BEFORE THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA

IN THE MATTER OF THE APPLICATION OF OKLAHOMA GAS AND ELECTRIC COMPANY FOR AN ORDER OF THE COMMISSION APPROVING ITS NEW EXTRA LARGE LOAD TARIFF AND TERMS AND CONDITIONS OF SERVICE FOR EXTRA LARGE LOAD CUSTOMERS AND A REGULATORY ASSET TO RECOVER COSTS ASSOCIATED WITH PORTFOLIO OPTIMIZATION SOFTWARE	)	CASE NO. PUD2026-000046

Direct Testimony

of

Kimber L. Shoop

on behalf of

Oklahoma Gas and Electric Company

June 17, 2026

Q. **Please state your name and business address.**

A. My name is Kimber L. Shoop. My business address is 321 North Harvey, Oklahoma City, Oklahoma 73102.

Q. **By whom are you employed and in what capacity?**

A. I am employed by Oklahoma Gas and Electric Company ("OG&E" or "Company") as the Director of Regulatory Affairs.

Q. **Please summarize your educational background and professional qualifications.**

A. I earned a Bachelor of Arts degree in Government from the University of Virginia (1996) and a Juris Doctorate from the University of Oklahoma College of Law (2002). I am a member of the Oklahoma Bar Association, the Arkansas Bar Association, and the District of Columbia Bar Association. After law school, I practiced law in Washington D.C. until accepting the position of Senior Attorney at OG&E in 2006. In 2015, I was named Managing Director of Law at OG&E. In 2017, I left OG&E to establish a private law practice in Edmond, Oklahoma and continued to perform work for OG&E. In 2020, I returned to OG&E as Director of Regulatory Policy and Planning before being named Director of Regulatory Affairs in 2022.

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

A. The purpose of my testimony is to provide an overview of OG&E's request for Commission approval of a new Extra Large Power and Light ("XLPL") tariff for certain large load customers, as required by Final Order No. 753440 in Case No. PUD2025-000038, and consistent with the requirements of Oklahoma House Bill 2992 ("HB 2992"), which goes into effect July 1, 2026. I will also provide the results of OG&E's portfolio optimization software cost and benefit study, which was also required by Final Order No. 753440. In addition, I will introduce the other witnesses presenting testimony on behalf of OG&E in this proceeding and provide a broad overview of the proposed tariff structure.

Q. **What other OG&E witnesses are sponsoring testimony in this proceeding?**

A. In addition to my testimony, Gwin Cash, OG&E's Senior Manager of Pricing, Rate Administration, and Load Analysis is filing Direct Testimony to explain both the XLPL tariff and accompanying Terms and Conditions of Service for Extra Large Customers ("T&CXLLC") in detail. Also, Matthew DeCourcey, Vice President in the Energy Practice at Charles River Associates, is providing Direct Testimony which explains how OG&E's XLPL tariff compares to other large load tariffs and contracts around the country.

Q. **Does this filing satisfy the requirements in Final Order No. 753440 issued in Case No. PUD2025-000038?**

A. Yes. This filing satisfies the requirements of Commission Order No. 753440, which directs OG&E to seek approval of a new large load tariff by July 1, 2026. OG&E is proposing the XLPL tariff to comply with that requirement and to set a standard for how OG&E can serve large load customers while ensuring all other customers are protected. Also, the Oklahoma Legislature recently passed HB 2992, which goes into effect July 1, 2026. This filing also addresses the requirements of HB 2992 to "establish and maintain separate terms and conditions of electric service applicable to any large load customer" and to "create and maintain separate tariffs applicable to such large load customers."[1]

Q. **What is OG&E's intent in crafting the XLPL Tariff and the accompanying T&CXLLC?**

A. OG&E recognizes the prospect of adding new large loads to the grid has raised concerns from existing customers and policy makers regarding how these large loads will impact customer rates. OG&E proposes the XLPL tariff and T&CXLLC in order to address these concerns. As this Commission is aware, OG&E wants to grow and serve new businesses, but it also wants to maintain affordable rates and reliability for all customers. While OG&E seeks to attract new businesses, the Company also needs to make sure its current customers are protected and OG&E grows its system responsibly.

[1] 17 Okla. Stat. §903 (effective July 1, 2026).

First, it is worth noting at the outset that adding these large loads will benefit OG&E's existing customer classes by paying their allocated portion of all existing shared system costs. Put simply, the additional large load customers with increased usage help pay the existing costs of the entire system and reduce the average cost to serve each customer. Existing system costs will be spread over many more kilowatt-hours, resulting in all retail customers on the system paying less per kilowatt-hour. The new loads, therefore, put downward pressure on rates for all customer classes, including residential, commercial, and industrial customers. For example, in Case No. PUD 2026-000031, OG&E witness Jason Thenmadathil testified about the clear benefit to existing customers of adding Google's load to OG&E's existing cost of service study.

As this Commission is aware, however, to serve any new large loads, additional costs will be incurred. OG&E seeks to establish necessary terms and conditions of service for these large load customers that protect other customer classes from rate increases that could be caused by these additional investments. These customer protections contained in the XLPL tariff and the T&CXLLC will be discussed in detail by OG&E witness Gwin Cash. Such provisions include:

- Contribution in aid of construction ("CIAC") payments for all transmission and distribution infrastructure associated with serving the customer's new or expanded load, ensuring large load customers pay all such costs associated with delivering power and connecting to the grid.
- Significant performance security to ensure fulfillment of the financial obligations arising from the Company providing service to the new large loads, which protects customers from rate increases.
- Required long-term commitments from these large load customers with fees imposed on those large load customers should they leave the OG&E system or reduce their demand prior to the end of the contract term.
- Minimum demand and energy charges to ensure large load customers pay a minimum amount regardless of actual usage and a fair share of costs incurred to serve the large loads.

- A "Customer Class Protection Charge" will be charged to XLPL customers if an adverse impact on other customer classes is demonstrated after considering additional costs of providing service to those extra-large load customers. This charge will be reviewed and addressed in each general rate proceeding.
- Creation of a new Customer Affordability Charge for extra-large load customers that will be credited to residential customers to offset increasing rates.

Q. **Please explain the process OG&E undertook to develop the proposed XLPL Tariff prior to filing this case.**

A. Prior to filing this case, OG&E engaged in many negotiations with Google, which ultimately resulted in an executed special contract to provide electric service for three new datacenter projects. That contract provided the foundational regulatory framework within which the XLPL tariff and the accompanying T&CXLLC were developed. The development of the tariff was also informed by the requirements of HB 2992, which will become effective on July 1, 2026 and will be codified as Sections 901 through 905 of Title 17 of the Oklahoma Statutes. HB 2992 mandates that all electric suppliers establish and maintain separate terms, conditions, and tariffs applicable to large load customers, including credit requirements and other measures necessary to ensure that such customers reimburse the electric supplier for all costs fairly allocated to them, and that the term of service for a large load customer be at least ten years.

In developing the specific provisions of the proposed tariff and T&CXLLC, OG&E also drew upon the work of Matthew DeCourcey, whose testimony in this proceeding provides a comparative analysis of large load tariffs and contracts offered by other utilities around the country, ensuring the protections and structural features incorporated into the XLPL tariff are informed by and consistent with emerging industry practice for serving customers of this scale.

Q. **What threshold or criteria would require a customer to take service under the proposed XLPL tariff?**

A. As set forth in the T&CXLLC , a customer is required to take service under the XLPL tariff if it meets the definition of any one of three customer types. Customer Type 1 encompasses any customer beginning service with OG&E after July 1, 2026, and expected to have an annual peak demand of 75 MW or more. Customer Type 2 encompasses existing customers taking service before July 1, 2026, whose future billing demand is expected to either increase by 75 MW or more above their billing demand prior to July 1, 2026, or increases its demand and has a total demand of 125 MW or more. Customer Type 3 encompasses existing customers taking service before July 1, 2026, who may not be adding load, but whose service conditions change in such a manner that OG&E would be required to add generating capacity to meet a 75 MW or higher increase in demand for that existing customer.

Q. **Why did OG&E create three different types of customers that would take service under the XLPL Tariff and T&CXLLC?**

A. These different types of customers were identified to ensure any customer (existing or new) that causes OG&E to have a new service obligation of 75 MW or more should be subject to the customer protections contained in the XLPL tariff and T&CXLLC. This means a brand new customer with load of 75 MW or higher or an existing customer who adds at least 75MW or grows to 125 MW or more will become subject to the XLPL Tariff and T&CXLLC.

Q. **Can you explain why OG&E has a Customer Type 3 and the difference between Type 3 and the other types of customers?**

A. There could be certain situations where an existing customer may not add load but still require OG&E to add 75 MW or more of generating capacity. For example, this could be necessary if a customer no longer participates in or no longer qualifies for OG&E's Load Reduction Program. Additionally, as this Commission is aware, the Southwest Power Pool rules around how utilities count Load Reduction is evolving. OG&E wants to ensure any

existing customer that causes OG&E to add an increase in generating capacity also falls under the XLPL tariff and T&CXLLC. If OG&E needs to add 75 MW or more capacity for a large load customer, the customer protections afforded by the XLPL tariff and T&CXLLC should apply.

Q. **Why did OG&E select 75 MW as the load requirement for the XLPL Tariff and T&CXLLC?**

A. This is the megawatt value contained in HB 2992 (17 Okla. Stat. §901(4)). Originally, OG&E was considering a 100 MW threshold for large load customers to be captured by the XLPL tariff and T&CXLLC, but changed it to 75 MW after the passage of HB 2992.

Q. Please describe the customer protections contained within the XLPL tariff and the T&CXLLC.

A. The proposed XLPL tariff and the accompanying T&CXLLC incorporate a comprehensive set of customer protections that operate at multiple levels to safeguard OG&E's existing customers from potential cost shifts associated with serving large load customers, while also establishing structural protections for OG&E itself against financial exposure from customer default or early departure. As discussed in detail in the testimony of OG&E witness Cash, these protections include a 15-year minimum service term with termination and capacity reduction fees, a CIAC requirement, a collateral requirement, special pricing provisions, minimum billing demand and energy obligations, and a reservation charge mechanism. Rather than repeat the full explanation of each provision provided in Mr. Cash's testimony, I will briefly summarize the function of each protection as a matter of policy overview and explain why each of these customer protections are important.

Q. **Please summarize the requirement for a long-term commitment for large load customers taking service under the XLPL tariff.**

A. The 15-year minimum service term following the load ramp-up period, combined with the termination and capacity reduction fees defined in the Electric Service Agreement ("ESA"), protects existing customers from stranded cost risk by ensuring OG&E has

contractual certainty over a duration sufficient to recover the capital investments made to serve the XLPL customer.

Q. **Are there customer protections in case an XLPL customer terminates early or reduces its capacity during the term?**

A. Yes. In order to protect other customers from losing the benefits of the large loads and avoid having to pay for stranded costs that could be incurred in this situation, OG&E's T&CXLLC includes fees if an XLPL customer terminates the contract or reduces its contract demand during the term. First, such a termination or capacity reduction can only occur after the ninth year and the XLPL customer must give a three-year notice. This means any termination or capacity reduction can only occur after the 12th year of the term. Second, in the case of a capacity reduction, the XLPL customer can only reduce its contract demand by a maximum of 25 percent. Third, if an XLPL customer terminates or reduces its contract demand, it will be required to prepay one hundred percent (100%) of the Minimum Charges for the remainder of the initial contract term impacted by such early termination or capacity reduction in the form of a one-time fee in order to make any such election effective. Because an XLPL customer cannot provide the requisite three-year notice for termination or capacity reduction until year 9, the amount of Minimum Charges associated with any early termination exit fee or capacity reduction fee will not exceed three (3) years of Minimum Charges. The ESA contained in the T&CXLLC also provides that in no event shall any early termination exit fee or capacity reduction fee be less than one year of Minimum Charges.

Q. **What is a CIAC and why is it necessary for large load customers?**

A. A CIAC is payment from a customer to the utility to cover costs of utility infrastructure. Any CIAC received from a customer allows the utility to make the infrastructure investment without adding it to rate base and without earning a return on the investment or otherwise including the investment in rates. In the T&CXLLC, the XLPL customer would be required to pay a CIAC reflecting all transmission and distribution infrastructure costs associated with serving its new or expanded load (plus applicable taxes). This means

transmission and distribution infrastructure costs specific to serving these customers are not included in OG&E rates and therefore are not recovered over time through the payment of rates.

Q. **Can you explain the benefits of the collateral requirement?**

A. The collateral requirement obligates XLPL customers to provide credit support covering 100 percent of the minimum charges for 60 months of the initial term of the ESA in the form of cash, an irrevocable standby letter of credit, or a guaranty meeting specified credit rating thresholds, protecting OG&E and its existing customers from the financial exposure that would result if an XLPL customer were to default on its payment obligations. OG&E recognizes that not all XLPL customers may be able to shoulder a collateral requirement that consists of 100 percent of minimum charges through the full course of the initial term. Therefore, the T&CXLLC requires collateral covering 100 percent of the minimum charges for just sixty (60) months of the Initial Term.

Q. **What special pricing provisions are OG&E proposing for large load customers?**

A. There are two special pricing provisions that will apply to XLPL customers through the XLPL tariff. The Customer Class Protection Charge is a tariff-embedded capacity charge, initially set at $0.00 per kW per month, that may be established or adjusted in future general rate cases, subject to Commission approval. The Customer Class Protection Charge provides the Commission with a recurring, structured opportunity to assess whether the XLPL class is causing costs to be borne by other customer classes and, if so, the ability to set the charge at a level sufficient to remedy any impact.

In addition, the tariff includes the Customer Affordability Charge of $2.50 per kW per month assessed on Billing Demand which generates revenues that are placed in a regulatory liability to be credited to residential customers, providing an affirmative financial benefit to residential customers as a direct result of XLPL service.

Q. **Do the Customer Class Protection Charge and the Customer Affordability Charge serve different purposes?**

A. Yes. The Customer Class Protection Charge ensures other customer classes are held harmless from any demonstrated adverse impacts of serving the XLPL customers, while the Customer Affordability Charge provides separate, guaranteed benefits to residential customers independent of whether any adverse rate impacts occur.

Q. **Can you explain in more detail OG&E's decision to include the Customer Class Protection Charge?**

A. This is a customer protection initially negotiated and included in OG&E's recent ESAs with Google and OG&E incorporated this concept into the XLPL Tariff as a specific charge for all XLPL customers. As described by OG&E witness Thenmadathil in Case No. PUD2026-000031 as a "fail-safe," he testified that it recognizes there is the potential for adverse rate impacts to other customer classes due to future costs of serving the XLPL customers. He further testified there are clear rate benefits from adding XLPL loads and shifting shared system costs from other customer classes to the XLPL class due to the nature of their large contribution of kilowatt-hour consumption. However, if the costs of serving those XLPL customers ends up outweighing those "cost shift" benefits, this Customer Class Protection Charge exists for OG&E and the Commission to remedy any such adverse impacts.

Q. **How would OG&E calculate the Customer Class Protection Charge?**

A. As discussed by OG&E witness Thenmadathil in Case No. PUD2026-000031, OG&E would perform and submit a separate Cost of Service Study ("COSS") in future rate cases, which tests whether serving XLPL customers (including Google) had an adverse rate impact on other customer classes. The demonstrative analysis would essentially be a COSS with and without the XLPL load and a proportional share of the XLPL load's contributing generation need, essentially providing a "what if" scenario of what rates would be if the XLPL customers were not customers on the system. If there is an adverse impact on other

customer classes, the adverse impacts would be used to create a $/KW-month charge and that revenue would be credited back to other customer classes.

Q. **Why is OG&E proposing a Customer Affordability Charge?**

A. Whereas the Customer Class Protection Charge is meant to hold other customer classes harmless in the case of costs to those customer classes outweighing the benefits, the Customer Affordability Charge is designed to create clear benefits for residential customers. This charge will go directly to a regulatory liability to be credited to residential customers.

Q. **How was the Customer Affordability Charge calculated?**

A. As testified by OG&E witness Cash, OG&E designed the Customer Affordability Charge to collect approximately $30 million per year from 1,000 MW of load. This amount is the approximate total of the Company's LIAP program, an expanded Senior Discount for all residential customers who qualify as senior citizens, and approximately 20 percent of our residential energy efficiency program.

Q. **How much benefit will the Customer Affordability Charge provide to residential customers?**

A. With just a single 1,000 MW XLPL customer, the Customer Affordability Charge will generate more than $400 million over the life of a 15-year agreement, for the benefit of residential customers. Any amount collected through this charge would be placed into a regulatory liability and provided to residential customers after each rate proceeding.

Q. **What additional provisions of the XLPL Tariff would you like to highlight that provide protections to customers?**

A. The XLPL tariff contains billing minimums (both demand and energy) designed to ensure XLPL customers pay a minimum amount for the capacity and energy they request. In order to protect all other customers from stranded costs in the event an XLPL customer's load is less than what the XLPL customer requests OG&E to plan for, the XLPL customer would

be required to pay a certain monthly minimum charge regardless of the energy consumed or capacity needed in a given monthly period. The XLPL tariff is set such that the billing demand will never be less than 85 percent of the contract demand corresponding to the monthly billing cycle, and the minimum billing energy is calculated using a 90 percent load factor requirement applied to the billing demand. The billed energy will be the greater of this calculated minimum energy and actual measured energy.

The minimum billing demand floor of 85 percent of the customer's contract demand for the applicable billing month, combined with the minimum billing energy obligations, ensures OG&E recovers the fixed costs it incurs to serve an XLPL customer even if the customer's actual measured demand or energy consumption falls below the contracted level in a given month.

Q. **What is a reservation charge and why is it considered a customer protection?**

A. The reservation charge mechanism requires new XLPL customers who execute a Preliminary Agreement or ESA to pay a monthly charge calculated by multiplying the Customer Affordability Charge by the Maximum Contract Demand. This charge will be imposed for a maximum period of 24 months prior to the commencement of service. OG&E will not retain these revenues. Rather, the revenues collected from the Reservation Charge will be placed in the same regulatory liability as the Customer Affordability Charge, ensuring residential customers receive a financial benefit during the period between contract execution and the date the XLPL customer begins taking service. Since OG&E may incur costs to serve them before they come on-line, OG&E believes a reservation charge (based on the Customer Affordability Charge discussed above) is reasonable.

Q. **Is OG&E providing a Cost and Benefit Study on the use of Portfolio Optimization Modeling Software?**

A. Yes. As required by Final Order No. 753440 in Case No. PUD2025-000038, OG&E has conducted a cost and benefit study of portfolio optimization modeling software and is filing the study as Direct Exhibit KLS-1 attached to my testimony.

Q. **What are the results of OG&E's cost and benefit study?**

A. OG&E's cost and benefit study concludes that portfolio optimization software can provide meaningful benefits in both the Integrated Resource Planning and Request for Proposals contexts by systematically identifying least-cost resource portfolios, quantifying portfolio performance across a wide range of future scenarios, revealing cost drivers and binding constraints, and highlighting where incremental reliability or emissions benefits require material cost tradeoffs.

As shown in Direct Exhibit KLS-1, OG&E's preliminary annual cost estimate for commercially available portfolio optimization software is up to $500,000, inclusive of user access, storage, vendor-provided data, initial training, and user support. The Commission should be aware that the study also identifies important limitations of such software, noting that portfolio optimization tools have limited ability to quantify or mitigate factors such as project development risk, execution complexity, contract terms, and counterparty considerations, which require separate commercial and due diligence review, and that differences in system architecture, workflow, transparency mechanisms, or runtime performance among available platforms may not translate into materially different portfolio selection outcomes. On balance, OG&E is supportive of the usage of a portfolio optimization tool in its evaluation of projects, while acknowledging that the qualitative factors noted above fall outside the scope of what such a tool can meaningfully evaluate.

Q. **How is OG&E proposing to handle the increased cost of the portfolio optimization software?**

A. OG&E is proposing to recover the increased cost of the portfolio optimization software through a regulatory asset. OG&E proposes that any costs associated with the integration of portfolio optimization software be added to a regulatory asset, to be reviewed in a future rate case.

Q. **What is your recommendation to the Commission?**

A. For the reasons set forth in my testimony and in the testimony of OG&E witnesses Gwin Cash and Matthew DeCourcey, OG&E respectfully requests the Commission approve the proposed XLPL tariff and the accompanying T&CXLLC as filed, effective July 1, 2026.

OG&E further requests the Commission accept Direct Exhibit KLS-1 as satisfying the requirement of Final Order 753440 that a cost benefit study of portfolio optimization modeling be submitted with OG&E's large load tariff filing, and requests the Commission authorize a regulatory asset to recover the costs associated with portfolio optimization software.

Q. **Does this conclude your Direct Testimony?**

A. Yes, this concludes my prepared Direct Testimony.

CERTIFICATE OF SERVICE

I hereby certify that on the 17th day of June 2026, a true and correct copy of the foregoing was electronically served via the Electronic Case Filing System to those on the Official Electronic Case Filing Service List, and via electronic mail to the following persons:

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A. Chase Snodgrass

AFFIDAVIT

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On the 15th day of June 2026, before me appeared Kimber L. Shoop, to me personally known, who, being by me first duly sworn, states that he is the Director of Regulatory Affairs for Oklahoma Gas and Electric Company ("OG&E") and acknowledges that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge, and belief.

Print Kimber Shoop

Signature

Subscribed and sworn to before me on this 17th day of June, 2026.

Notary Public

My commission expires: 10-17-2026

Seal

HARRISON L. BURTON NOTARY PUBLIC # 14009452 EXP. 10/17/26 STATE OF OKLAHOMA

EXHIBITS

1 **DIRECT EXHIBIT KLS-1** — Cost and Benefit Study of Portfolio Optimization Modeling

Direct Exhibit KLS-1

Cost and Benefit Study of Portfolio Optimization Modeling

1. Introduction

As part of the final order in Case No. PUD 2025-00038, OG&E has been directed by the Oklahoma Corporation Commission ("Commission") to conduct a cost/benefit study of portfolio optimization modeling so that the Commission may evaluate the potential benefits of such modeling before the Company's next triennial integrated resource plan.

2. Methodology for resource selection

Oklahoma's Integrated Resource Planning ("IRP") rules are detailed in Oklahoma Administrative Code ("OAC") Oklahoma Corporation Commission's ("OCC") Electric Utility Rules OAC 165:35-37. IRPs must provide the Commission and stakeholders with updates on planning assumptions and risk factors. The IRP also establishes the need for future generation or capacity procurement. OG&E is required to file an IRP every three (3) years and file interim updates when material changes in planning assumptions occur. OG&E's 2026 IRP, submitted as an update, forecasts a need for incremental generation capacity primarily due to continued expansion of the Southwest Power Pool ("SPP") Resource Adequacy framework and continued strength in regional demand trends.

The subchapter 165:35-37-1-b (9) requires the IRP to establish the appropriate portfolio of products to be obtained through competitive procurement. Consistent with this subchapter, OG&E's IRP process evaluates possible resource options and provides its preferred portfolio.

The IRP analysis of resource options presents the results of detailed analysis associated with a range of technologies, the timing and availability of resources, and technology-specific risk factors. OG&E's production cost modeling forecasts future operating margins by incorporating individual generating unit operating characteristics, transmission grid topology and constraints, unit commitment/operating conditions, and market system operations to model the SPP IM. Individual resource performance is then modeled across multiple sensitivities such as low gas and high gas costs, implementation of a CO_2 tax, low and high solar costs as well as scenarios such as low and high fuel supply, and energy evolution across 30 years to calculate the 30-year Net Present Value of Customer Cost ("NPVCC") under a wide range of future potential market conditions. The NPVCC differs

for each resource due to the unique capital costs, O&M expenses, market revenues, tax incentives, in-service dates, and other factors.

NPVCC modeling is a robust method of economically evaluating resources in an IRP setting. However, the NPVCC does not account for a variety of qualitative conditions and risks, such as environmental regulation considerations, operational issues, or siting concerns. For example, a resource with a relatively low NPVCC may also be subject to ongoing environmental litigation for extensive modification requirements. In such cases, selection based solely on a low NPVCC value could come with increased environmental policy risk.

In the 2024 IRP, OG&E did employ portfolio optimization software for expansion planning and production cost modeling, with the assistance of an outside consultant. The portfolio optimization model was used to determine the recommended mix of generation resources expected to achieve a projected least cost combination of generating assets to meet electric load along with regulatory and reliability requirements.

Subsequent to an IRP establishing the need for capacity, procurement of resources must also comply with the Commission's rules. OG&E's 2024 All Source RFP, and 2026 All Source RFP, for example, are procurement processes administered consistently with rules for competitive procurement in OAC 165:35-34.

OG&E's RFP analysis follows similar processes as the IRP evaluation of resources. However, an RFP analysis focuses strictly on the specific projects offered in. Evaluation and selection of RFP resources consider all factors outlined in the RFP. Additionally, an RFP evaluation must also consider availability, timing, and size of the offered resource in order to meet the capacity needs in the least cost, least risk way. This requires careful consideration of the RFP scoring, resource sizing, and a wide array of execution and operating risks.

3. Description of Portfolio Optimization Software Tools

Portfolio optimization is the process of evaluating many possible combinations of resources and selecting the mix that best meets defined objectives while respecting constraints. It starts by characterizing each option of an offered resource (contract type, offered capacity, in-service dates, etc.) in terms of expected benefits, costs, risks, and performance under different future conditions. These options are then combined into portfolios and modeled through scenarios such as demand growth, fuel price variations, technology performance, or regulatory changes. The core idea of portfolio optimization tools is that many resource combinations can be evaluated quickly. Some resources may perform better than others in a particular scenario but comparatively worse in a different

scenario, so the value of a portfolio depends on how its components interact, not just on how each resource performs individually.

4. Costs

There are a number of commercially available software tools available to conduct portfolio optimization that aid electric utility resource planning, such as OG&E, to make prudent investment decisions.

OG&E's preliminary annual cost estimate is up to $500,000. This estimate includes access for users, storage, vendor-provided data, initial training, and user support.

These tools may differ meaningfully in their underlying approaches, modeling philosophies, or areas of emphasis. Differences in system architecture, workflow, transparency mechanisms, or runtime performance may influence user experience and implementation considerations but may not translate into materially different portfolio selection outcomes.

In addition, software, regardless of platform, has limited ability to quantify or mitigate factors such as project development risk, execution complexity, contract terms, and counterparty considerations, which require separate commercial and due-diligence reviews.

5. Benefits

The optimization step applies an objective comparison of the full range of available resource portfolios.

In an IRP context, portfolio optimization can improve the quality and defensibility of long-term plans by systematically identifying least-cost resource portfolios over multi-decade horizons while satisfying planning reserve margins, reliability standards, environmental policies, and operational constraints. This supports more robust comparisons among candidate plans by (i) quantifying portfolio performance across a wide range of futures, (ii) revealing cost drivers and binding constraints, and (iii) highlighting where incremental reliability or emissions benefits require material cost tradeoffs.

Similarly, in an RFP context, portfolio optimization serves a complementary but distinct function by evaluating discrete bid options as candidate resources and identifying the combination of bids that minimizes total system cost while meeting identified needs, delivery timing requirements, and any portfolio-level constraints (e.g., technology diversity targets, siting or interconnection limitations, fuel or emissions considerations, and contract types). Rather than selecting projects one-by-one, optimization helps quantify

how bids interact as a portfolio. It should be noted that utilization of a portfolio optimization model does not address nor reduce contract negotiation or project execution risk. Individual projects can face strong headwinds against completion regardless of their evaluated NPVCC metrics.

6. Conclusion

In conclusion, several portfolio optimization software options are available that can effectively address quantitative analysis requirements and can be tailored to meet specific needs; however, they are limited in their ability to address qualitative factors. Implementation of portfolio optimization will require additional expenditures. OG&E is supportive of the usage of a portfolio optimization tool in its evaluation of projects while also noting that elements like project development risk, execution complexity, contractual terms, and counterparty dynamics often fall outside the scope of what this tool can meaningfully evaluate.