)'. At the bottom of the window, there is an 'Ask:' dropdown menu currently set to 'All Panelists'. Below the dropdown is a text input field with a yellow background and the text: 'Select a panelist in the Ask menu first and then type your question here. There's a 512-character limit.'

2 Select the raised hand icon to notify panelists you would like to ask a question

Select 'All Panelists'





# Request for Feedback

05

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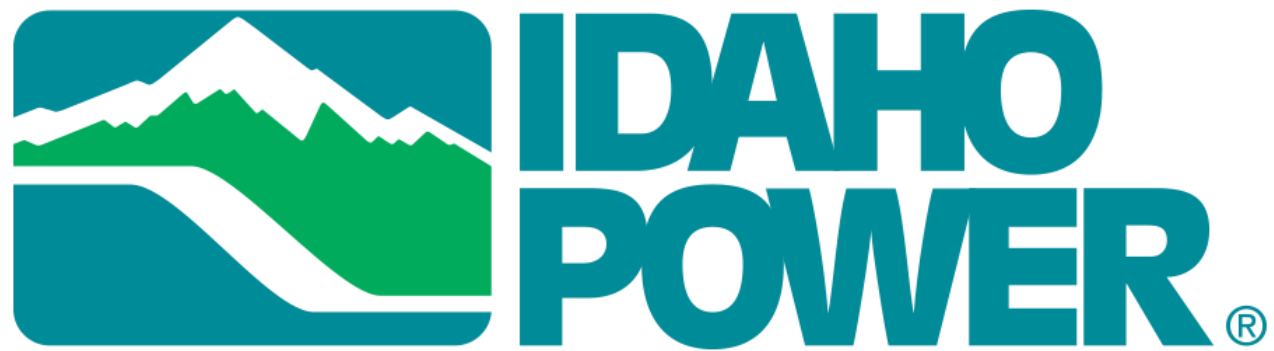
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**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-22-22**

**IDAHO POWER COMPANY**

**ANDERSON, DI**

**TESTIMONY**

**EXHIBIT 3**

**From:**  
**Sent:** Monday, May 2, 2022 6:56 PM  
**To:** CGWorkshop  
**Subject:** [EXTERNAL]Customer Generation Workshop

**KEEP IDAHO POWER SECURE!** External emails may request information or contain malicious links or attachments. Verify the sender before proceeding, and check for additional warning messages below.

---

Thank you for hosting the customer generation ECR workshop. That was a ton of information in less than an hour. Do you have any information you can share, beyond the PPT, that I can review? I'm interested in the data and information that supports the benefits and costs you presented. If possible to also share the 2020 integration costs report that would be great (save me from navigating the PUC website).

Thank you,

**From:**  
**Sent:** Monday, May 2, 2022 7:06 PM  
**To:** CGWorkshop  
**Subject:** [EXTERNAL]net metering

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-----

I tried to attend the WEBEX virtual meeting on May 2 at 6 PM.

Unfortunately something went wrong and I was not connected to the meeting. It is regretful that Idaho Power is still seeking to reduce the incentive for net metering through distributive solar power. I invested my own money as a teacher from the bottom ranking of educators pay in the USA. My family sacrificed other expenditures so we could invest in clean solar energy in order to do our part of reducing the use of fossil fuels through my power company. I started in 2013, long before there was a public commitment by Idaho Power to reduce and eventually eliminate its worst fuel source, COAL. We accepted solar expenses and benefits to meet the challenge for a sustainable world for our children. In my family's case, it includes our 5 grandchildren and 2 great grandchildren. We must do the same for any IPC customers who are willing to make similar financial sacrifices and expect the same financial rewards. KEEP THE RATES THE SAME!

I do not want any changes in the rate schedule for solar net metering customers past, present or future. The costs to Idaho Power are negligible because:

1. My family absorbed the initial costs of the parts and labor to install our net metering solar panels, electrical upgrades and wiring, not IPC.
2. During most of the year, our family's solar panels are adding electricity to neighboring homes since electricity flows like water to the nearest down grid from the source. So we do not use any of the high voltage power lines, substations and IPC resources to maintain those. However my family does pay for all of these in fixed rate expenses and monthly hookup for all the months that we send more electricity out than we consume. So we are paying for services we do not even receive for more than half of the months of connection.
3. As a shareholder I am well aware of IPC's SEC reports of continually increasing sales and profit margins in spite of increasing solar net metering. Soooooooo net metering has not cost anything that has harmed our bottom line or shows any sign of affecting it.

Benefits to keeping the rates as they are for grandfathered home solar net metering for all past, present and future solar net metering customers.

1. The only way to get to NET-ZERO carbon for IPC is through alternative energy. We are instrumental in helping IPC meet that goal but only if rates stay the same as those grandfathered homes.
2. Solar is uniquely adaptable to the electrical high demands for the summer & as solar usage grows it helps with the higher demands and reduces the chances for the spot market expenses of buying electricity when demand exceeds capacity.
3. IPC is privately owned and publicly controlled because we are a monopoly. There are two purposes to our existence. One purpose is to continue to return an investment profit. As solar energy decreases in cost, IPC is best suited to add its own solar generation and reduce its expenses with its growing net metering base. Second, IPC is a public utility that is mandated to work on behalf of the public by being a responsible corporate citizen. Fighting climate change is the number one challenge this century. We have to do everything possible and KEEPING RATES THE SAME IT AN IMPORTANT PART OF THIS GOAL.

"The greatest threat to our planet is the belief that someone else will save it," - — Robert Swan, Arctic explorer and climate activist

**From:**  
**Sent:** Tuesday, May 3, 2022 8:33 AM  
**To:** CGWorkshop  
**Subject:** [EXTERNAL]My comments re solar power meeting of May 2, 2022

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---

To whom it may concern,

Please enter the following comments into the meeting record.

While I don't know the details of the current rate structure, nor the proposed changes, that apply to homeowners with solar panels, I fully intend to buy a grid-connected solar system soon, and thus have a great deal at stake in this question.

I understand that Idaho Power wishes to reduce the amount they would pay to grid-connected home solar-generating customers, for excess power that would flow from one's solar array into the grid. I believe this would be unfair to said customers, and would slow the acquisition of home solar systems by Idaho Power customers.

Customers who invest tens of thousands of dollars in a home solar array are reducing Idaho Power's need to invest in power generation--they are manifestly helping Idaho Power meet its objective of providing electricity to the region. Thus, the relevant regulations should incentivize such weighty investments by homeowners, not penalize them.

It is critically urgent that society make the transition to fully renewable energy generation as swiftly as possible--clearly, the planet's wellbeing and human welfare are at stake. Making it less painful for homeowners to make such large investments in furtherance of a societal good is the right thing to do.

Idaho Power, please be a good citizen and not a greedy one.

Sincerely,

**From:**  
**Sent:** Tuesday, May 10, 2022 8:10 PM  
**To:** CGWorkshop  
**Cc:** maria.barratt-riley@puc.idaho.gov  
**Subject:** [EXTERNAL]Comments on the costs and benefits study for the export credit rate for residential solar installations

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---

Thank you for hosting the May 2 workshop at which you and your staff presented the plan for your study of calculating the export credit rate for power generated by residential solar installations.

My comments are:

1. Every Idaho Power customer knows that Idaho Power does not like residential solar.
2. It is disingenuous for Idaho Power to try to discourage residential solar by attempting to reduce credit for non-legacy on-site generation systems and then in the same breath say that you are a company that cares about climate change impacts.
3. Your presentation was highly technical and difficult for the average person to understand which leads one to the conclusion that your study will not result in a fair or equitable assessment of the value of on-site generated solar. "Keep it technical to keep the comments to a minimum" seemed to be the point of the presentation.
4. While I respect the Idaho Power staff and their engineering skills, I also understand their "golden handcuffs" when responding to questions and designing the study on the value of residential solar.
5. As an Idaho Power customer, locked into the system and without options, I expect honesty, integrity, fairness, and unobscured/transparent evaluation in your study.

Best regards,



**From:**  
**Sent:** Monday, May 23, 2022 2:11 PM  
**To:** CGWorkshop  
**Subject:** [EXTERNAL]Case IPC-E-21-21

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---

Dear Idaho Power,

I'm writing to comment on Case No. IPC-E-21-21. I only recently heard of the proposed change, so I hope my comments will be considered in this matter. At any rate I do hope the concerns I raise below can be addressed.

Reading the case, it seems the main rationale for moving away from the volumetric rate or one to one net metering rests on the fixed costs of your operations. Two main points I ask you need to consider with regards to economic efficiency:

1) Even residential customers who 'zero out' their power bill still pay a fee to stay connected to the grid. If the rate case is truly about fixed costs, then you should adjust this fixed monthly cost and not the per-unit cost of power returned to the grid under net metering.

2) A major fixed cost for Idaho Power is investing in the facilities which generate power. The more customers who are generating power on your behalf, the fewer investments Idaho Power needs to make, thus saving you substantial fixed costs. Coupled with the fact that solar power produces most in the summer when Idaho is using more power (for air conditioning and irrigation, for example), this increase in production saves Idaho Power from having to directly invest in summer surge capacity.

I do hope you can address this in your eventual study, and I would like the opportunity to discuss this with you further, if possible. Thank you for your time.

Best Regards,



# Clean Energy Opportunities for Idaho

May 16, 2022

Reference: May 2, 2022 WebEx workshop

Subject: Additional comments of Clean Energy Opportunities for Idaho (CEO)

CEO recognizes the magnitude of the Study Idaho Power is preparing regarding the cost, benefits and compensation of excess energy from customers with on-site generation. CEO appreciates Idaho Power having held the workshop on May 2<sup>nd</sup>. Both this Study and the Company's extensive proposals related to the proposed Clean Energy Your Way programs are welcome responses to the rapidly changing environment that electric utilities like Idaho Power serve.

While much valuable information was provided during the May 2<sup>nd</sup> workshop, the format of submitting questions/comments via a text chat feature was inherently limiting. Thank you for accepting additional input in this alternative fashion. CEO offers comments on four topics that we see as potentially adding to the efficacy of the Study.

1. Exports from customers with renewable on-site generation have valuable environmental characteristics. Failure to recognize the potential for such exports to allow Idaho Power to avoid the costs associated with purchasing additional RECs would unfairly bias the Study results.
2. The study should consider an alternative method for harnessing the location value of self-generator exports at certain advantageous locations within the Company's distribution system.
3. Time-of-Use (TOU) rates would be better focused on incenting changes in consumption patterns than in approximating variations in the marginal value of exports based on the timing of the export event.
4. The Study should address the value of exports from customers with on-site generation in reducing the fuel price risk all customers face as a result of current prices for natural gas being dramatically higher than were projected in either the 2019 or 2021 IRP.



# Clean Energy Opportunities for Idaho

**1 Exports from customers with renewable on-site generation have valuable environmental characteristics. Failure to recognize the potential for such exports to allow Idaho Power to avoid the costs associated with purchasing additional RECs would unfairly bias the Study results.**

RECs are not the only way to certify to customers that they are paying for clean energy. While some business customers' ESG goals may require the purchase of RECs as the specific form of certified renewable energy to meet their goals, many other customers could find exports from customers with renewable self-generation perfectly adequate.

If we heard correctly, CEO believes that Jared Ellsworth indicated during the workshop that the sole source of avoided cost the Company was considering for environmental characteristics was from reductions in payments under pollution regulations. CEO believes that approach would unfairly bias too low the analyzed value of avoided environmental costs.<sup>1</sup>

It has been noted in a separate docket that within the CEYW - Flexible program, more customers have expressed a desire to purchase clean energy than the Company currently has adequate RECs to serve. CEO believes exports from customers with renewable self-generation should be allowed to serve as a source of clean power CEYW customers wish to purchase.

CEO sees the Company's billing system is adequate to ensure reliable recording of such sales transactions. Further, CEO believes that the Company could require, as one of the terms related to exported energy, that the Company acquire all the environmental characteristics of the exported energy.

For these reasons, CEO believes the Study evaluation of Environmental Benefits associated with self-generating customer exports should include their value for avoiding costs to otherwise purchase RECs for "Green Power" or CEYW type programs.<sup>2</sup>

**2 The study should consider an alternative method for harnessing the location value of self-generator exports at certain advantageous locations within the Company's distribution system.**

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<sup>1</sup> "We have not been granted the legislative or executive authority to monetize many of the environmental attributes addressed by Parties and customers. That said, there are environmental considerations that are quantifiable and will be included in an ultimate determination of fair, just and reasonable terms for the Company's on-site generation program. The intent of these studies is to value the export to the Company's system." Order 35284, page 12

<sup>2</sup> Under the heading "Environmental and Other Benefits", the Commission stated "The Commission finds it reasonable that the Study include an evaluation of all benefits and costs that are quantifiable, measurable, and avoided costs that affect rates." Order 35284, page 27



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The Commission has recognized the potential for self-generation customers to avoid costs based on the location of the customers' exports.

*"Avoided distribution costs are locational benefits properly studied."*<sup>3</sup>

That said, allocating those benefits via customer specific locational pricing is not currently feasible and non-site specific pricing is unlikely to incent customer installations of self-generation that could avoid future distribution system upgrade costs.

CEO believes the Study should evaluate whether an alternative method is possible for harnessing the potential for increased customers' generation at some specific locations to avoid distribution system upgrade costs. Specifically, CEO requests that the Study evaluate whether the Company could provide incentives to reduce the cost for customers to install self-generation in locations within the distribution system where such self-generation could avoid future costs associated with distribution system upgrades. CEO believes it would be appropriate for the dollar amounts associated with those incentives to go into a regulatory asset upon which the Company could earn a return.

### **3 Time-of-Use (TOU) rates would be better focused on incenting changes in consumption patterns than in approximating variations in the marginal value of exports based on the timing of the export event.**

In the context of multiple related dockets, CEO perceives opportunities for using price signals to incent changes in consumption patterns and generally applauds the Company's consideration of TOU rates. However, CEO believes that TOU rate structures should be focused on changes to consumption patterns, which requires allowing self-generators access to time differentiated rates for consumption.

In IPC-E-21-41 the Company recognizes the need for substantial resource additions (many of which are likely to be solar generation) in the immediate future to address imminent generation capacity shortfalls in meeting late summer afternoon and early evening loads. In IPC-E-22-13 the Company requests certification of the need to purchase batteries, in part to allow time-shifting of that solar generation to meet those late afternoon, early evening loads.

Using TOU price signals for consumption makes great sense to move load from times of high marginal cost to serve to times with lower marginal costs. Currently, the periods with high marginal costs warranting a higher TOU price, largely result from a need to add load-serving capacity to meet rising late summer afternoon and early evening loads. Similarly, there are periods of lower than average marginal prices. As is displayed in the graph below, solar output

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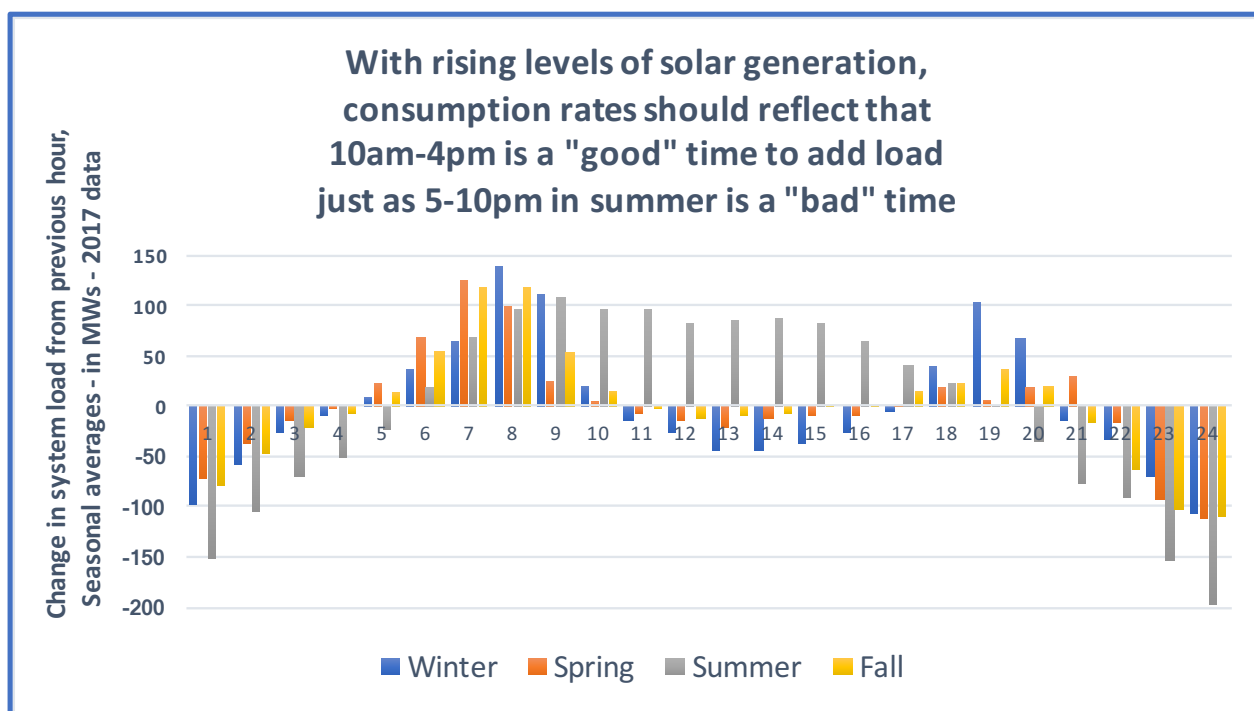
<sup>3</sup> Order 35284, page 19



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rises faster than load during a mid-day (say 10am-4pm) period. Using price signals to move some load from the high use periods (summer 5-10pm) where rising loads are requiring incremental investment to low marginal cost periods where some investment in batteries for time-shifting could be offset makes good economic sense.

CEO believes the asymmetrical proposal of higher TOU rates for exports only and in summer peak periods is too narrow. For example, an EV driver and self-generator coming home for work has no price signal to choose between charging the car at 6pm vs. at night. TOU rate changes should include allowing Schedule 6 & 8 customers access to time-differentiated rates for consumption, and both higher rates in high cost periods and lower rates in low cost times. As CEO detailed in comments made in IPC-E-21-40<sup>4</sup>, there are other sources of marginal avoided cost information than the TOU proposal mentioned at the workshop.



This chart shows the rate at which loads change by hour during the four seasons. Note that in Winter, Spring and Fall, loads fall during the 10am-4pm peak solar output period. Even in the Summer, although loads rise during the 10am-4pm period, solar output rises faster thus allowing more load to be served during that period at a very low marginal cost. Of course, loads fall in the night in all seasons but solar can't directly affect those opportunities.

<sup>4</sup> See IPC-E-21-40, CEO comments dated May 12, 2022, page 7



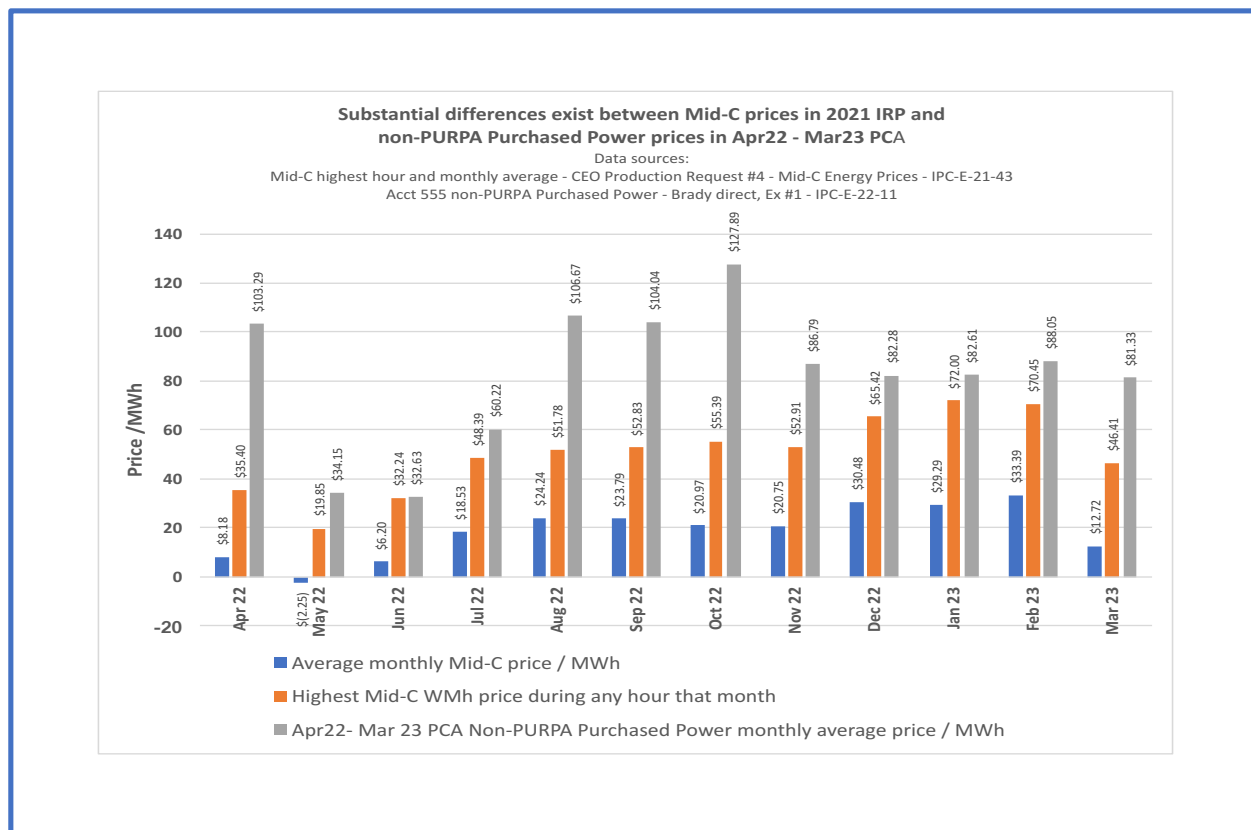
## 4 The Study should address the value of exports from customers with on-site generation in reducing the fuel price risk all customers face as a result of current prices for natural gas being dramatically higher than were projected in either the 2019 or 2021 IRP.

It is possible to read some ambiguity in the directions the Commission provided the Company regarding the data sources used for valuing customer exports. For example, the Commission noted on page 9 of Order 35284:

*“We remind the Company that the study must use the most current data possible, and the data must be readily available to the public and in the Commission’s decision-making record. Id. This does not specifically dictate use of either the 2019 or the 2021 Integrated Resource Plan (“IRP”) for the study.”*

While for purposes of calculating Avoided Energy values, the Commission said:

*“Provide the calculations and documentation for the avoided cost of exported energy using: (a) energy price assumptions in the Company’s most recently acknowledged IRP, and (b) market index price assumptions”. Order 35284, page 14*



The above graph shows that the “most recent data” (included in the Company’s current PCA request under IPC-E-22-11) forecasts dramatically higher natural gas driven marginal costs than the costs forecast in the 2021 IRP (IPC-E-21-43).



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The PCA submittal shows the Company projecting substantial power purchases in every month, with an annual total of such purchases equaling about 10% of customer load (180 aMWs of annual power purchases) at average monthly prices sometimes more than double the highest price the 2021 IRP forecasted for any hour of that month.

CEO has previously expressed concerns regarding the use of 2019 IRP price data due to start-up difficulties the Company experienced in its first use of a Capacity Expansion model.<sup>5</sup> Clearly, a comparison of the price data in IPC-E-22-11 with that the 2021 IRP shows prices from the 2021 IRP are grossly outdated.

Even if the Company believes Commission direction requires that they calculate avoided energy costs based on IRP price data, CEO believes the Study must address the potential for exports to reduce exposure for all customers by mitigating fuel price risk.<sup>6</sup> In addition to evaluating an ECR using 2021 IRP data, CEO asks that the study also evaluate the ECR using the price data in IPC-E-22-11.

Much like the verification testing IPC conducts in running multiple scenarios during the IRP process, this comparison of ECR values would indicate whether there are material differences between the 2021 IRP data and more current market conditions.

Respectfully submitted,

Mike Heckler  
Policy Director  
Clean Energy Opportunities for Idaho

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<sup>5</sup> IPC-E-21-21, CEO comments dated November 16, 2021, page 5

<sup>6</sup> See Section 10-Avoided risk, Order 35284 page 22