

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION )  
OF IDAHO POWER COMPANY TO ) CASE NO. IPC-E-24-07  
INCREASE RATES FOR ELECTRIC )  
SERVICE TO RECOVER COSTS )  
ASSOCIATED WITH INCREMENTAL )  
CAPITAL INVESTMENTS AND CERTAIN )  
ONGOING OPERATIONS AND )  
MAINTENANCE EXPENSES. )

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

MITCH COLBURN

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 Mitch Colburn. My business address  
5 is 1221 West Idaho Street, Boise, Idaho 83702. I am  
6 employed by Idaho Power as the Vice President of Planning,  
7 Engineering, and Construction.

8 Q. Please describe your educational and  
9 professional experience.

10 A. I graduated from the University of Idaho in  
11 2006 with a Bachelor of Science degree in Electrical  
12 Engineering, Summa Cum Laude. Thereafter, I obtained a  
13 Master of Engineering degree in Electrical Engineering from  
14 the University of Idaho in 2010 and a Master of Business  
15 Administration from Boise State University in 2015. I am a  
16 licensed Professional Engineer in the State of Idaho.

17 I have worked at Idaho Power since 2007. Prior to my  
18 current role, I served as Director of Engineering and  
19 Construction, Director of Resource Planning and Operations,  
20 Senior Manager of Transmission & Distribution Strategic  
21 Projects, Engineering Leader over 500 kilovolt ("kV") and  
22 Joint Projects. I held several engineering roles prior to  
23 these leadership roles.

24 Q. What are your duties as Vice President of  
25 Planning, Engineering, and Construction?



1 Necessity ("CPCN"),<sup>1</sup> the distribution portion of those  
2 investments which are proposed for recovery in this case.  
3 My testimony will conclude with a discussion of a project  
4 resulting from a grid modernization initiative, which will  
5 ultimately support all generation, transmission, and  
6 distribution investments.

7 **II. TRANSMISSION INVESTMENTS**

8 Q. Please describe how the Company defines the  
9 transmission-related portion of the electrical grid.

10 A. Transmission generally describes the bulk or  
11 high voltage components of the electrical grid, including  
12 stations and high voltage lines typically utilized to  
13 transmit large volumes of electricity closer to load  
14 centers. On Idaho Power's system, transmission equipment is  
15 considered to be facilities at or above 138 kilovolts  
16 ("kV"), with an additional sub-transmission component  
17 comprised of facilities at 46-kV and 69-kV.

18 Q. How have the transmission-related investments  
19 grown since the completion of the last general rate case in  
20 2023, Case No. IPC-E-23-11 ("2023 GRC")?

21 A. Of the \$860 million in infrastructure placed

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<sup>1</sup> *In the Matter of the Application of Idaho Power Company for a Certificate of Public Convenience and Necessity to Construct System Improvements for Wood River Valley Customers*, Case No. IPC-E-16-28, Certificate No. 537 (Jul. 26, 2022); *In the Matter of the Idaho Power Company's Petition for Approval of a Customer Surcharge and Modified Line Route Configuration for Construction of a New 138 kV Transmission Line in the Wood River Valley*, Case No. IPC-E-21-25, Amended Certificate No. 537 (Aug. 2, 2022).

1 in service over this period, approximately \$125.4 million  
2 reflects expected investment in the Company's transmission  
3 system in 2024, or growth of 9.3 percent since the  
4 Company's 2023 GRC.

5 Q. What drives investment in the transmission  
6 system?

7 A. Growth and reliability are the primary drivers  
8 of the transmission investments reflected in the Company's  
9 request in this case. Growth-related projects typically  
10 include either the construction of new transmission  
11 facilities or the expanded capacity of existing facilities.  
12 Reliability projects typically include the proactive  
13 reconstruction or replacement of aging facilities. My  
14 testimony will discuss three transmission-related major  
15 projects expected to be complete in 2024, all of which were  
16 required to address aging infrastructure: (1) the rebuild  
17 of a portion of Line 423, (2) the rebuild of a portion of  
18 Line 902, and (3) the replacement of a series capacitor  
19 bank.

20 ***The Rebuild of Line 423***

21 Q. Please describe the portion of Line 423 that  
22 was rebuilt.

23 A. Line 423 is a 138-kV line that runs from  
24 Ontario to the Quartz substation, south of Baker City in  
25 Oregon. This project rebuilt the Huntington to Quartz 138-

1 kV portion of Line 423 ("Huntington-Quartz line") due to  
2 the age of the existing line and resulting reliability  
3 issues. When evaluating potential outage sources it was  
4 noted that due to the age of the lines, shield wires had  
5 not been installed on the lines and therefore lightning was  
6 likely contributing to the performance issues. Thus, the  
7 Company engaged POWER Engineers, Inc. ("POWER Engineers"),  
8 to perform a study to analyze the entire Ontario to Quartz  
9 138-kV line, and specifically the Huntington to Quartz  
10 section to determine if a rebuild on the line would  
11 increase reliability.

12 Q. What were the results of the analysis?

13 A. POWER Engineers used a lightning performance  
14 software, analyzing three cases, each with two different  
15 footing resistance assumptions: (1) the existing wood  
16 structure with no shield wires, (2) a new wood structure  
17 with two shield wires, and (3) a new steel structure with  
18 two shield wires. The results indicated that the overall  
19 line performance would be significantly improved with the  
20 addition of shield wires and further improvement is  
21 expected if steel structures were used in combination with  
22 the addition of shield wires.

23 Q. Did Idaho Power replace the existing wood  
24 structures with steel structures?

25 A. Yes. The Huntington-Quartz line rebuild

1 involved the replacement of 286 structures from the  
2 Huntington substation to the Quartz substation with tubular  
3 steel 138-kV structures with shield wire and optical ground  
4 wire for fiber optic communications. The majority of the  
5 existing wood structures were installed in 1951 and  
6 therefore did not have space for the addition of shield  
7 wires. Moreover, because the Huntington-Quartz line was  
8 identified as being in a wildfire prone area, the project  
9 was prioritized, and grid hardening performed as part of  
10 the rebuild. Grid hardening includes the use of steel  
11 structures for resiliency against wildfires and improved  
12 customer reliability. The project is identified in Table 13  
13 of the Company's 2024 Wildfire Mitigation Plan,<sup>2</sup> which lists  
14 the transmission line rebuild projects planned over the  
15 next five years and necessitating steel structures in  
16 wildfire prone areas.

17 Q. How does the addition of shield wires improve  
18 reliability?

19 A. Shield wires are installed above the  
20 conductors for the purpose of channeling lightning strikes  
21 to ground, which helps to prevent or minimize damage to  
22 power lines and equipment, avoid major outages on the line,  
23 and mitigate maintenance and repair costs. The rebuild of  
24 the Huntington-Quartz line, with a total cost of

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<sup>2</sup> [2024 Wildfire Mitigation Plan at 89-91.](#)

1 approximately \$15.0 million and an anticipated in service  
2 of October 2024, was necessary to ensure Idaho Power  
3 continues providing safe, reliable electric service to its  
4 customers.

5 ***The Rebuild of Line 902***

6 Q. What drove the rebuild of Line 902?

7 A. Line 902 is one of the three 230-kV  
8 transmission lines that run from the Boise Bench substation  
9 to the Midpoint substation. Line 902 has been connected to  
10 and split into many line sections by station additions over  
11 the years, and is now comprised of the Midpoint to Justice,  
12 Justice to Mountain Air Wind Tap, Mountain Air Wind Tap to  
13 Rattlesnake, Rattlesnake to DRAM, and finally DRAM to Boise  
14 Bench segments. Similar to Line 423, Line 902 was  
15 originally built over 70 years ago, with 478 of the  
16 original structures from 1947 in place.

17 The Company follows transmission maintenance and  
18 inspection practices in accordance with Western Electricity  
19 Coordinating Council and the North American Electric  
20 Reliability Corporation ("NERC") requirements to ensure  
21 compliance with applicable safety and reliability standards  
22 and takes proactive steps to repair or replace transmission  
23 line components on an ongoing basis as part of asset  
24 management and aging infrastructure assessments. Pursuant  
25 to its Transmission Maintenance and Inspection Plan



1 ("TMIP"), the Company performs line inspections to identify  
2 conditions or defects and inform, prioritize, and schedule  
3 maintenance activities. Routine line patrols are conducted  
4 annually and comprehensive maintenance inspections are  
5 generally performed every 10 years, and include a detailed  
6 inspection of all transmission line components and a pole  
7 inspection and ground-line treatment of all wood poles in  
8 the line. When inspected, many poles and cross arms on Line  
9 902 were found to be in poor condition and as a result of  
10 this process, Line 902 was identified as needing to be  
11 rebuilt. The rebuild project will occur in four phases, the  
12 first of which is included in the Company's request in this  
13 case, approximately 36-mile Rattlesnake substation to DRAM  
14 substation section ("Rattlesnake to DRAM").

15 Q. What are the consequences of delaying the  
16 rebuild of the line?

17 A. Delaying the rebuild of Line 902 could result  
18 in higher maintenance and repair costs should the  
19 structures need replacement individually, while also  
20 potentially reducing reliability. Further, the Company's  
21 Integrated Resource Plan has repeatedly identified the need  
22 for resource additions east of the Treasure Valley and  
23 rebuilding the line with larger conductors is the most  
24 cost-effective way to integrate those resources.

25 Q. Were there any other implementation

1 considerations related to the Line 902 rebuild project?

2 A. Yes. The Company's inspection and maintenance  
3 activities helps inform planning for rebuild projects  
4 including consideration of wildfire risk and the resulting  
5 prioritization of transmission line rebuild projects. All  
6 four phases of the Line 902 rebuild fall within the  
7 wildfire prone areas as identified in Idaho Power's  
8 Wildfire Mitigation Plan, including the Rattlesnake to DRAM  
9 section. Therefore, all four phases of the line rebuild  
10 will utilize steel structures for resiliency against  
11 wildfires and to improve customer reliability.

12 Q. What is the total investment associated with  
13 the Rattlesnake to DRAM rebuild included in the Company's  
14 request in this case?

15 A. Idaho Power is requesting to include the  
16 revenue requirement associated with an investment amount of  
17 \$21.2 million in rates for the Rattlesnake to DRAM rebuild,  
18 which is anticipated to be placed in service in December  
19 2024.

20 ***The Series Capacitor Bank Replacement***

21 Q. What drove the need for the replacement of the  
22 series capacitor bank?

23 A. The series capacitor bank at the Midpoint  
24 Station was over 40 years old, having been installed in  
25 1980 and needed replacement. While the asset life of a

1 series capacitor bank can be longer, major components need  
2 to be replaced every 15 to 30 years, depending on the part.  
3 However, new parts for the series capacitor bank at the  
4 Midpoint Station were difficult to procure and some parts  
5 had become obsolete, including certain relay parts, control  
6 potential transformers, un-balance current transformers,  
7 spark gaps, and the triggering circuit for the spark gap.

8 Q. Was a deferment in the replacement of the  
9 series capacitor bank an option?

10 A. No. Replacement of the series capacitor bank  
11 at the Midpoint Station had first been considered in 2015  
12 and was deferred several times. This series capacitor bank  
13 is jointly-owned, and therefore jointly-funded with  
14 PacifiCorp, requiring company approval, and coordination  
15 with PacifiCorp's corresponding capacitor banks. A failure  
16 of a trigger or spark gap, or a loss of a critical relay,  
17 could disable either one or both of the series capacitor  
18 bank segments indefinitely. The bank ensures the Midpoint  
19 Station transformer is not overloaded and prevents derating  
20 the transmission paths at Midpoint up to 280 MW's, which is  
21 critical to the continued reliability.

22 Q. When did work to replace the Midpoint Station  
23 series capacitor bank begin?

24 A. In accordance with the Joint Ownership and  
25 Operating Agreement between Idaho Power Company and

1 PacifiCorp ("JOOA"), Idaho Power sponsored the project,  
2 commencing in early 2022. The project was completed in  
3 April 2024, and the transmission investments placed in  
4 service. Also, in accordance with the JOOA, PacifiCorp  
5 funded 36.33 percent of the project therefore the amounts  
6 included in the Company's request in this case, \$11.3  
7 million, reflect only Idaho Power's 63.67 percent share of  
8 the series capacitor bank investment.

9 Q. Do the transmission-related major projects you  
10 discussed demonstrate a prudent approach to investment in  
11 the Company's transmission system and support Idaho Power's  
12 transmission-related rate base included in this case?

13 A. Yes. In just one year, the Company is  
14 investing over \$125.4 million in its transmission system.  
15 Idaho Power is constantly evaluating the capacity needs,  
16 resiliency, and reliability of its transmission system,  
17 ensuring that the electrical grid is stable and in  
18 compliance with NERC standards. Further, the Company is  
19 dedicated to the safety of its customers and communities as  
20 evidenced in the continuously evolving Wildfire Mitigation  
21 Plan. Idaho Power works to reduce the risk of wildfire  
22 ignition through the implementation of core mitigation  
23 approaches, such as grid hardening of the electrical  
24 system, as evidenced by the transmission-related  
25 investments I discussed in my testimony.

1                                   **III.    DISTRIBUTION INVESTMENTS**

2           Q.       Please describe how the Company defines the  
3 distribution-related portion of the electrical grid.

4           A.       Distribution refers to equipment at 34.5-kV  
5 and below, including lower voltage lines, substations, and  
6 transformers that are typically utilized to provide  
7 electricity at the lower voltages required by the majority  
8 of end-use customers.

9           Q.       How have the distribution-related investments  
10 grown since the completion of the 2023 GRC?

11          A.       Of the \$860 million in infrastructure placed  
12 in service over this period, approximately \$186.6 million  
13 reflects expected investment in the Company's distribution  
14 system in 2024, or growth of 10.2 percent since the 2023  
15 GRC.

16          Q.       What factors contributed to investment in  
17 Idaho Power's distribution system over this period?

18          A.       Growth in the distribution system can be  
19 directly tied to the addition of new customers, as every  
20 new customer, regardless of service level, requires some  
21 form of additional equipment. In addition, similar to  
22 certain components of the Company's generation and  
23 transmission systems, Idaho Power has also undertaken a  
24 number of key projects to proactively harden its  
25 distribution system to maintain and improve reliability in

1 light of aging infrastructure. The next section of my  
2 testimony will discuss at length the distribution-related  
3 major project completed in 2024, the distribution portion  
4 of the WRV Project, including providing an overview of its  
5 long and complex regulatory history.

6 **IV. WOOD RIVER VALLEY RELIABILITY PROJECT**

7 Q. Please describe the WRV Project.

8 A. Idaho Power's WRV Project includes a  
9 combination of electric distribution, transmission, and  
10 substation work, in which the Company will bury or rebuild  
11 existing distribution lines as well as new overhead and  
12 underground transmission line between the Wood River  
13 substation in Hailey and the Ketchum substation in  
14 northeastern Ketchum. The new transmission line and related  
15 facilities will provide a redundant source of energy into  
16 the northern portion of the Wood River Valley, including  
17 the communities of Ketchum and Sun Valley and portions of  
18 Blaine County (collectively referred to as the "North  
19 Valley").

20 Q. What drove the need for the WRV Project?

21 A. The North Valley contains the resort  
22 communities of Ketchum and Sun Valley as well as the Sun  
23 Valley ski resort. Currently, the North Valley is served by  
24 the Wood River and Ketchum substations, which are connected  
25 to the Company's transmission system by a single-source,

1 12.4 mile, 138-kV radial line that was built in 1962 with  
2 wooden poles. If the line experiences sustained outages,  
3 and the outages may be lengthy because access to repair the  
4 line is impeded by residential development, rough terrain,  
5 and aged construction roads in many areas. Further, the  
6 mountainous terrain limits vehicle access, impedes  
7 equipment set-up, and contributes to avalanche threats.  
8 Ultimately, the need to construct the WRV Project was to:  
9 (1) increase reliability to the area by providing a  
10 redundant source of energy, and (2) reconstruct the  
11 existing and aging 138-kV radial transmission line without  
12 long-term disruption of service to the North Valley.

13 Q. Does the Company have standard business  
14 practices it follows for determining when construction of a  
15 redundant transmission line is needed?

16 A. Yes. Idaho Power generally initiates and  
17 constructs a second transmission source and transformer  
18 when a substation peak load is projected to exceed 40  
19 megawatts ("MW"). With peak loads of about 60 MW at the  
20 Ketchum and Elkhorn substations<sup>3</sup>, coupled with the winter  
21 tourism population in the North Valley, the need for a  
22 second transmission line was strongly supported. Multiple  
23 transmission sources are standard practices that Idaho

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<sup>3</sup> The Elkhorn substation is located between the Ketchum and Wood River substations, via a tap connection on the existing Wood River to Ketchum line.

1 Power implements to reduce the likelihood of sustained  
2 outages. Additionally, the Company installs distribution  
3 circuit tie switches, where adjacent circuits are  
4 available, to reduce the duration of sustained outages on  
5 the radially sourced distribution system.

6 Q. Were there any alternatives to the redundant  
7 transmission line component of the WRV project?

8 A. No. Reconstruction of the existing line, which  
9 was required whether a redundant transmission line was  
10 constructed or not, was not feasible absent long-term  
11 outages without building either a redundant transmission  
12 line or a temporary line that would be removed after  
13 construction because of the extreme disruption of service  
14 required by the reconstruction.

15 ***WRV Project Background***

16 Q. Prior to commencing work, did Idaho Power  
17 perform any community outreach and invite public  
18 participation regarding the plan for the WRV Project?

19 A. Yes. In 1995, the Company first undertook an  
20 extensive public involvement process regarding the proposed  
21 construction of the WRV Project. At the conclusion of the  
22 process, Idaho Power carefully evaluated the input received  
23 from the area's public officials and citizens. The general  
24 response at that time was that, despite the unavoidable  
25 risk of an outage to the existing transmission line, the



1 proposed new transmission line should not be built. The  
2 reasons for the public opposition included the difficulty  
3 of finding an acceptable route for the transmission line,  
4 aesthetic impacts, perceived health and safety concerns,  
5 and the requirement that local funding of incremental costs  
6 of placing part or all the line underground would be  
7 required. The project was put on hold indefinitely and  
8 Idaho Power's previous Certificate of Public Convenience  
9 and Necessity to construct the line was cancelled.<sup>4</sup>

10 Subsequently, in 2004, Idaho Power initiated several  
11 Community Advisory Committees ("CAC") and undertook a  
12 comprehensive, cooperative transmission planning exercise  
13 with the communities and leaders across its service  
14 territory. These committees were created to provide a  
15 cooperative effort between the Company and the communities  
16 it serves in developing an outline for prioritized  
17 improvements and additions to Idaho Power's transmission  
18 and substation infrastructure. One of those, the Wood River  
19 CAC, was convened in 2007 and developed the Wood River  
20 Valley Electrical Plan ("WREP"), a comprehensive plan for  
21 future transmission facilities in the Wood River Valley.

22 Q. Did the WREP include some form of the WRV

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<sup>4</sup> *In the Matter of the Application of Idaho Power Company for an Amended Certificate of Public Convenience and Necessity No. 272, Case No. IPC-E-95-06, Order No. 26107 and cancelled Certificate No. 272 (Aug. 1995); Case No. U-1006-89, Order No. 11315 and Certificate No. 272 (Feb. 1974).*

1 Project?

2           A.       Yes. The WREP included construction of the  
3 redundant 138-kV transmission line between the Wood River  
4 and Ketchum substations. The WREP was updated in 2011 after  
5 additional deliberations and extensive public outreach, and  
6 in 2012 the CAC reconvened to provide additional input for  
7 planned open house events. In 2014, both the City of  
8 Ketchum and the Ketchum Energy Advisory Committee were  
9 invited to join the CAC, which reaffirmed the need for a  
10 second energy path into the North Valley. While most of the  
11 parties generally agreed upon the purpose and need for the  
12 redundant transmission line, the consensus opinion was that  
13 a feasible route could only be obtained and permitted if at  
14 least a portion of the line was underground. However, the  
15 parties were unable to reach agreement about the funding  
16 and payment of any incremental cost difference between an  
17 overhead, or least-cost alternative, and an underground, or  
18 higher-cost build.

19           Q.       Did Idaho Power provide an option for  
20 undergrounding a portion of the WRV Project such that no  
21 incremental cost recovery from the local jurisdictions  
22 would be required?

23           A.       Yes. The proposed line route and facilities  
24 included a 138-kV overhead transmission line from the Wood  
25 River substation, north along Highway 75, to an underground

1 transmission transition point near Elkhorn Road, and then  
2 underground to the Ketchum substation. These proposed  
3 facilities would follow the same path as the existing  
4 distribution lines, replacing them and minimizing the  
5 aesthetic impact. The route was economically equivalent to  
6 the Company's standard construction configuration and  
7 therefore would not require any additional incremental cost  
8 recovery from the local jurisdictions.

9 ***CPCN for the WRV Project***

10 Q. You indicated Idaho Power had previously filed  
11 a request for a CPCN for a new transmission line to serve  
12 the North Valley area but withdrew the request. Did the  
13 Company file a subsequent request for a CPCN following  
14 community consensus on a feasible route that included Idaho  
15 Power's proposed solution that would not require  
16 incremental cost recovery from local jurisdictions?

17 A. Yes. On November 8, 2016, the Company filed  
18 Case No. IPC-E-16-28, requesting the Commission find that  
19 the new 138-kV transmission line and related facilities to  
20 provide redundant service from the Wood River substation  
21 into the Ketchum substation was needed, and further  
22 requesting the Commission grant a CPCN for construction of  
23 the line as proposed and agreed upon by the local  
24 jurisdictions. The Commission issued Order No. 33872 on  
25 September 15, 2017, granting Idaho Power's request for a

1 CPCN for a second 138-kV line, approving the requested  
2 route of overhead transmission from the Wood River  
3 substation to the transition point near Elkhorn Road, then  
4 underground transmission to the Ketchum substation.

5 Q. At the time the CPCN was issued, had the  
6 Company received the local permits necessary for  
7 construction of the new 138-kV line?

8 A. No. Prior to the CPCN proceeding, Idaho Power  
9 submitted an application for a Conditional Use Permit  
10 ("CUP") to the Blaine County Board of Commissioners  
11 ("County Board"), which was ultimately denied. Subsequent  
12 to the issuance of the CPCN, the Company filed a new CUP  
13 with the County Board to seek out a mutually acceptable  
14 route configuration that was consistent with the CPCN route  
15 and acceptable to Blaine County, with the opportunity to  
16 mutually agree to certain micro-siting of facilities, and  
17 for the County Board to request additional undergrounding  
18 should it identify a method to fund the additional  
19 incremental cost of such undergrounding.

20 Idaho Power then carried out extensive public  
21 involvement and local permitting efforts relating to the  
22 transmission line project and, although lengthy, ultimately  
23 came to an agreement with the County Board on a line route  
24 configuration, as well as a surcharge mechanism to fund the  
25 incremental cost of additional undergrounding by Idaho

1 Power's customers in Blaine County.

2 **Final WRV Project Route Configuration**

3 Q. What changes were made to the line route  
4 configuration that required the establishment of a  
5 surcharge mechanism?

6 A. Following filing of the new CUP application in  
7 November 2017, Idaho Power worked with the Blaine County  
8 Planning and Zoning ("P&Z") Commission, with engagement  
9 from the County Board, and lengthy public hearing  
10 processes, conducting extensive analysis of the micro-  
11 siting options identified by the P&Z Commission. The CUP  
12 application was approved on January 15, 2019, though no  
13 specific route for the line was approved. While several  
14 parties appealed this decision, the County Board ultimately  
15 affirmed the P&Z Commission's CUP grant on appeal, with the  
16 condition that "the entire transmission line be  
17 undergrounded from the Wood River Substation north to the  
18 City of Ketchum.<sup>5</sup> However, recognizing it could be difficult  
19 to secure the required funding to bury the entire  
20 transmission line, the decision left open the possible  
21 consideration of "an overhead transmission line in this  
22 area."<sup>6</sup>

23 Securing funding to underground substantial portions

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<sup>5</sup> County Board's June 2019 Decision on Appeal.

<sup>6</sup> *Id.*

1 of the line did prove difficult, although the County Board  
2 explored a variety of options, including passing a bond or  
3 government grants. The County Board, with consultation from  
4 the P&Z Commission, prioritized portions of the line and  
5 facilities for undergrounding. To cover the cost of the  
6 incremental undergrounding, the County Board asked Idaho  
7 Power to develop a surcharge mechanism that would be placed  
8 on Blaine County customers' electric bills.

9           Ultimately the new line configuration, referred to  
10 as the Owl Rock Road Route, was agreed upon by all parties  
11 involved in the P&Z and CAC efforts, and included the  
12 burial of: (1) an additional 1.4 miles of transmission,  
13 located to the south from Elkhorn Road to near Owl Rock  
14 Road, and (2) the existing distribution line for  
15 approximately 8 miles along the planned route along  
16 Buttercup Road to Highway 75. The transmission line would  
17 include overhead construction from the Wood River  
18 substation to the underground transition point at Owl Rock  
19 Road. Additionally, rather than place the existing  
20 distribution lines as under-build on the new overhead  
21 transmission structures, the existing distribution lines  
22 along the route would be buried. This will both reduce the  
23 height of the transmission poles and reduce the number of  
24 lines in the air as the transmission line will have three  
25 energized wires while the existing distribution line has

1 between three and six energized wires and one neutral wire.

2 Q. Did the County Board approve the CUP for the  
3 Owl Rock Road Route?

4 A. Yes. On December 22, 2020, Idaho Power filed  
5 an application to the County Board for CUP approval of the  
6 Owl Rock Road Route funded by a surcharge mechanism to be  
7 placed on Blaine County customers' electric bills. The  
8 County Board approved the CUP for the Owl Rock Road Route  
9 on March 9, 2021. Under this CUP, the County Board modified  
10 the "all underground" condition for the WRV Project and  
11 replaced the language with a condition that the CUP was  
12 contingent on partial undergrounding as decided on with the  
13 Owl Rock Road Route. This final CUP from the County Board  
14 gave Idaho Power authority to move forward with an  
15 application with the Commission for approval of a modified  
16 line route CPCN based on the Owl Rock Road Route, as well  
17 as authority to develop a surcharge that would be used to  
18 collect the incremental costs of undergrounding from Blaine  
19 County customers.

20 Q. Please describe the intent of the surcharge  
21 mechanism.

22 A. As I discussed earlier in my testimony, to  
23 recover the incremental costs of undergrounding the section  
24 of transmission and distribution lines prioritized by the  
25 County Board, the Company was asked by the County Board to

1 develop a monthly surcharge to be applied to Idaho Power's  
2 Blaine County customers' bills over an estimated 20-year  
3 period.

4 Q. Did the Company receive approval from the  
5 Commission for the changes to the line route configuration  
6 and resulting surcharge mechanism?

7 A. Yes. On June 28, 2022, in Case No. IPC-E-21-  
8 25, the Commission issued Order No. 35452, finding the  
9 modified line configuration for the WRV Project and  
10 implementation of a surcharge mechanism were fair, just,  
11 and reasonable.<sup>7</sup> The Commission issued an amended CPCN to  
12 reflect the new line route configuration on August 2, 2022.  
13 Figure 1 below is the Owl Rock Road Route, identifying the  
14 transmission line and line segments to be buried.

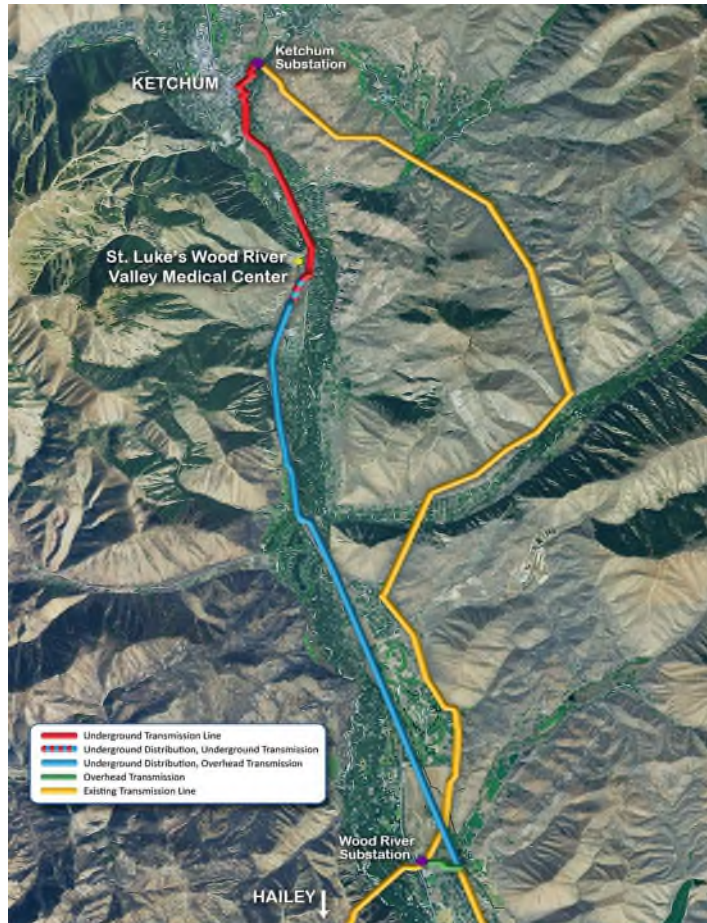
15 //

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<sup>7</sup> Case No. IPC-E-21-25, Order No. 35452 at 16 (June 28, 2022).



1 **FIGURE 1 - WRV PROJECT**



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3 ***WRV Project Costs***

4 Q. What is the status of the WRV Project?

5 A. In the fall of 2023, work began on the  
6 distribution line portion of the WRV Project and continued  
7 until the weather prohibited progress. Construction resumed  
8 again in the spring of 2024 and work is anticipated to be  
9 complete by November 2024.

10 Q. The distribution undergrounding is a portion  
11 of the broader WRV Project. What work is being completed in  
12 November 2024?

1           A.       Work on the WRV Project began with the  
2 undergrounding of approximately eight miles of the existing  
3 distribution line along Buttercup Road and Highway 75, to  
4 allow the future transmission line to be built with shorter  
5 transmission poles to meet county height requirements. To  
6 prepare for undergrounding of the distribution line, crews  
7 first excavated a duct bank and made multiple bores along  
8 the eight-mile route. Next, the distribution line is  
9 installed in the duct bank and equipment is installed to  
10 connect existing customers.

11           Q.       Has Idaho Power included the costs associated  
12 with the distribution line portion of the WRV Project,  
13 which is anticipated to be completed in November 2024, in  
14 the Company's request in this case?

15           A.       Yes. However, the Company has reduced the  
16 total project costs by the estimated incremental  
17 undergrounding costs of distribution, as those costs will  
18 be recovered from Idaho Power's Blaine County customers  
19 only through the surcharge mechanism. Concurrent with the  
20 Company's request in this proceeding, Idaho Power is making  
21 a compliance filing in Case No. IPC-E-24-22<sup>8</sup> to update the  
22 distribution portion of the surcharge approved with Order

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<sup>8</sup> *In the Matter of Idaho Power Company's Compliance Filing to Update the Customer Surcharge to Collect Incremental Costs of Distribution Undergrounding of the New 138 KV Transmission Line in the Wood River Valley and Establish Necessary Regulatory Accounting Treatment.*

1 No. 35452, effective the month following the month of line  
2 energization.

3 Q. You indicated the Company reduced the WRV  
4 Project costs associated with the distribution line  
5 included in Idaho Power's request in this case by an  
6 estimate of the incremental undergrounding costs. Why was  
7 an estimate used as opposed to actual costs?

8 A. Order No. 35452 acknowledged the Company's  
9 methodology for computing the estimated incremental  
10 grounding costs. Because the distribution line  
11 configuration Idaho Power would have constructed under a  
12 standard construction configuration was not built, the  
13 Company cannot identify the precise costs it would have  
14 incurred under the hypothetical scenario. That is, the  
15 request for proposals issued for the work to be performed  
16 or materials to be procured was based on a different  
17 distribution line configuration and therefore Idaho Power  
18 cannot compute with certainty the portion of the costs that  
19 would have been incurred under a different distribution  
20 line configuration.

21 Q. How did Idaho Power develop the incremental  
22 cost estimate?

23 A. To estimate the incremental costs associated  
24 with the modified distribution line configuration, the  
25 Company built a cost estimate associated with a comparable

1 overhead distribution line rebuild with a standard  
2 construction configuration which entails replacement of all  
3 distribution line equipment, including overhead wires and  
4 pole mounted equipment, except for most of the distribution  
5 poles. Costs were added to reflect: (1) the overhead  
6 distribution work being performed on an energized system,  
7 (2) the replacement of a portion of the existing wood poles  
8 with taller, steel poles as required by the line design,  
9 and (3) the addition of distribution intersect poles that  
10 would have been required for the distribution under-build.  
11 Finally, Allowance for Funds Used During Construction,  
12 overheads, and a contingency were applied to the total  
13 project costs as is standard when developing a project cost  
14 estimate.

15 Q. What are the WRV Project costs included in the  
16 Company's request in this case?

17 A. Net WRV Project costs of \$11.8 million are  
18 included for recovery in this case from all customers,  
19 which reflects the estimated costs associated with the  
20 distribution portion of the WRV Project less the amount  
21 being recovered through the separate WRV Project surcharge.

22 V. GRID MODERNIZATION INVESTMENT

23 Q. Please describe the grid modernization  
24 initiative.

25 A. The grid modernization initiative is a set of

1 multi-year projects designed to maintain and improve  
2 reliability on the Company's electrical grid. This suite of  
3 projects replaces and modernizes equipment nearing its end  
4 of life and updates the Company's system with modern  
5 technology to enhance reliability while keeping costs low.

6 Q. What was the grid modernization initiative  
7 project identified as a major project and included in Idaho  
8 Power's request in this case?

9 A. Work on the first phase of the single vendor  
10 platform project under the Company's grid modernization  
11 initiative will be completed and placed in service in 2024.  
12 Idaho Power currently leverages three stand-alone grid  
13 control systems for managing the bulk electric system,  
14 optimizing distribution assets, and responding to customer  
15 outages. The systems are the (1) Energy Management  
16 ("EMS")/Supervisory Control and Data Acquisition ("SCADA")  
17 system, (2) Outage Management System ("OMS"), and  
18 Integrated Volt/Var Control, a Distribution Management  
19 System ("DMS"). Because these systems are independent, they  
20 require three sets of hardware, three network models, three  
21 support organizations, and complex integrations between the  
22 systems. The single vendor platform initiative replaces  
23 these numerous vendor solutions, consolidating the EMS,  
24 OMS, and DMS into a single vendor platform.

25 Q. What are the benefits of a single vendor

1 platform?

2           A.       The Company's investments in distribution  
3 management technologies as part of grid modernization are  
4 laying a foundation for an Advanced DMS platform. An  
5 Advanced DMS will provide significant enhancements in  
6 modeling, control, and system awareness needed to support  
7 the grid, providing real-time load flow and new advanced  
8 applications such as fault locating, isolation and system  
9 restoration, enhanced switch order management, and  
10 Distributed Energy Resource Management tools. The real-time  
11 load flow and distributed energy resource awareness will  
12 improve Idaho Power's operational visibility into the  
13 distribution network and provide more direct control to  
14 operators, improving reliability for customers and  
15 increasing the Company's ability to effectively manage  
16 additional distributed generation, which is necessary with  
17 the growth of distributed energy resources. The single  
18 vendor platform specifically will reduce costs, allow the  
19 Company to consolidate knowledge and resources, and  
20 increase overall reliability.

21           Q.       What is the first phase of the single vendor  
22 platform project that will be completed and placed in  
23 service in 2024?

24           A.       The first phase of the single vendor platform  
25 project, which is anticipated to be placed in service in

1 October 2024, is associated with the EMS/SCADA system. The  
2 EMS/SCADA system monitors and controls transmission and  
3 generation assets as well as distribution feeder relays.  
4 During the first phase of the project, Idaho Power set up  
5 an EMS/SCADA system to replace the existing EMS system, and  
6 also set up a base SCADA model, providing a foundation for  
7 subsequent phases of the single vendor platform project to  
8 be built. The Company has included the approximately \$11.6  
9 million investment in the revenue requirement request in  
10 this case.

11 Q. Does the EMS/SCADA system portion of the  
12 single vendor platform project demonstrate a prudent  
13 approach to investment in the Company's system?

14 A. Yes. The replacement and modernization of  
15 equipment is necessary to maintain and improve reliability  
16 on the Company's electrical grid.

## 17 VI. CONCLUSION

18 Q. Please summarize your testimony.

19 A. As evidenced by the continued growth in  
20 transmission and distribution investments, the Company  
21 continues its thoughtful and prudent approach to  
22 construction and maintenance of its transmission and  
23 distribution systems to ensure Idaho Power maintains a safe  
24 and reliable system, while also making great strides to  
25 mitigate wildfire risk.

1           Q.     Does this conclude your direct testimony in  
2 this case?

3           A.     Yes, it does.

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**DECLARATION OF MITCH COLBURN**

I, Mitch Colburn, declare under penalty of perjury under the laws of the state of Idaho:

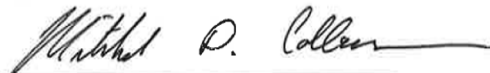
1. My name is Mitch Colburn. I am employed by Idaho Power Company as the Vice President of Planning, Engineering, and Construction.

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

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

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

SIGNED this 31st day of May 2024, at Boise, Idaho.

Signed   
MITCH COLBURN