RECEIVED
May 30, 2025
IDAHO PUBLIC
UTILITIES COMMISSION

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION OF IDAHO POWER COMPANY FOR AUTHORITY TO INCREASE ITS RATES AND CHARGES FOR ELECTRIC SERVICE IN THE STATE OF IDAHO AND AUTHORITY TO IMPLEMENT CERTAIN MEASURES TO MITIGATE THE IMPACT OF REGULATORY LAG.	)	CASE NO. IPC-E-25-16

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

BRIAN R. BUCKHAM

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

A. My name is Brian Buckham. My business address is 1221 West Idaho Street, Boise, Idaho 83702. I am employed by Idaho Power and Idaho Power's parent company, IDACORP, Inc. ("IDACORP"), as Senior Vice President, Chief Financial Officer, and Treasurer.

Q. Please describe your educational background.

A. I received a Bachelor of Science in Mining Engineering from the University of Idaho, a Master of Business Administration from Gonzaga University, and a Juris Doctor from the University of Idaho College of Law.

Q. Please describe your work experience with Idaho Power.

A. I was hired in 2010 as an attorney in Idaho Power's Legal Department, where I focused on securities compliance and external reporting, capital markets transactions, corporate governance, and commercial transactions, among other areas. This followed several years of private law practice at two global law firms, where my practice areas focused on both domestic and international capital markets transactions, securities, corporate governance, and mergers and acquisitions. In 2016, I was appointed as IDACORP's and Idaho Power's Vice

President & General Counsel, and in 2017 as Senior Vice President & General Counsel, where in both roles I was responsible for leadership of the legal, corporate governance, compliance, risk management, and physical and cyber security functions at IDACORP and Idaho Power. In 2022, I was appointed as IDACORP's Senior Vice President and Chief Financial Officer, where I oversee the companies' finance, accounting, financial planning and analysis, investor relations, treasury, tax, Sarbanes-Oxley compliance, internal audit, environmental compliance, regulatory compliance, credit risk, risk management, and physical and cyber security functions.

Q. What are your duties as Senior Vice President and Chief Financial Officer of Idaho Power as they relate to this proceeding?

A. I oversee the direct financial planning and forecasting, capital procurement, financing, and investment of funds for Idaho Power, as well as supervise corporate liquidity management and credit. I also have oversight and responsibility for our financial reporting, both internal and external, our investor relations function, and our capital markets transactions and associated relationships with stakeholders in those forums.

My duties and responsibilities include various aspects of the Company's capital markets transactions,

treasury management, and other financial matters. With respect to long-term financing, sale of debt securities, credit facilities, and sale of equity, my duties include development of financial plans with senior officers and senior managers; meeting with representatives of current and prospective investment banking firms that underwrite IDACORP and Idaho Power securities; preparation of materials and meetings with credit rating agencies; assisting in preparation of financial material (including registration statements and prospectuses filed with the U.S. Securities and Exchange Commission); representing IDACORP and Idaho Power in meetings with investment banking firms; assessing information relative to the companies' financings; participating in investor deal and non-deal roadshows and other similar events; meeting with current and prospective debt and equity investors; meeting with infrastructure and alternative investment funds; and meeting with investment analysts, New York Stock Exchange representatives, and other members of the investment community. With respect to short-term financing, these duties and responsibilities include negotiation of credit facilities and term loans with commercial banks, overseeing the purchase and sale of commercial paper, and establishing and maintaining the relationships that help facilitate those transactions.

Q. Do your responsibilities include communicating with members of the financial community?

A. Yes. I am in regular, and effectively daily, contact with individuals associated with investment and commercial banking firms, credit rating agencies, insurance companies, institutional investment firms, pension funds, infrastructure funds, and other organizations interested in aspects of publicly-traded and privately-placed securities, as well as securities analysts, who follow IDACORP and Idaho Power. Along with the Company's Vice President of Finance, Compliance, and Risk, my responsibilities include keeping these representatives of the financial community informed of the Company's financial condition, arranging and participating in meetings with these individuals and IDACORP's and Idaho Power's other senior executive management, and visiting with financial representatives in their respective offices or virtually and at industry events. Many of these members of the investment community have followed the electric utility industry for an extended period of time, have a great deal of expertise in the specific financial risks and prospects of utilities and in the regulatory process, and are highly sophisticated.

Through my contact with the financial community and review of investment banking and both buy-side and sell-side analytical reports and publications issued by these

firms and the credit rating agencies, I keep informed on market trends, equity valuations, interest rates, debt costs, financing costs, security ratings, credit ratings, mergers and acquisitions, capital-raising transactions, financing methodologies and costs, and other financial developments in the public utility industry.

Q. Are you a member of any professional societies or associations?

A. Yes. I am a current member of the Idaho State Bar, the Oregon State Bar, the Arizona State Bar (inactive), the Governing Council of the Business & Corporate Law Section of the Idaho State Bar, and the University of Idaho Law Advisory Council, in addition to serving on various non-profit boards, both currently and in the past. I am also a member of the advisory board for FM, a global property-casualty insurance company. Further, I was previously an adjunct professor of law at the University of Idaho College of Law, where I taught the securities regulation course. I also previously held the licensed designation of Registered Investment Advisor Representative as an agent of an SEC-regulated wealth management firm.

I also attend numerous conferences and seminars of these and other utility business, law, and finance professional groups, such as the Edison Electric Institute

and Western Energy Institute, and an investor-owned utility Chief Financial Officer forum, on a regular basis. I meet regularly with bankers, lawyers, investment analysts, investors, debtholders, executive management at peer companies, and other members of the investment community and capital markets, and read numerous sources of analyst and market commentary. Through participation in these areas, I gain additional information and insights into the financial developments affecting IDACORP and Idaho Power, as well as the electric utility industry.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to discuss financial risk factors generally and risk factors unique to Idaho Power that justify the Company's proposed rate of return ("ROR") of 7.818 percent. I discuss the components of the requested ROR, including a requested return on equity ("ROE") of 10.4 percent as supported by the Direct Testimony of Company Witness Dr. John Thompson, a capital structure of 51 percent equity and 49 percent debt, and an embedded cost of long-term debt of 5.132 percent. My testimony also addresses the importance of the proposed depreciation and interest expense tracking mechanism discussed in Mr. Timothy E. Tatum's Direct Testimony, and

how its approval is vital to maintaining the overall financial health of Idaho Power.

Q. What Exhibits are you sponsoring?

A. I am sponsoring Exhibit Nos. 15-17.

I. GENERAL OVERVIEW

Q. Generally speaking, how does Idaho Power obtain financing for its operations?

A. Financing of Idaho Power's operations, beyond what is originated from operating cash flows, comes from a combination of debt transactions conducted at Idaho Power and equity (stock) transactions conducted at the publicly traded IDACORP level. IDACORP is the sole owner of Idaho Power.

Q. What are the primary costs associated with debt and equity financing?

A. Beyond issuance costs, the primary cost of debt financing is the interest rate charged by lenders, similar to the interest rate an individual would pay on a home or car loan. Equity financing costs can be represented by the return investors expect in exchange for their investment, referred to as return on equity, or "ROE."

Q. How do debt financing costs and the ROE impact customer rates?

A. For ratemaking purposes, the Company's weighted average cost of debt and equity financing – referred to as the "rate of return" or "ROR" – is applied to the Company's rate base to determine financing costs allowed in customer rates. With all else held constant, increased financing costs result in higher rates for customers. This relationship between financing and customer rates also works in reverse – lower financing costs result in lower customer rates.

Q. Does a utility's financial health impact its overall cost of financing?

A. Yes. Credit ratings and the outlook for a company's financial condition and operating cash flow are primary drivers of the interest rates a lender is willing to offer for debt financing. Those credit ratings and financial outlook also significantly impact a company's stock price. Idaho Power is currently monitored by two credit ratings agencies – Moody's Investors Service ("Moody's") and Standard & Poor's Global Ratings ("S&P") – that issue credit ratings for IDACORP and Idaho Power based on a number of metrics that measure each company's financial health.

Q. Based on the interplay between the financial health of a utility and its overall cost of financing, is it in the public interest that a utility is provided with

adequate and timely cost recovery through rates, including through an appropriate ROE?

A. Yes. Rate recovery that supports more timely cash flows and a financially healthy utility is a direct benefit to customers by ensuring that the utility can, in the lowest cost manner possible, obtain the funds needed to construct, operate, and maintain a safe and reliable electric grid. This is especially important in a period of high growth when exceptionally high levels of incremental debt and equity financing will certainly be required for the Company to fulfill its obligation to serve customers. The amount of financing necessary, as well as the cost of that financing, correlates closely with the cash flow the utility generates from customer revenues and the timely receipt of those cash flows. Regulatory lag can create pressure on operating cash flows, resulting in a need for greater external financing and at a higher cost to the utility and to its customers.

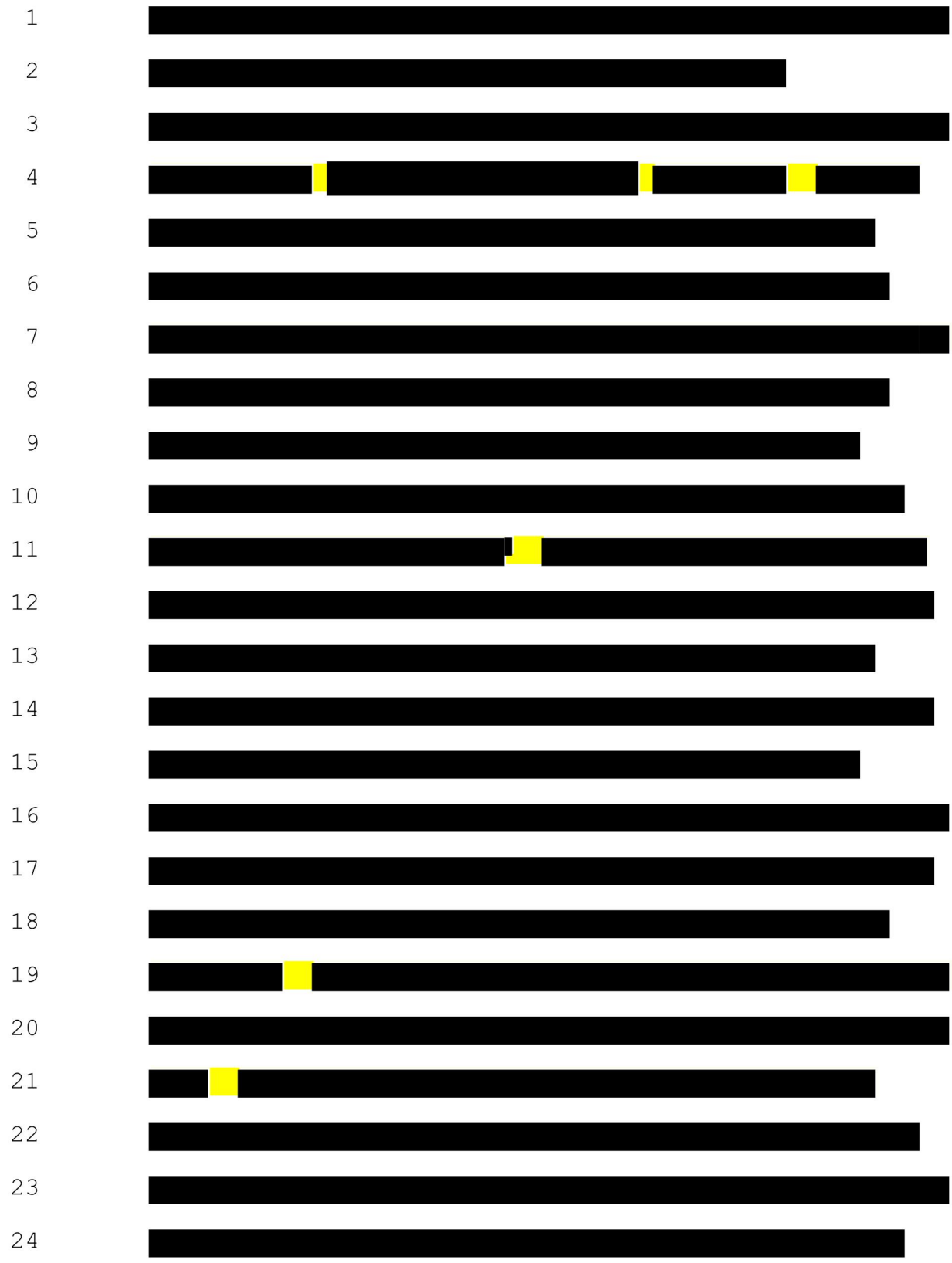
Q. As context for the remainder of your testimony, can you provide an overview of the Company's financial condition and plans and why the outcome of this case is important to the Company?

A. Absolutely. Stated simply, the Company's financial health has degraded notably. The outcome of this case is critical to the Company's financial condition and

ability to cost-effectively serve customers in light of financing costs. Idaho Power is in a period of unprecedented investment – a once in multiple generations level of infrastructure development where the Company expects its rate base will at least double in a five-year period. Other than Idaho Power from 1955-1960 when it constructed part of the Hells Canyon Complex, I am not aware of any investor-owned utility in modern history that has organically doubled its rate base growth in such a short period of time. That growth gets its genesis from the State of Idaho's economic development efforts and from organic growth in the State through an influx of new residents, and Idaho Power has been working to fulfill its obligation to provide electric service as the State's economy grows and the State prospers. That investment requires the Company to pursue enormous levels of financing. As Mr. Tatum notes in his testimony, when investments and associated costs are increasing annually as significantly as they are today, even with annual general rate cases, rates derived under a historical average rate base methodology will inevitably be inadequate to cover the costs that will exist in the rate effective period. To add some perspective, that impacts Idaho Power's financial condition and ultimately customer rates in several ways, including the following:

- For 2024, Idaho Power's Idaho-jurisdiction return on equity was 8.19 percent prior to the accelerated amortization of nearly $30 million of additional accumulated deferred investment tax credits ("ADITCs") under the Idaho ADITC amortization and earnings sharing regulatory mechanism. That accelerated amortization of ADITCs was necessary to achieve a floor-level of 9.12 percent return on equity, below the Company's authorized return on equity of 9.6 percent, reflective of substantial regulatory lag. Recall, accelerated amortization of ADITCs is a non-cash event, so while accelerated amortization of ADITCs is beneficial to the Company's earnings, it does not benefit the Company's operating cash flow.

- [redacted]



[1] Case No. IPC-E-24-07.

[redacted]

- Idaho Power plans to invest approximately $1 billion in new infrastructure during 2025, with associated incremental depreciation and interest expense of approximately $52.5 million over 2024 levels. With additional plant in service and incremental debt to fund capital investment not in rates, this amount increases each year. The 2025 incremental depreciation and interest expense alone will exceed

the total amount of the rate increase the Company received in its 2024 Limited Scope Rate Case that became effective January 1, 2025, which was based on a 2024 historical test year. This has rendered the Company with no realistic opportunity to earn its authorized rate of return in 2025.

- IDACORP and Idaho Power have been very active in the capital markets. From 2023 to present, Idaho Power issued approximately $1.6 billion in debt securities. In that same period, IDACORP has transacted for approximately $1.0 billion in common stock sales. Thus, in approximately 2.5 years, the Company has accessed the capital market for $2.6 billion of incremental financing. As stated in IDACORP's investor relations materials, IDACORP and Idaho Power have significant additional debt and equity financing needs through at least the next five years. This financing is on top of the imputed debt caused by power purchase and lease arrangements. The substantial need for debt and equity is a function of inadequate operating cash flow from customer rates to sustain the business. While the need for external financing for utility operations is not unusual, the need for financing of this magnitude is very atypical, particularly for a utility of Idaho Power's size. In

fact, Idaho Power's need for external equity capital relative to its market cap is the highest of all investor-owned utilities, which is not an accolade.

- During 2024 and 2025, IDACORP sold over $700 million of stock, meaning the company had to sell over 10 percent of the company's market capitalization in less than one year (a substantial percentage for a company that has been in existence for more than 100 years). IDACORP also sold nearly $300 million of stock in late-2023. For a company like Idaho Power, these amounts are *staggeringly* high. These stock sales were in an effort to maintain a reasonably healthy balance sheet and try to prevent further credit metric degradation, and to fund operations, as cash flow is currently grossly inadequate to do so. Unfortunately, it also meant the stock was sold at a time when IDACORP's equity valuation factored-in weaker financial and credit metrics and the financial and market-perception impacts of substantial regulatory lag and unprecedented levels of anticipated equity dilution.
- During 2025, Idaho Power issued $400 million in long-term debt. In 2026, Idaho Power expects to issue approximately $[redacted] million in long-term debt. Based on the known interest rate for the debt issued in 2025

and based on current credit ratings, Treasury rates, and pricing spreads from recent debt transactions by peers for evaluating the potential cost of 2026 debt financing, Idaho Power expects the annual incremental interest expense on that $1.1 billion in indebtedness issued after the conclusion of the 2024 Limited Scope Rate Case will be around $67 million. None of that amount of interest is included for recovery in current rates, but it is a very real expense the Company will incur, and part of which it is already incurring without recovery.

- In 2024, Idaho Power's operating cash flow was $561 million, which was abnormally high relative to history based on power supply collection. By contrast, capital expenditures were over $1 billion. For 2025, the Company expects the delta between operating cash flow and capital expenditures to be even greater. This negative free cash flow is persistent and exacerbated by regulatory lag, and it has a particularly adverse impact on credit metrics.
- Idaho Power remains on negative watch from Moody's. S&P's rating for Idaho Power is already one notch lower than Moody's. IDACORP's rating at Moody's and Idaho Power's rating at S&P are only one notch above the non-investment grade, speculative level. Moody's

downgrade threshold for Idaho Power for its primary metric, Cash Flow from Operations pre-Working Capital to Debt is 13 percent. S&P's downgrade threshold for its primary metric, Funds from Operations to Debt, is 14 percent. [redacted]

I believe the foregoing are illustrative of the Company's financial condition, and they reflect the adverse impacts of regulatory lag. The Company's continued weak cash flow performance and the pervasive deterioration of credit metrics are demonstrative of the challenging environment in which the Company is operating and the importance of a supportive regulatory environment and outcome in this case. A key component of the Company's long-term financial profile is the ability to receive timely recovery of capital additions and expenses, so that the Company has the opportunity to earn its authorized rate of return on prudent capital expenditures. Under the current rate structure, the Company has no such opportunity, and it has contributed to unsustainable financial weakness and substantial risk.

II. COST OF EQUITY POINT ESTIMATE

Q. Given the risks and financial profile you describe in your general overview above, what ROE is the Company requesting in this proceeding?

A. The Company requests 10.4 percent as the point estimate to be used for the cost of equity.

Q. Does that point estimate align with the midpoint of the reasonable range of ROEs developed by Dr. Thompson, the Company's outside cost of capital expert?

A. No, it is lower. As the Company evaluated its request it decided to apply an ROE that is lower than the 10.7 percent midpoint provided by Dr. Thompson.

Q. How did you arrive at your recommendation?

A. The Company believes this requested ROE, when coupled with its request to implement the depreciation and interest expense tracking mechanism described in Mr. Tatum's testimony, will enable the Company to attract capital at customer-beneficial rates in the currently competitive, uncertain, and volatile financial markets. While I believe the discussion of risk factors later in my testimony justifies an ROE in excess of 10.4 percent, as supported by Dr. Thompson, the Company is cognizant of the impact to customers of rising rates. Therefore, the Company is proposing in this case to utilize a ROE at the lower bound of what it would consider to be a reasonable range of

ROEs.

Q. Can you describe the financial market conditions Idaho Power is currently facing that influenced the proposed 10.4 percent ROE?

A. Yes. Interest rates have remained elevated, with the 30-year United States ("US") Treasury rate hovering between 4.98 percent on January 1, 2025, and approximately 4.89 percent as of May 16, 2025 (source: Federal Reserve Economic Data). As interest rates are elevated, investors expect a higher ROE given the higher risk for both debt and equity compared to their alternative investment in debt instruments. In today's market, the ROE needs to appropriately reflect the increase in debt cost and prevailing interest rates, given investors' available options and expectations. The number of basis points should increase even further in light of volatile market conditions and other factors I discuss in this testimony.

Moreover, in my conversations with current and prospective investors and with equity analysts, the topic of authorized ROEs is frequently raised. Based on those conversations, it is my impression that an ROE of the level the Company has requested in this case, assuming it also includes recovery of prudent expenditures and a return on and of investment, would be sufficient to meet the expectations of those investors and thus maintain IDACORP's

reasonable access to equity capital and Idaho Power's access to debt capital. The authorized ROE is one of the primary factors participants in the equity capital markets will review when assessing the constructiveness of the regulatory environment and the adequacy of the outcome of a general rate case for purposes of making an investment decision, and an authorized ROE lower than Idaho Power's request could increase the Company's cost of equity issuances. With IDACORP anticipating substantial debt and equity issuances in the coming years, an authorized ROE that meets investor expectations will benefit customers through greater value in debt issuances via interest rates and equity financing via issuance pricing. Dr. Thompson addresses this important intersection of utility regulation and the investment markets in his testimony.

Q. Why is Idaho Power's requested 10.4 percent ROE justified in this case?

A. Unstable economic conditions, persistent high cost levels, heightened competition for equity and debt capital, market volatility and uncertainty, direct and indirect tariff impacts, and elevated interest rates, have taken place in the past few years, and exacerbated recently. In his testimony, Dr. Thompson also discusses these changes and their implications on capital costs and ROE.

Over the last few years, the utility risk landscape has been shifting dramatically, increasing several risks that the Company must address. I highlight in the next section of my testimony several of these heightened risks, including the Company's financial health, power supply costs, liquidity challenges, wildfires, cybersecurity, and physical security. I will also discuss other specific risks Idaho Power continues to face.

There is also a risk that the Company's ROE falls behind in the marketplace and the competition for capital becomes more difficult, particularly as recent state utility commissions have authorized ROEs in other jurisdictions that are higher than Idaho Power's currently authorized ROE, such as 9.8 percent for Avista Utilities in Washington in December 2024 and a settlement of 10.5 percent for Southern Company in Georgia in May 2025. Ultimately, IDACORP and Idaho Power compete with other companies for debt and equity in the capital markets, including both utility industry peers and the broader market. To attract the capital necessary to fund its operations, IDACORP and Idaho Power must be able to demonstrate to the investment and banking community the likelihood of a reasonable return on investment at an acceptable level of risk and the ability to timely fund its interest and principal debt repayment obligations.

Certainly, the rating agencies also perform this assessment.

Some of the important risk factors highlighted by the investment community relate to cost pressures due to inflation and supply chain issues, balance sheet strength, weakening returns, and regulatory outcomes that have not provided the Company with a reasonable opportunity to earn its authorized rate of return. Because IDACORP is comprised almost entirely of Idaho Power, and because over 96 percent of Idaho Power's retail jurisdiction resides within Idaho, the Company's ability to earn a fair rate of return in Idaho is paramount to capital market access and outcomes. Based on my discussions with current and prospective investors, analysts, credit rating agencies, and other participants in the capital markets, it is apparent that they are heavily focused on the Company's ability to maintain balance sheet strength going into and through this heavy period of capital expenditures, as well as the willingness of the state regulatory commissions to maintain the financial health of the Company through rates that reduce regulatory lag, increase cash flows, allow access to capital markets at a reasonable amount and cost, and allow the Company an opportunity to earn a reasonable return. As such, an authorized ROE responsive to that investor sentiment is important to Idaho Power's financial

health, and thus ultimately to customer rates for the Company's cost of financing.

Q. You mentioned the impact of elevated interest rates. How do interest rates affect the required ROE?

A. As Idaho Power competes with other investments (both stocks and bonds) in the capital markets, to attract capital at reasonable costs the Company must provide a return that adequately compensates its investors relative to the risk of other investments. With elevated interest rates, investors can obtain relatively higher returns on debt instruments while retaining a much lower risk profile relative to stocks. The Company is competing not only with other utilities for capital, but also with businesses in other sectors. More recently, the Company is also competing with the risk-free Treasury rate, which has made utility dividends, and IDACORP's relatively low dividend in particular, less attractive. To compete as an investment, utilities must then provide the opportunity for a higher return commensurate with their higher relative risk level.

Q. Can you quantify the recent increases in interest rates?

A. Certainly. As seen in the chart below (based on data from Yahoo Finance as of May 19, 2025), 30-year US Treasury bond yields have risen from around 1.8 percent near the start of 2022, peaking at over 5.0 percent in fall

of 2023, and remaining as high as 4.98 percent in January 2025, a nearly 300 percent increase over that time period. Please refer to Exhibit No. 15 for daily Treasury bond yields from 2022 to current.

FIGURE 1

30-Year Treasury Bond



Q. Have markets been more or less stable in recent months during this time period?

A. Capital markets have grown increasingly unstable in 2025. Using a 30-day moving average of the COBE VIX index, which is a real-time index that represents the market's expectations for the relative strength of near-term price changes of the S&P 500 Index, the peak volatility in 2025 was 34 percent higher than peak volatility in 2023, pointing to the more anxious market. This volatility is also a key factor in Idaho Power's

proposed 10.4 percent ROE. Exhibit No. 16 supplies data underpinning this summary.

Q. Based on current market conditions, do you believe Idaho Power's request for a 10.4 percent ROE is justified?

A. Yes. Based on the market characteristics I just described, I would consider Idaho Power's requested 10.4 percent ROE to be conservative in nature. Additionally, as I will discuss in detail in the next section of my testimony, Idaho Power faces several specific risks that further bolster its request for a 10.4 percent ROE.

III. RISK FACTORS

Q. While you have highlighted several risks already earlier in your testimony, could you briefly outline the risks confronting the Company that further support your recommendation for a 10.4 percent ROE as the authorized return?

A. Yes. I will summarize them here and discuss each in greater detail later in my testimony. I believe that a 10.4 percent ROE is required to properly account for the risks confronting Idaho Power for the following reasons:

(1) The general decline in the Company's credit quality, in conjunction with the growing need for

access to debt and equity capital to fund the Company's growing capital expenditures in response to recent and expected future economic growth in its service area. The Company forecasts capital expenditures of approximately $6.1 billion from 2025 to 2029 to reliably serve customer needs, for which it will need substantial debt and equity capital.

(2) Energy market volatility and associated liquidity challenges.

(3) Large and growing Public Utility Regulatory Policies Act of 1978 ("PURPA") project and Power Purchase Agreement ("PPA") expenditures, and more recently, energy storage agreement expenditures.

(4) Risks related to wildfires from a financial, reliability, insurability, reputational, and operational standpoint.

(5) The renewal of federal licenses for the Company's hydroelectric projects, primarily the Hells Canyon Complex, which provides 36 percent of the Company's total generating nameplate capacity, and particularly the costs and uncertainties associated with the relicensing of that project.

(6) Increased risks related to power reliability, as well as execution risk associated with

infrastructure projects intended to address growth and maintain reliability.

(7) Risks and uncertainties related to new or proposed legislation and requirements, executive orders, tax proposals, tariffs, and their impacts on the Company's planning and operations.

(8) The increasing risks of cyber and physical security attacks on Idaho Power's and other entities' infrastructure.

(9) The impacts of changing weather conditions on the Company, including the perceived risk in the financial community associated with the variability of the Company's hydroelectric generating base, variances in sales, impacts on operations, reputational concerns, and application of investment policies.

(10) The Company's small size in terms of market capitalization and concentrated geographic and associated regulatory risk (i.e., 96 percent of the Company's business is in Idaho).

(11) The financial impact of a lag in the recovery of costs associated with higher capital expenditures, including growing depreciation expense and the higher costs of financing those capital expenditures.

(12) Heightened scrutiny by equity investors, analysts, lenders, and credit rating agencies, of authorized ROEs and regulatory outcomes, and the disproportionate impact it has on the success of debt and equity financing transactions, particularly in light of the magnitude of the Company's need for equity issuances.

I address several of those risks below in my testimony. Many of the risks associated with the Company and IDACORP, and that factor into equity and debt valuations, are included in the Annual Report on Form 10-K that the Company files with the US Securities and Exchange Commission, under the heading "Risk Factors." For the Form 10-K filed in February 2025, that section of the document was approximately 14 pages in length, owing to the substantial risks that the Company faces.[2]

Credit Ratings, Capital Market Expectations, and Balance Sheet Pressures

Q. What is the status of Idaho Power's credit ratings, and how does that compare to peer utilities?

A. Idaho Power's credit ratings as of May 30, 2025, are as follows:

[2] The Company's 10-K is available at: https://d18rn0p25nwr6d.cloudfront.net/CIK-0000049648/0e16568d-8ad5-4306-83e6-1d338bfa96d7.pdf

TABLE 1

Idaho Power Credit Ratings as of May 30, 2025

	Standard and Poor's Rating Services (S&P)	Moody's Investors Service (Moody's)
Corporate Credit Rating	BBB	Baa1
Senior Secured Debt	A-	A2
Senior Unsecured Debt	BBB	Baa1
Commercial Paper	A-2	P-2
Rating Outlook	Stable	Negative

Unfortunately, these credit ratings place the Company on the lower end of the distribution curve for credit ratings with, for example, the bulk of utilities having an S&P credit rating of A- or BBB+. Ideally, the Company would have a credit rating at that higher level, as it would result in lower cost debt and equity and a more comfortable gap from "junk" status, which ultimately inures to the benefit of customers through rates.

Q. Have there been any changes in the Company's credit ratings recently?

A. Yes. In April 2024, Moody's rating outlook for Idaho Power was downgraded from stable to negative. This followed a downgrade of Idaho Power's long-term issuer rating from A3 to Baa1 by Moody's in July 2022. In addition, in July 2022, Moody's ratings for First Mortgage Bonds and Senior Secured Debt were downgraded to A2 from A1. Also, in February 2023, S&P downgraded its liquidity assessment of the Company from "strong" to "adequate." The

2024 rating outlook downgrade by Moody's occurred after approval of the settlement stipulation in Case No. IPC-E-23-11 ("2023 GRC"), but the negative outlook was confirmed in March 2025 after the finalization of the 2024 Limited Scope Rate Case, despite incorporating an expectation that Idaho Power will file general rate cases in 2025 and beyond.

Q. What is the Company's assessment of the impact of these downgrades?

A. As of now, the Company's credit ratings remain investment grade. However, Idaho Power's corporate credit rating for Moody's is only two rating notches above the cutoff to being below investment grade, referred to as "junk bond" status. S&P's corporate credit rating is only one rating notch above the cutoff. And Moody's has Idaho Power's credit rating on "negative watch," recently affirmed by Moody's based on weak operating cash flow due to regulatory lag. [redacted]

Further ratings downgrades or imposition of a negative watch from S&P would cause additional harm to the

risk perception of the Company in both the debt and equity markets. If, for example, Idaho Power's credit ratings were to fall below investment grade, which would be below Baa3 for Moody's and below BBB- for S&P, also known as "junk" status, Idaho Power's cost of borrowing would increase substantially. Many investors represent funding sources that expressly prohibit investing in junk bonds, such as pension funds and insurance companies, which comprise a significant portion of the utility debt investment market, and junk status would thus substantially diminish the marketplace for the Company's debt securities. A change below investment grade will also trigger significant increases in collateral-related margining deposits as well as significant cost increases for the Company's credit facility, which will increase costs to customers. That downgrade would also further negatively impact IDACORP's stock price, decreasing the value the Company would receive for IDACORP's issuances in the equity markets.

A downgrade in the short-term debt rating could make it difficult for the Company to issue commercial paper under reasonable terms, if at all, which is an instrument Idaho Power may rely upon during volatile power and fuel markets for its liquidity and to meet margin requirements. Additionally, in tight markets such as a recession, liquidity for companies that are below investment grade

becomes extremely limited, resulting in lack of cash on reasonable terms to finance the business.

The increased financing costs associated with weak credit metrics and ratings would remain in the Company's cost of financing – and ultimately customer rates – throughout the lives of the applicable financial instruments. Idaho Power issues debt instruments with maturities as long as 30 years, and IDACORP's equity issuances are effectively permanent as stock is generally originally issued only once. Thus, the damage and cost to customers of high-cost securities is long-tenured.

Q. How did Moody's describe the reasons for its current negative outlook?

A. In March 2025, Moody's noted financial metrics and a need for more timely rate relief as reasons for its negative outlook, stating as follows:

> Idaho Power's financial profile has declined due to a combination of high capital expenditures, slow cash flow growth and the lack of general rate cases (GRC) filed for several years prior to June 2023. We expect IPC's credit metrics to continue to be pressured due to a sizeable capital expenditure program that will necessitate additional debt with a ratio of cash flow from operations before changes in working capital (CFO pre-WC) to debt expected to be around 13% over the next two years. The negative outlook reflects these weak credit metrics that, despite supportive rate case outcomes in 2023 and 2024, may not improve due to the higher capital expenditures, the lack of cost recovery mechanisms to expedite

> cash flow recovery and limited equity issuance to offset higher debt levels.

and

> … Although it expects to fund the negative free cash flow with a mix of debt and equity to maintain a 50/50 capital structure, cash flow recovery could be delayed because Idaho's regulatory framework lacks mechanisms that could help expedite cash flow collection.

Q. How did S&P characterize its February 2023 change?

A. S&P cited Idaho Power's reliability and economic growth-driven capital spending needs as reflecting its liquidity downgrade, as it perceived "elevated capital spending that will result in modest weakening of the Company's liquidity throughout the forecast period."

Q. Would an improvement in credit ratings benefit customers?

A. Yes. Stronger credit ratings would be beneficial. New debt/bond issues are at a higher cost now than if Idaho Power's credit ratings were higher (i.e., the higher the credit rating, the lower the debt financing cost). Stronger credit ratings also result in more liquidity in all market conditions, which could become important as Idaho Power will be raising significant amounts of equity and debt financing to fund its required

capital investments and operating costs over the next few years.

Q. How else can credit ratings impact the Company and its customers?

A. Idaho Power maintains margin agreements relating to its wholesale commodity contracts that allow performance assurance collateral to be requested of and/or posted with certain counterparties. If Idaho Power experiences a reduction in its credit rating on its unsecured debt to below investment grade, Idaho Power could be subject to requests by its wholesale counterparties to post additional performance assurance collateral. Likewise, counterparties to derivative instruments and other forward contracts could request immediate payment or demand immediate ongoing full daily collateralization on derivative instruments and contracts in net liability positions. For example, on March 31, 2025, the amount of collateral that could be requested by counterparties upon a downgrade to below investment grade was $21.5 million. The costs to finance the cash needed to meet these margin requirements would increase costs to customers.

Q. What factors could lead to a credit rating upgrade or downgrade?

A. Moody’s shared their opinion on potential factors that could lead to an upgrade in March 2025:

> A rating upgrade is unlikely given the negative outlook. The rating of IPC could be upgraded if key credit metrics increase significantly, including a CFO pre-WC to debt ratio sustained above 16%. An upgrade could also occur if the utility's regulatory construct improves materially, including authorization of cost recovery mechanisms that result in faster cash flow recovery, reducing regulatory lag and limiting the reliance on debt.

Factors cited that could lead to a downgrade include:

> A rating downgrade could occur if IPC's credit metrics remain weak including a CFO pre-WC to debt ratio sustained below 13%. A rating downgrade could also occur if there is an adverse rate case outcome or a decline in regulatory support for the utility.

Per S&P in March 2025, factors that could lead to an upgrade include:

> We could raise our ratings on Idaho Power if IDACORP strengthens its business risk profile through more-robust management of its regulatory relationships, improves its operating efficiency, and strengthens its cash flow measures such that its FFO to debt consistently exceeds 20%.

Factors cited that could lead to a downgrade include:

> We could lower our ratings on Idaho Power if we lower our ratings on IDACORP, which could occur if its business risk increases because of the unsupported recovery of operating expenses, including a higher-than-average reliance on purchased power or unsupported capital investments through the regulatory process. Furthermore, we could downgrade IDACORP if its consolidated financial measures consistently underperform our base-case assumptions, leading it to sustain FFO to debt of consistently below 14%.

Q. Are there any other considerations mentioned by the rating agencies that could point to future downgrade risks?

A. Yes. Moody's pointed to regulatory lag on material investments that, in its view, overshadows regulatory mechanisms that are in place in Idaho. Specifically, Moody's stated in March 2025 that:

> …the utility's financial profile has historically lagged peers due to certain unusual regulatory constructs, such as flow-through tax accounting and the long-lived depreciation of its hydro asset base. Since Idaho lacks the type of timely investment and operating cost recovery mechanisms seen in many other states, IPC's cash flow growth is primarily dependent upon general rate case (GRC) filings, which it had not filed for 12 years prior to its 2023 GRC filed in June 2023. IPC also filed a limited scope GRC filing in May 2024, with a relatively supportive outcome, and it plans to file another GRC in 2025.

Q. When determining Idaho Power's credit ratings, do the rating agencies consider wildfire risk in Idaho Power's service area?

A. Both rating agencies have highlighted wildfire risk as a key risk or credit challenge in their most recent credit rating reports. In March 2025, Moody's indicated:

> IPC's credit profile is further pressured by wildfire risk in its service territory, which we view as moderate due to the company's well developed mitigation plans. IPC has a total of 34,415 miles of transmission and distribution lines across

> Idaho and Oregon, most of which is exposed to wildfires to some degree… Although IPC has experienced several wildfires within its service territories over the years, including several major wildfires in the last three years, to date, IPC has not had wildfire losses large enough to exceed its insurance coverage. Additionally, IPC successfully implemented its PSPS program during the 2024 wildfire season. This demonstrates the strength of IPC's planning and execution, which we view positively. Nevertheless, the utility remains exposed to litigation risk that could lead to court decisions that result in severe losses to the company.

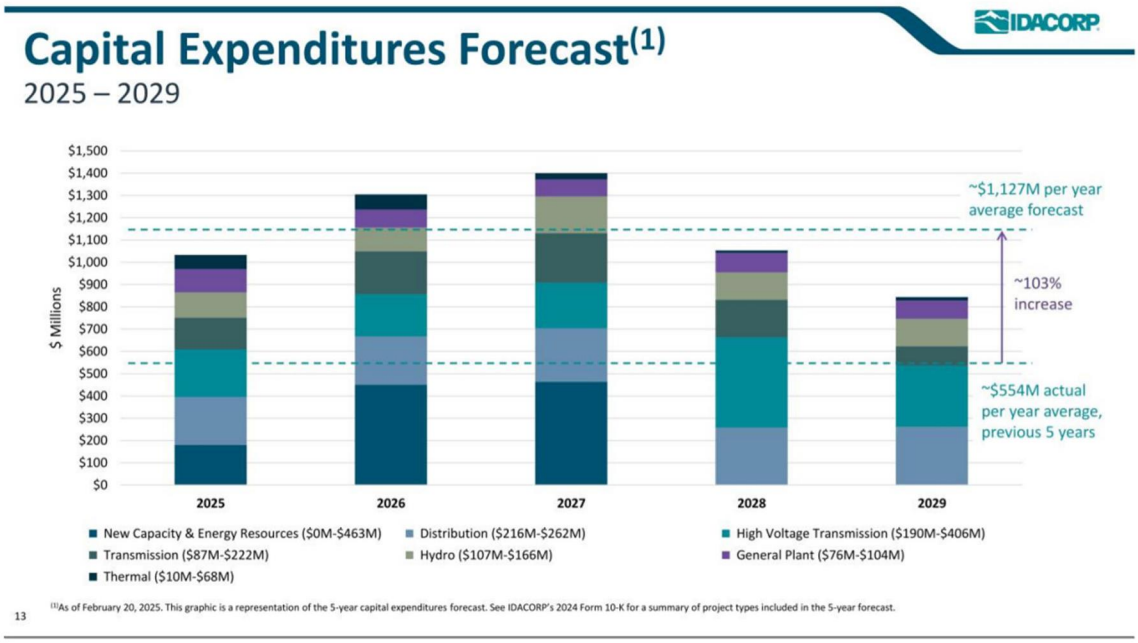
S&P also noted Idaho Power's exposure to wildfire risk as a "key risk" in its March 2025 ratings report for Idaho Power:

> To date, the company has not experienced any significant liability due to wildfires in its operating jurisdictions; however, we believe it faces an elevated exposure to wildfires in some parts of its service territory.

Q. What are Idaho Power's expected near-term capital needs?

A. Over the five-year period from 2025-2029, Idaho Power anticipates spending between $5.35 and $6.05 billion, and approximately $2.25 billion in 2025-2026, on new property, plant, and equipment to serve customers. Those amounts could increase, for instance, depending on the outcomes of pending requests for proposals. For comparison, Idaho Power's annual capital expenditures have

averaged about $554 million over the five-year period from 2020-2024, and they were considerably lower for the five-year period preceding that period. On February 20, 2025, Idaho Power disclosed its capital expenditure estimates for purposes of IDACORP's fourth quarter earnings press release and 2024 Annual Report on Form 10-K. Those capital expenditures are represented in a chart filed with the US Securities and Exchange Commission on a Form 8-K on February 20, 2025. The chart was as follows:



The amount of capital expenditures shown for 2028 and 2029 could increase, depending on a number of factors, including the outcomes of pending requests for proposals. Several factors, including those identified in the 2024 Annual Report on Form 10-K described above, could cause costs in any year listed in the table to increase. This

amount of capital expenditures perpetuates the Company's need for debt and equity financing, as cash flows are grossly inadequate to fund these expenditures.

Q. Do you believe the relief requested in this case will serve to stabilize or improve the Company's credit ratings going forward?

A. I believe it could stabilize the current credit ratings but not improve them. The credit rating agencies have built their models and assumptions, in part, based on forecasts Idaho Power has discussed with them over the past few years. Those forecasts have contemplated in many respects the rate relief requested in this case. In addition, this case requests additional return of and return on rate base that has been placed into service since the last general rate case, and that substantial investment has carried regulatory lag from a cash flow perspective. The credit rating agencies will view as positive the Company's requests in this case to continue to address needed cash collections related to regulatory deferrals, such as those related to wildfire mitigation expenses, as well as the depreciation and interest expense tracker described in Mr. Tatum's testimony. But they will understandably be more focused on the Commission's actual order in this case rather than the Company's request. They will assess the ultimate order from the perspective of the

revenue change, overall constructiveness of the regulatory environment, and degree to which it mitigates regulatory lag. Investors, analysts, and debt holders will also assess those same items.

Q. Does Idaho Power's substantial equity need factor into investors' and rating agencies' assessment of risk and the appropriate ROE?

A. Yes, it does. As I noted in my general overview above, Idaho Power (through its publicly traded parent IDACORP) has the highest equity capital need relative to market capitalization of all investor-owned utilities in the U.S., and it has entered into transactions for a staggeringly high amount of equity for a company of Idaho Power's size. Those equity issuances are dilutive to existing shareholders, and they are demonstrative of contributions from net income being inadequate to maintain a balance sheet at a strong 50 percent debt, 50 percent equity level. That net income deficiency is due in large-part to inadequate revenues from customer rates to fund the Company's operations. Idaho Power's ability to raise the equity capital, and also the debt capital, necessary to fund its capital investment and operating expenses is a risk the investment community has identified and cited as a concern based on the size of the Company relative to its needs.

Energy Market Volatility and Liquidity Challenges

Q. How have recent events in the energy markets impacted the Company?

A. Higher and more volatile prices in the energy and natural gas markets continue to create risks for the Company, though the drivers of that volatility have evolved. While global events and relatively low hydro conditions were key contributors in 2022 and 2023, current volatility is increasingly tied to structural shifts in the energy landscape, particularly the accelerated retirement of coal-fired generation and the rapid addition of variable energy resources like wind and solar in the western US. These changes have reduced the availability of dispatchable generation and increased reliance on intermittent resources, which can lead to sharp price swings, especially during periods of high demand or limited renewable output. Although wholesale market prices have moderated from recent peaks, volatility remains relatively high and continues to impact power supply costs. The power cost adjustment mechanism ("PCA") helps mitigate in-part the financial effects of this volatility, but the Company still absorbs a portion of the cost variance. For example, for the Company's April 2024-March 2025 PCA year, total actual power supply costs were approximately $550 million, compared to base power supply costs of $484.9 million.

After jurisdictionalization and the PCA mechanism's 95 percent/5 percent sharing was applied to the majority of the variance, this resulted in $3.8 million of increased power supply costs being absorbed by the Company. While this GRC will establish new base power supply costs that will help mitigate some of this impact, continued volatility will likely continue to negatively impact the Company and its cash flows, and thus the return expected by investors.

Additionally, higher prices and volatility in the energy and natural gas markets impact the Company's liquidity. While the PCA mechanism mitigates in-part the potential adverse earnings impacts to Idaho Power of fluctuations in power supply costs, collection from customers of most of the difference between actual power supply costs compared with those included in retail rates is deferred to a subsequent period, which can affect Idaho Power's operating cash flow and liquidity until those costs are recovered from customers. In 2023, revenue collection lag associated with the PCA mechanism caused cash flows to be alarmingly low.

Further, as mentioned earlier in my testimony, wholesale commodity contracts often require performance assurance collateral be posted with counterparties. During recent energy market price spikes, the Company was required

to post very large amounts of cash collateral, significantly straining its available liquidity. To give an order of magnitude, one relatively recent margin call was nearly $50 million of cash performance assurance collateral related to energy market contracts.

PURPA and PPA Expenditures and Associated Credit and Equity Impacts

Q. What is the significance of PURPA, PPA, and Battery Storage Agreement ("BSA") expenditures?

A. The Company has significant amounts of financial commitments related to PURPA facilities, other PPAs, and BSAs. In Idaho Power's 2024 Annual Report on Form 10-K, it cites contractual obligations associated with these contracts totaling nearly $7.1 billion. Additional contracts signed in 2025 and awaiting Commission approval push that total to nearly $8.2 billion.

The regulatory cost recovery treatment for these costs is typically one-for-one recovery of dollars expended, meaning neither provides for any return to compensate the Company for its long-term purchase obligation under the applicable contract, despite it being a debt-like obligation and long-term capital commitment. The Company is, in effect, buying and selling energy (pursuant to a legal mandate in the case of qualifying facilities ("QFs")) without any compensation for providing

this service. The mere dollar-for-dollar recovery of these expenditures and the significant size of the obligation, with no return for the use of the Company's general and administrative resources, balance sheet, and liquidity in managing QF programs, PPAs, and BSAs, is viewed as a long-term contractual and debt-like obligation, and thus a risk, by the rating agencies. The rating agencies are not making a judgment related to the appropriateness of QF or PPA- or BSA-based energy purchase programs, but merely pointing out the cost of the financial risk(s) arising from a QF or PPA/BSA transaction, and that this risk should be reflected in a higher ROE to recognize the impact of the Company's QF and PPA/BSA contracts.

Q. Do the rating agencies recognize the financial costs of QF and PPA/BSA transactions beyond the contract price?

A. Yes. Like other electric utilities, when the Company adds to its rate base, it must use some portion of shareholder equity to fund the investment. The Company must maintain its proportion of equity to debt above a certain level as it continues this investment process. If it does not, the debt level increases and the Company will face the threat of a ratings downgrade. Conversely, when the Company enters into a QF or PPA contract for purchased power, an obligation is generally not reflected in the Company's

financial statements; however, the rating agencies add to the financial statement an imputed debt for the QF or PPA, resulting in an increase in total debt and a need to increase equity in order to maintain credit quality. BSAs appear on the financial statements as long-term lease obligations, and thus receive debt-like treatment, when the battery storage projects begin commercial operation.

Unless an equity component is provided to offset the debt-like obligation of those long-term contracts, the Company faces off-balance sheet financial risk that threatens a reduction in credit ratings. For financial commitments that are not presented on the balance sheet, rating agency analysts impute the debt and interest equivalents on the financial statements of the Company to achieve a more accurate picture of the risk associated with the investment and the Company's related commitment. For BSAs that appear as a long-term lease obligation on the balance sheet, the credit rating agencies apply that directly to the debt load. The added equity needed to offset this imputed debt, interest cost, and long-term lease obligation represents the effect that long-term purchased power and battery storage commitments have on the cost of capital. An increase in the long-term obligation of a utility related to its capacity and energy resources will

have to be backed by an appropriate amount of equity in the eyes of the ratings agencies.

In reviewing its evaluation of the credit implications of QF-related expenditures, in November of 2013, as stated below, S&P noted that it viewed such agreements as creating "fixed debt-like financial obligations" that must be considered in evaluating a utility's credit risks.

> We view long-term purchased power agreements (PPA) as creating fixed, debt-like financial obligations that represent substitutes for debt-financed capital investments in generation capacity. By adjusting financial measures to incorporate PPA fixed obligations, we achieve greater comparability of utilities that finance and build generation capacity and those that purchase capacity to satisfy new load. PPAs do benefit utilities by shifting various risks to the electricity generators, such as construction risk and most of the operating risk. The principal risk borne by a utility that relies on PPAs is recovering the costs of the financial obligation in rates.
>
> …Risk factors based on regulatory or legislative cost recovery typically range between 0% and 50%, but can be as high as 100%. A 100% risk factor would signify that substantially all risk related to contractual obligations rests on the company, with no regulatory or legislative support. A 0% risk factor indicates that the burden of the contractual payments rests solely with ratepayers.

Q. How material are QF- and PPA/BSA-related expenditures?

A. As of the end of 2024, Idaho Power had online QF and PPA contracts representing 1,524 megawatts ("MW") of capacity, and an additional 1,048 MW of capacity from signed contracts scheduled to be online through 2027. Idaho Power also had commitments for 250 MW of output from battery storage units under BSAs. In 2024, the Company incurred approximately $294 million of expense related to QF and PPA projects. As of December 31, 2024, the Company is obligated to pay approximately $7 billion to QF and PPA developers over the remaining life of these contracts. To provide context on how significant the $7 billion liability is to Idaho Power, the Company's total long-term debt obligation at year-end 2024 is only $3 billion. The QF and PPA obligations are over 230 percent of the debt financing for all assets the Company owns to serve customers.

Q. Are QF and PPA/BSA expenses increasing?

A. Yes. Idaho Power has been engaged in resource procurement activities that the Company expects will result in several new, large PPAs and BSAs to meet future resource needs. Currently, Idaho Power has 745 MW of signed solar PPAs, a signed 300 MW wind PPA, and 250 MW of signed battery BSAs, all expected to be online between 2025 and 2027, with additional substantial resource procurement in the competitive bidding process. The substantial and increasing obligations of PURPA QF, PPAs, and BSAs create a

material risk factor for Idaho Power and increase costs to customers due to the imputed debt associated with these agreements.

Wildfire Risks, Insurability, and Insurance Costs

Q. Please describe the increased risks associated with wildfires.

A. Since the 1980s, wildfire activity in the United States in terms of acres burned has more than tripled and, according to the National Interagency Fire Center, western states account for upwards of 95 percent of the acres burned in recent years. While Idaho Power has not experienced catastrophic wildfires within its service area at the same level experienced in other western states, such as California and Oregon, millions of acres of rangeland and southern Idaho forests have burned in the last 30 years.

A variety of factors have contributed to more destructive wildfires, including climate change, increased human encroachment in wildland areas, historical land management practices, and changes in wildland and forest health, among other factors.

Specific to Idaho Power, wildfires have the potential to damage or destroy the Company's facilities, impact personnel, and cause significant harm to Idaho Power's customers and the communities in which the Company

serves. Company Witness Mr. Mitch Colburn provides a more detailed discussion of wildfire risk in his testimony.

Q. Have Idaho Power's overall insurance premium costs increased in recent years?

A. Yes. While Idaho Power undertakes significant efforts to manage the cost of insurance and obtain the greatest insurance value possible for its customers, the Company is to some degree a price-taker in the insurance market. In that regard, despite annual assessment of its insurance portfolio to identify the best value and the retention of an experienced insurance broker, the Company is subject to price increases as insurers raise premiums due to losses, either pertaining to Idaho Power or to insurers' overall insured base.

Idaho Power's wildfire insurance premium costs continue to increase. Much of the increase in premiums is attributable to the frequency and magnitude of western-state wildfires in recent years, as well as insurance providers' perceptions of Idaho Power's specific wildfire risk. The sizable increase in Idaho Power's premiums became prominent in 2024 due in part to the loss of insurance capacity provided by the insurance providers. Energy Insurance Mutual reduced wildfire insurance capacity from $75 million in 2023 to $25 million in 2024. This required Idaho Power to secure insurance from the commercial

insurance market where insurance rates are substantially much more than what the Company was historically able to secure through the utility mutuals.

To help manage the costs of insurance, Idaho Power has taken actions such as intense marketing of its programs as needed, formation of a captive insurance program to access the reinsurance market, reviewing and adjusting of self-insured retentions, meeting regularly with insurers to provide details on risk-mitigation practices, and regularly assessing the adequacy of overall coverage. While these efforts have resulted in benefits, costs of insurance for the Company, and for the industry as a whole, have increased notably in recent years.

Q. Does Idaho Power anticipate these premium increases will continue?

A. Because insurance markets continue to be volatile, premium increases are difficult to forecast. Idaho Power anticipates that, notwithstanding its heavy efforts to negotiate favorable rates and coverage, premiums for insurance will continue to increase for the foreseeable future. This trend has been echoed by Idaho Power's third-party insurance broker, who has explained that insurance premiums will continue to increase due to prior losses incurred by insurance providers and projected increased risks of losses by insurers from wildfires.

Q. Aside from insurance premium increases, which are representative of third-party assessments of Idaho Power's wildfire risk, does wildfire risk impact the cost of capital?

A. Yes, it does. In recent years, credit rating agencies have inquired about Idaho Power's wildfire risk and the efforts it undertakes to mitigate the risk. Investment analysts and current and prospective debt and equity investors also frequently inquire about wildfire risk and mitigation efforts. This was elevated by the Pacific Gas & Electric bankruptcy that resulted in large part from wildfire liability associated with numerous California wildfires ignited by the utility, as well as subsequent large wildfires throughout the western U.S.

Credit rating agencies, analysts, and investors have inquired about operating practices, financial exposure, insurance coverage, legal risks, and other topics relevant to wildfire liability, and the exposure the Company has to wildfires factors. They then incorporate this information into their decision about whether to purchase debt and equity securities and in credit ratings, and the pricing associated with those securities, and thus ultimately the cost of capital, in much the same way that exposure influences insurance premiums.

//

Hydroelectric Facility Relicensing Risks and Costs

Q. What risks are associated with the Company's relicensing efforts for its hydroelectric facilities?

A. Relicensing of the Company's hydroelectric facilities will create additional obligations. It involves large capital expenditures, increased operating costs, and reduced hydropower generation, all of which can negatively affect Idaho Power's results of operations and financial condition. For the last several years, Idaho Power has been engaged in an effort to renew its federal license for its largest hydropower generation source, the Hells Canyon Complex ("HCC"). Idaho Power is also in the process of relicensing the American Falls hydroelectric facility.

Relicensing and ongoing permitting requirements include an extensive public review process that involves numerous natural resource issues and environmental conditions. For instance, the existence of endangered and threatened species in the watershed may result in major operational changes to the region's hydropower projects, which may be reflected in hydropower licenses, including for the HCC and the American Falls facilities.

In addition, new interpretations of existing laws and regulations could be adopted or become applicable to hydropower facilities, which could further increase required expenditures for endangered species protection and

other environmental compliance obligations and reduce the amount of hydropower generation available to meet Idaho Power's generation requirements. Idaho Power cannot accurately predict the requirements that might be imposed during the relicensing and permitting process, or the financial or operational impact of those requirements.

Q. Are there other hydroelectric relicensing-based financial risks considered by the investment community?

A. Yes. For any particular generating facility, the worst possible outcome would be the loss of the license to a competing party. Along with the uncertainty as to the eventual receipt of licenses and the costs involved in preparing for the license applications, costs of protection, mitigation, and enhancement ("PM&E") related to these projects are also difficult to quantify. The potential financial magnitude of these PM&E costs and their effect on the Company's low-cost hydro generation resources threaten the financial stability of a company the size of Idaho Power and the ultimate rates it must charge its customers. These amounts will vary among facilities; however, in all cases, they can be significant due to lost generation capacity, generation at a higher cost, and the decreased ability of the Company to time and control water releases. If the Company cannot generate when it is most

advantageous for the system, then some of the economic value of the generation will be lost even if the amount of total generation does not change.

Q. What will occur when the Company receives a new license for the Hells Canyon facilities?

A. The amounts in construction work in progress ("CWIP") will be transferred to plant in service and the accumulation of AFUDC will cease and the amortization of the relicensing costs will start. The result will be an increase in rate base, net of the accrued balance in the regulatory liability account for pre-collected amounts received relative to the allowance for funds used during construction ("AFUDC"), with earnings of the Company declining substantially unless or until this additional amount is included in rate base and reflected in rates, since there will be no ongoing contribution to earnings from AFUDC. This is a notable risk to the Company's financial condition. Because this is a relicense of an existing hydro facility, there will be no increase (and potentially a decrease due to operational changes) in the generation of power and thus no increase in sales revenues.

Q. What other risks does the relicensing process create?

A. As Idaho Power's largest single generating resource, continued operation of the HCC and failure to

renew a federal license for HCC could have a dramatic operational impact. Further, imposition of onerous conditions in the relicensing and permitting processes could result in Idaho Power incurring significant additional capital expenditures, increase operating costs (including power purchase costs), and reduce hydropower generation, which could negatively affect the financial condition of the Company and the prices its customers pay for electricity.

Reliability Risk and Execution Risk on Infrastructure

Q. What issues with reliability are creating additional risk?

A. The transition to intermittent renewable energy resources in the region, transmission constraints, retirement of baseload fossil fuel plants, aging infrastructure, demand growth, weather conditions and wildfires, and other factors have all impacted the Company's ability to reliably provide energy. As noted in Ms. Lisa Grow's testimony, the Company is making a concerted effort to maintain reliability using a variety of programs. However, the aforementioned items do subject the Company to greater reliability risks than existed in the past.

Q. Besides the risk of not being able to deliver energy, what other risks does reliability entail?

A. Idaho Power could be subject to regulatory penalties, reputational harm, legal claims, and operational changes if it fails to provide reliable service or violates mandatory reliability and security requirements. The obligation to provide reliable service also entails a significant commitment of capital, both for operating and maintenance expenses and for capital improvements. As I noted previously, Idaho Power is in a stage of significant capital investment, upgrading and constructing the resources needed to reliably serve customers. The capital needed to maintain reliability introduces two elements of risk -- the ability of the Company to attract that required capital, and the recovery of the investments on a deferred basis and subject to the uncertainty of the regulatory process.

There are also significant efforts at the national level to reshape energy policy, and that can put upward pressure on that spending and the associated need to attract capital. New federal energy policies are evolving and could introduce new spending requirements to meet reliability standards and regulatory requirements.

Q. Are there other risks associated with Idaho Power's build-out of infrastructure to address reliability?

A. Yes. There are several considerable risks. These risks include, as examples:

- the ability to timely obtain labor or materials at reasonable costs;
- defaults and delays by suppliers and contractors, including delays for specialty equipment that require significant lead times;
- increases in price and limitations on availability of commodities, materials, and equipment;
- imposition of tariffs on commodities, materials, and equipment sourced by foreign providers;
- equipment, engineering, and design failures;
- credit quality of counterparties and suppliers and their ability to meet financial and operational commitments;
- unexpected environmental and geological problems;
- the effects of adverse weather conditions;
- catastrophic events, natural disasters, epidemics, pandemics and other public health or disruptive events that could result in supply chain disruptions, as well as permitting and construction delays;
- availability of financing;

- the ability to obtain approval from local, state, or federal regulatory and governmental bodies and to comply with permits and land use rights, and environmental constraints; and
- delays and costs associated with disputes and litigation with third parties.

The occurrence of any of these risks could cause Idaho Power to operate at reduced capacity levels, increase expenses, incur penalties, and adversely affect Idaho Power's financial condition.

Environmental Issues and Risks

Q. Please describe the Company's risks related to environmental issues.

A. Idaho Power's operations are subject to numerous federal, state, and local environmental statutes, rules, and regulations relating to air and water quality, natural resources, endangered species and wildlife, renewable energy, and health and safety. Compliance with environmental regulations can significantly increase capital spending, operating costs, and plant availability and can negatively affect the affordability of Idaho Power's services for customers.

Q. What are the costs associated with environmental compliance?

A. Idaho Power's current estimated compliance expenditures for the three-year period from 2025 to 2027 are $156 million of capital expenditures and $151 million of operating expenses, based on current environmental laws and regulations. Idaho Power anticipates that finalization, revocation, implementation, or modification of federal and state rulemakings and other proceedings could result in unanticipated changes in operating and compliance costs. Idaho Power is unable to estimate the changes in costs that could result, given the uncertainty associated with existing and potential future regulations, but Idaho Power expects the expenditures will remain substantial regardless.

Q. What other impacts could environmental compliance requirements have?

A. In some cases, the costs to obtain permits and ensure facilities are in compliance may be prohibitively expensive. In other instances, the permitting process might substantially delay the Company's ability to acquire resources or construct infrastructure in accordance with its resource planning process. Furthermore, Idaho Power may not be able to obtain or maintain all environmental regulatory approvals necessary for operation of its existing infrastructure or construction of new infrastructure.

Q. What would be the impact of prohibitively expensive compliance costs or inability to acquire regulatory approval to operate facilities?

A. If regulations render generating facilities uneconomical or impossible to maintain or operate or to timely construct, Idaho Power would need to identify alternative resources for power, potentially in the form of new generation and transmission facilities, market power purchases, demand-side management programs, or a combination of these and other methods.

Q. What impact do lengthy permitting processes have on the ability to operate facilities and the Company's financial condition?

A. Idaho Power's resource procurement and long-term planning process, its Integrated Resource Plan ("IRP"), assumes the ability of the Company to timely plan and procure the necessary resources to serve load. Lengthy permitting processes impact the Company's ability to execute on its lowest-cost, least-risk resource portfolios. For example, the Boardman to Hemingway ("B2H") transmission project was first identified in the preferred portfolio of the Company's 2009 IRP, with an estimated in-service date of 2015. Since that time, B2H has remained in subsequent IRP preferred portfolios, and the Company has continued to work to obtain the permits and approvals necessary for

construction of B2H, but the process has significantly delayed construction and commercial operation of the project. As of March 31, 2025, the Company has $216 million in CWIP for future recovery for the B2H project. Similar to the HCC relicensing, the prolonged B2H permitting process negatively impacts liquidity and recovery of the costs is subject to regulatory lag.

Physical Security and Cyber Security Risks

Q. What risks do physical security and cybersecurity pose?

A. Idaho Power operates in an industry that requires the continuous use and operation of sophisticated information technology and increasingly complex operational technology systems and network infrastructure. In addition to those cyber assets, Idaho Power's generation and transmission facilities and its grid operations are potential targets for terrorist acts and threats, acts of war, social unrest, cyber and physical security attacks, and other disruptive activities of individuals or groups, including by nation states or nation state-sponsored groups.

Q. Have there been recent examples of such attacks?

A. Yes. There have been recent cyber and physical attacks within the energy industry on infrastructure such

as electric substations and fuel pipelines, with notable reports in the media of electric industry infrastructure specifically being targeted for and impacted by physical attacks more recently. There have also been multiple reports of embedded vulnerabilities in U.S. energy infrastructure. Unfortunately, there will be additional attacks in the future. Idaho Power and its vendors have been subject to, and will likely continue to be subject to, continuous attempts to gain unauthorized access to systems and confidential information, and efforts to disrupt operations.

Q. Besides attempts to damage utility infrastructure, are there other cybersecurity risks?

A. Yes. In the normal course of business, Idaho Power or its vendors collect and store sensitive and confidential customer and employee information and proprietary information of Idaho Power. Idaho Power's technology systems are dependent upon connectivity to the internet and third-party vendors to host, maintain, modify, and update its systems, which may experience significant system failures or cyberattacks that could compromise the security of Idaho Power's assets and information. All information technology systems are vulnerable to disability, unauthorized access, unintentional defects,

user error, errors in system changes, and cybersecurity incidents.

Idaho Power is in the process of pursuing complex business system upgrades, and these significant changes increase the risk of system interruption. Any data security breaches, such as misappropriation, misuse, leakage, falsification, or accidental release or loss of information maintained in Idaho Power's information technology systems or on third-party systems, including customer or employee data, could result in violations of privacy and other laws and associated litigation and liability for damages, fines, and penalties; financial loss to Idaho Power or to its customers; customer dissatisfaction or diminished customer confidence; and damage to Idaho Power’s reputation, all of which could materially affect Idaho Power's financial condition and results of operations.

No security measures can completely shield Idaho Power's systems, infrastructure, and data from vulnerabilities to cyberattacks, human error, intrusions, or other events that could result in their failure or reduced functionality, and ultimately the potential loss of sensitive information or the loss of Idaho Power's ability to fulfill critical business functions and provide reliable electric power to customers. Despite the steps Idaho Power may take to detect, mitigate, or eliminate threats and

respond to security incidents, the techniques used by those who seek to obtain unauthorized access, and possibly disable or sabotage systems or abscond with information and data, change frequently and Idaho Power may not be able to protect against all such actions.

Although Idaho Power continues to make investments in its cyber and physical security programs, including personnel, technologies, and training of personnel, there can be no assurance that these systems or their expected functionality will be implemented, maintained, or expanded effectively; nor can security measures completely eliminate the possibility of a cyber or physical security breach or incident. Further, the implementation of security guidelines and measures has resulted in, and Idaho Power expects to continue to result in, increased costs.

Weather and Hydrologic Conditions Risks

Q. Are changes or variability in weather conditions creating increased risk for the Company?

A. Yes, in a number of ways, including the following:

- The price of power in the wholesale energy markets tends to be higher during periods of high regional demand that often occur with weather extremes, which may cause Idaho Power to purchase power in the wholesale market

during peak price periods, increasing power supply costs. The PCA helps mitigate the effects of energy market price volatility, but the volatility levels can result in the Company absorbing significant amounts of power supply costs.

- The Company's hydroelectric generating base depends on water conditions in the Snake River Basin. Warmer temperatures and changes in precipitation levels and sustained drought conditions can adversely affect the amount of energy generated by its hydroelectric generation facilities. Low water conditions in the Snake River Basin, as well as in other areas, can increase wholesale market prices due to a lack of hydroelectric generation in the region and a reliance on more costly energy sources. This can result in power supply cost variances that are absorbed by the Company, as noted previously in my testimony.
- The increased frequency and severity of storms, lightning, high winds, icing events, droughts, heat waves, fires, floods, snow loading, and other extreme weather events can damage transmission, distribution, and generation

facilities, causing service interruptions and extended or mass outages, which increases costs and impairs Idaho Power's ability to meet customer energy demand.

- The costs of repairing and replacing infrastructure or any costs related to Idaho Power’s liability for personal injury, loss of life, and property damage from utility equipment that fails, including as a result of significant weather and weather-related events and fires, is not covered in full by insurance.
- Customers' energy use could increase or decrease based on variable weather conditions, impacting the predictability of revenues and earnings.
- Idaho Power has experienced certain stakeholders, including investors and lenders, placing importance on the impact and social cost associated with climate change. The focus on climate change may result in Idaho Power facing adverse reputational risks associated with certain of its operations that produce carbon emissions or that mine coal, and inquiries from investors on carbon-emitting and coal mining operations persist. If Idaho Power

is unable to satisfy the expectations of certain stakeholders, IDACORP and Idaho Power may suffer reputational harm or reduce investment interest. This could cause IDACORP's stock price to decrease or cause certain investors and financial institutions not to purchase the companies' debt securities or otherwise provide the companies with capital or credit on favorable terms, which may cause IDACORP's and Idaho Power's cost of capital to increase.

Company Size and Geographic Concentration

Q. Does IDACORP's size have an impact on investors' perceived level of risk?

A. Yes, IDACORP's relatively small market capitalization compared to its peers is a factor that makes IDACORP riskier than the average electric utility holding company. IDACORP's $6.3 billion market capitalization is much smaller than the $29.5 billion average market cap of the electric utilities used by Dr. Thompson to estimate the range of acceptable ROEs. There is well-documented evidence that investors in smaller companies expect higher rates of return than larger companies but also face higher risk. Idaho Power does not have a corporate parent with a large balance sheet and strong credit ratings to rely on during

times of financial stress given the fact that Idaho Power is the primary subsidiary of IDACORP.

Also, the Company faces a concentrated regulatory risk compared to many of its peers because 96 percent of its retail revenues come from one jurisdiction. Both equity analysts and the credit agencies consistently identify regulatory risk as one of the chief risk factors for the Company. This risk from lack of diversification, combined with the relatively small size, gravitates toward a higher required return from investors compared to many of Idaho Power's peers, in addition to investors' and rating agencies' enhanced scrutiny on the regulatory compact and methodology in Idaho Power's primary jurisdiction of Idaho.

Growth and Regulatory Lag

Q. What will prevent the Company from earning its authorized or allowed ROE, absent approval of this rate request?

A. In light of the substantial infrastructure development Idaho Power is undertaking, and will be undertaking for the foreseeable future, in my opinion the reliance on a historical test year is a primary reason the Company will be unable to earn its authorized or allowed ROE going forward. Idaho Power is in a position of applying to recover its costs on a historical basis when its costs are constantly increasing on a prospective basis, including

recovery of costs it incurs for plant that is already in service, serving customers. As a result, there is and will continue to be a consistent recovery lag.

Q. What effect does growth have on the use of historical data?

A. Growth inherently worsens the effects. Separate from rising operation & maintenance costs that must accommodate that growth, the allowed rate of return is applied to a rate base from a prior historical period, and thus new plant additions that are in-service and serving customers suffer some period of zero-percent return awaiting eventual rate base treatment. Financing costs and depreciation associated with the assets that receive this zero-percent return are unsustainably high, and investors and credit rating agencies notice that impact.

IV. CAPITAL STRUCTURE

Q. Would you please describe Exhibit No. 17?

A. Exhibit No. 17 details the 2025 test year capital structure for long-term debt and common equity prepared under my direction, the resulting recommended overall rate of return, and the calculation of the Company's weighted average cost of long-term debt.

Q. What is the rationale for proposing a capital structure of 51 percent equity and 49 percent debt?

A. This is the projected actual capital structure as of the end of 2025. Idaho Power believes a higher equity proportion than the typical 50/50 split is needed to help support the Company's credit ratings, particularly with the significant QF and PPA/BSA debt-like obligations I referred to previously, which are not included in the debt component of the ratio. IDACORP very recently entered into equity sale transactions that will allow for over-equitization of the balance sheet at year-end which, combined with revenues from this case, will help with balance sheet health, though it comes at a substantial cost.

Q. What is the Company's proposed cost of debt?

A. As shown on page 2 of Exhibit No. 17, which details the calculation of the cost of debt used in the 2025 test year capital structure, the Company's proposed cost of debt is 5.132 percent.

Q. What was the Company's cost of debt in its GRC filed in 2023?

A. In that case, the Company filed a cost of debt of 4.895 percent.

Q. Has there been any significant refinancing since the last GRC?

A. Yes. There has been some refinancing since the last GRC (a $50 million 1.45 percent pollution control bond matured in 2024), but the greater impact has been

incremental debt issuances used to fund capital expenditures and general corporate purposes. Idaho Power issued $300 million of 10-year debt during 2024 at a coupon rate of 5.20 percent, and $400 million of 30-year debt in March of 2025 at a 5.7 percent coupon rate.

Q. What method did the Company use for calculating its cost of debt in this case?

A. Idaho Power applied a debt calculation method to fully consider the effect of discounts, premiums, and expense of issue on the annual cost of each bond, adopting the bond yield to maturity method.

Q. Please explain the cost of debt calculation on page 2 of Exhibit No. 17.

A. The calculation takes the settlement date, maturity date, coupon rate, and net proceeds at the issuance date for each debt issue to produce a bond yield to maturity. The bond yield was then multiplied by the principal amount outstanding for each debt issue, resulting in an annualized cost of each debt issuance in column 12. The total in column 12 for all the debt issuances produces a total annual effective cost of debt in line 31. This total was divided by the total in column 6, line 31 to produce the weighted average cost for all long-term debt in column 11, line 31. This method is appropriate because the expense of issuance associated with a bond is essentially

prepaid interest, and the net proceeds, not the principal amount of the bond, are all that is available to be invested in property, plant, and equipment (rate base).

Q. Does the Company use variable rate securities in its long-term capitalization?

A. No. The Company retired its only variable rate security, the Port of Morrow (Boardman) Pollution Control Revenue Bonds, in 2022 upon the demolition of the Boardman plant and its pollution control equipment, and previously repaid in full its variable-rate term loan entered into in March 2022.

V. OVERALL COST OF CAPITAL

Q. What is the overall cost of capital for Idaho Power?

A. As shown on page 1 of Exhibit No. 17, using the Company's projected year-end 2025 capital structure, the Company's cost of debt as presented in my testimony, and incorporating the recommended 10.4 percent cost of equity, the resulting overall cost of capital for Idaho Power is 7.818 percent. This is an appropriate rate of return to be utilized by the Commission when deriving the Company's revenue requirement.

//

//

//

VI. DEPRECIATION AND INTEREST EXPENSE TRACKER

Q. Are you familiar with the proposed tracking of depreciation and interest expense discussed by Company Witness Mr. Tatum?

A. Yes. In his testimony, Mr. Tatum discusses the implementation of a mechanism that would track the difference between actual depreciation and interest expense and a sales-adjusted baseline level of depreciation and interest expense on a January through December calendar year basis.

Q. If approved, what would be the impact of this mechanism on the financial health of Idaho Power?

A. While the proposed tracking mechanism lacks a "return on" or ROE component, or an O&M recovery component, the ability to recover depreciation and interest expense on a timelier basis would serve as a benefit to the Company's operating cash flows. As noted previously in my testimony, ratings agencies have cited Idaho Power's cash flow metrics as a central concern in their view of the Company's current financial position, including the lack of a regulatory mechanism for those types of costs.

Q. Can you elaborate on how these agencies incorporate cash flow metrics into their evaluations?

A. Yes. As I described earlier in my testimony, credit rating agencies use various ratios to evaluate the

financial health of a utility. For Moody's, a key ratio is referred to as "Cash Flow from Operations ('CFO') pre-WC to Debt," which measures the ratio of net cash flow from operations net of changes in working capital to total debt. S&P utilizes a similar metric referred to as "Funds from Operations ("FFO") to Total Debt," which measures the ratio of funds from operations to a company's total debt. Both agencies use these metrics as key components of their current ratings as well as their outlook designations, and they have repeatedly and recently with increased emphasis and alarm expressed concerns with Idaho Power's cash-based metrics relative to industry peers.

Q. How would the proposed tracking mechanism impact cash flow metrics?

A. Because the measures of CFO and FFO are the primary drivers of the Moody's and S&P ratings, respectively, implementation of the proposed tracking mechanism would have a positive impact on these key metrics by reducing regulatory lag associated with depreciation and interest expense stemming from plant that is used and useful and serving customers. Barring other changes, the approval of this mechanism would at least help maintain Idaho Power's current financial standing in the eyes of the ratings agencies, if not improve it. I could not attest that it would result in the lifting of the current negative

outlook by Moody's, but it may stabilize the ratings with both credit rating agencies.

Q. As Chief Financial Officer and Treasurer, do you believe that approval of the proposed mechanism is important to the financial health of Idaho Power and its ability to serve customers?

A. Yes, I do. As discussed earlier in my testimony, a company's credit rating is central to its cost of accessing capital. Both Moody's and S&P have cited relatively weak cash flow metrics as key components of their recent negative actions related to Idaho Power. Further, these agencies also cite the lack of mechanisms to address regulatory lag, which is inherent in a jurisdiction in which forecast test year methodologies have not been permitted. In order to address the concerns of ratings agencies and maintain the financial health of Idaho Power, I believe that approval of the proposed tracking mechanism is in the best interest of the Company and its customers.

VII. CONCLUSION

Q. Please summarize your testimony.

A. Idaho Power faces a number of challenges to maintaining, and at this point repairing, its financial health while continuing to provide safe, reliable service to customers during the current climate of unprecedented growth. Market conditions currently reflect an environment

of sustained elevated interest rates and volatility and heightened competition for capital, leading investors to require increased returns in exchange for their investment. In addition to systemic market issues, Idaho Power possesses a number of characteristics that further elevate its risk profile, including massive external capital needs, liquidity issues with volatile net power supply costs, wildfire risk, substantial debt-like obligations to PPAs/BTAs and QFs, and pervasive declining financial performance and metrics in the eyes of ratings agencies and investors. In light of these challenges and the Company's financing needs for the foreseeable future, Idaho Power's proposed ROR of 7.818 percent, including the proposed 10.4 percent ROE, represents the lower bound of a range of reasonable returns that will allow the Company to continue to attract the capital it needs to construct, operate, and maintain a safe, reliable electrical grid. This rate of return, in conjunction with the depreciation and interest expense tracking mechanism discussed by Mr. Tatum, will serve to help repair the financial health of Idaho Power while meeting the needs of its customers and the affordability of financing costs for the Company's customers.

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

A. Yes, it does.

//

DECLARATION OF BRIAN BUCKHAM

I, Brian Buckham, declare under penalty of perjury under the laws of the state of Idaho:

1. My name is Brian Buckham. I am employed by Idaho Power Company as Senior Vice President and Chief Financial Officer.

2. On behalf of Idaho Power, I present this pre-filed direct testimony and Exhibit Nos. 15 through 17 in this matter.

3. To the best of my knowledge, my pre-filed direct testimony and exhibits are 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 30th day of May 2025, at Boise, Idaho.

Signed: _____
Brian R. Buckham

BEFORE THE

IDAHO PUBLIC UTILITIES COMMISSION

CASE NO. IPC-E-25-16

IDAHO POWER COMPANY

BUCKHAM, DI TESTIMONY

EXHIBIT NO. 15

Statistics			
	Max	Min	Terminal
2021			1.90
2022	4.40	2.01	
2023	5.11	3.54	
2024	4.82	3.94	
2025	4.98	4.41	
Start of 2022 to Max 2025			2.621053

Graphic



Data

Observation Date	DGS30
2021-12-31	1.90
2022-01-03	2.01
2022-01-04	2.07
2022-01-05	2.09
2022-01-06	2.09
2022-01-07	2.11
2022-01-10	2.11
2022-01-11	2.08
2022-01-12	2.08
2022-01-13	2.05
2022-01-14	2.12

2022-01-17	
2022-01-18	2.18
2022-01-19	2.14
2022-01-20	2.14
2022-01-21	2.07
2022-01-24	2.10
2022-01-25	2.12
2022-01-26	2.16
2022-01-27	2.09
2022-01-28	2.07
2022-01-31	2.11
2022-02-01	2.12
2022-02-02	2.11
2022-02-03	2.14
2022-02-04	2.23
2022-02-07	2.22
2022-02-08	2.25
2022-02-09	2.25
2022-02-10	2.30
2022-02-11	2.24
2022-02-14	2.29
2022-02-15	2.37
2022-02-16	2.34
2022-02-17	2.31
2022-02-18	2.24
2022-02-21	
2022-02-22	2.24
2022-02-23	2.29
2022-02-24	2.28
2022-02-25	2.29
2022-02-28	2.17
2022-03-01	2.11
2022-03-02	2.24
2022-03-03	2.24
2022-03-04	2.16
2022-03-07	2.19
2022-03-08	2.24
2022-03-09	2.29
2022-03-10	2.38
2022-03-11	2.36
2022-03-14	2.47
2022-03-15	2.49
2022-03-16	2.46
2022-03-17	2.50
2022-03-18	2.42
2022-03-21	2.55
2022-03-22	2.60

2022-03-23	2.52
2022-03-24	2.51
2022-03-25	2.60
2022-03-28	2.57
2022-03-29	2.53
2022-03-30	2.48
2022-03-31	2.44
2022-04-01	2.44
2022-04-04	2.48
2022-04-05	2.57
2022-04-06	2.63
2022-04-07	2.69
2022-04-08	2.76
2022-04-11	2.84
2022-04-12	2.82
2022-04-13	2.81
2022-04-14	2.92
2022-04-15	
2022-04-18	2.95
2022-04-19	3.01
2022-04-20	2.90
2022-04-21	2.94
2022-04-22	2.95
2022-04-25	2.88
2022-04-26	2.86
2022-04-27	2.91
2022-04-28	2.92
2022-04-29	2.96
2022-05-02	3.07
2022-05-03	3.03
2022-05-04	3.01
2022-05-05	3.15
2022-05-06	3.23
2022-05-09	3.19
2022-05-10	3.12
2022-05-11	3.05
2022-05-12	3.00
2022-05-13	3.10
2022-05-16	3.09
2022-05-17	3.17
2022-05-18	3.07
2022-05-19	3.05
2022-05-20	2.99
2022-05-23	3.08
2022-05-24	2.98
2022-05-25	2.97
2022-05-26	2.99

2022-05-27	2.97
2022-05-30	
2022-05-31	3.07
2022-06-01	3.09
2022-06-02	3.09
2022-06-03	3.11
2022-06-06	3.19
2022-06-07	3.13
2022-06-08	3.18
2022-06-09	3.18
2022-06-10	3.20
2022-06-13	3.42
2022-06-14	3.45
2022-06-15	3.39
2022-06-16	3.35
2022-06-17	3.30
2022-06-20	
2022-06-21	3.39
2022-06-22	3.25
2022-06-23	3.21
2022-06-24	3.26
2022-06-27	3.31
2022-06-28	3.30
2022-06-29	3.22
2022-06-30	3.14
2022-07-01	3.11
2022-07-04	
2022-07-05	3.05
2022-07-06	3.14
2022-07-07	3.20
2022-07-08	3.27
2022-07-11	3.18
2022-07-12	3.13
2022-07-13	3.08
2022-07-14	3.11
2022-07-15	3.10
2022-07-18	3.14
2022-07-19	3.17
2022-07-20	3.17
2022-07-21	3.08
2022-07-22	3.00
2022-07-25	3.04
2022-07-26	3.03
2022-07-27	3.03
2022-07-28	3.02
2022-07-29	3.00
2022-08-01	2.92

2022-08-02	3.00
2022-08-03	2.96
2022-08-04	2.97
2022-08-05	3.06
2022-08-08	3.00
2022-08-09	3.01
2022-08-10	3.04
2022-08-11	3.15
2022-08-12	3.12
2022-08-15	3.10
2022-08-16	3.11
2022-08-17	3.15
2022-08-18	3.14
2022-08-19	3.22
2022-08-22	3.24
2022-08-23	3.26
2022-08-24	3.32
2022-08-25	3.25
2022-08-26	3.21
2022-08-29	3.25
2022-08-30	3.23
2022-08-31	3.27
2022-09-01	3.37
2022-09-02	3.35
2022-09-05	
2022-09-06	3.49
2022-09-07	3.42
2022-09-08	3.45
2022-09-09	3.47
2022-09-12	3.53
2022-09-13	3.51
2022-09-14	3.47
2022-09-15	3.48
2022-09-16	3.52
2022-09-19	3.52
2022-09-20	3.59
2022-09-21	3.50
2022-09-22	3.65
2022-09-23	3.61
2022-09-26	3.72
2022-09-27	3.87
2022-09-28	3.70
2022-09-29	3.71
2022-09-30	3.79
2022-10-03	3.73
2022-10-04	3.70
2022-10-05	3.78

2022-10-06	3.81
2022-10-07	3.86
2022-10-10	
2022-10-11	3.92
2022-10-12	3.90
2022-10-13	3.97
2022-10-14	3.99
2022-10-17	4.04
2022-10-18	4.04
2022-10-19	4.15
2022-10-20	4.24
2022-10-21	4.33
2022-10-24	4.40
2022-10-25	4.26
2022-10-26	4.19
2022-10-27	4.12
2022-10-28	4.15
2022-10-31	4.22
2022-11-01	4.14
2022-11-02	4.15
2022-11-03	4.18
2022-11-04	4.27
2022-11-07	4.34
2022-11-08	4.28
2022-11-09	4.31
2022-11-10	4.03
2022-11-11	
2022-11-14	4.07
2022-11-15	3.98
2022-11-16	3.85
2022-11-17	3.89
2022-11-18	3.92
2022-11-21	3.91
2022-11-22	3.83
2022-11-23	3.74
2022-11-24	
2022-11-25	3.74
2022-11-28	3.74
2022-11-29	3.81
2022-11-30	3.80
2022-12-01	3.64
2022-12-02	3.56
2022-12-05	3.62
2022-12-06	3.52
2022-12-07	3.42
2022-12-08	3.44
2022-12-09	3.56

2022-12-12	3.57
2022-12-13	3.53
2022-12-14	3.52
2022-12-15	3.48
2022-12-16	3.53
2022-12-19	3.62
2022-12-20	3.74
2022-12-21	3.74
2022-12-22	3.73
2022-12-23	3.82
2022-12-26	
2022-12-27	3.93
2022-12-28	3.98
2022-12-29	3.92
2022-12-30	3.97
2023-01-02	
2023-01-03	3.88
2023-01-04	3.81
2023-01-05	3.78
2023-01-06	3.67
2023-01-09	3.66
2023-01-10	3.74
2023-01-11	3.67
2023-01-12	3.56
2023-01-13	3.61
2023-01-16	
2023-01-17	3.64
2023-01-18	3.54
2023-01-19	3.57
2023-01-20	3.66
2023-01-23	3.69
2023-01-24	3.62
2023-01-25	3.62
2023-01-26	3.62
2023-01-27	3.64
2023-01-30	3.66
2023-01-31	3.65
2023-02-01	3.55
2023-02-02	3.55
2023-02-03	3.63
2023-02-06	3.67
2023-02-07	3.72
2023-02-08	3.70
2023-02-09	3.75
2023-02-10	3.83
2023-02-13	3.79
2023-02-14	3.81

2023-02-15	3.85
2023-02-16	3.92
2023-02-17	3.88
2023-02-20	
2023-02-21	3.98
2023-02-22	3.94
2023-02-23	3.88
2023-02-24	3.93
2023-02-27	3.93
2023-02-28	3.93
2023-03-01	3.97
2023-03-02	4.03
2023-03-03	3.90
2023-03-06	3.92
2023-03-07	3.88
2023-03-08	3.88
2023-03-09	3.88
2023-03-10	3.70
2023-03-13	3.70
2023-03-14	3.77
2023-03-15	3.70
2023-03-16	3.71
2023-03-17	3.60
2023-03-20	3.65
2023-03-21	3.73
2023-03-22	3.68
2023-03-23	3.66
2023-03-24	3.64
2023-03-27	3.77
2023-03-28	3.77
2023-03-29	3.78
2023-03-30	3.74
2023-03-31	3.67
2023-04-03	3.64
2023-04-04	3.60
2023-04-05	3.56
2023-04-06	3.54
2023-04-07	3.61
2023-04-10	3.62
2023-04-11	3.62
2023-04-12	3.64
2023-04-13	3.69
2023-04-14	3.74
2023-04-17	3.81
2023-04-18	3.79
2023-04-19	3.79
2023-04-20	3.75

2023-04-21	3.78
2023-04-24	3.73
2023-04-25	3.65
2023-04-26	3.70
2023-04-27	3.76
2023-04-28	3.67
2023-05-01	3.84
2023-05-02	3.72
2023-05-03	3.70
2023-05-04	3.73
2023-05-05	3.76
2023-05-08	3.84
2023-05-09	3.85
2023-05-10	3.80
2023-05-11	3.73
2023-05-12	3.78
2023-05-15	3.84
2023-05-16	3.87
2023-05-17	3.88
2023-05-18	3.91
2023-05-19	3.95
2023-05-22	3.97
2023-05-23	3.96
2023-05-24	3.97
2023-05-25	4.01
2023-05-26	3.96
2023-05-29	
2023-05-30	3.90
2023-05-31	3.85
2023-06-01	3.84
2023-06-02	3.88
2023-06-05	3.89
2023-06-06	3.87
2023-06-07	3.95
2023-06-08	3.89
2023-06-09	3.89
2023-06-12	3.87
2023-06-13	3.94
2023-06-14	3.90
2023-06-15	3.85
2023-06-16	3.86
2023-06-19	
2023-06-20	3.83
2023-06-21	3.81
2023-06-22	3.88
2023-06-23	3.82
2023-06-26	3.83

2023-06-27	3.84
2023-06-28	3.81
2023-06-29	3.92
2023-06-30	3.85
2023-07-03	3.87
2023-07-04	
2023-07-05	3.95
2023-07-06	4.01
2023-07-07	4.05
2023-07-10	4.05
2023-07-11	4.03
2023-07-12	3.96
2023-07-13	3.90
2023-07-14	3.93
2023-07-17	3.94
2023-07-18	3.91
2023-07-19	3.84
2023-07-20	3.91
2023-07-21	3.91
2023-07-24	3.92
2023-07-25	3.95
2023-07-26	3.94
2023-07-27	4.06
2023-07-28	4.03
2023-07-31	4.02
2023-08-01	4.11
2023-08-02	4.17
2023-08-03	4.32
2023-08-04	4.21
2023-08-07	4.27
2023-08-08	4.20
2023-08-09	4.18
2023-08-10	4.24
2023-08-11	4.27
2023-08-14	4.29
2023-08-15	4.32
2023-08-16	4.38
2023-08-17	4.41
2023-08-18	4.38
2023-08-21	4.45
2023-08-22	4.42
2023-08-23	4.27
2023-08-24	4.30
2023-08-25	4.30
2023-08-28	4.29
2023-08-29	4.23
2023-08-30	4.23

1.9 Start of 2022

2023-08-31	4.20
2023-09-01	4.29
2023-09-04	
2023-09-05	4.38
2023-09-06	4.37
2023-09-07	4.36
2023-09-08	4.33
2023-09-11	4.37
2023-09-12	4.35
2023-09-13	4.34
2023-09-14	4.39
2023-09-15	4.42
2023-09-18	4.40
2023-09-19	4.43
2023-09-20	4.40
2023-09-21	4.56
2023-09-22	4.53
2023-09-25	4.67
2023-09-26	4.70
2023-09-27	4.73
2023-09-28	4.71
2023-09-29	4.73
2023-10-02	4.81
2023-10-03	4.95
2023-10-04	4.87
2023-10-05	4.89
2023-10-06	4.95
2023-10-09	
2023-10-10	4.85
2023-10-11	4.73
2023-10-12	4.86
2023-10-13	4.78
2023-10-16	4.87
2023-10-17	4.94
2023-10-18	5.00
2023-10-19	5.11
2023-10-20	5.09
2023-10-23	5.01
2023-10-24	4.96
2023-10-25	5.09
2023-10-26	5.01
2023-10-27	5.03
2023-10-30	5.04
2023-10-31	5.04
2023-11-01	4.96
2023-11-02	4.82
2023-11-03	4.77

2023-11-06	4.84
2023-11-07	4.75
2023-11-08	4.64
2023-11-09	4.77
2023-11-10	4.73
2023-11-13	4.75
2023-11-14	4.61
2023-11-15	4.68
2023-11-16	4.63
2023-11-17	4.59
2023-11-20	4.57
2023-11-21	4.57
2023-11-22	4.55
2023-11-23	
2023-11-24	4.60
2023-11-27	4.53
2023-11-28	4.52
2023-11-29	4.44
2023-11-30	4.54
2023-12-01	4.40
2023-12-04	4.43
2023-12-05	4.30
2023-12-06	4.22
2023-12-07	4.25
2023-12-08	4.31
2023-12-11	4.32
2023-12-12	4.30
2023-12-13	4.19
2023-12-14	4.03
2023-12-15	4.00
2023-12-18	4.05
2023-12-19	4.03
2023-12-20	3.98
2023-12-21	4.03
2023-12-22	4.05
2023-12-25	
2023-12-26	4.04
2023-12-27	3.95
2023-12-28	3.98
2023-12-29	4.03
2024-01-01	
2024-01-02	4.08
2024-01-03	4.05
2024-01-04	4.13
2024-01-05	4.21
2024-01-08	4.17
2024-01-09	4.18

2024-01-10	4.20
2024-01-11	4.18
2024-01-12	4.20
2024-01-15	
2024-01-16	4.30
2024-01-17	4.31
2024-01-18	4.37
2024-01-19	4.36
2024-01-22	4.32
2024-01-23	4.38
2024-01-24	4.41
2024-01-25	4.38
2024-01-26	4.38
2024-01-29	4.31
2024-01-30	4.28
2024-01-31	4.22
2024-02-01	4.10
2024-02-02	4.22
2024-02-05	4.35
2024-02-06	4.29
2024-02-07	4.31
2024-02-08	4.36
2024-02-09	4.37
2024-02-12	4.37
2024-02-13	4.46
2024-02-14	4.45
2024-02-15	4.42
2024-02-16	4.45
2024-02-19	
2024-02-20	4.44
2024-02-21	4.49
2024-02-22	4.47
2024-02-23	4.37
2024-02-26	4.40
2024-02-27	4.44
2024-02-28	4.40
2024-02-29	4.38
2024-03-01	4.33
2024-03-04	4.36
2024-03-05	4.27
2024-03-06	4.24
2024-03-07	4.25
2024-03-08	4.26
2024-03-11	4.26
2024-03-12	4.31
2024-03-13	4.35
2024-03-14	4.44

2024-03-15	4.43
2024-03-18	4.46
2024-03-19	4.44
2024-03-20	4.45
2024-03-21	4.44
2024-03-22	4.39
2024-03-25	4.42
2024-03-26	4.40
2024-03-27	4.36
2024-03-28	4.34
2024-03-29	
2024-04-01	4.47
2024-04-02	4.51
2024-04-03	4.51
2024-04-04	4.47
2024-04-05	4.54
2024-04-08	4.55
2024-04-09	4.50
2024-04-10	4.64
2024-04-11	4.65
2024-04-12	4.61
2024-04-15	4.74
2024-04-16	4.77
2024-04-17	4.71
2024-04-18	4.74
2024-04-19	4.72
2024-04-22	4.72
2024-04-23	4.73
2024-04-24	4.78
2024-04-25	4.82
2024-04-26	4.78
2024-04-29	4.75
2024-04-30	4.79
2024-05-01	4.74
2024-05-02	4.72
2024-05-03	4.66
2024-05-06	4.64
2024-05-07	4.61
2024-05-08	4.64
2024-05-09	4.60
2024-05-10	4.64
2024-05-13	4.63
2024-05-14	4.59
2024-05-15	4.52
2024-05-16	4.52
2024-05-17	4.56
2024-05-20	4.58

2024-05-21	4.55
2024-05-22	4.55
2024-05-23	4.58
2024-05-24	4.57
2024-05-27	
2024-05-28	4.66
2024-05-29	4.74
2024-05-30	4.69
2024-05-31	4.65
2024-06-03	4.55
2024-06-04	4.48
2024-06-05	4.44
2024-06-06	4.43
2024-06-07	4.55
2024-06-10	4.59
2024-06-11	4.53
2024-06-12	4.47
2024-06-13	4.40
2024-06-14	4.34
2024-06-17	4.40
2024-06-18	4.36
2024-06-19	
2024-06-20	4.39
2024-06-21	4.39
2024-06-24	4.38
2024-06-25	4.36
2024-06-26	4.45
2024-06-27	4.43
2024-06-28	4.51
2024-07-01	4.64
2024-07-02	4.60
2024-07-03	4.53
2024-07-04	
2024-07-05	4.47
2024-07-08	4.46
2024-07-09	4.49
2024-07-10	4.47
2024-07-11	4.41
2024-07-12	4.39
2024-07-15	4.46
2024-07-16	4.38
2024-07-17	4.37
2024-07-18	4.41
2024-07-19	4.45
2024-07-22	4.48
2024-07-23	4.48
2024-07-24	4.54

2024-07-25	4.50
2024-07-26	4.45
2024-07-29	4.42
2024-07-30	4.40
2024-07-31	4.35
2024-08-01	4.27
2024-08-02	4.11
2024-08-05	4.06
2024-08-06	4.18
2024-08-07	4.26
2024-08-08	4.28
2024-08-09	4.23
2024-08-12	4.19
2024-08-13	4.16
2024-08-14	4.12
2024-08-15	4.18
2024-08-16	4.15
2024-08-19	4.11
2024-08-20	4.07
2024-08-21	4.06
2024-08-22	4.13
2024-08-23	4.10
2024-08-26	4.11
2024-08-27	4.13
2024-08-28	4.13
2024-08-29	4.15
2024-08-30	4.20
2024-09-02	
2024-09-03	4.13
2024-09-04	4.06
2024-09-05	4.02
2024-09-06	4.03
2024-09-09	4.00
2024-09-10	3.97
2024-09-11	3.96
2024-09-12	4.00
2024-09-13	3.98
2024-09-16	3.94
2024-09-17	3.96
2024-09-18	4.03
2024-09-19	4.06
2024-09-20	4.07
2024-09-23	4.09
2024-09-24	4.09
2024-09-25	4.14
2024-09-26	4.12
2024-09-27	4.10

2024-09-30	4.14
2024-10-01	4.08
2024-10-02	4.14
2024-10-03	4.18
2024-10-04	4.26
2024-10-07	4.30
2024-10-08	4.32
2024-10-09	4.34
2024-10-10	4.38
2024-10-11	4.39
2024-10-14	
2024-10-15	4.32
2024-10-16	4.30
2024-10-17	4.39
2024-10-18	4.38
2024-10-21	4.49
2024-10-22	4.49
2024-10-23	4.51
2024-10-24	4.47
2024-10-25	4.51
2024-10-28	4.53
2024-10-29	4.52
2024-10-30	4.49
2024-10-31	4.47
2024-11-01	4.57
2024-11-04	4.50
2024-11-05	4.44
2024-11-06	4.60
2024-11-07	4.52
2024-11-08	4.47
2024-11-11	
2024-11-12	4.58
2024-11-13	4.63
2024-11-14	4.58
2024-11-15	4.60
2024-11-18	4.61
2024-11-19	4.57
2024-11-20	4.59
2024-11-21	4.61
2024-11-22	4.60
2024-11-25	4.45
2024-11-26	4.48
2024-11-27	4.44
2024-11-28	
2024-11-29	4.36
2024-12-02	4.36
2024-12-03	4.40

2024-12-04	4.35
2024-12-05	4.33
2024-12-06	4.34
2024-12-09	4.39
2024-12-10	4.41
2024-12-11	4.48
2024-12-12	4.55
2024-12-13	4.61
2024-12-16	4.60
2024-12-17	4.59
2024-12-18	4.65
2024-12-19	4.74
2024-12-20	4.72
2024-12-23	4.78
2024-12-24	4.76
2024-12-25	
2024-12-26	4.76
2024-12-27	4.82
2024-12-30	4.77
2024-12-31	4.78
2025-01-01	
2025-01-02	4.79
2025-01-03	4.82
2025-01-06	4.85
2025-01-07	4.91
2025-01-08	4.91
2025-01-09	4.92
2025-01-10	4.96
2025-01-13	4.97
2025-01-14	4.98
2025-01-15	4.88
2025-01-16	4.84
2025-01-17	4.84
2025-01-20	
2025-01-21	4.80
2025-01-22	4.82
2025-01-23	4.87
2025-01-24	4.85
2025-01-27	4.76
2025-01-28	4.78
2025-01-29	4.79
2025-01-30	4.76
2025-01-31	4.83
2025-02-03	4.77
2025-02-04	4.75
2025-02-05	4.64
2025-02-06	4.65

2025-02-07	4.69
2025-02-10	4.71
2025-02-11	4.75
2025-02-12	4.83
2025-02-13	4.72
2025-02-14	4.69
2025-02-17	
2025-02-18	4.77
2025-02-19	4.76
2025-02-20	4.74
2025-02-21	4.67
2025-02-24	4.66
2025-02-25	4.55
2025-02-26	4.51
2025-02-27	4.56
2025-02-28	4.51
2025-03-03	4.45
2025-03-04	4.53
2025-03-05	4.57
2025-03-06	4.58
2025-03-07	4.62
2025-03-10	4.54
2025-03-11	4.59
2025-03-12	4.63
2025-03-13	4.59
2025-03-14	4.62
2025-03-17	4.60
2025-03-18	4.58
2025-03-19	4.56
2025-03-20	4.55
2025-03-21	4.59
2025-03-24	4.66
2025-03-25	4.65
2025-03-26	4.69
2025-03-27	4.73
2025-03-28	4.64
2025-03-31	4.59
2025-04-01	4.52
2025-04-02	4.54
2025-04-03	4.49
2025-04-04	4.41
2025-04-07	4.58
2025-04-08	4.71
2025-04-09	4.72
2025-04-10	4.86
2025-04-11	4.85
2025-04-14	4.80

2025-04-15	4.79
2025-04-16	4.74
2025-04-17	4.80
2025-04-18	
2025-04-21	4.91
2025-04-22	4.88
2025-04-23	4.83
2025-04-24	4.77
2025-04-25	4.74
2025-04-28	4.69
2025-04-29	4.64
2025-04-30	4.66
2025-05-01	4.74
2025-05-02	4.79
2025-05-05	4.83
2025-05-06	4.81
2025-05-07	4.77
2025-05-08	4.83
2025-05-09	4.83
2025-05-12	4.89
2025-05-13	4.94
2025-05-14	4.97
2025-05-15	4.91
2025-05-16	4.89

BEFORE THE

IDAHO PUBLIC UTILITIES COMMISSION

CASE NO. IPC-E-25-16

IDAHO POWER COMPANY

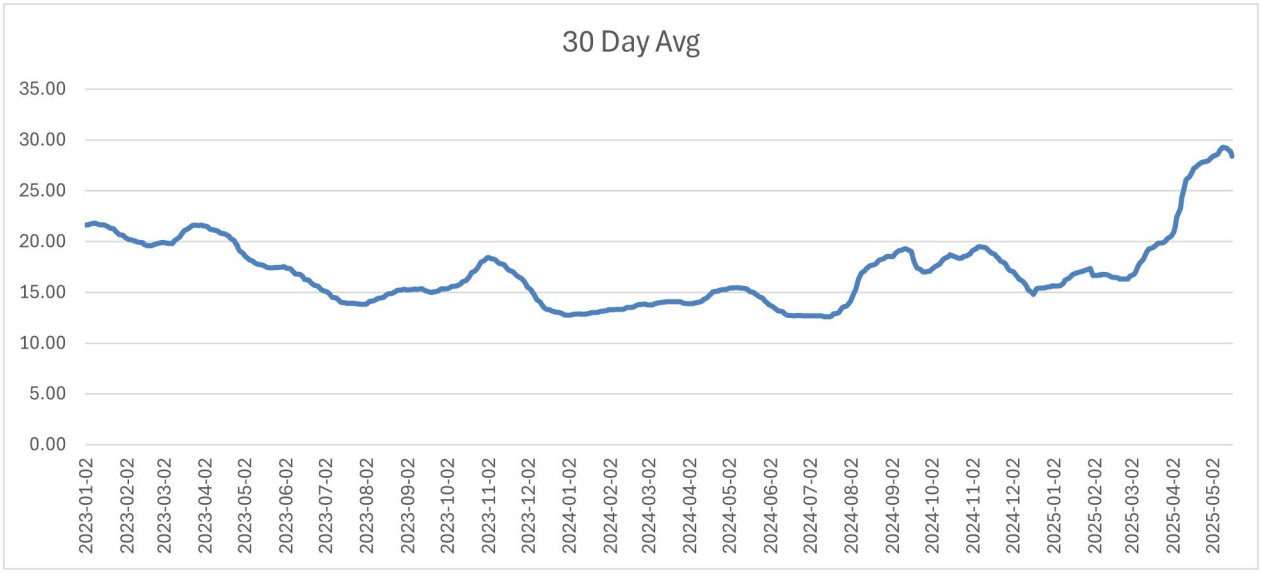
BUCKHAM, DI TESTIMONY

EXHIBIT NO. 16

Statistics

	Maximum of 30 day MA	Avg of 30 day MA
2023	21.81	17.38
2025	29.29	20.66
Difference	34.3%	18.9%
2023 Avg to 25 Max		68.6%

Graphic



Data

Observation Date	VIXCLS	7 period Avg	30 Period Avg
2020-05-18	29.30		
2020-05-19	30.53		
2020-05-20	27.99		
2020-05-21	29.53		
2020-05-22	28.16		
2020-05-25			
2020-05-26	28.01	28.92	
2020-05-27	27.62	28.64	
2020-05-28	28.59	28.32	
2020-05-29	27.51	28.24	
2020-06-01	28.23	28.02	
2020-06-02	26.84	27.80	
2020-06-03	25.66	27.49	
2020-06-04	25.81	27.18	
2020-06-05	24.52	26.74	
2020-06-08	25.81	26.34	
2020-06-09	27.57	26.35	

2020-06-10	27.57	26.25	
2020-06-11	40.79	28.25	
2020-06-12	36.09	29.74	
2020-06-15	34.40	30.96	
2020-06-16	33.67	32.27	
2020-06-17	33.47	33.37	
2020-06-18	32.94	34.13	
2020-06-19	35.12	35.21	
2020-06-22	31.77	33.92	
2020-06-23	31.37	33.25	
2020-06-24	33.84	33.17	
2020-06-25	32.22	32.96	
2020-06-26	34.73	33.14	
2020-06-29	31.78	32.98	30.38
2020-06-30	30.43	32.31	30.42
2020-07-01	28.62	31.86	30.36
2020-07-02	27.68	31.33	30.35
2020-07-03		30.91	30.37
2020-07-06	27.94	30.20	30.37
2020-07-07	29.43	29.31	30.33
2020-07-08	28.08	28.70	30.34
2020-07-09	29.26	28.50	30.39
2020-07-10	27.29	28.28	30.35
2020-07-13	32.19	29.03	30.50
2020-07-14	29.52	29.10	30.55
2020-07-15	27.76	29.08	30.58
2020-07-16	28.00	28.87	30.66
2020-07-17	25.68	28.53	30.65
2020-07-20	24.46	27.84	30.65
2020-07-21	24.84	27.49	30.62
2020-07-22	24.32	26.37	30.51
2020-07-23	26.08	25.88	30.46
2020-07-24	25.84	25.60	29.96
2020-07-27	24.74	25.14	29.58
2020-07-28	25.44	25.10	29.28
2020-07-29	24.10	25.05	28.96
2020-07-30	24.76	25.04	28.67
2020-07-31	24.46	25.06	28.39
2020-08-03	24.28	24.80	28.03
2020-08-04	23.76	24.51	27.76
2020-08-05	22.99	24.26	27.48
2020-08-06	22.65	23.86	27.11
2020-08-07	22.21	23.59	26.78
2020-08-10	22.13	23.21	26.36
2020-08-11	24.03	23.15	26.10
2020-08-12	22.28	22.86	25.83
2020-08-13	22.13	22.63	25.61
2020-08-14	22.05	22.50	25.42
2020-08-17	21.35	22.31	25.29
2020-08-18	21.51	22.21	25.08
2020-08-19	22.54	22.27	24.86
2020-08-20	22.72	22.08	24.69
2020-08-21	22.54	22.12	24.47
2020-08-24	22.37	22.15	24.31

2020-08-25	22.03	22.15	23.99
2020-08-26	23.27	22.43	23.78
2020-08-27	24.47	22.85	23.68
2020-08-28	22.96	22.91	23.52
2020-08-31	26.41	23.44	23.54
2020-09-01	26.12	23.95	23.59
2020-09-02	26.57	24.55	23.65
2020-09-03	33.60	26.20	23.95
2020-09-04	30.75	27.27	24.10
2020-09-07		27.74	24.04
2020-09-08	31.46	29.15	24.26
2020-09-09	28.81	29.55	24.38
2020-09-10	29.71	30.15	24.56
2020-09-11	26.87	30.20	24.63
2020-09-14	25.85	28.91	24.68
2020-09-15	25.59	28.05	24.72
2020-09-16	26.04	27.76	24.80
2020-09-17	26.46	27.05	24.92
2020-09-18	25.83	26.62	25.02
2020-09-21	27.78	26.35	25.21
2020-09-22	26.86	26.34	25.37
2020-09-23	28.58	26.73	25.52
2020-09-24	28.51	27.15	25.72
2020-09-25	26.38	27.20	25.87
2020-09-28	26.19	27.16	26.00
2020-09-29	26.27	27.22	26.17
2020-09-30	26.37	27.02	26.33
2020-10-01	26.70	27.00	26.47
2020-10-02	27.63	26.86	26.63
2020-10-05	27.96	26.79	26.81
2020-10-06	29.48	27.23	27.05
2020-10-07	28.06	27.50	27.25
2020-10-08	26.36	27.51	27.35
2020-10-09	25.00	27.31	27.37
2020-10-12	25.07	27.08	27.44
2020-10-13	26.07	26.86	27.43
2020-10-14	26.40	26.63	27.44
2020-10-15	26.97	26.28	27.45
2020-10-16	27.41	26.18	27.25
2020-10-19	29.18	26.59	27.20
2020-10-20	29.35	27.21	27.26
2020-10-21	28.65	27.72	27.17
2020-10-22	28.11	28.01	27.15
2020-10-23	27.55	28.17	27.08
2020-10-26	32.46	28.96	27.26
2020-10-27	33.35	29.81	27.50
2020-10-28	40.28	31.39	27.98
2020-10-29	37.59	32.57	28.35
2020-10-30	38.02	33.91	28.72
2020-11-02	37.13	35.20	29.09
2020-11-03	35.55	36.34	29.34
2020-11-04	29.57	35.93	29.43
2020-11-05	27.58	35.10	29.39
2020-11-06	24.86	32.90	29.28

2020-11-09	25.75	31.21	29.26
2020-11-10	24.80	29.32	29.21
2020-11-11	23.45	27.37	29.12
2020-11-12	25.35	25.91	29.09
2020-11-13	23.10	24.98	28.97
2020-11-16	22.45	24.25	28.80
2020-11-17	22.71	23.94	28.63
2020-11-18	23.84	23.67	28.45
2020-11-19	23.11	23.43	28.29
2020-11-20	23.70	23.47	28.21
2020-11-23	22.66	23.08	28.13
2020-11-24	21.64	22.87	28.02
2020-11-25	21.25	22.70	27.87
2020-11-26		22.70	27.91
2020-11-27	20.84	22.20	27.71
2020-11-30	20.57	21.78	27.48
2020-12-01	20.77	21.29	27.20
2020-12-02	21.17	21.04	26.93
2020-12-03	21.28	20.98	26.68
2020-12-04	20.79	20.90	26.44
2020-12-07	21.30	20.96	26.23
2020-12-08	20.68	20.94	25.84
2020-12-09	22.27	21.18	25.47
2020-12-10	22.52	21.43	24.88
2020-12-11	23.31	21.74	24.40
2020-12-14	24.72	22.23	23.96
2020-12-15	22.89	22.53	23.48
2020-12-16	22.50	22.70	23.05
2020-12-17	21.93	22.88	22.79
2020-12-18	21.57	22.78	22.59
2020-12-21	25.16	23.15	22.60
2020-12-22	24.23	23.29	22.55
2020-12-23	23.31	23.08	22.50
2020-12-24	21.53	22.89	22.44
2020-12-25		22.96	22.34
2020-12-28	21.70	22.92	22.29
2020-12-29	23.08	23.17	22.31
2020-12-30	22.77	22.77	22.31
2020-12-31	22.75	22.52	22.28
2021-01-01		22.37	22.25
2021-01-04	26.97	23.45	22.36
2021-01-05	25.34	23.77	22.46
2021-01-06	25.07	24.33	22.58
2021-01-07	22.37	24.21	22.62
2021-01-08	21.56	24.01	22.58
2021-01-11	24.08	24.23	22.70
2021-01-12	23.33	24.10	22.79
2021-01-13	22.21	23.42	22.84
2021-01-14	23.25	23.12	22.91
2021-01-15	24.34	23.02	23.02
2021-01-18		23.13	23.10
2021-01-19	23.24	23.41	23.17
2021-01-20	21.58	22.99	23.20
2021-01-21	21.32	22.66	23.17

2021-01-22	21.91	22.61	23.14
2021-01-25	23.19	22.60	23.14
2021-01-26	23.02	22.38	23.08
2021-01-27	37.21	24.50	23.59
2021-01-28	30.21	25.49	23.87
2021-01-29	33.09	27.14	24.26
2021-02-01	30.24	28.41	24.57
2021-02-02	25.56	28.93	24.59
2021-02-03	22.91	28.89	24.54
2021-02-04	21.77	28.71	24.49
2021-02-05	20.87	26.38	24.46
2021-02-08	21.24	25.10	24.35
2021-02-09	21.63	23.46	24.35
2021-02-10	21.99	22.28	24.31
2021-02-11	21.25	21.67	24.26
2021-02-12	19.97	21.25	24.16
2021-02-15		21.16	24.16
2021-02-16	21.46	21.26	23.97
2021-02-17	21.50	21.30	23.84
2021-02-18	22.49	21.44	23.75
2021-02-19	22.05	21.45	23.74
2021-02-22	23.45	21.82	23.81
2021-02-23	23.11	22.34	23.77
2021-02-24	21.34	22.20	23.70
2021-02-25	28.89	23.26	23.93
2021-02-26	27.95	24.18	24.10
2021-03-01	23.35	24.31	24.06
2021-03-02	24.10	24.60	24.06
2021-03-03	26.67	25.06	24.18
2021-03-04	28.57	25.84	24.41
2021-03-05	24.66	26.31	24.52
2021-03-08	25.47	25.82	24.64
2021-03-09	24.03	25.26	24.67
2021-03-10	22.56	25.15	24.65
2021-03-11	21.91	24.84	24.14
2021-03-12	20.69	23.98	23.83
2021-03-15	20.03	22.76	23.39
2021-03-16	19.79	22.07	23.04
2021-03-17	19.23	21.18	22.83
2021-03-18	21.58	20.83	22.79
2021-03-19	20.95	20.60	22.76
2021-03-22	18.88	20.16	22.69
2021-03-23	20.30	20.11	22.66
2021-03-24	21.20	20.28	22.65
2021-03-25	19.81	20.28	22.57
2021-03-26	18.86	20.23	22.50
2021-03-29	20.74	20.11	22.52
2021-03-30	19.61	19.91	22.43
2021-03-31	19.40	19.99	22.36
2021-04-01	17.33	19.56	22.23
2021-04-02		19.29	22.22
2021-04-05	17.91	18.98	22.08
2021-04-06	18.12	18.85	21.90
2021-04-07	17.16	18.26	21.70

2021-04-08	16.95	17.81	21.56
2021-04-09	16.69	17.36	21.15
2021-04-12	16.91	17.29	20.78
2021-04-13	16.65	17.20	20.56
2021-04-14	16.99	17.07	20.32
2021-04-15	16.57	16.85	19.99
2021-04-16	16.25	16.72	19.57
2021-04-19	17.29	16.76	19.33
2021-04-20	18.68	17.05	19.10
2021-04-21	17.50	17.13	18.88
2021-04-22	18.71	17.43	18.76
2021-04-23	17.33	17.48	18.60
2021-04-26	17.64	17.63	18.50
2021-04-27	17.56	17.82	18.42
2021-04-28	17.28	17.81	18.34
2021-04-29	17.61	17.66	18.28
2021-04-30	18.61	17.82	18.18
2021-05-03	18.31	17.76	18.10
2021-05-04	19.48	18.07	18.12
2021-05-05	19.15	18.29	18.08
2021-05-06	18.39	18.40	17.98
2021-05-07	16.69	18.32	17.88
2021-05-10	19.66	18.61	17.91
2021-05-11	21.84	19.07	17.94
2021-05-12	27.59	20.40	18.21
2021-05-13	23.13	20.92	18.33
2021-05-14	18.81	20.87	18.38
2021-05-17	19.72	21.06	18.43
2021-05-18	21.34	21.73	18.54
2021-05-19	22.18	22.09	18.67
2021-05-20	20.67	21.92	18.78
2021-05-21	20.15	20.86	18.88
2021-05-24	18.40	20.18	18.94
2021-05-25	18.84	20.19	19.00
2021-05-26	17.36	19.85	19.02
2021-05-27	16.74	19.19	19.02
2021-05-28	16.76	18.42	19.02
2021-05-31		18.04	19.11
2021-06-01	17.90	17.67	19.13
2021-06-02	17.48	17.51	19.09
2021-06-03	18.04	17.38	19.11
2021-06-04	16.42	17.22	19.04
2021-06-07	16.42	17.17	19.01
2021-06-08	17.07	17.22	18.99
2021-06-09	17.89	17.32	19.00
2021-06-10	16.10	17.06	18.96
2021-06-11	15.65	16.80	18.89
2021-06-14	16.39	16.56	18.82
2021-06-15	17.02	16.65	18.78
2021-06-16	18.15	16.90	18.73
2021-06-17	17.75	16.99	18.69
2021-06-18	20.70	17.39	18.76
2021-06-21	17.89	17.65	18.80
2021-06-22	16.66	17.79	18.70

2021-06-23	16.32	17.78	18.52
2021-06-24	15.97	17.63	18.13
2021-06-25	15.62	17.27	17.88
2021-06-28	15.76	16.99	17.78
2021-06-29	16.02	16.32	17.66
2021-06-30	15.83	16.03	17.47
2021-07-01	15.48	15.86	17.25
2021-07-02	15.07	15.68	17.06
2021-07-05		15.63	16.96
2021-07-06	16.44	15.77	16.89
2021-07-07	16.20	15.84	16.80
2021-07-08	19.00	16.34	16.85
2021-07-09	16.18	16.40	16.83
2021-07-12	16.17	16.51	16.81
2021-07-13	17.12	16.85	16.82
2021-07-14	16.33	16.78	16.77
2021-07-15	17.01	16.86	16.76
2021-07-16	18.45	17.18	16.77
2021-07-19	22.50	17.68	16.97
2021-07-20	19.73	18.19	17.08
2021-07-21	17.91	18.44	17.11
2021-07-22	17.69	18.52	17.10
2021-07-23	17.20	18.64	17.14
2021-07-26	17.58	18.72	17.20
2021-07-27	19.36	18.85	17.30
2021-07-28	18.31	18.25	17.35
2021-07-29	17.70	17.96	17.33
2021-07-30	18.24	18.01	17.35
2021-08-02	19.46	18.26	17.31
2021-08-03	18.04	18.38	17.31
2021-08-04	17.97	18.44	17.36
2021-08-05	17.28	18.14	17.39
2021-08-06	16.15	17.83	17.39
2021-08-09	16.72	17.69	17.43
2021-08-10	16.79	17.49	17.46
2021-08-11	16.06	17.00	17.47
2021-08-12	15.59	16.65	17.46
2021-08-13	15.45	16.29	17.46
2021-08-16	16.12	16.13	17.49
2021-08-17	17.91	16.38	17.51
2021-08-18	21.57	17.07	17.67
2021-08-19	21.67	17.77	17.85
2021-08-20	18.56	18.12	17.83
2021-08-23	17.15	18.35	17.86
2021-08-24	17.22	18.60	17.90
2021-08-25	16.79	18.70	17.89
2021-08-26	18.84	18.83	17.97
2021-08-27	16.39	18.09	17.95
2021-08-30	16.19	17.31	17.88
2021-08-31	16.48	17.01	17.68
2021-09-01	16.11	16.86	17.56
2021-09-02	16.41	16.74	17.52
2021-09-03	16.41	16.69	17.47
2021-09-06		16.33	17.48

2021-09-07	18.14	16.62	17.50
2021-09-08	17.96	16.92	17.46
2021-09-09	18.80	17.31	17.47
2021-09-10	20.95	18.11	17.58
2021-09-13	19.37	18.61	17.62
2021-09-14	19.46	19.11	17.62
2021-09-15	18.18	18.98	17.62
2021-09-16	18.69	19.06	17.65
2021-09-17	20.81	19.47	17.76
2021-09-20	25.71	20.45	18.08
2021-09-21	24.36	20.94	18.34
2021-09-22	20.87	21.15	18.47
2021-09-23	18.63	21.04	18.56
2021-09-24	17.75	20.97	18.63
2021-09-27	18.76	20.98	18.74
2021-09-28	23.25	21.33	18.98
2021-09-29	22.56	20.88	19.13
2021-09-30	23.14	20.71	19.19
2021-10-01	21.15	20.75	19.17
2021-10-04	22.96	21.37	19.32
2021-10-05	21.30	21.87	19.45
2021-10-06	21.00	22.19	19.58
2021-10-07	19.54	21.66	19.67
2021-10-08	18.77	21.12	19.67
2021-10-11	20.00	20.67	19.79
2021-10-12	19.85	20.49	19.91
2021-10-13	18.64	19.87	19.98
2021-10-14	16.86	19.24	20.01
2021-10-15	16.30	18.57	20.01
2021-10-18	16.31	18.10	20.00
2021-10-19	15.70	17.67	19.86
2021-10-20	15.49	17.02	19.78
2021-10-21	15.01	16.33	19.68
2021-10-22	15.43	15.87	19.57
2021-10-25	15.24	15.64	19.39
2021-10-26	15.98	15.59	19.28
2021-10-27	16.98	15.69	19.20
2021-10-28	16.53	15.81	19.15
2021-10-29	16.26	15.92	19.07
2021-11-01	16.41	16.12	18.93
2021-11-02	16.03	16.20	18.61
2021-11-03	15.10	16.18	18.32
2021-11-04	15.44	16.11	18.14
2021-11-05	16.48	16.04	18.07
2021-11-08	17.22	16.13	18.05
2021-11-09	17.78	16.35	18.02
2021-11-10	18.73	16.68	17.88
2021-11-11	17.66	16.92	17.72
2021-11-12	16.29	17.09	17.50
2021-11-15	16.49	17.24	17.35
2021-11-16	16.37	17.22	17.14
2021-11-17	17.11	17.20	17.00
2021-11-18	17.59	17.18	16.89
2021-11-19	17.91	17.06	16.84

2021-11-22	19.17	17.28	16.85
2021-11-23	19.38	17.72	16.83
2021-11-24	18.58	18.02	16.79
2021-11-25		18.29	16.73
2021-11-26	28.62	20.21	17.12
2021-11-29	22.96	21.10	17.34
2021-11-30	27.19	22.65	17.70
2021-12-01	31.12	24.64	18.22
2021-12-02	27.95	26.07	18.63
2021-12-03	30.67	28.09	19.16
2021-12-06	27.18	27.96	19.55
2021-12-07	21.89	26.99	19.77
2021-12-08	19.90	26.56	19.90
2021-12-09	21.58	25.76	20.05
2021-12-10	18.69	23.98	20.13
2021-12-13	20.31	22.89	20.26
2021-12-14	21.89	21.63	20.44
2021-12-15	19.29	20.51	20.55
2021-12-16	20.57	20.32	20.73
2021-12-17	21.57	20.56	20.94
2021-12-20	22.87	20.74	21.15
2021-12-21	21.01	21.07	21.28
2021-12-22	18.63	20.83	21.31
2021-12-23	17.96	20.27	21.28
2021-12-24		20.44	21.40
2021-12-27	17.68	19.95	21.45
2021-12-28	17.54	19.28	21.49
2021-12-29	16.95	18.30	21.51
2021-12-30	17.33	17.68	21.52
2021-12-31	17.22	17.45	21.50
2022-01-03	16.60	17.22	21.46
2022-01-04	16.91	17.18	21.38
2022-01-05	19.73	17.47	21.39
2022-01-06	19.61	17.76	21.43
2022-01-07	18.76	18.02	21.34
2022-01-10	19.40	18.32	21.03
2022-01-11	18.41	18.49	20.88
2022-01-12	17.62	18.63	20.56
2022-01-13	20.31	19.12	20.20
2022-01-14	19.19	19.04	19.91
2022-01-17		18.95	19.54
2022-01-18	22.79	19.62	19.39
2022-01-19	23.85	20.36	19.45
2022-01-20	25.59	21.56	19.65
2022-01-21	28.85	23.43	19.90
2022-01-24	29.90	25.03	20.29
2022-01-25	31.16	27.02	20.66
2022-01-26	31.96	27.73	21.01
2022-01-27	30.49	28.83	21.40
2022-01-28	27.66	29.37	21.64
2022-01-31	24.83	29.26	21.75
2022-02-01	21.96	28.28	21.72
2022-02-02	22.09	27.16	21.76
2022-02-03	24.35	26.19	21.96

2022-02-04	23.22	24.94	22.14
2022-02-07	22.86	23.85	22.16
2022-02-08	21.44	22.96	22.29
2022-02-09	19.96	22.27	22.37
2022-02-10	23.91	22.55	22.60
2022-02-11	27.36	23.30	22.93
2022-02-14	28.33	23.87	23.30
2022-02-15	25.70	24.22	23.61
2022-02-16	24.29	24.43	23.85
2022-02-17	28.11	25.38	24.13
2022-02-18	27.75	26.49	24.40
2022-02-21		26.92	24.60
2022-02-22	28.81	27.17	24.92
2022-02-23	31.02	27.61	25.36
2022-02-24	30.32	28.38	25.80
2022-02-25	27.59	28.93	26.05
2022-02-28	30.15	29.27	26.42
2022-03-01	33.32	30.20	26.65
2022-03-02	30.74	30.28	26.92
2022-03-03	30.48	30.52	27.14
2022-03-04	31.98	30.65	27.35
2022-03-07	36.45	31.53	27.61
2022-03-08	35.13	32.61	27.78
2022-03-09	32.45	32.94	27.82
2022-03-10	30.23	32.49	27.77
2022-03-11	30.75	32.50	27.77
2022-03-14	31.77	32.68	27.91
2022-03-15	29.83	32.37	28.08
2022-03-16	26.67	30.98	28.24
2022-03-17	25.67	29.62	28.35
2022-03-18	23.87	28.40	28.34
2022-03-21	23.53	27.44	28.35
2022-03-22	22.94	26.33	28.35
2022-03-23	23.57	25.15	28.42
2022-03-24	21.67	23.99	28.48
2022-03-25	20.81	23.15	28.38
2022-03-28	19.63	22.29	28.12
2022-03-29	18.90	21.58	27.80
2022-03-30	19.33	20.98	27.59
2022-03-31	20.56	20.64	27.47
2022-04-01	19.63	20.08	27.19
2022-04-04	18.57	19.63	26.88
2022-04-05	21.03	19.66	26.69
2022-04-06	22.10	20.02	26.47
2022-04-07	21.55	20.40	26.17
2022-04-08	21.16	20.66	25.87
2022-04-11	24.37	21.20	25.77
2022-04-12	24.26	21.86	25.58
2022-04-13	21.82	22.33	25.21
2022-04-14	22.70	22.57	24.95
2022-04-15		22.64	24.76
2022-04-18	22.17	22.75	24.44
2022-04-19	21.37	22.78	23.93
2022-04-20	20.32	22.11	23.44

2022-04-21	22.68	21.84	23.12
2022-04-22	28.21	22.91	23.05
2022-04-25	27.02	23.63	22.92
2022-04-26	33.52	25.04	22.98
2022-04-27	31.60	26.39	23.04
2022-04-28	29.99	27.62	23.15
2022-04-29	33.40	29.49	23.41
2022-05-02	32.34	30.87	23.69
2022-05-03	29.25	31.02	23.88
2022-05-04	25.42	30.79	23.97
2022-05-05	31.20	30.46	24.22
2022-05-06	30.19	30.26	24.50
2022-05-09	34.75	30.94	24.97
2022-05-10	32.99	30.88	25.41
2022-05-11	32.56	30.91	25.87
2022-05-12	31.77	31.27	26.28
2022-05-13	28.87	31.76	26.56
2022-05-16	27.47	31.23	26.82
2022-05-17	26.10	30.64	27.07
2022-05-18	30.96	30.10	27.40
2022-05-19	29.35	29.58	27.65
2022-05-20	29.43	29.14	27.91
2022-05-23	28.48	28.67	28.15
2022-05-24	29.45	28.75	28.32
2022-05-25	28.37	28.88	28.46
2022-05-26	27.50	29.08	28.65
2022-05-27	25.72	28.33	28.75
2022-05-30	26.54	27.93	28.68
2022-05-31	26.19	27.46	28.81
2022-06-01	25.69	27.07	28.95
2022-06-02	24.72	26.39	29.09
2022-06-03	24.79	25.88	29.16
2022-06-06	25.07	25.53	29.05
2022-06-07	24.02	25.29	28.96
2022-06-08	23.96	24.92	28.65
2022-06-09	26.09	24.91	28.47
2022-06-10	27.75	25.20	28.40
2022-06-13	34.02	26.53	28.42
2022-06-14	32.69	27.66	28.43
2022-06-15	29.62	28.31	28.44
2022-06-16	32.95	29.58	28.69
2022-06-17	31.13	30.61	28.68
2022-06-20	31.03	31.31	28.71
2022-06-21	30.19	31.66	28.56
2022-06-22	28.95	30.94	28.43
2022-06-23	29.05	30.42	28.32
2022-06-24	27.23	30.08	28.17
2022-06-27	26.95	29.22	28.11
2022-06-28	28.36	28.82	28.14
2022-06-29	28.16	28.41	28.21
2022-06-30	28.71	28.20	28.13
2022-07-01	26.70	27.88	28.05
2022-07-04	27.53	27.66	27.99
2022-07-05	27.54	27.71	27.96

2022-07-06	26.73	27.68	27.87
2022-07-07	26.08	27.35	27.80
2022-07-08	24.64	26.85	27.70
2022-07-11	26.17	26.48	27.72
2022-07-12	27.29	26.57	27.74
2022-07-13	26.82	26.47	27.76
2022-07-14	26.40	26.30	27.79
2022-07-15	24.23	25.95	27.77
2022-07-18	25.30	25.84	27.79
2022-07-19	24.50	25.82	27.77
2022-07-20	23.88	25.49	27.76
2022-07-21	23.11	24.89	27.74
2022-07-22	23.03	24.35	27.64
2022-07-25	23.36	23.92	27.50
2022-07-26	24.69	23.98	27.19
2022-07-27	23.24	23.69	26.89
2022-07-28	22.33	23.38	26.65
2022-07-29	21.33	23.01	26.28
2022-08-01	22.84	22.97	26.01
2022-08-02	23.93	23.10	25.78
2022-08-03	21.95	22.90	25.52
2022-08-04	21.44	22.44	25.27
2022-08-05	21.15	22.14	25.02
2022-08-08	21.29	21.99	24.83
2022-08-09	21.77	22.05	24.66
2022-08-10	19.74	21.61	24.38
2022-08-11	20.20	21.08	24.13
2022-08-12	19.53	20.73	23.83
2022-08-15	19.95	20.52	23.61
2022-08-16	19.69	20.31	23.36
2022-08-17	19.90	20.11	23.11
2022-08-18	19.56	19.80	22.88
2022-08-19	20.60	19.92	22.71
2022-08-22	23.80	20.43	22.68
2022-08-23	24.11	21.09	22.61
2022-08-24	22.82	21.50	22.47
2022-08-25	21.78	21.80	22.30
2022-08-26	25.56	22.60	22.28
2022-08-29	26.21	23.55	22.34
2022-08-30	26.21	24.36	22.37
2022-08-31	25.87	24.65	22.42
2022-09-01	25.56	24.86	22.47
2022-09-02	25.47	25.24	22.55
2022-09-05	25.99	25.84	22.64
2022-09-06	26.91	26.03	22.76
2022-09-07	24.64	25.81	22.75
2022-09-08	23.61	25.44	22.77
2022-09-09	22.79	25.00	22.78
2022-09-12	23.87	24.75	22.86
2022-09-13	27.27	25.01	23.01
2022-09-14	26.16	25.04	23.08
2022-09-15	26.27	24.94	23.22
2022-09-16	26.30	25.18	23.37
2022-09-19	25.76	25.49	23.52

2022-09-20	27.16	26.11	23.71
2022-09-21	27.99	26.70	23.91
2022-09-22	27.35	26.71	24.16
2022-09-23	29.92	27.25	24.47
2022-09-26	32.26	28.11	24.88
2022-09-27	32.60	29.01	25.29
2022-09-28	30.18	29.64	25.63
2022-09-29	31.84	30.31	26.01
2022-09-30	31.62	30.82	26.40
2022-10-03	30.10	31.22	26.71
2022-10-04	29.07	31.10	26.88
2022-10-05	28.55	30.57	27.02
2022-10-06	30.52	30.27	27.27
2022-10-07	31.36	30.44	27.58
2022-10-10	32.45	30.52	27.80
2022-10-11	33.63	30.81	28.04
2022-10-12	33.57	31.31	28.28
2022-10-13	31.94	31.72	28.47
2022-10-14	32.02	32.21	28.68
2022-10-17	31.37	32.33	28.87
2022-10-18	30.50	32.21	29.02
2022-10-19	30.76	31.97	29.14
2022-10-20	29.98	31.45	29.32
2022-10-21	29.69	30.89	29.51
2022-10-24	29.85	30.60	29.74
2022-10-25	28.46	30.09	29.89
2022-10-26	27.28	29.50	29.89
2022-10-27	27.39	29.06	29.93
2022-10-28	25.75	28.34	29.91
2022-10-31	25.88	27.76	29.90
2022-11-01	25.81	27.20	29.90
2022-11-02	25.86	26.63	29.86
2022-11-03	25.30	26.18	29.77
2022-11-04	24.55	25.79	29.68
2022-11-07	24.35	25.36	29.50
2022-11-08	25.54	25.33	29.28
2022-11-09	26.09	25.36	29.07
2022-11-10	23.53	25.03	28.86
2022-11-11	22.52	24.55	28.56
2022-11-14	23.73	24.33	28.30
2022-11-15	24.54	24.33	28.12
2022-11-16	24.11	24.29	27.96
2022-11-17	23.93	24.06	27.81
2022-11-18	23.12	23.64	27.58
2022-11-21	22.36	23.47	27.29
2022-11-22	21.29	23.30	26.93
2022-11-23	20.35	22.81	26.50
2022-11-24	20.42	22.23	26.07
2022-11-25	20.50	21.71	25.70
2022-11-28	22.21	21.46	25.39
2022-11-29	21.89	21.29	25.08
2022-11-30	20.58	21.03	24.76
2022-12-01	19.84	20.83	24.41
2022-12-02	19.06	20.64	24.06

2022-12-05	20.75	20.69	23.77
2022-12-06	22.17	20.93	23.52
2022-12-07	22.68	21.00	23.33
2022-12-08	22.29	21.05	23.17
2022-12-09	22.83	21.37	23.03
2022-12-12	25.00	22.11	23.00
2022-12-13	22.55	22.61	22.90
2022-12-14	21.14	22.67	22.74
2022-12-15	22.83	22.76	22.65
2022-12-16	22.62	22.75	22.56
2022-12-19	22.42	22.77	22.49
2022-12-20	21.48	22.58	22.40
2022-12-21	20.07	21.87	22.22
2022-12-22	21.97	21.79	22.09
2022-12-23	20.87	21.75	22.00
2022-12-26		21.57	21.99
2022-12-27	21.65	21.41	21.92
2022-12-28	22.14	21.36	21.84
2022-12-29	21.44	21.36	21.75
2022-12-30	21.67	21.62	21.67
2023-01-02		21.55	21.62
2023-01-03	22.90	21.96	21.64
2023-01-04	22.01	21.97	21.67
2023-01-05	22.46	22.10	21.74
2023-01-06	21.13	21.94	21.76
2023-01-09	21.97	22.02	21.81
2023-01-10	20.58	21.84	21.76
2023-01-11	21.09	21.73	21.73
2023-01-12	18.83	21.15	21.67
2023-01-13	18.35	20.63	21.62
2023-01-16	19.49	20.21	21.63
2023-01-17	19.36	19.95	21.59
2023-01-18	20.34	19.72	21.52
2023-01-19	20.52	19.71	21.45
2023-01-20	19.85	19.53	21.36
2023-01-23	19.81	19.67	21.26
2023-01-24	19.20	19.80	21.06
2023-01-25	19.08	19.74	20.94
2023-01-26	18.73	19.65	20.86
2023-01-27	18.51	19.39	20.71
2023-01-30	19.94	19.30	20.62
2023-01-31	19.40	19.24	20.51
2023-02-01	17.87	18.96	20.39
2023-02-02	18.73	18.89	20.34
2023-02-03	18.33	18.79	20.22
2023-02-06	19.43	18.89	20.17
2023-02-07	18.66	18.91	20.12
2023-02-08	19.63	18.86	20.05
2023-02-09	20.71	19.05	20.00
2023-02-10	20.53	19.43	19.97
2023-02-13	20.34	19.66	19.93
2023-02-14	18.91	19.74	19.89
2023-02-15	18.23	19.57	19.74
2023-02-16	20.17	19.79	19.68

2023-02-17	20.02	19.84	19.60
2023-02-20	21.23	19.92	19.61
2023-02-21	22.87	20.25	19.64
2023-02-22	22.29	20.53	19.69
2023-02-23	21.14	20.85	19.69
2023-02-24	21.67	21.34	19.79
2023-02-27	20.95	21.45	19.87
2023-02-28	20.70	21.55	19.91
2023-03-01	20.58	21.46	19.95
2023-03-02	19.59	20.99	19.92
2023-03-03	18.49	20.45	19.86
2023-03-06	18.61	20.08	19.82
2023-03-07	19.59	19.79	19.81
2023-03-08	19.11	19.52	19.81
2023-03-09	22.61	19.80	19.92
2023-03-10	24.80	20.40	20.12
2023-03-13	26.52	21.39	20.38
2023-03-14	23.73	22.14	20.50
2023-03-15	26.14	23.21	20.72
2023-03-16	22.99	23.70	20.88
2023-03-17	25.51	24.61	21.10
2023-03-20	24.15	24.83	21.29
2023-03-21	21.38	24.35	21.35
2023-03-22	22.26	23.74	21.47
2023-03-23	22.61	23.58	21.56
2023-03-24	21.74	22.95	21.60
2023-03-27	20.60	22.61	21.60
2023-03-28	19.97	21.82	21.59
2023-03-29	19.12	21.10	21.59
2023-03-30	19.02	20.76	21.62
2023-03-31	18.70	20.25	21.57
2023-04-03	18.55	19.67	21.52
2023-04-04	19.00	19.28	21.45
2023-04-05	19.08	19.06	21.33
2023-04-06	18.40	18.84	21.20
2023-04-07		18.79	21.21
2023-04-10	18.97	18.78	21.12
2023-04-11	19.10	18.85	21.05
2023-04-12	19.09	18.94	21.00
2023-04-13	17.80	18.74	20.91
2023-04-14	17.07	18.41	20.82
2023-04-17	16.95	18.16	20.77
2023-04-18	16.83	17.97	20.71
2023-04-19	16.46	17.61	20.61
2023-04-20	17.17	17.34	20.54
2023-04-21	16.77	17.01	20.35
2023-04-24	16.89	16.88	20.09
2023-04-25	18.76	17.12	19.83
2023-04-26	18.84	17.39	19.66
2023-04-27	17.03	17.42	19.36
2023-04-28	15.78	17.32	19.12
2023-05-01	16.08	17.16	18.81
2023-05-02	17.78	17.31	18.59
2023-05-03	18.34	17.52	18.49

2023-05-04	20.09	17.71	18.42
2023-05-05	17.19	17.47	18.24
2023-05-08	16.98	17.46	18.08
2023-05-09	17.71	17.74	17.98
2023-05-10	16.94	17.86	17.88
2023-05-11	16.93	17.74	17.81
2023-05-12	17.03	17.55	17.74
2023-05-15	17.12	17.13	17.69
2023-05-16	17.99	17.24	17.67
2023-05-17	16.87	17.23	17.60
2023-05-18	16.05	16.99	17.50
2023-05-19	16.81	16.97	17.45
2023-05-22	17.21	17.01	17.44
2023-05-23	18.53	17.23	17.43
2023-05-24	20.03	17.64	17.46
2023-05-25	19.14	17.81	17.46
2023-05-26	17.95	17.96	17.46
2023-05-29	17.46	18.16	17.47
2023-05-30	17.46	18.25	17.49
2023-05-31	17.94	18.36	17.53
2023-06-01	15.65	17.95	17.50
2023-06-02	14.60	17.17	17.42
2023-06-05	14.73	16.54	17.35
2023-06-06	13.96	15.97	17.26
2023-06-07	13.94	15.47	17.10
2023-06-08	13.65	14.92	16.93
2023-06-09	13.83	14.34	16.83
2023-06-12	15.01	14.25	16.81
2023-06-13	14.61	14.25	16.76
2023-06-14	13.88	14.13	16.63
2023-06-15	14.50	14.20	16.51
2023-06-16	13.54	14.15	16.30
2023-06-19	14.19	14.22	16.20
2023-06-20	13.88	14.23	16.10
2023-06-21	13.20	13.97	15.96
2023-06-22	12.91	13.73	15.83
2023-06-23	13.44	13.67	15.71
2023-06-26	14.25	13.63	15.62
2023-06-27	13.74	13.66	15.51
2023-06-28	13.43	13.55	15.37
2023-06-29	13.54	13.50	15.26
2023-06-30	13.59	13.56	15.18
2023-07-03	13.57	13.65	15.08
2023-07-04	13.70	13.69	14.96
2023-07-05	14.18	13.68	14.82
2023-07-06	15.44	13.92	14.67
2023-07-07	14.83	14.12	14.54
2023-07-10	15.07	14.34	14.44
2023-07-11	14.84	14.52	14.36
2023-07-12	13.54	14.51	14.23
2023-07-13	13.61	14.50	14.09
2023-07-14	13.34	14.38	14.02
2023-07-17	13.48	14.10	13.98
2023-07-18	13.30	13.88	13.94

2023-07-19	13.76	13.70	13.93
2023-07-20	13.99	13.57	13.93
2023-07-21	13.60	13.58	13.93
2023-07-24	13.91	13.63	13.93
2023-07-25	13.86	13.70	13.89
2023-07-26	13.19	13.66	13.85
2023-07-27	14.41	13.82	13.87
2023-07-28	13.33	13.76	13.83
2023-07-31	13.63	13.70	13.83
2023-08-01	13.93	13.75	13.82
2023-08-02	16.09	14.06	13.89
2023-08-03	15.92	14.36	13.98
2023-08-04	17.10	14.92	14.12
2023-08-07	15.77	15.11	14.19
2023-08-08	15.99	15.49	14.25
2023-08-09	15.96	15.82	14.32
2023-08-10	15.85	16.10	14.40
2023-08-11	14.84	15.92	14.44
2023-08-14	14.82	15.76	14.48
2023-08-15	16.46	15.67	14.57
2023-08-16	16.78	15.81	14.67
2023-08-17	17.89	16.09	14.79
2023-08-18	17.30	16.28	14.85
2023-08-21	17.13	16.46	14.93
2023-08-22	16.97	16.76	14.99
2023-08-23	15.98	16.93	15.02
2023-08-24	17.20	17.04	15.14
2023-08-25	15.68	16.88	15.21
2023-08-28	15.08	16.48	15.26
2023-08-29	14.45	16.07	15.30
2023-08-30	13.88	15.61	15.31
2023-08-31	13.57	15.12	15.31
2023-09-01	13.09	14.71	15.28
2023-09-04	13.82	14.22	15.29
2023-09-05	14.01	13.99	15.29
2023-09-06	14.45	13.90	15.31
2023-09-07	14.40	13.89	15.35
2023-09-08	13.84	13.88	15.33
2023-09-11	13.80	13.92	15.34
2023-09-12	14.23	14.08	15.36
2023-09-13	13.48	14.03	15.35
2023-09-14	12.82	13.86	15.24
2023-09-15	13.79	13.77	15.18
2023-09-18	14.00	13.71	15.08
2023-09-19	14.11	13.75	15.02
2023-09-20	15.14	13.94	14.99
2023-09-21	17.54	14.41	15.05
2023-09-22	17.20	14.94	15.09
2023-09-25	16.90	15.53	15.16
2023-09-26	18.94	16.26	15.29
2023-09-27	18.22	16.86	15.34
2023-09-28	17.34	17.33	15.36
2023-09-29	17.52	17.67	15.35
2023-10-02	17.61	17.68	15.36

2023-10-03	19.78	18.04	15.45
2023-10-04	18.58	18.28	15.50
2023-10-05	18.49	18.22	15.58
2023-10-06	17.45	18.11	15.59
2023-10-09	17.70	18.16	15.65
2023-10-10	17.03	18.09	15.72
2023-10-11	16.09	17.87	15.77
2023-10-12	16.69	17.43	15.86
2023-10-13	19.32	17.54	16.04
2023-10-16	17.21	17.36	16.18
2023-10-17	17.88	17.42	16.31
2023-10-18	19.22	17.63	16.48
2023-10-19	21.40	18.26	16.70
2023-10-20	21.71	19.06	16.94
2023-10-23	20.37	19.59	17.15
2023-10-24	18.97	19.54	17.31
2023-10-25	20.19	19.96	17.51
2023-10-26	20.68	20.36	17.74
2023-10-27	21.27	20.66	18.01
2023-10-30	19.75	20.42	18.20
2023-10-31	18.14	19.91	18.34
2023-11-01	16.87	19.41	18.43
2023-11-02	15.66	18.94	18.44
2023-11-03	14.91	18.18	18.36
2023-11-06	14.89	17.36	18.28
2023-11-07	14.81	16.43	18.22
2023-11-08	14.45	15.68	18.07
2023-11-09	15.29	15.27	17.98
2023-11-10	14.17	14.88	17.87
2023-11-13	14.76	14.75	17.79
2023-11-14	14.16	14.65	17.67
2023-11-15	14.18	14.55	17.49
2023-11-16	14.32	14.48	17.36
2023-11-17	13.80	14.38	17.20
2023-11-20	13.41	14.11	17.07
2023-11-21	13.35	14.00	16.93
2023-11-22	12.85	13.72	16.80
2023-11-23	12.80	13.53	16.69
2023-11-24	12.46	13.28	16.56
2023-11-27	12.69	13.05	16.34
2023-11-28	12.69	12.89	16.20
2023-11-29	12.98	12.83	16.04
2023-11-30	12.92	12.77	15.84
2023-12-01	12.63	12.74	15.55
2023-12-04	13.08	12.78	15.27
2023-12-05	12.85	12.83	15.03
2023-12-06	12.97	12.87	14.84
2023-12-07	13.06	12.93	14.61
2023-12-08	12.35	12.84	14.34
2023-12-11	12.63	12.80	14.06
2023-12-12	12.07	12.72	13.81
2023-12-13	12.19	12.59	13.62
2023-12-14	12.48	12.54	13.48
2023-12-15	12.28	12.44	13.37

2023-12-18	12.56	12.37	13.29
2023-12-19	12.53	12.39	13.22
2023-12-20	13.67	12.54	13.18
2023-12-21	13.65	12.77	13.16
2023-12-22	13.03	12.89	13.08
2023-12-25		12.95	13.05
2023-12-26	12.99	13.07	12.99
2023-12-27	12.43	13.05	12.93
2023-12-28	12.47	13.04	12.87
2023-12-29	12.45	12.84	12.81
2024-01-01		12.67	12.78
2024-01-02	13.20	12.71	12.77
2024-01-03	14.04	12.93	12.79
2024-01-04	14.13	13.12	12.84
2024-01-05	13.35	13.27	12.86
2024-01-08	13.08	13.38	12.88
2024-01-09	12.76	13.43	12.88
2024-01-10	12.69	13.32	12.88
2024-01-11	12.44	13.21	12.86
2024-01-12	12.70	13.02	12.85
2024-01-15	13.25	12.90	12.88
2024-01-16	13.84	12.97	12.90
2024-01-17	14.79	13.21	12.97
2024-01-18	14.13	13.41	13.01
2024-01-19	13.30	13.49	13.02
2024-01-22	13.19	13.60	13.05
2024-01-23	12.55	13.58	13.04
2024-01-24	13.14	13.56	13.08
2024-01-25	13.45	13.51	13.12
2024-01-26	13.26	13.29	13.15
2024-01-29	13.60	13.21	13.20
2024-01-30	13.31	13.21	13.22
2024-01-31	14.35	13.38	13.28
2024-02-01	13.88	13.57	13.29
2024-02-02	13.85	13.67	13.30
2024-02-05	13.67	13.70	13.32
2024-02-06	13.06	13.67	13.31
2024-02-07	12.83	13.56	13.31
2024-02-08	12.79	13.49	13.32
2024-02-09	12.93	13.29	13.33
2024-02-12	13.93	13.29	13.38
2024-02-13	15.85	13.58	13.46
2024-02-14	14.38	13.68	13.50
2024-02-15	14.01	13.82	13.50
2024-02-16	14.24	14.02	13.50
2024-02-19	14.71	14.29	13.55
2024-02-20	15.42	14.65	13.62
2024-02-21	15.34	14.85	13.71
2024-02-22	14.54	14.66	13.77
2024-02-23	13.75	14.57	13.81
2024-02-26	13.74	14.53	13.84
2024-02-27	13.43	14.42	13.85
2024-02-28	13.84	14.29	13.85
2024-02-29	13.40	14.01	13.80

2024-03-01	13.11	13.69	13.77
2024-03-04	13.49	13.54	13.78
2024-03-05	14.46	13.64	13.82
2024-03-06	14.50	13.75	13.88
2024-03-07	14.44	13.89	13.92
2024-03-08	14.74	14.02	13.96
2024-03-11	15.22	14.28	14.03
2024-03-12	13.84	14.38	14.03
2024-03-13	13.75	14.42	14.05
2024-03-14	14.40	14.41	14.05
2024-03-15	14.41	14.40	14.07
2024-03-18	14.33	14.38	14.08
2024-03-19	13.82	14.25	14.09
2024-03-20	13.04	13.94	14.09
2024-03-21	12.92	13.81	14.09
2024-03-22	13.06	13.71	14.10
2024-03-25	13.19	13.54	14.11
2024-03-26	13.24	13.37	14.08
2024-03-27	12.78	13.15	13.99
2024-03-28	13.01	13.03	13.94
2024-03-29		13.03	13.94
2024-04-01	13.65	13.16	13.92
2024-04-02	14.61	13.41	13.92
2024-04-03	14.33	13.60	13.88
2024-04-04	16.35	14.12	13.91
2024-04-05	16.03	14.66	13.96
2024-04-08	15.19	15.03	14.01
2024-04-09	14.98	15.02	14.05
2024-04-10	15.80	15.33	14.13
2024-04-11	14.91	15.37	14.17
2024-04-12	17.31	15.80	14.30
2024-04-15	19.23	16.21	14.50
2024-04-16	18.40	16.55	14.66
2024-04-17	18.21	16.98	14.79
2024-04-18	18.00	17.41	14.91
2024-04-19	18.71	17.82	15.05
2024-04-22	16.94	18.11	15.12
2024-04-23	15.69	17.88	15.14
2024-04-24	15.97	17.42	15.21
2024-04-25	15.37	16.98	15.26
2024-04-26	15.03	16.53	15.28
2024-04-29	14.67	16.05	15.29
2024-04-30	15.65	15.62	15.34
2024-05-01	15.39	15.40	15.39
2024-05-02	14.68	15.25	15.44
2024-05-03	13.49	14.90	15.46
2024-05-06	13.49	14.63	15.48
2024-05-07	13.23	14.37	15.48
2024-05-08	13.00	14.13	15.47
2024-05-09	12.69	13.71	15.47
2024-05-10	12.55	13.30	15.45
2024-05-13	13.60	13.15	15.39
2024-05-14	13.42	13.14	15.38
2024-05-15	12.45	12.99	15.31

2024-05-16	12.42	12.88	15.25
2024-05-17	11.99	12.73	15.11
2024-05-20	12.15	12.65	14.99
2024-05-21	11.86	12.56	14.88
2024-05-22	12.29	12.37	14.79
2024-05-23	12.77	12.28	14.70
2024-05-24	11.93	12.20	14.60
2024-05-27	12.36	12.19	14.44
2024-05-28	12.92	12.33	14.24
2024-05-29	14.28	12.63	14.10
2024-05-30	14.47	13.00	13.98
2024-05-31	12.92	13.09	13.82
2024-06-03	13.11	13.14	13.64
2024-06-04	13.16	13.32	13.52
2024-06-05	12.63	13.36	13.42
2024-06-06	12.58	13.31	13.31
2024-06-07	12.22	13.01	13.21
2024-06-10	12.74	12.77	13.13
2024-06-11	12.85	12.76	13.07
2024-06-12	12.04	12.60	12.96
2024-06-13	11.94	12.43	12.85
2024-06-14	12.66	12.43	12.78
2024-06-17	12.75	12.46	12.76
2024-06-18	12.30	12.47	12.72
2024-06-19	12.48	12.43	12.69
2024-06-20	13.28	12.49	12.70
2024-06-21	13.20	12.66	12.72
2024-06-24	13.33	12.86	12.75
2024-06-25	12.84	12.88	12.72
2024-06-26	12.55	12.85	12.69
2024-06-27	12.24	12.85	12.69
2024-06-28	12.44	12.84	12.69
2024-07-01	12.22	12.69	12.69
2024-07-02	12.03	12.52	12.69
2024-07-03	12.09	12.34	12.70
2024-07-04	12.26	12.26	12.70
2024-07-05	12.48	12.25	12.69
2024-07-08	12.37	12.27	12.70
2024-07-09	12.51	12.28	12.71
2024-07-10	12.85	12.37	12.70
2024-07-11	12.92	12.50	12.66
2024-07-12	12.46	12.55	12.60
2024-07-15	13.12	12.67	12.60
2024-07-16	13.19	12.77	12.60
2024-07-17	14.48	13.08	12.65
2024-07-18	15.93	13.56	12.75
2024-07-19	16.52	14.09	12.88
2024-07-22	14.91	14.37	12.97
2024-07-23	14.72	14.70	13.03
2024-07-24	18.04	15.40	13.20
2024-07-25	18.46	16.15	13.41
2024-07-26	16.39	16.42	13.55
2024-07-29	16.60	16.52	13.68
2024-07-30	17.69	16.69	13.84

2024-07-31	16.36	16.89	13.97
2024-08-01	18.59	17.45	14.16
2024-08-02	23.39	18.21	14.49
2024-08-05	38.57	21.08	15.31
2024-08-06	27.71	22.70	15.77
2024-08-07	27.85	24.31	16.26
2024-08-08	23.79	25.18	16.62
2024-08-09	20.37	25.75	16.88
2024-08-12	20.71	26.06	17.15
2024-08-13	18.12	25.30	17.34
2024-08-14	16.19	22.11	17.47
2024-08-15	15.23	20.32	17.57
2024-08-16	14.80	18.46	17.66
2024-08-19	14.65	17.15	17.73
2024-08-20	15.88	16.51	17.84
2024-08-21	16.27	15.88	17.96
2024-08-22	17.55	15.80	18.11
2024-08-23	15.86	15.75	18.21
2024-08-26	16.15	15.88	18.33
2024-08-27	15.43	15.97	18.40
2024-08-28	17.11	16.32	18.53
2024-08-29	15.65	16.29	18.56
2024-08-30	15.00	16.11	18.53
2024-09-02	15.55	15.82	18.50
2024-09-03	20.72	16.52	18.69
2024-09-04	21.32	17.25	18.90
2024-09-05	19.90	17.89	18.96
2024-09-06	22.38	18.65	19.09
2024-09-09	19.45	19.19	19.19
2024-09-10	19.08	19.77	19.27
2024-09-11	17.69	20.08	19.27
2024-09-12	17.07	19.56	19.29
2024-09-13	16.56	18.88	19.23
2024-09-16	17.14	18.48	19.02
2024-09-17	17.61	17.80	18.35
2024-09-18	18.23	17.63	18.04
2024-09-19	16.33	17.23	17.67
2024-09-20	16.15	17.01	17.42
2024-09-23	15.89	16.84	17.28
2024-09-24	15.39	16.68	17.11
2024-09-25	15.41	16.43	17.02
2024-09-26	15.37	16.11	16.99
2024-09-27	16.96	15.93	17.05
2024-09-30	16.73	15.99	17.11
2024-10-01	19.26	16.43	17.26
2024-10-02	18.90	16.86	17.36
2024-10-03	20.49	17.59	17.49
2024-10-04	19.21	18.13	17.55
2024-10-07	22.64	19.17	17.77
2024-10-08	21.42	19.81	17.94
2024-10-09	20.86	20.40	18.11
2024-10-10	20.93	20.64	18.24
2024-10-11	20.46	20.86	18.39
2024-10-14	19.70	20.75	18.54

2024-10-15	20.64	20.95	18.71
2024-10-16	19.58	20.51	18.67
2024-10-17	19.11	20.18	18.60
2024-10-18	18.03	19.78	18.54
2024-10-21	18.37	19.41	18.41
2024-10-22	18.20	19.09	18.37
2024-10-23	19.24	19.02	18.37
2024-10-24	19.08	18.80	18.42
2024-10-25	20.33	18.91	18.52
2024-10-28	19.80	19.01	18.63
2024-10-29	19.34	19.19	18.70
2024-10-30	20.35	19.48	18.79
2024-10-31	23.16	20.19	18.95
2024-11-01	21.88	20.56	19.13
2024-11-04	21.98	20.98	19.31
2024-11-05	20.49	21.00	19.46
2024-11-06	16.27	20.50	19.49
2024-11-07	15.20	19.90	19.48
2024-11-08	14.94	19.13	19.47
2024-11-11	14.97	17.96	19.41
2024-11-12	14.71	16.94	19.34
2024-11-13	14.02	15.80	19.17
2024-11-14	14.31	14.92	19.02
2024-11-15	16.14	14.90	18.88
2024-11-18	15.58	14.95	18.77
2024-11-19	16.35	15.15	18.56
2024-11-20	17.16	15.47	18.43
2024-11-21	16.87	15.78	18.30
2024-11-22	15.24	15.95	18.11
2024-11-25	14.60	15.99	17.92
2024-11-26	14.10	15.70	17.74
2024-11-27	14.10	15.49	17.53
2024-11-28	13.90	15.14	17.35
2024-11-29	13.51	14.62	17.17
2024-12-02	13.34	14.11	17.02
2024-12-03	13.30	13.84	16.85
2024-12-04	13.45	13.67	16.70
2024-12-05	13.54	13.59	16.52
2024-12-06	12.77	13.40	16.31
2024-12-09	14.19	13.44	16.11
2024-12-10	14.18	13.54	15.93
2024-12-11	13.58	13.57	15.75
2024-12-12	13.92	13.66	15.54
2024-12-13	13.81	13.71	15.24
2024-12-16	14.69	13.88	15.01
2024-12-17	15.87	14.32	14.81
2024-12-18	27.62	16.24	15.04
2024-12-19	24.09	17.65	15.29
2024-12-20	18.36	18.34	15.39
2024-12-23	16.78	18.75	15.45
2024-12-24	14.27	18.81	15.43
2024-12-25		19.50	15.45
2024-12-26	14.73	19.31	15.48
2024-12-27	15.95	17.36	15.53

2024-12-30	17.40	16.25	15.58
2024-12-31	17.35	16.08	15.63
2025-01-01		15.94	15.61
2025-01-02	17.93	16.67	15.64
2025-01-03	16.13	16.58	15.61
2025-01-06	16.04	16.80	15.64
2025-01-07	17.82	17.11	15.75
2025-01-08	17.70	17.16	15.87
2025-01-09	18.07	17.28	16.01
2025-01-10	19.54	17.60	16.20
2025-01-13	19.19	17.78	16.40
2025-01-14	18.71	18.15	16.59
2025-01-15	16.12	18.16	16.68
2025-01-16	16.60	17.99	16.79
2025-01-17	15.97	17.74	16.88
2025-01-20	15.81	17.42	16.98
2025-01-21	15.06	16.78	17.01
2025-01-22	15.10	16.20	17.04
2025-01-23	15.02	15.67	17.09
2025-01-24	14.85	15.49	17.12
2025-01-27	17.90	15.67	17.26
2025-01-28	16.41	15.74	17.32
2025-01-29	16.56	15.84	17.35
2025-01-30	15.84	15.95	16.94
2025-01-31	16.43	16.14	16.68
2025-02-03	18.62	16.66	16.69
2025-02-04	17.21	17.00	16.70
2025-02-05	15.77	16.69	16.75
2025-02-06	15.50	16.56	16.71
2025-02-07	16.54	16.56	16.77
2025-02-10	15.81	16.55	16.77
2025-02-11	16.02	16.50	16.72
2025-02-12	15.89	16.11	16.67
2025-02-13	15.10	15.80	16.62
2025-02-14	14.77	15.66	16.52
2025-02-17	15.37	15.64	16.49
2025-02-18	15.35	15.47	16.47
2025-02-19	15.27	15.40	16.39
2025-02-20	15.66	15.34	16.32
2025-02-21	18.21	15.68	16.33
2025-02-24	18.98	16.23	16.31
2025-02-25	19.43	16.90	16.32
2025-02-26	19.10	17.43	16.33
2025-02-27	21.13	18.25	16.49
2025-02-28	19.63	18.88	16.59
2025-03-03	22.78	19.89	16.81
2025-03-04	23.51	20.65	17.06
2025-03-05	21.93	21.07	17.28
2025-03-06	24.87	21.85	17.60
2025-03-07	23.37	22.46	17.86
2025-03-10	27.86	23.42	18.28
2025-03-11	26.92	24.46	18.58
2025-03-12	24.23	24.67	18.83
2025-03-13	24.66	24.83	19.09

2025-03-14	21.77	24.81	19.28
2025-03-17	20.51	24.19	19.41
2025-03-18	21.70	23.95	19.51
2025-03-19	19.90	22.81	19.60
2025-03-20	19.80	21.80	19.73
2025-03-21	19.28	21.09	19.85
2025-03-24	17.48	20.06	19.88
2025-03-25	17.15	19.40	19.92
2025-03-26	18.33	19.09	20.00
2025-03-27	18.69	18.66	20.09
2025-03-28	21.65	18.91	20.30
2025-03-31	22.28	19.27	20.54
2025-04-01	21.77	19.62	20.75
2025-04-02	21.51	20.20	20.95
2025-04-03	30.02	22.04	21.42
2025-04-04	45.31	25.89	22.38
2025-04-07	46.98	29.93	23.31
2025-04-08	52.33	34.31	24.38
2025-04-09	33.62	35.93	24.84
2025-04-10	40.72	38.64	25.54
2025-04-11	37.56	40.93	26.07
2025-04-14	30.89	41.06	26.43
2025-04-15	30.12	38.89	26.67
2025-04-16	32.64	36.84	26.96
2025-04-17	29.65	33.60	27.21
2025-04-18		33.60	27.29
2025-04-21	33.82	32.45	27.64
2025-04-22	30.57	31.28	27.73
2025-04-23	28.45	30.88	27.78
2025-04-24	26.47	30.27	27.85
2025-04-25	24.84	28.97	27.86
2025-04-28	25.15	28.22	27.97
2025-04-29	24.17	27.64	28.10
2025-04-30	24.70	26.34	28.20
2025-05-01	24.60	25.48	28.35
2025-05-02	22.68	24.66	28.45
2025-05-05	23.64	24.25	28.59
2025-05-06	24.76	24.24	28.84
2025-05-07	23.55	24.01	29.05
2025-05-08	22.48	23.77	29.19
2025-05-09	21.90	23.37	29.29
2025-05-12	18.39	22.49	29.19
2025-05-13	18.22	21.85	29.05
2025-05-14	18.62	21.13	28.95
2025-05-15	17.83	20.14	28.82
2025-05-16	17.24	19.24	28.40

BEFORE THE

IDAHO PUBLIC UTILITIES COMMISSION

CASE NO. IPC-E-25-16

IDAHO POWER COMPANY

BUCKHAM, DI TESTIMONY

EXHIBIT NO. 17

IDAHO POWER COMPANY

PRO FORMA COST OF CAPITAL
SUMMARIZED
December 31, 2025 Capitalization
(000's)

Line No	(1)	(2) Capitalization Structure Amount	(3) Capitalization Structure Percent	(4) Embedded Cost	(5) Weighted Cost
1	Long-term Debt	3,461,300	49.0%	5.132%	2.515%
3	Common Equity	3,600,000	51.0%	10.400% *	5.302%
4	Total Capitalization	$7,061,300	100.000%		7.818%

Note:
* Requested Rate of Return

Exhibit No. 17
Case No. IPC-E-25-16
B. Buckham, IPC
1 of 2

IDAHO POWER COMPANY
PRO FORMA COST OF LONG-TERM DEBT
As of 12/31/2025
(000's)

Line No.	(1) Class and Series	(2) Coupon Rate	(3) Settlement Date	(4) Maturity Date	(5) Principal Amount Issued	(6) Principal Amount Outstanding	(7) Price	(8) Discount/ (Premium)	(9) Issuance Costs	(10) Net Proceeds	(11) Yield To Maturity	(12) Effective Cost
	First Mortgage Bonds:											
1	6.00% Series due 2032	6.00%	11/15/2002	11/15/2032	100,000	100,000	98.706	1,294.0	441.2	98,264.8	6.127%	6,127.1
2	5.5% Series due 2033	5.50%	5/13/2003	4/1/2033	70,000	70,000	99.198	561.4	3,810.2	65,628.4	5.949%	4,164.3
3	5.5% Series due 2034	5.50%	3/26/2004	3/15/2034	50,000	50,000	98.483	758.5	149.4	49,092.1	5.626%	2,813.0
4	5.875% Series due 2034	5.875%	8/16/2004	8/15/2034	55,000	55,000	97.890	1,160.5	173.3	53,666.2	6.051%	3,328.2
5	5.30% Series due 2035	5.30%	8/26/2005	8/15/2035	60,000	60,000	98.569	858.6	3,399.7	55,741.7	5.802%	3,481.3
6	6.30% Series due 2037	6.30%	6/22/2007	6/15/2037	140,000	140,000	99.051	1,328.6	450.0	138,221.4	6.396%	8,953.9
7	6.25% Series due 2037	6.25%	10/18/2007	10/15/2037	100,000	100,000	98.982	1,018.0	477.5	98,504.5	6.362%	6,362.3
8	4.85% Series due 2040	4.85%	8/30/2010	8/15/2040	100,000	100,000	99.080	920.0	534.9	98,545.1	4.943%	4,943.4
9	4.30% Series due 2042	4.30%	4/13/2012	4/1/2042	75,000	75,000	99.184	612.0	1,397.8	72,990.2	4.463%	3,347.2
10	4.00% Series due 2043	4.00%	4/8/2013	4/1/2043	75,000	75,000	98.991	756.8	179.2	74,064.0	4.072%	3,054.3
11	3.65% Series due 2045	3.65%	3/6/2015	3/1/2045	250,000	250,000	98.564	3,590.0	19,137.5	227,272.5	4.185%	10,462.3
12	4.05% Series due 2046	4.05%	3/10/2016	3/1/2046	120,000	120,000	98.992	1,209.6	14,689.4	104,101.0	4.898%	5,877.1
13	4.20% Series due 2048	4.20%	3/16/2018	3/1/2048	220,000	220,000	98.880	2,464.0	5,532.0	212,004.0	4.420%	9,723.8
14	4.20% Series due 2048	4.20%	4/3/2020	3/1/2048	230,000	230,000	113.013	(29,929.9)	621.1	259,308.8	3.482%	8,009.4
15	1.90% Series due 2030	1.90%	6/22/2020	7/15/2030	80,000	80,000	98.940	848.0	3,925.3	75,226.7	2.577%	2,061.4
16	4.99% Series due 2032	4.99%	12/22/2022	12/22/2032	23,000	23,000	99.500	115.0	53.9	22,831.1	5.085%	1,169.5
17	5.06% Series due 2042	5.06%	12/22/2022	12/22/2042	25,000	25,000	99.500	125.3	58.5	24,816.2	5.119%	1,279.8
18	5.06% Series due 2043	5.06%	3/8/2023	3/8/2043	60,000	60,000	99.500	300.7	140.5	59,558.8	5.119%	3,071.5
19	5.20% Series due 2053	5.20%	3/8/2023	3/8/2053	62,000	62,000	99.500	310.7	145.2	61,544.1	5.249%	3,254.3
20	5.50% Series due 2053	5.50%	3/14/2023	3/15/2053	400,000	400,000	98.182	7,272.0	881.2	391,846.8	5.642%	22,566.7
21	5.80% Series due 2054	5.80%	9/11/2023	4/1/2054	350,000	350,000	98.201	6,296.5	707.1	342,996.4	5.942%	20,798.6
22	5.20% Series due 2034	5.20%	8/12/2024	8/15/2034	300,000	300,000	99.288	2,136.0	311.6	297,552.4	5.306%	15,918.1
23	5.70% Series due 2055	5.70%	3/13/2025	3/15/2055	400,000	400,000	98.357	6,572.0	970.0	392,458.0	5.834%	23,335.2
24												
25	Total First Mortgage Bonds				3,345,000	3,345,000		10,578.3	58,186.6	3,276,235.1	5.205%	174,102.7
26												
27	Pollution Control Revenue Bonds:											
28	Sweetwater 1.70% Series 2006, due 2026	1.70%	8/21/2019	7/15/2026	116,300	116,300	99.2	930.4	8,612.9	106,756.7	3.027%	3,519.8
29												
32												
33	TOTAL DEBT CAPITAL				3,461,300	3,461,300		11,509	66,800	3,382,992	5.132%	177,623

Exhibit No. 17
Case No. IPC-E-25-16
B. Buckham, IPC
2 of 2