BEFORE THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA

IN THE MATTER OF THE APPLICATION OF OKLAHOMA GAS AND ELECTRIC COMPANY FOR COMMISSION PREAPPROVAL OF NEW GENERATION CAPACITY PURSUANT TO 17 O.S. SECTION 286(C)	)))))	Case No. PUD 2023-000038

Direct Testimony

of

Kelly M. Riley

on behalf of

Oklahoma Gas and Electric Company

May 31, 2023

I. INTRODUCTION AND SUMMARY

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

A. My name is Kelly M. Riley. I am employed by Oklahoma Gas and Electric Company ("OG&E" or "Company") and my business address is 321 N. Harvey, Oklahoma City, Oklahoma 73102.

Q. **What position do you hold with OG&E?**

A. I hold the position of Director of Resource Planning. I am responsible for OG&E's resource planning group and for all of its activities including the preparation of integrated resource plan submittals and frequent resource planning analyses that are performed on an ongoing basis.

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

A. I have been employed by OG&E since 2007. I earned a Bachelor of Science Degree in Business Administration from the University of Oklahoma (1991) and a Master of Science in Management - Operations Research (2001) from Case Western Reserve University in Cleveland, Ohio. Since joining OG&E, I have held various risk management and planning positions. I have been a member of OG&E's resource planning team for the past ten years and have been in my current role since 2019. My responsibilities include strategic oversight for the resource planning group including the development and submittal of the Company's Integrated Resource Plans and the analysis of particular capital investments.

Q. **Have you previously testified or appeared before the Oklahoma Corporation Commission ("Commission")?**

A. No, I have not.

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

A. In this proceeding, the Company is seeking approval of the Horseshoe Lake Flexible Resource Combustion Turbines ("HL CTs"). The purpose of my testimony is to support

both the need for this additional generating capacity and the Company's decision to pursue the construction of these generating facilities after evaluating various offers in multiple competitive bidding processes. First, I will discuss OG&E's Integrated Resource Planning ("IRP") process that established the Company's need for generating capacity. The most recent IRP was submitted to the Commission on October 1, 2021 and demonstrated a balanced portfolio of solar resources and natural gas-fired combustion turbines provided the lowest reasonable cost plan for customers and satisfied the capacity requirements identified in the IRP.

Second, I will discuss several competitive bidding processes initiated by the Company to pursue needed capacity, including:

- 2022 Flexible Resource Request for Proposals (the "Flexible Resource RFP")
- Original Solar Request for Proposals (the "Solar RFP")
- Re-Issued Solar RFP
- 2022 Existing Capacity Request for Proposals (the "Existing Capacity RFP")

This testimony refers to the list above as the "RFPs." I will describe the RFPs, how the Company partnered with consulting firm ICF to evaluate bids received through various quantitative and qualitative factors, and how the RFPs yielded the HL CTs as the lowest reasonable cost project.

I will also discuss some recent changes to SPP requirements that will impact OG&E's capacity needs and further increase the amount of capacity required in the future to comply. Both OG&E Witness Maria Scheller, Vice President, Energy Power Markets with ICF and I will discuss the impact of increasing the Planning Reserve Margin ("PRM") from 12 percent to 15 percent along with other SPP initiatives that have the potential to further increase capacity needs.

Finally, I will discuss the final costs of completing the HL CTs and how that total cost (with final negotiated contracts, Owner's costs, contingency, allowance for funds used during construction ("AFUDC"), and taxes) still shows the project is the lowest reasonable cost option among the bids received in the RFPs.

Q. **Please describe the HL CTs.**

A. The new units will be a class of assets referred to as simple cycle CTs. The HL CTs will be made up of two GE 7F class natural gas-fired combustion turbines (but capable of burning hydrogen directly as a fuel when blended with natural gas) with a summer capacity of 224 MW each. These CTs have the ability to be turned off and on quickly, which allows them to supply power during peak times, to serve variations in demand, and to supply ancillary services to the grid. These units will be located at the Horseshoe Lake Generating Station and will replace both Horseshoe Lake 6 and 7 vintage gas-fired steam units. Utilizing the existing Horseshoe Lake facility will allow OG&E to leverage the existing transmission interconnection, a site close to OG&E's largest load center (Oklahoma City) and Tinker Air Force Base, and existing infrastructure such as a secured property, roads, facilities to support maintenance and operation, water supply/water rights, and gas pipeline facilities. The Horseshoe Lake site also has an existing highly skilled workforce and established support from the local community around Harrah, Oklahoma. OG&E will also be able to reference the existing air permit for the vintage units to support the permitting of the new HL CTs, whereas locating thermal generation at a new site would require new air permits, which could prove to be challenging.

II. INTEGRATED RESOURCE PLAN AND CAPACITY NEEDS

Q. **Please briefly describe the Company's approach to the 2021 IRP.**

A. The 2021 IRP identifies the resource plan that allows OG&E to meet its capacity obligations at the lowest reasonable cost. OG&E submitted the 2021 IRP in compliance with requirements established pursuant to the Commission's Electric Utility Rules (OAC 165:35-37). This 2021 IRP was submitted according to the prescribed triennial schedule after the last IRP was submitted in 2018.

The main objective of the 2021 IRP was to explore options to maintain OG&E's generation capability in accordance with the Southwest Power Pool ("SPP") PRM of 12 percent in a manner that achieves the lowest reasonable costs to customers and improves reliability. The best way to accomplish this is by considering a range of capacity options with varying degrees of scalability and timelines. As stated in previous IRPs, the Company continues to pursue fuel diversity by maintaining a reasonable balance among gas, coal,

and renewable generation resources, while adding advancing technologies as they become cost effective.

Q. **What were OG&E's capacity needs identified in the 2021 IRP?**

A. Resource capacity needs in the 2021 IRP were based on an assessment of existing resource capabilities, including planned retirements of aging infrastructure, compared to projected customer demand growth over a 10-year period. Electric companies, such as OG&E, which are responsible for serving customer load, must maintain sufficient generating capacity to serve their customers forecasted annual net peak demand plus a specified amount of reserves above the forecasted peak. The amount above the forecasted net peak demand is called the Planning Reserve Margin. Table 1 below provides the information from the 2021 IRP based on the SPP 12 percent PRM requirement, which shows capacity needs growing throughout the entire 10-year period. Later in my testimony I will also discuss how recent SPP initiatives have increased OG&E's capacity needs.

Table 1: 2021 IRP Needs Assessment based on 12% PRM requirement

MW		2023	2024	2025	2026	2027	2028	2029	2030	2031
Capacity	Owned Capacity[1]	6,534	6,534	6,323	6,259	5,856	5,856	5,856	5,856	5,371
	Purchase Contracts	47	47	47	47	47	47	47	47	16
	Total Capacity	6,581	6,581	6,370	6,306	5,903	5,903	5,903	5,903	5,386
Demand	Net Demand	6,004	6,039	6,059	6,088	6,111	6,133	6,149	6,136	6,154
Margin	Reserve Margin[2]	10%	9%	5%	4%	-3%	-4%	-4%	-4%	-13%
Needs	Needed Capacity[3]	145	183	417	514	942	967	985	970	1,507

Q. **How did the 2021 IRP address OG&E's capacity needs?**

A. OG&E analyzed over a million portfolios that would be capable of meeting OG&E's capacity needs over the 10-year study time horizon. The least cost portfolios were then studied under numerous scenarios and sensitivities to understand how each portfolio performed under a wide range of assumptions. The analysis resulted in a projected Net

[1] "Owned Capacity" includes planned retirements before additions.

[2] "Reserve Margin" represents the percentage of capacity above net demand using following formula: (Total Capacity-Net Demand)/Net Demand.

[3] "Needed Capacity" represents the amount of capacity that is needed to increase reserve margin to 12% as required by SPP during the 2021 IRP.

Present Value Customer Cost ("NPVCC") for each portfolio under each scenario and sensitivity as shown in the IRP report provided as Direct Exhibit KMR-1.

Q. **What was the conclusion of the IRP analyses?**

A. The Company's IRP concluded the lowest reasonable cost capacity option for meeting OG&E's future needs was a combination of natural gas-fired combustion turbine and solar resources. The IRP analysis demonstrated this blend of resources mitigates risks across the range of sensitivities and scenarios analyzed. Also, the balanced approach of meeting OG&E's capacity needs with both combustion turbines and solar fulfilled the objectives for fuel and technology diversity and improves OG&E's operational flexibility and resiliency.

Q. **Did OG&E formulate an Action Plan as part of the 2021 IRP?**

A. Yes. OG&E planned to issue RFPs for both solar and combustion turbines consistent with the 2021 IRP's Solar/CT plan.

Q. **What steps has OG&E taken to satisfy the capacity needs identified in the IRP?**

A. Soon after OG&E submitted the 2021 IRP, the Company initiated RFPs for resources to satisfy the capacity needs. As discussed below, in addition to issuing RFPs for solar resources, combustion turbines and other flexible generating resources (such as batteries), the Company also issued other RFPs for existing generating capacity and Power Purchase Agreements ("PPAs") in order to evaluate all reasonable capacity alternatives.

III. RFP TIMELINE

Q. **When did OG&E issue the RFP that invited offers for combustion turbines?**

A. OG&E issued the Flexible Resource RFP in June 2022. Flexible Resources are defined in this RFP as resources that can start quickly and cycle multiple times per day. Therefore, the RFP sought bids for resources that meet the operational characteristics of a Flexible Resource, such as combustion turbines, which were identified in the 2021 IRP preferred plan, as well as other flexible technologies such as energy storage and reciprocating internal combustion engines.

Q. **When did OG&E issue the RFP for solar resources?**

A. OG&E first issued a Solar RFP in January 2022 and subsequently opened bids into that RFP in March 2022. This Solar RFP sought bids from solar projects or solar projects coupled with energy storage technology. OG&E selected three bids in this Solar RFP for negotiations, however, by September 2022, each bidder communicated they could no longer meet the scheduled in-service date requirements of the RFP and either voluntarily withdrew their bid or was notified by OG&E that the Company could no longer consider the bid because of delays to in-service dates.

Q. **Did OG&E continue to pursue solar resources after the original Solar RFP was brought to a close?**

A. Yes. OG&E re-issued the Solar RFP in October 2022 to allow for a broader range of in-service dates. OG&E hoped this re-issued RFP would result in a greater number of attractive bids for solar generating capacity. Additionally, President Biden signed the Inflation Reduction Act ("IRA") into law in August 2022. The IRA contained new provisions to allow production tax credits for solar generation and investment tax credits for energy storage in the United States. The Re-Issued Solar RFP would also capture the potential benefits of the tax credits contained in the IRA.

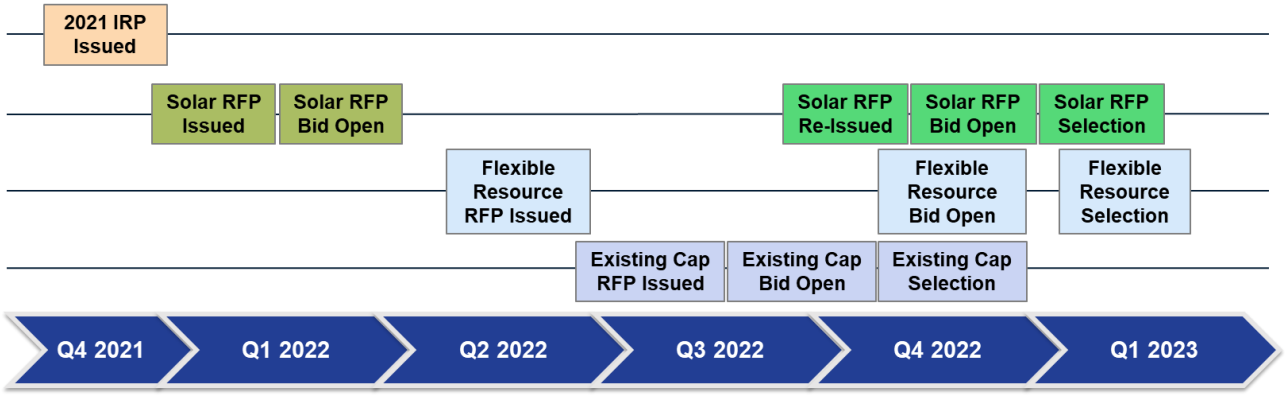
Q. **Did OG&E consider any other long-term capacity options?**

A. Yes. In June 2022, it was clear OG&E's short term capacity needs were not going to be addressed by either the Solar RFPs or the Flexible Resource RFP. Meanwhile, SPP indicated it was moving quickly to materially increase the amount of generation capacity required from OG&E starting in the summer of 2023. For these reasons, OG&E issued an Existing Capacity RFP in July 2022 for the purchase of solar and wind resources as well as resources of all fuel types, except coal or fuel oil. OG&E believed this additional RFP would identify other capacity options for satisfying immediate capacity needs beginning in 2023. Together, the Solar, Flexible Resource and Existing Capacity RFPs allowed for resources with capabilities between 50 MW to 1,500 MW to be offered to OG&E over the next 5 years.

Q. **Can you please summarize the RFPs discussed above?**

A. Yes. As discussed above, OG&E issued two Solar RFPs, a Flexible Resource RFP, and an Existing Resource RFP. A timeline summary of these RFP activities is shown in Figure 1.

Figure 1: RFP Timeline



IV. RFP DESIGN AND PROCESS

Q. **Were the RFPs noted in Section III consistent in design and follow similar processes?**

A. Yes. OG&E used a consistent design for each RFP, which is described in detail in this section. The Company followed the Oklahoma Corporation Commission ("OCC") competitive procurement rules under Oklahoma Administrative Code ("OAC") 165:35-34, which details a specific process for RFPs. Each of the RFPs was structured and conducted in very similar ways that adhered to the rules.

Q. **Was an Independent Evaluator involved in the RFP processes?**

A. Yes. As OG&E began to issue the series of RFPs, the Company consulted with the Public Utility Division of the Commission ("PUD") and the Attorney General about the RFP process and the Independent Evaluator ("IE") requirement under OAC 165:35-34-3(b), including the rule's consideration of utility self-bidding. PUD and the Attorney General selected Guernsey as an IE to monitor each of the RFPs.

Q. **How was the Independent Evaluator involved in the RFP processes?**

A. The IE was involved at the beginning of the RFP process by reviewing the draft RFP documents and participating in the technical conferences. The IE virtually attended the bid

openings and was provided the bid materials from each bidder for their own review. All bidder communication was shared with the IE and OG&E stayed in communication with the IE throughout the evaluation process including successful bid selection communication with Commission staff and bidders. Witness Scheller's testimony further discusses compliance with the Commission's competitive procurement rules.

Q. **Please describe OG&E's approach to the RFP design and process.**

A. During and after the 2021 IRP process, the Company shared with stakeholders the plan to undertake competitive solicitations for capacity through individual RFPs. After preparing draft RFP solicitations, OG&E formally notified the Commission about the intent to engage in the competitive bidding process and posted the draft RFP on the OG&E webpage.

Q. **Please describe the RFP process after the RFP draft document was completed.**

A. OG&E provided each draft RFP to interested parties and posted the draft RFP documents to OG&E's website. Bidders were given opportunities to ask questions about each RFP and to provide feedback during Technical Conference virtual meetings and through RFP communication email inboxes. All communications received in or sent from the email inboxes were provided to the Independent Evaluator and posted to OG&E's website so that all bidders had access to the information. This was done to ensure full transparency and compliance with the Commission rules. After at least 30 days, the RFP documents were finalized, updated on the OG&E webpage, and remained open until the respective bid due dates.

Q. **Please provide an overview of OG&E's RFP specifications.**

A. Each RFP document presented an overview section containing the amount, type of resources and in-service date requirements as shown in Table 2. The RFP documents are provided as Direct Exhibits KMR-2, 3 and 4, and all RFP Appendices have been included as workpapers in this cause.

Table 2 – Overview of specifications in each RFP

Attribute	Flexible Resource RFP	Solar RFP (all attributes were the same for original & re-issued RFPs, unless otherwise noted)	Existing Capacity RFP
Eligible Technology Types	Standalone Energy Storage, Gas-Fired Combustion Turbine, or Gas-Fired Reciprocating Internal Combustion Engine	Standalone Solar or Solar + Energy Storage	All sources, except those using fuel oil or coal as their primary fuel
Per-Bid Nameplate Capacity Megawatts (MW)	Minimum: 50 MW Maximum: 500 MW	Minimum: 50 MW Maximum: 450 MW	Minimum: 50 MW Maximum: 1,500 MW
Latest In-Service Date	May 1, 2027	May 1, 2025 (Original RFP) May 1, 2027 (Re-Issued RFP)	May 1, 2025,
Facility Operating Status	In development: new build resource	In development: new build resource	Existing; in-operation resource
Contract Type	Asset Purchase Agreement, including Engineering, Procurement, and Construction (EPC) Exhibit	Build Transfer Agreement	Asset Purchase Agreement
Location	Within SPP in Oklahoma or Arkansas, with preference for OG&E's service territory	Within SPP, with preference for OG&E's service territory	Within SPP, with preference for OG&E's service territory

Q. **Did the RFP's have other specific requirements.**

A. Yes, each RFP document described the RFP schedule and included instructions for participating in the bidders' technical conference. The RFP document also explained: (1) the process for communication between OG&E and the bidders, (2) the requirement for bidders to provide a notice of intent ("NOI") to bid into the RFP, (3) provided form documents for bidders to complete and (4) *pro forma* agreements for bidders to edit in redline as part of their bid. Each RFP used a consistent evaluation methodology as outlined in the RFP documents and explained later in my testimony and in OG&E Witness Scheller's testimony.

Q. **Did OG&E self-bid into any of the RFPs?**

A. Yes. OG&E self-bid into the Flexible Resource RFP. OG&E therefore prepared a Code of Conduct document, which identified OG&E members representing the Bid and

Evaluation Teams and the steps OG&E took to maintain separation between the two teams for the duration of the RFP. This Code of Conduct ensured the OG&E Bid Team did not have any special information that could give it an advantage in the RFP process. As stated above, all communications between bidders and the OG&E Evaluation Team were through dedicated email inboxes and provided to the Independent Evaluator for monitoring and compliance. No communications with any bidders occurred outside that dedicated email process and the technical conferences throughout the evaluation period. The Code of Conduct was posted on the Company website during the RFP and is provided as Exhibit KMR-5. OG&E did not self-bid into any RFP other than the Flexible Resource RFP.

V. RFP EVALUATION

Q. **Were the RFP evaluation methodologies consistent across the Solar RFP, the Flexible Resource RFP, the Re-Issued Solar RFP and the Existing Capacity RFP?**

A. Yes. As described in the RFP documents, there were three parts to OG&E's evaluation process: threshold evaluation, quantitative evaluation, and qualitative evaluation. Each proposal was subjected to the initial threshold review process to determine whether the proposal was complete and technically viable and whether the bidder had the financial viability and capability to deliver the project. Witness Scheller of ICF explains the methodology used for the threshold evaluation.

Q. **Please explain the bid review process that occurred after the threshold evaluation.**

A. Proposals that passed the threshold evaluation were then analyzed based on the qualitative and quantitative criteria outlined in the RFP documents. ICF led the qualitative evaluation which considered categories of (1) Contract Risks, Costs, and Benefits, (2) Overall Project Characteristics and Development Risks, and (3) Community and Environmental Impacts. These qualitative factors and how they were analyzed is described by Witness Scheller. Ms. Scheller also explains how the qualitative score representing 30 percent (or 30 points) of the overall 100-point score mitigates risk for OG&E and its customers as well as the results of ICF's qualitative scoring.

Q. **Please describe how OG&E conducted the quantitative evaluation.**

A. The quantitative evaluation represents 70 percent of each proposal's overall score and utilizes price and operational performance factors through a simulation of the costs paid and benefits received by OG&E's customers. That is, OG&E calculated the expected NPVCC for each proposal through detailed resource planning simulation modeling and sensitivity analysis. As noted in Section II above, NPVCC is also the central quantitative metric used in OG&E's IRP analysis, which means there is a high degree of consistency between the IRP analysis and the RFP evaluations. This analysis incorporated initial capital costs with tax credits as applicable, as well as projections for on-going fixed and variable O&M costs, future capital expenditures, fuel cost (if applicable) and generation revenue from participation in the SPP Integrated Marketplace. For modeling purposes, the Company projected the performance of resources in the SPP Integrated Marketplace over a 30-year time horizon. The modeling application was consistent with the analysis and tools described in OG&E's 2021 IRP with routine updates to load forecast and fuel prices.

Q. **What sensitivities were used in OG&E's RFP quantitative evaluations?**

A. OG&E analyzed each proposal under a "Base Case" and three sensitivities (Low Gas, High Gas and Energy Evolution). Consistent with OG&E's 2021 IRP, the Low Gas sensitivity assumed natural gas price forecasts were half of the gas price forecasts used in the Base Case and the High Gas sensitivity assumed natural gas price forecasts were 1.5 times higher than the gas price forecasts used in the Base Case. The Energy Evolution scenario reflected the impact that could potentially be caused by federal policy leading to increased electrification and a region-wide accelerated coal-fired generation retirement schedule, as described in the 2021 IRP.

Q. **How did OG&E determine a score for the RFP quantitative evaluations?**

A. The Company calculated a weighted NPVCC by assigning weights to the Base Case (40% weight) and the Low Gas (25% weight), High Gas (25% weight) and Energy Evolution (10% weight) sensitivities as stated in each RFP document. Collectively, this created a weighted NPVCC for each proposal that was designed to capture the quantitative risks for each proposal over the long-term. The proposal with the lowest weighted NPVCC,

meaning lowest customer cost impact, received 70 points. Points were then awarded to the other proposals based on the ratio between the weighted NPVCC for each proposal and the lowest weighted NPVCC.

VI. RFP RESULTS

Q. **Please describe the participation in the RFPs.**

A. OG&E received proposals for more than 5,000 MW of nameplate capacity across the Flexible Resource, Re-Issued Solar, and Existing Capacity RFPs. In the Flexible Resource RFP, OG&E received bids for approximately 2,500 MW of capacity including stand-alone energy storage resources and natural gas fired generation resources. The Re-Issued Solar RFP bids totaled more than 1,000 MW of solar with several bids offering optional co-located batteries. The remaining generation was received in the Existing Capacity RFP. While OG&E received more than 5,000 MWs of nameplate capacity in the three RFPs, some of the bids are mutually exclusive as they utilize the same site. Additionally, the accredited capacity values, which address OG&E's Needed Capacity identified in Table 1, vary by resource type. A summary of the bids for each RFP is provided in Confidential Direct Exhibit KMR-6.

Q. **Were any offered projects deemed non-conforming or withdrawn during the RFPs?**

A. Yes. As described by Witness Scheller, some of the bids did not conform to the RFP requirements and were not evaluated because they did not pass or meet the threshold criteria in the RFPs. Additionally, some projects were withdrawn by bidders before analysis was complete and some were withdrawn during negotiation.

Q. **What were the results of the quantitative evaluation in the Flexible Resource RFP?**

A. OG&E evaluated the eight conforming bids that passed the threshold criteria in the Flexible Resource RFP. The winning bid was OG&E's proposal to construct 448 MW of new combustion turbines at the existing Horseshoe Lake ("HL") power plant, the Horseshoe Lake CT project. Of the bids received, OG&E's HL CT self-bid provided by far the lowest reasonable cost resource for customers in all sensitivities and scenarios evaluated in the

RFP. In addition to the cost benefits, the HL CTs have the ability to respond quickly to market price signals and system reliability needs.

Q. **What were the results of the combined scoring of the quantitative evaluation and qualitative evaluation in the Flexible Resource RFP?**

A. The HL CTs performed better than other offers in both the quantitative and qualitative evaluations, proving the selection of HL CTs is the best resource selection for customers.

Q. **After the Flexible Resource RFP evaluations were completed, did OG&E select a successful bid and notify the Commission?**

A. Yes. Pursuant to the OCC competitive procurement rules, OG&E provided notice of the successful bid along with the results of the evaluation and documentation of non-conforming bids as shown in Confidential Direct Exhibit KMR-7 to the Oklahoma Corporation Commission staff, staff of the Oklahoma Attorney General, and the Independent Evaluator.

Q. **What were the results of the Re-Issued Solar RFP?**

A. OG&E evaluated five conforming bids in the Re-Issued Solar RFP. OG&E provided notice to the Oklahoma Corporation Commission staff, staff of the Oklahoma Attorney General, and the Independent Evaluator that three bids were successful. This notice is provided in Confidential Direct Exhibit KMR-8.

Q. **What were the results of the Existing Capacity RFP?**

A. The Existing Capacity RFP received one bid from a single bidder. As noted by Witness Scheller and discussed later in my testimony, capacity is becoming scarce in the SPP. Therefore, there were limited opportunities for purchasing existing capacity. OG&E provided notice to the Oklahoma Corporation Commission staff, staff of the Oklahoma Attorney General, and the Independent Evaluator of the successful bid. This notice is provided in Confidential Direct Exhibit KMR-9.

Q. **What resources did OG&E select for this preapproval case?**

A. OG&E selected the HL CTs for seeking preapproval from these three RFPs. The HL CTs provided the best resource for customers from the Flexible Resource RFP. During negotiations of the Re-Issued Solar RFP, two of the three successful bids were withdrawn from the RFP process by the bidder. The remaining project has yet to be negotiated to a point that would minimize cost and risk to OG&E's customers. The Existing Capacity RFP had one bid and could not be negotiated to a point that would minimize cost and risk to OG&E's customers.

Q. **Has OG&E updated the RFP quantitative evaluation based on the final cost projections?**

A. Yes. The costs used during the RFP quantitative evaluations directly relate to the bids received in each RFP. After contracts were finalized with the turbine manufacturer and the engineering and construction joint venture company, the Company also developed estimates for contingency costs and the Owner's Costs described in the testimony of OG&E Witness Schuermann. When OG&E updated the quantitative analysis using the total updated estimated costs of the HL CTs, the HL CTs still provide the best resource for customers. The updated cost comparison is provided in Confidential Direct Exhibit KMR-10.

VII. FUTURE CAPACITY NEEDS

Q. **Do the HL CTs satisfy all of the Company's capacity needs?**

A. No. The HL CTs add 448 MW of capacity in late 2026. They address only a portion of the full capacity needs of the Company in summer 2027 identified in the 2021 IRP and do not address the growing needs caused by the SPP's recent increase in the PRM. However, it is a critical step in addressing OG&E's total needs.

Q. **Did bids received in the other RFPs offer reasonable resource options that help OG&E address its remaining capacity needs?**

A. No. The majority of the bids provided in the other RFPs would not be available to provide capacity for OG&E's needs until at least 2027. Only the resource provided in the Existing

Capacity RFP would be available to meet OG&E's needs for the next three years. In the end, no contracts with bidders have been negotiated with pricing, terms and conditions that would be in the best interest of customers for meeting capacity needs.

Q. **How is OG&E addressing its capacity needs before 2027?**

A. After the various RFPs conducted in 2022 were unable to identify any viable, near-term capacity options, OG&E decided to seek PPAs for meeting its capacity needs between 2024 and 2027.

Q. **Could OG&E acquire capacity through the SPP Integrated Market?**

A. No. The SPP Integrated Marketplace is an energy-only market so there is no market mechanism for purchasing capacity through SPP.

Q. **What actions is OG&E taking to secure capacity to meet its need in 2024 through 2027?**

A. In March 2023, OG&E issued RFPs for PPAs that could fill the near-term capacity needs from 2024 to 2027. These RFPs are seeking available capacity from resources currently operational in SPP to help meet OG&E's near-term and significant capacity needs. In accordance with OAC 165:35-34, the Company notified the OCC and Oklahoma Attorney General's office of the winning bids into the RFPs on April 21, 2023. OG&E is pursuing contract negotiations.

Q. **Would these PPAs satisfy the Company's capacity needs that have grown because of recent SPP policy initiatives?**

A. Yes, these PPAs could satisfy the currently projected capacity needs between 2024 and 2027.

Q. **What was the foundation for the Company's capacity needs in the 2021 IRP?**

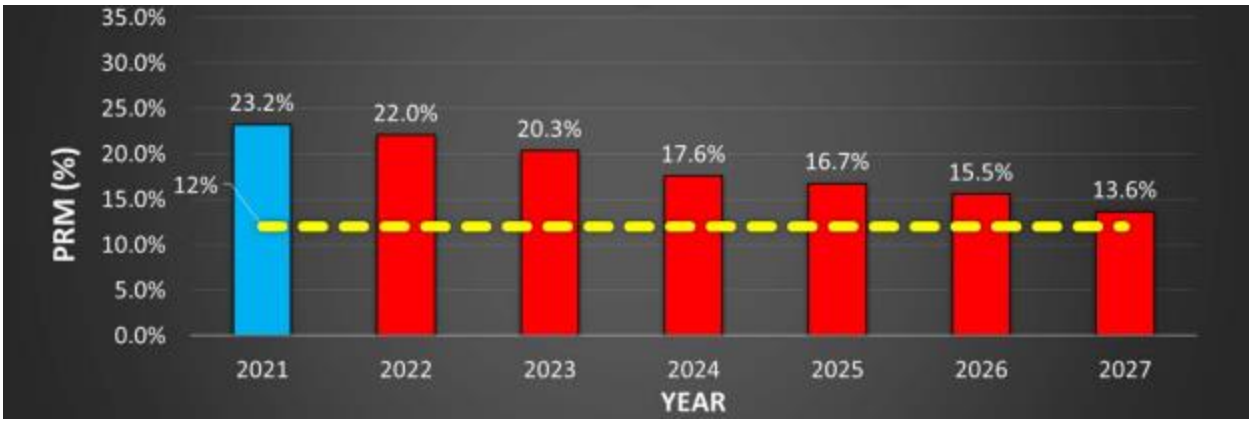
A. The capacity need identified in the 2021 IRP was premised on SPP's PRM requirement of 12 percent. That is, under that SPP PRM requirement, OG&E remains responsible for ensuring it has adequate capacity either from OG&E generating units or from contracts for

capacity from independent power producers or from other utilities to meet its projected peak load requirements, plus the PRM.

Q. **Has the SPP recently increased the PRM?**

A. Yes, in late 2022, SPP approved increasing the PRM for the entire SPP footprint from 12 percent to 15 percent beginning immediately in the summer of 2023. This change increases OG&E's capacity needs in each year by 180 MW - 190 MW. At the same time, this PRM change increases the capacity requirements for all SPP Load Responsible Entities and therefore reduces the amount of excess capacity available for purchase across the SPP footprint. As shown in Figure 2, the amount of excess capacity in the SPP is declining. At the 12 percent PRM, SPP was projected to have excess capacity through 2027. After the increase to PRM of 15 percent, SPP, as a whole, is projected to be capacity deficient within the next four years. Therefore, to solve future capacity needs, new generation resources will have to be installed.

Figure 2 – Summer Season SPP Planning Reserve Margin Summary



Q. **Will the PPAs being negotiated for 2024-2027 help address increasing short-term capacity needs being driven by the increased PRM?**

A. Yes. The PPAs will help ensure OG&E will meet its capacity needs (even with the 15 percent PRM) between now and 2027. The HL CTs will then be able to come on-line to address increasing capacity needs in 2027. OG&E now has the ability use its next IRP and additional RFPs to address capacity needs beginning in 2028.

Q. **Is SPP planning other changes that put pressure on OG&E's ability to meet PRM requirements?**

A. Yes. SPP has several other initiatives that have the potential to increase overall capacity needs in the next few years and, therefore, reduce the amount of available excess capacity in SPP. First, SPP studies the ability for generation to meet load requirements every two years. From this study, SPP determines the needed PRM to maintain reliability standards. The next study assessing the needed PRM is scheduled to be released in 2024 and SPP staff has already informed their Board of Directors this study will likely indicate a PRM higher than 15 percent is required[4].

Second, SPP has approved the implementation of Performance Based Accreditation ("PBA") for thermal resources. PBA reduces thermal generation capacity accreditation based on forced outage rates. Although SPP has approved moving to PBA, precise implementation guidance is currently under development. This guidance will be needed to understand the exact impact to OG&E. Currently, SPP has indicated the transition to PBA will begin in 2025 and be phased in over time with full implementation by 2028[5].

SPP is also working toward adding a resource adequacy requirement to the winter season consistent with requirements for the summer season. This requirement would result in specific generation capabilities and load requirements during the winter season. The PRM for the winter season will be the same as the PRM for the summer season until SPP can determine and approve a different margin specifically for winter. OG&E is monitoring the development of this policy and will provide feedback to SPP as needed. However, it should be noted that the final implementation does have the potential to increase the generation required during the winter season.

Q. **Will the HL CTs also help OG&E address future environmental requirements?**

A. Yes. The new HL CTs will be "hydrogen capable." This means the CTs will be designed and engineered at commissioning to have the potential to safely and reliably burn hydrogen blended with natural gas directly as a fuel, including the ability to convert the facility to

[4] https://www.spp.org/documents/67635/bod_mc%20minutes%202022%2007%2026.pdf, page 146

[5] https://spp.org/search?q=%22RR554%22&t=Documents, page 13 of word document in zip file

using hydrogen as its primary fuel in the future. This capability will provide an added amount of flexibility for the future.

VIII. CONCLUSION

Q. **What are your overall conclusions about OG&E's capacity needs and RFPs?**

A. OG&E has immediate and significant resource capacity needs. OG&E's 2021 IRP showed capacity needs in the hundreds of MWs. Multiple factors, including SPP policy changes, are now driving those capacity needs higher, starting in 2023. OG&E followed its 2021 IRP Action Plan and issued several RFPs, including a Flexible Resource RFP, two Solar RFPs and an Existing Capacity RFP. The HL CTs is the best, most cost-effective bid from these RFPs, and it addresses a portion of OG&E's future capacity needs. The HL CTs also provide OG&E additional fuel diversity and flexibility with the CTs being "hydrogen capable." OG&E has also issued RFPs for PPAs to find solutions for its immediate capacity needs. Altogether, OG&E has assessed reasonable alternatives through both the 2021 IRP and the RFPs, which tested the market to meet the immediate and future capacity needs.

I believe the Company has approached resource planning in a comprehensive and responsible way. Not only has OG&E addressed its short-term needs, but it has also begun to address its growing and evolving future needs though the addition of flexible, hydrogen capable CTs.

Q. **Does this conclude your prepared direct testimony?**

A. Yes, it does.

CERTIFICATE OF MAILING

I hereby certify that on the 31st day of May 2023, a true and correct copy of the foregoing Application was electronically transmitted to the following via email:

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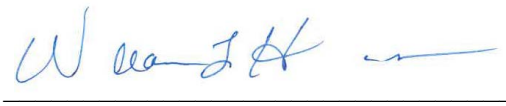


AFFIDAVIT

STATE OF OKLAHOMA)
)
COUNTY OF OKLAHOMA)

On the 30th day of May 2023, before me appeared Kelly Riley, to me personally known, who, being by me first duly sworn, states that she is the Director of Resource Planning for Oklahoma Gas and Electric ("OG&E") and acknowledges that she has read the above and foregoing document and believes that the statements therein are true and correct to the best of her information, knowledge, and belief.

Print Kelly Riley

Signature Kelly Riley

Subscribed and sworn to before this 30th day of May, 2023.

Harrison L. Burton
Notary Public

My commission expires: 10-17-2026

Seal

Direct Exhibit KMR-1

OG&E

INTEGRATED RESOURCE PLAN

OKLAHOMA GAS & ELECTRIC

PREPARED 2021

OGE ENERGY CORP.

OG&E submits this Integrated Resource Plan (IRP) in compliance with requirements established pursuant to the Oklahoma Corporation Commission's (OCC) Electric Utility Rules OAC 165:35-37 and the Arkansas Public Service Commission's (APSC) Resource Planning Guidelines for Electric Utilities. This IRP is submitted according to the triennial schedule established by the OCC and APSC.

EXECUTIVE SUMMARY

OG&E plans to meet future capacity needs through a balanced portfolio of solar resources and hydrogen-capable combustion turbines that provides affordable costs for customers while satisfying IRP objectives.

Over the next five years, load growth and unit retirements result in the need for new generation capacity to meet OG&E's planning reserve requirements. These capacity needs are shown in the table below:

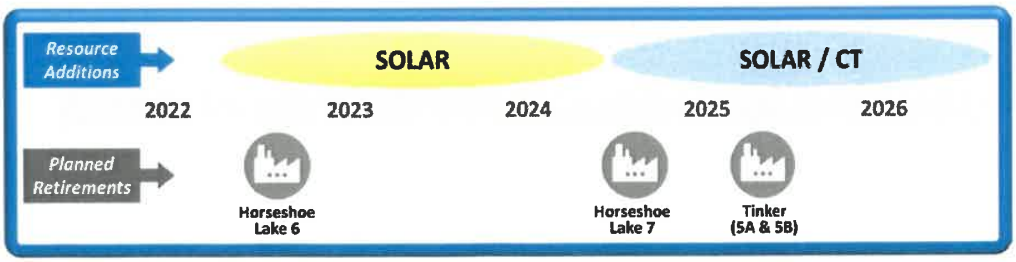
OG&E Planning Reserve Margin and Needed Capacity (MW unless noted)

	2022	2023	2024	2025	2026
Total Capacity	6,749	6,581	6,581	6,370	6,306
Net Demand	6,025	6,004	6,039	6,059	6,088
Reserve Margin	12%	10%	9%	5%	4%
Needed Capacity*	0	145	183	417	514
**Indicates the capacity needed to restore the reserve margin to 12%.*					

OG&E evaluated more than one million portfolios that meet the capacity needs utilizing a combination of potential future resources of various technology types, sizes and availability. The IRP analysis shows the lowest reasonable cost plan is a balanced portfolio of solar resources and combustion turbines. This plan helps maintain system resiliency, advances fuel and technology diversity of the generation fleet, improves operational flexibility and expands OG&E's renewable generation portfolio. Adding zero-emitting technologies along with high-efficiency combustion turbines that enable and support renewable generation growth are important building blocks to meet future expectations for cleaner energy. Additionally, the combustion turbines are capable of using hydrogen as a fuel in the future, providing further emission reduction potential.

OG&E will issue a Request(s) for Proposals (RFP) for resources to meet the capacity requirements and other IRP objectives of the company for future generation designed to increase efficiency, advance cleaner generation and maintain affordability.

OG&E Action Plan



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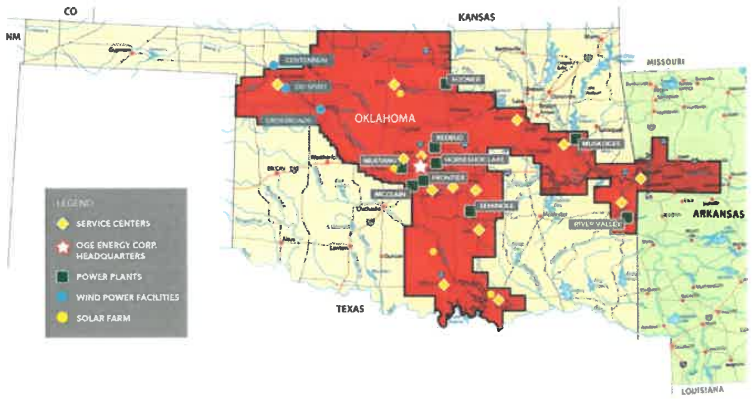
List of Acronyms

Acronym	Phrase Represented	Reference
APSC	Arkansas Public Service Commission	Agency
CO_2	Carbon Dioxide	Chemical
CC	Combined Cycle electricity generating unit	Technology
CT	Combustion Turbine electricity generating unit	Technology
DSM	Demand Side Management	Industry
EIA	Energy Information Administration	Agency
FERC	Federal Energy Regulatory Commission	Agency
IM	Integrated Marketplace	SPP
HH	Henry Hub	Industry
ITP	Integrated Transmission Plan	SPP
IVVC	Integrated Volt Var Control	OG&E
IRP	Integrated Resource Plan	Industry
LMP	Locational Marginal Price	SPP
LRR	Load Reduction Rider	OG&E
NERC	North American Electric Reliability	Agency
NPVCC	Net Present Value of Customer Cost	OG&E
NTC	Notice to Construct	SPP
NREL	National Renewable Energy Laboratory	Agency
O&M	Operations & Maintenance	General
OCC	Oklahoma Corporation Commission	Agency
OG&E	Oklahoma Gas & Electric	Agency
PCI	Power Costs Inc.	Agency
PPA	Power Purchase Agreement	Industry
RFP	Request for Proposal	General
SPP	Southwest Power Pool	SPP
STEP	SPP Transmission Expansion Plan	SPP

I. Introduction

OG&E was formed in 1902 and is Oklahoma's oldest and largest investor-owned electric utility. OG&E serves more than 871,000 customers in 267 towns and cities in a 30,000 square mile area of Oklahoma and western Arkansas. OG&E's service area is shown in Figure 1.

Figure 1 – OG&E Service Area



This IRP Report and Appendices have been completed following the OCC Electric Utility Rules and APSC Resource Planning Guidelines for Electric Utilities. Sections II - V present the IRP objectives and process, assumptions, resource planning modeling and analysis, and five-year action plan. Section VI concludes the report with the following schedules as prescribed by Oklahoma Corporation Commission rule OAC 165:35-37-4(c):

A. Electric demand and energy forecast
B. Forecast of capacity and energy contributions from existing and committed supply- and demand-side resources
C. Description of transmission capabilities and needs covering the forecast period
D. Assessment of the need for additional resources
E. Description of the supply, demand-side and transmission options available to the utility to address the identified needs
F. Fuel procurement, purchased power procurement, and risk management plans
G. Action plan identifying the near-term (i.e., across the first five (5) years) actions
H. Proposed RFP(s) documentation, and evaluation
I. Technical appendix for the data, assumptions and descriptions of models
J. Description and analysis of the adequacy of its existing transmission system
K. Assessment of the need for additional resources to meet reliability, cost and price, environmental or other criteria
L. An analysis of the utility's proposed resource plan
M. Description and analysis of the utility's consideration of physical and financial hedging to determine the utility's ability to mitigate price volatility

II. IRP Objectives and Process

OG&E strives to develop a resource plan that will allow it to most reasonably and affordably meet its capacity obligations over the planning horizon with due consideration of the uncertainties attributable to many of the planning assumptions and other items of value to OG&E customers. The objectives below are relied upon to identify the best future portfolio.

1. Capacity Obligation: satisfy Southwest Power Pool (SPP) planning reserve margin requirements
2. Expected Cost to Customers: lowest reasonable Net Present Value of Customer Cost (NPVCC) subject to satisfying other IRP objectives
3. Exposure to Risks: consider the sensitivity of NPVCC related to risks that affect customer cost and benefits, including uncertain future prices of fuel and emissions, as well as other potential risks
4. Fuel & Technology Diversity: maintain a reasonable balance among technologies and fuel sources including natural gas, renewable, coal, energy storage and demand-side resources
5. Operational Flexibility: maintain or increase the ability of OG&E's portfolio to respond at SPP's direction to localized reliability issues
6. Adaptability: Consider a range of capacity options with varying degrees of scalability and differing implementation timelines
7. Portfolio Age: maintain a reasonable balance of resources as measured by expected remaining asset life
8. Resiliency Benefits: maintain generation capability to minimize disruptions
9. Environmental Stewardship: consistent with OG&E's expectation to reduce CO_2 emissions by 2030

OG&E's seven-step Integrated Resource Planning process remains largely unchanged from previous IRPs and is illustrated in Figure 2.

Figure 2 – Integrated Resource Planning Seven Step Process

III. Assumptions

OG&E's resource planning process includes collecting information regarding material assumptions used in the modeling and analysis of potential resource additions.

A. Load Forecast

The retail energy forecast is based on retail sector-level econometric models representing weather, growth and economic conditions in OG&E's Oklahoma and Arkansas service territories. The peak demand forecast relies on an hourly econometric model. Historical and forecast weather-adjusted retail energy sales are the main driver for the peak demand forecast projections. The most recent load forecast also considers anticipated short-term and long-term economic impacts related to the COVID-19 pandemic. The peak demand forecast is reduced by planned OG&E Demand Side Management (DSM) programs to determine the net demand used for planning purposes. Energy and Peak Demand forecasts are provided in Table 1 and Table 2.

Table 1 – Energy Forecast (GWh)

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Energy Forecast[1]	29,897	30,053	30,225	30,395	30,620	30,858	31,113	31,389	31,695	31,978
OG&E DSM[2]	615	803	991	1,179	1,353	1,499	1,622	1,725	1,812	1,986
Net Energy	29,283	29,250	29,234	29,215	29,267	29,359	29,491	29,664	29,883	29,992

Table 2 – Peak Demand Forecast (MW)

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Demand Forecast[1]	6,303	6,313	6,379	6,431	6,491	6,543	6,589	6,626	6,630	6,659
OG&E DSM[2]	278	309	340	372	403	432	456	477	494	505
Net Demand	6,025	6,004	6,039	6,059	6,088	6,111	6,133	6,149	6,136	6,154

The baseline Energy and Demand Forecasts include the impacts of historical Energy Efficiency, the SmartHours Program and the Integrated Volt Var Control Program (IVVC). Historically, OG&E's Energy Efficiency programs in Oklahoma and Arkansas have achieved between 30 MW and 40 MW of incremental demand reduction each year. The SmartHours Program integrates technology and pricing to help customers reduce energy

[1] Includes SmartHours, Historical Demand Program Rider programs and Integrated Volt Var Control.
[2] Represents estimates for incremental energy efficiency programs in Oklahoma and Arkansas, the Load Reduction Program, and existing and future OG&E distributed energy resources.

usage at peak times. Customers respond to price signals between the non-holiday weekday hours of 2:00 p.m. and 7:00 p.m. over the summer months to help reduce the peak demand on the system by more than 100 MW. IVVC manages OG&E's distribution system reactive power flow and voltage level while also reducing demand by nearly 100 MW.

OG&E DSM, shown in the energy and peak demand forecast tables as forecasted incremental program growth, demonstrates OG&E's ongoing commitment to engaging customers to reduce energy and demand requirements. OG&E's Energy Efficiency programs in Oklahoma and Arkansas include, but are not limited to, efforts to improve weatherization, lighting, heating, ventilation and air conditioning systems. OG&E's Energy Efficiency programs are projected to add nearly 40 MW of demand reduction each year. OG&E's Load Reduction Rider offers rate incentives to commercial and industrial customers that can reduce their electrical load when notified by OG&E. OG&E's distributed solar resources are also accounted for in the OG&E DSM.

B. Generation Resources

OG&E is obligated to satisfy SPP Planning Reserve Margin requirements by maintaining capacity sufficient to serve its peak load requirements and a planning reserve. This is accomplished through OG&E-owned generation, existing power purchase agreements (PPAs) and, if necessary, potential new resources.

1. Existing Resources

OG&E's existing portfolio of electric generating facilities consists of owned thermal generation, owned renewable resources and four PPAs, as presented in the following three tables.

Table 3 – OG&E Existing Thermal Resources

Unit Type	Unit Name	First Year In Service	Summer Capacity (MW)
Coal Fired Steam (1,854 MW)	Muskogee 6	1984	503
	Sooner 1	1979	516
	Sooner 2	1980	515
	River Valley 1	1990	160
	River Valley 2	1990	160
Gas Fired Steam (3,130 MW)	Muskogee 4	1977	423
	Muskogee 5	1978	442
	Horseshoe Lake 6	1958	168
	Horseshoe Lake 7	1963	211
	Horseshoe Lake 8	1969	403
	Seminole 1	1971	485
	Seminole 2	1973	500
	Seminole 3	1975	498
Combined Cycle (1,113 MW)	McClain [3]	2001	378
	Redbud [3]	2002	615
	Frontier	1989	120
Combustion Turbine (553 MW)	Horseshoe Lake 9	2000	45
	Horseshoe Lake 10	2000	43
	Tinker (Mustang 5A)	1971	33
	Tinker (Mustang 5B)	1971	31
	Mustang 6	2018	57
	Mustang 7	2018	57
	Mustang 8	2018	58
	Mustang 9	2018	58
	Mustang 10	2018	57
	Mustang 11	2018	57
	Mustang 12	2018	57

Table 4 – OG&E Existing Renewable Resources

Unit Type	Unit Name	First Year In Service	Nameplate Capacity (MW)	Summer Capacity (MW)
Wind (52 MW)	Centennial	2006	120	15
	OU Spirit	2009	101	9
	Crossroads	2012	228	28
Solar (18 MW)[4]	Mustang	2015	3	2
	Covington	2018	9	8
	Chickasaw Nation	2020	5	4
	Choctaw Nation	2020	5	4

[3] Represents OG&E owned interest: 77% of McClain and 51% of Redbud.
[4] Solar is connected to distribution and is embedded in the Net Demand Forecast. OG&E expects 10 MW of additional nameplate distributed solar resources will be in service by the end of 2021.

Table 5 – Existing Power Purchase Agreements

	Unit Name	Contract Start date	Nameplate Capacity (MW)	Summer Capacity (MW)
Power Purchase (47 MW)	Keenan	2010	152	21
	Taloga	2011	130	10
	Blackwell	2012	60	9
	Southwestern Power Administration	1979	7	7

2. *Resource Changes in the Ten-Year Planning Horizon*

Six of OG&E's owned generation resources will retire over the next 10 years. In addition, two wind PPAs will expire at the end of the 10 years.

Horseshoe Lake

Horseshoe Lake units 6, 7 and 8 are natural gas-fired steam generating units located at the Horseshoe Lake power plant in Harrah, Okla. These are the oldest units in OG&E's generation fleet and among the oldest units of their type and size operating in the SPP. Horseshoe Lake units 6, 7 and 8 have provided value to OG&E's customers, as well as consumers across the Southwest Power Pool, for many years. The advent of the SPP Integrated Marketplace (IM) in 2014 and changes to the resource mix in SPP have led to the Horseshoe Lake units operating in a more seasonal manner and outside their original design parameters.

OG&E's recent Depreciation Studies have shown the three steam turbine units at Horseshoe Lake have probable retirement dates within the next decade. The Company has determined that these three older Horseshoe Lake steam turbine units should be retired. The risk of significant failure with these units is material and increasing every year. Multiple components of Horseshoe Lake units 6, 7 and 8 have been in service since the units came online in the 1950s and 1960s. Replacement parts for these units are not readily supported by the manufacturers and, instead, must frequently be re-engineered and manufactured at significant expense and production lead time. Additionally, units of this age are more susceptible to catastrophic component failure. Some of these components include but are not limited to high-speed rotating equipment, high voltage equipment and high-pressure components. Failure of any of these components could lead to additional collateral equipment damage and OG&E employee exposure to hazardous conditions.

Horseshoe Lake units 6, 7 and 8 share a number of common systems at the plant, such as the demineralized water unit and gas main. These systems have been in service since the 1950s and pose the same maintenance and end-of-life risks as the generating units themselves. The lake and river intake structure were put in place almost 100 years ago to support Horseshoe Lake units 1-5, which retired in 1981. Both the lake and river intake structure need significant modifications/upgrades to continue to function as the cooling water source to units 6 and 7. While OG&E has outlined dates to retire each unit, a

change of conditions, such as failure of a co-dependent system, could advance planned dates.

Horseshoe Lake Unit 6 is a 168 MW natural gas-fired steam turbine unit originally commissioned in 1958. Unit 6 is the oldest unit in OG&E's current generation fleet and depreciation studies prepared for OG&E have shown probable retirement dates for Horseshoe Lake 6 as early as 2013. The 2019 EIA-860[5] shows that similarly sized natural gas-fired steam generators have reached retirement after an average of 54 years of operation. OG&E will retire Horseshoe Lake unit 6 as planned in 2023, after 65 years.

Horseshoe Lake Unit 7 was originally commissioned in 1963 as an early combined cycle unit with a gas turbine and a natural gas-fired steam turbine. Unit 7's 26 MW gas turbine, last operated in 2015, has since been retired. OG&E has worked to keep the remaining 211 MW steam unit operating without the legacy gas turbine. Previous depreciation studies have shown Horseshoe Lake unit 7's probable retirement date as early as 2019. The 2019 EIA-860 shows that similarly sized natural gas-fired steam generators have reached retirement after an average of 54 years of operation. OG&E plans to retire Horseshoe Lake unit 7 in 2025, after 62 years.

Horseshoe Lake Unit 8 is a 403 MW natural gas-fired steam turbine unit originally commissioned in 1969. Previous depreciation studies have shown a probable retirement date as early as 2024. The 2019 EIA-860 shows that similarly sized natural gas-fired steam generators have reached retirement after an average of 46 years of operation. OG&E plans to retire Horseshoe Lake unit 8 in 2027, after 58 years.

Tinker

Mustang Units 5A and 5B are two aero-derivative simple-cycle combustion turbines (CTs) that were originally installed at OG&E's Mustang power plant site in 1971. In 1990, OG&E moved these two units to Tinker Air Force Base. These units have a net capacity of approximately 64 MW and support all customers while providing onsite resiliency at Tinker. Previous depreciation studies have shown a probable retirement date as early as 2018. The 2019 EIA-860 shows that natural gas-fired simple cycle combustion turbines have reached retirement after an average of 37 years of operation. The two units located at Tinker are planned to be retired in 2025 after 54 years.

Seminole

Seminole Units 1, 2 and 3 are natural gas-fired steam generators located at the Seminole power plant in Konawa, Oklahoma. These units were placed in service in the early to

[5] EIA. (2020). 2019 EIA-860 3_1_Generator_Y2019.xlsx. U.S. Energy Information Administration. https://www.eia.gov/electricity/data/eia860/archive/xls/eia8602019.zip

mid-1970's. Previous depreciation studies showed these three units' probable retirement dates in 2030. OG&E currently anticipates retiring Seminole Unit 1 at the end of 2030 after 59 years of service. Seminole Unit 2 retirement would then be extended to the end of 2032 at 59 years of service. Retirement for Seminole Unit 3 would then be extended to the end of 2034, also at 59 years of service. OG&E will update the depreciation study to reflect these dates. The three Seminole units represent almost 1,500 MWs of OG&E's current generating capacity.

Wind Purchase Power Agreements

OG&E entered into PPAs for generation from the Keenan and Taloga Wind facilities starting in 2010 and 2011, respectively. Each agreement provides generation for 20 years and will end within the next ten years.

3. Future Resource Options

OG&E contracted with Burns & McDonnell to provide cost and performance estimates for combined cycle (CC), simple cycle technologies like combustion turbines (CT) and reciprocating engines (RICE), solar and battery storage. The cost estimates for Wind are from the National Renewable Energy Laboratory (NREL)[6]. The potential additional resource options are shown in Table 6.

[6] NREL. (2020). *Electricity annual Technology Baseline data download.* NREL. https://atb-archive.nrel.gov/electricity/2020/data.php

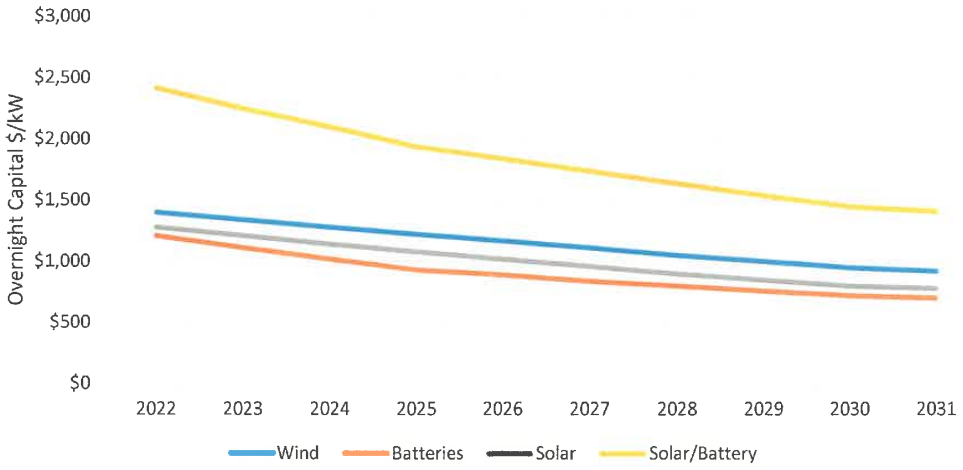
Table 6 – Resource Options in 2021$

Technology	Model	Nameplate Capacity (MW)	Nameplate Overnight Capital Cost ($/kW)	Summer Peak Capacity	Fixed O&M Cost ($/kW)	Variable O&M Cost ($/MWh)
Wind	Land-Based	250	$1,470	50	$46.00	N/A
Batteries	Lithium Ion	100	$1,310	100	$21.00	N/A
Solar	Photovoltaic Single Axis	100	$1,350	60	$16.90	N/A
Solar/Battery Hybrid	Single Axis/Lithium Ion	100	$2,590	100	$37.90	N/A
RICE	Reciprocating Engine 1x	19	$2,430	19	$38.80	$4.50
	Reciprocating Engine 6x	111	$1,320	111	$14.50	$4.50
Combustion Turbine (CT)	AGT 1x	62	$1,690	58	$4.50	$0.90
	AGT 7x	432	$1,100	404	$5.60	$0.90
	LMS100 1x	111	$1,090	101	$2.60	$5.70
	LMS100 4x	444	$860	405	$3.20	$5.70
	E Class 1x	85	$1,120	77	$6.50	$7.20
	E Class 5x	427	$840	386	$6.80	$7.20
	F Class	221	$690	212	$3.20	$1.80
	G/H Class	278	$660	264	$3.50	$2.20
Combined Cycle (CC)	1x1 J Class	531	$930	503	$3.50	$1.50
	1x1 J Class Fired	637	$780	613	$3.50	$2.20
	2x1 G/H Class Fired	1,001	$700	944	$2.50	$2.30
	2x1 F Class	729	$850	662	$2.40	$1.50
	2x1 F Class Fired	880	$750	828	$2.40	$2.30
	1x1 F Class Fired	441	$960	411	$4.30	$2.40

Capital costs for renewable resources have been declining over the last several years and are expected to continue to decline over the next decade, albeit at a slower pace than in the previous decade. OG&E utilized NREL[7] price projections to develop an estimated price reduction curve for wind, solar and battery resources in the IRP, as reflected in Figure 3.

[7]NREL. (2020). *Electricity annual Technology Baseline data download.* NREL. https://atb-archive.nrel.gov/electricity/2020/data.php

Figure 3 – Renewables Nameplate Overnight Cost Projections in 2021$ ($/kW$_{AC}$)



A number of high-potential innovations in electricity generation and storage are currently under development and testing. The Company will continue to assess developments in emerging technologies for future planning consideration as they become viable options.

4. Resource Location Considerations

The SPP's long-term Integrated Transmission Plan (ITP)[8] anticipates continued growth in renewable energy resources throughout the SPP system. Additionally, the ITP model assumes retiring thermal generators are primarily replaced by combustion turbines at existing generation sites to meet resource adequacy requirements. Existing generation facilities can provide opportunities for re-development of new generation by providing benefits such as land, water rights, emission permits and are already strategically connected to the existing electric transmission infrastructure. The Horseshoe Lake, Tinker and Seminole sites have the potential to provide these re-development opportunities. Additionally, their locations near OG&E's largest load center offer opportunities to maintain the locational reliability these sites have provided to OG&E's system for many years. OG&E will consider these factors as each site experiences retirements in the future.

[8]SPP. (2020). *2020 Integrated Transmission Planning Assessment Report*. SPP. https://www.spp.org/documents/63434/2020%20integrated%20transmission%20plan%20report%20v1.0.pdf

C. Fuel Price Projections

OG&E utilizes fuel price projections provided in the EIA 2021 Annual Energy Outlook (AEO)[9]. EIA's models consider macroeconomic conditions, world oil prices, technological developments, and energy policies to provide price projections for the U.S. The AEO "Reference Case" reflects current laws, regulations and market conditions, including projected impacts due to COVID-19. The AEO Reference Case is part of the foundation for OG&E's Base Case in this IRP. The following figure provides the Henry Hub (HH) Natural Gas price assumption and the projected U.S. average coal price assumption for the next ten years from the 2021 AEO.

Figure 4 – EIA 2021 Annual Energy Outlook Fuel Projections (Nominal $)

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Natural Gas - HH	$3.30	$3.10	$2.95	$3.10	$3.29	$3.44	$3.68	$3.91	$4.08	$4.20
Coal	$2.15	$2.18	$2.22	$2.25	$2.31	$2.38	$2.42	$2.48	$2.54	$2.59

D. Risk Assessment

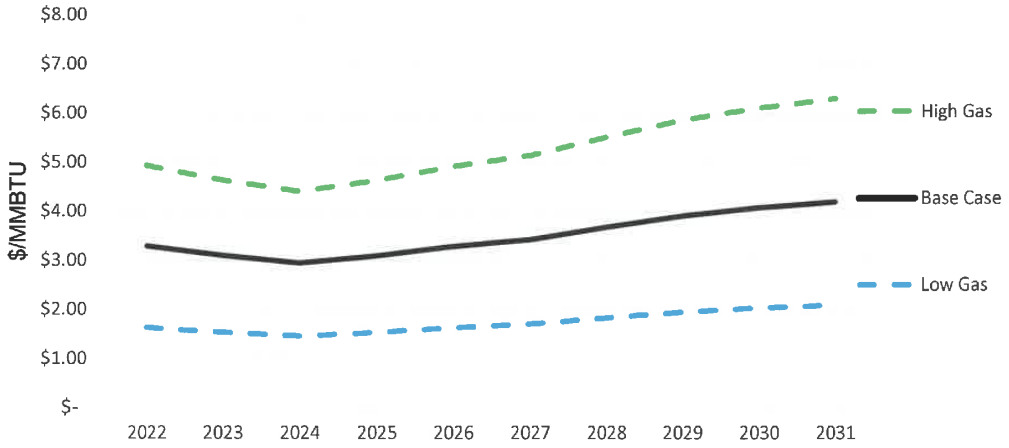
In addition to conducting the resource planning analysis under Base Case conditions, assumptions are varied to develop a range of hypothetical future conditions. Sensitivities involve adjusting a single assumption and measuring the impact of that specific variable on potential resource plans. Scenarios are designed by modifying more than one assumption. The analysis using the sensitivities and scenarios are provided in Section IV of this report to quantify risk.

1. Sensitivities

The variables considered in the sensitivity analysis are natural gas prices, solar capital costs, load and the potential future implementation of a CO_2 tax. The High and Low natural gas prices used in this analysis represent a 50% increase and a 50% reduction, respectively, to the base natural gas price assumptions as shown in Figure 5.

[9] EIA. (2021, February 3). U.S. Energy Information Administration. *Annual Energy Outlook 2021*. https://www.eia.gov/outlooks/aeo/

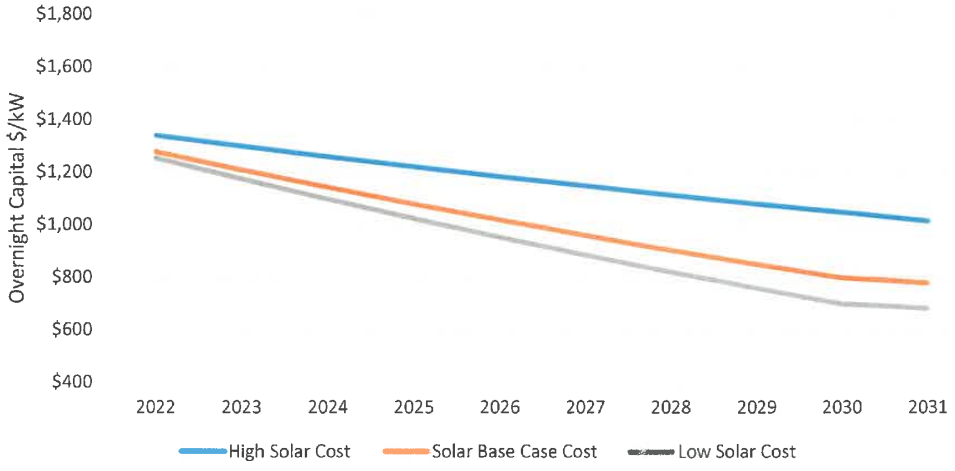
Figure 5 – Natural Gas Sensitivities



NREL provides three projections for future solar capital costs.

Figure 6 illustrates OG&E's solar capital cost sensitivities based on the current expected capital cost shown in Table 6 and the projected capital cost trajectories also provided by NREL[10].

Figure 6 – Solar Capital Cost Sensitivities



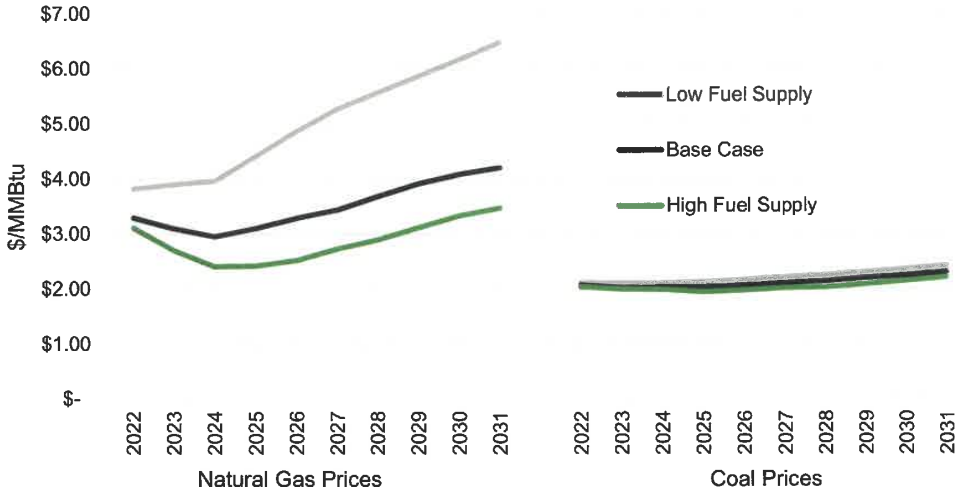
[10] NREL. (2020). *Electricity annual Technology Baseline data download.* NREL. https://atb-archive.nrel.gov/electricity/2020/data.php

The Low Load Sensitivity evaluates the impact of a 10% reduction in energy forecasts for the SPP across the analysis time horizon. Finally, the CO_2 tax sensitivity added a cost of $20 per ton of CO_2 emissions starting in 2025 and escalating by 2% each year afterward.

2. Scenarios

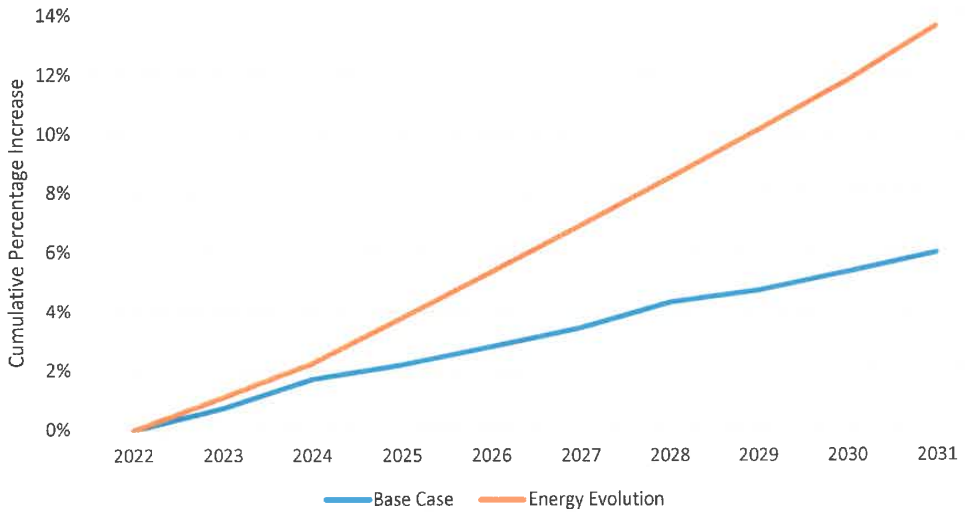
The 2021 Annual Energy Outlook provides several scenarios addressing uncertainties in technology improvements, economic performance, commodity prices, legislation, regulation or energy policies. The Low and High Oil and Gas Resource and Technology cases provide the largest potential variations in commodity prices among scenarios prepared by EIA. These cases also include hypothetical changes to load projections. As a simplification, OG&E labels these cases as Low and High Fuel Supply scenarios. The future commodity prices assumed in these scenarios are provided in Figure 7.

Figure 7 – Scenario Fuel Projections



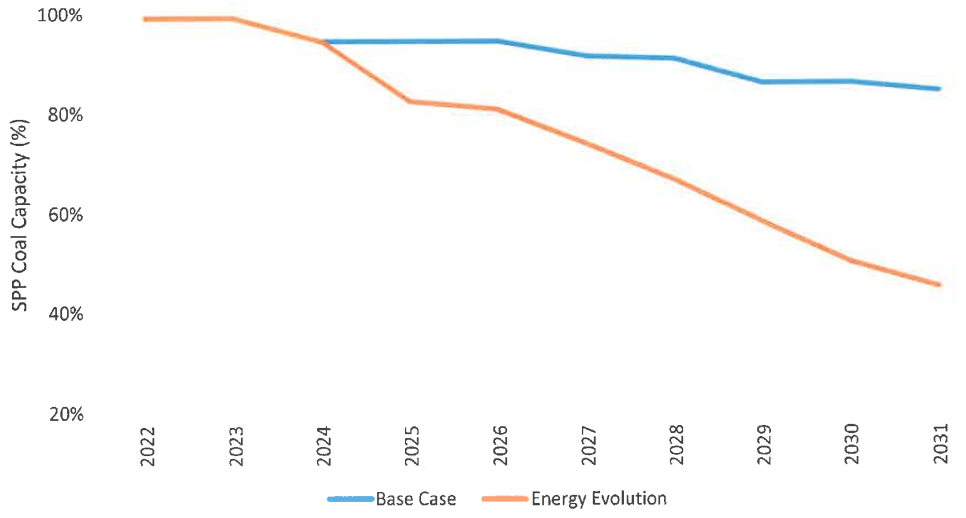
Additionally, OG&E developed an Energy Evolution scenario to analyze the potential impact that could be caused by federal policy leading to increased electrification and a region-wide accelerated coal-fired generation retirement schedule. Increased electrification could involve changes in the residential, commercial, industrial, and transportation sectors resulting in increased load on the power grid. Figure 8 shows the annual SPP load growth percentages for the Energy Evolution case compared to the Base Case.

Figure 8 – Energy Evolution Impact to Load



The Energy Evolution scenario also includes a reduction in SPP coal capacity through accelerated coal unit conversions and retirements. The coal capacity percent reduction for the Base Case and the Energy Evolution scenario are provided in Figure 9.

Figure 9 – SPP Coal Capacity Comparison



3. Sensitivity and Scenario Summary

Table 7 provides a summary of the assumptions that were changed in the various sensitivities and scenarios.

Table 7 – Sensitivity and Scenario Summary

	Case	Description
Base	Base Case	EIA AEO 2021 Fuel Reference Case, Existing Laws and Regulations
Sensitivities	Low Gas	Base Case Natural Gas Prices x 50%
	High Gas	Base Case Natural Gas Prices x 150%
	CO_2 Tax	$20/ton starting 2025
	Low Solar Capital Cost	NREL low solar cost trajectory and $0 transmission cost
	High Solar Capital Cost	NREL high solar cost trajectory
	Low Load	10% SPP load reduction
Scenarios	High Fuel Supply (EIA)	High Oil & Gas Resource and Technology - Low Fuel cost, Higher Load
	Low Fuel Supply (EIA)	Low Oil & Gas Resource and Technology - High Fuel Cost, Lower Load
	Energy Evolution	Increased electrification, accelerated coal retirements

E. Integrated Marketplace Locational Marginal Prices

Hourly Locational Marginal Prices (LMPs) for both generation and load are established through the IM. OG&E utilizes Hitachi ABB Power Grids PROMOD®, an electric market simulation tool, which incorporates generating unit operating characteristics, transmission grid topology and constraints, to simulate future nodal energy prices in the SPP IM. Forecasted LMPs are applied to electricity generated by OG&E units. Market conditions such as availability of diverse generation resources, fuel pricing and emission costs impact market pricing. The resulting average annual OG&E Load LMPs for the Base Case and all sensitivities are provided in Figure 10. Figure 11 shows the average annual OG&E Load LMPs for the Base Case and all scenarios.

Figure 10 – Base Case and Sensitivity Average Annual OG&E Load LMP Comparison

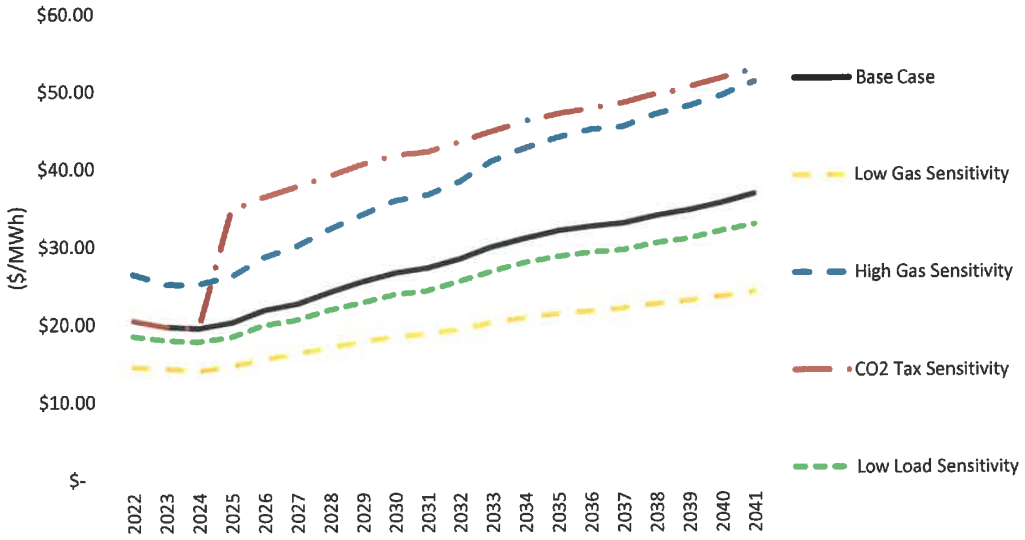
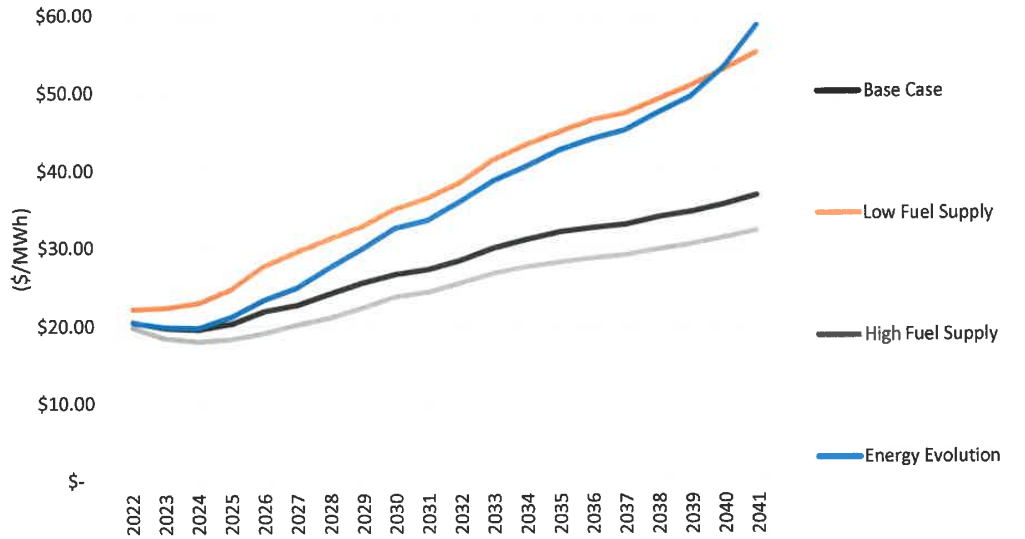


Figure 11 – Base Case and Scenario Average Annual OG&E Load LMP Comparison



IV. Resource Planning Modeling and Analysis

This section explains OG&E's future incremental capacity needs, the modeling and analysis steps utilized to identify the lowest reasonable customer cost plan for satisfying those needs and the risks considered.

A. Planning Reserve Margin

The SPP IM does not operate a capacity market, in contrast to certain other regions. OG&E continues to have responsibility for ensuring that it has sufficient planning capacity to serve its peak load requirements and a planning reserve margin. OG&E's minimum 12% planning reserve margin is established in Section 4 of the SPP Planning Criteria [11]. OG&E's projection of the annual planning reserve margin is shown in Table 8.

Table 8 – Planning Reserve Margin (MW unless noted)

		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Capacity	Owned Capacity	6,702	6,534	6,534	6,323	6,259	5,856	5,856	5,856	5,856	5,371
	Purchase Contracts	47	47	47	47	47	47	47	47	47	16
	Total Capacity	6,749	6,581	6,581	6,370	6,306	5,903	5,903	5,903	5,903	5,386
Demand	Demand Forecast	6,303	6,313	6,379	6,431	6,491	6,543	6,589	6,626	6,630	6,659
	OG&E DSM	278	309	340	372	403	432	456	477	494	505
	Net Demand	6,025	6,004	6,039	6,059	6,088	6,111	6,133	6,149	6,136	6,154
Margin	Reserve Margin[12]	12%	10%	9%	5%	4%	-3%	-4%	-4%	-4%	-13%
Needs	Needed Capacity	0	145	183	417	514	942	967	985	970	1,507

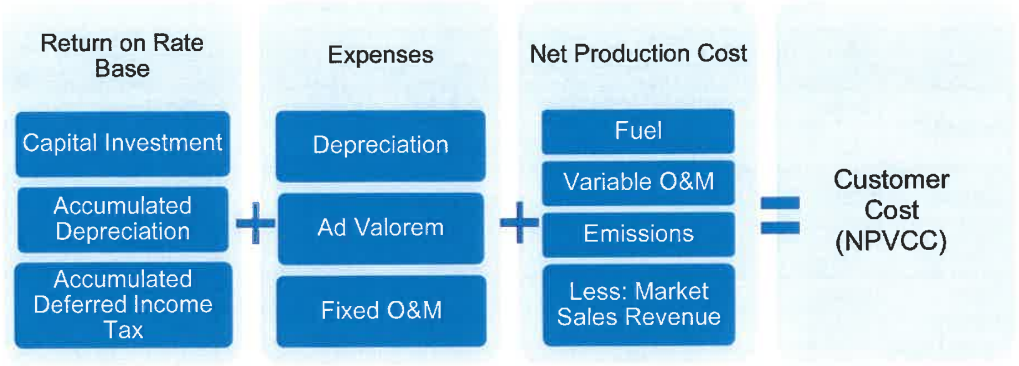
B. Modeling Methodology

OG&E relies on the PROMOD® software to simulate the SPP IM and project hourly nodal LMPs. The PCI GenTrader® software then uses these LMPs to determine production costs and market revenues for the generators. A revenue requirement model combines all the cost components into the estimated 30-year net present value of customer costs (NPVCC) and is illustrated in Figure 12. This analysis approach allows the comparison of resources with a wide range of capital and operating costs. For instance, some renewable generation resources may have a higher overnight capital cost than conventional generation, however, conventional generation also has ongoing fuel cost over the life of the asset that the renewables do not.

[11] SPP. (2021). *SPP Planning Criteria Revision 2.4*. SPP. 2021. https://www.spp.org/documents/58638/spp%20planning%20criteria%20v2.4.pdf

[12] Reserve Margin % = ((Total Net Capacity) - (Net System Demand)) / Net System Demand

Figure 12 – Customer Cost Components



C. Portfolio Development

Potential Portfolios are made up of resources that enable OG&E to meet its capacity requirements. Assembling portfolios considers the construction time of the resource options to determine the earliest possible in-service date for each resource type. Figure 13 shows the first year that the various resources are available for meeting the Planning Reserve Margin requirement based on the expected construction timeframes for each.

Figure 13 – New Resource Option Earliest Availability

More than one million portfolios were analyzed to meet OG&E's capacity needs over the next 10 years. These portfolios have NPVCC values ranging from $1.2 billion to $3.6 billion in the Base Case and represent various timing, sizing and combinations of the new unit options shown in Table 6. The 100 least cost portfolios consistently contain combinations of solar and combustion turbines. Therefore, a plan that is a balanced approach of solar and combustion turbines is preferred. In Table 9, OG&E first analyzed the technologies available by 2023, which includes solar, battery, hybrid and wind resources. As shown in the table, the only difference between these four portfolios is the technology type in 2023.

Table 9 – Portfolios with Base Case NPVCC in Million $

Portfolio Name	Type	Accredited Capacity (MW)											NMPL. MW**	NPVCC
		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total*		
Solar/CT	**Solar**		**200**		60			**60**			240	560	933	**$1,182**
	CT				**212**	**212**	**264**				**264**	952	998	
Battery then Solar/CT	*Battery*		200									200	200	$1,256
	Solar				60			60			240	360	600	
	CT				212	212	264				264	952	998	
Solar/ Battery Hybrid then Solar/CT	*Hybrid*		200									200	200	$1,391
	Solar				60			60			240	360	600	
	CT				212	212	264				264	952	998	
Wind then Solar/CT	*Wind*		200									200	1,000	$1,415
	Solar				60			60			240	360	600	
	CT				212	212	264				264	952	998	

**Total = Accredited MW*
***NMPL. MW = Nameplate MW*

As shown in Table 9, solar in 2023 expands the Company's renewable resources and enhances Fuel & Technology Diversity while also being the lowest cost option when compared to batteries, solar/battery hybrids and wind. Stand-alone batteries had higher net present value customer costs than solar over their lifetime in this analysis due to higher maintenance costs, and energy costs associated with charging the batteries. Combining batteries with solar could result in added tax benefits but this hybrid resource approach did not perform as well as stand-alone solar due to assumed operating costs to maintain both the solar resource and the batteries. Finally, while wind is an excellent renewable energy source, only a small percentage of an installed nameplate wind resource can be utilized toward meeting the SPP planning reserve requirements. For this comparison, to achieve the same accredited capacity level as solar, much larger amounts of nameplate wind capacity would be needed, which results in a higher total NPVCC.

Figure 14 – Portfolios Comparing 2023 Resource – Base Case NPVCC in Million $

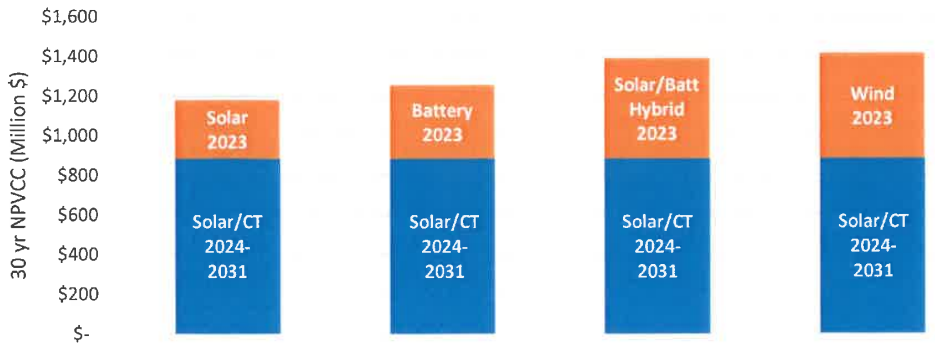


Figure 14 illustrates graphically that, when holding the rest of the portfolio constant, the Solar resource in 2023 results in the lowest net present value of customer costs for the portfolio.

After determining that solar is the lowest reasonable cost resource option in 2023, OG&E then assessed the resource options for its needs in 2025 and beyond. Table 10 below compares various portfolios containing technology options for those post-2023 resource needs.

Table 10 – Representative Portfolios

Portfolio Name	Type	Accredited Capacity (MW)											NMPL. MW**	NPVCC
		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total*		
Solar/CT	**Solar**		200		**60**			**60**			**240**	560	933	**$1,182**
	CT				**212**	**212**	**264**				**264**	952	998	
Solar then CT Only	*Solar*		200									200	333	$1,191
	CT				264	101	424				528	1,317	1,387	
Solar then CT/CC	*Solar*		200									200	333	$1,334
	CT				264							264	278	
	CC					503			613			1,116	1,168	
Solar Only	Solar		200		240	120	420		60		480	1,520	2,533	$1,398
Solar then RICE and Solar/CT	*Solar*		200				180		60		240	680	1,133	$1,449
	RICE				222	111						333	333	
	CT						264				264	528	556	

**Total = Accredited MW*
***NMPL. MW = Nameplate MW*

Table 10 demonstrates that a combination of solar generation and combustion turbines are the most cost-effective option for OG&E's post-2023 needs under the Base Case.

D. Portfolio Risk Assessment

Each portfolio was also assessed under the various sensitivities and scenarios to determine how each portfolio performed when a particular assumption was adjusted. Comparing the NPVCC of the Base Case to the NPVCC of each sensitivity and scenario shows how each portfolio performs under a range of assumptions. The Solar/CT portfolio has the lowest customer cost in the Base Case and performs well throughout the Risk Assessment.

As explained in Section III, the sensitivity analysis evaluates the impact of changes in a single input assumption. The sensitivities evaluated for risk are future fuel prices, SPP load, a potential CO_2 tax and solar project capital costs. Table 11 provides a summary of the 30-year NPVCC for each portfolio in each sensitivity.

Table 11 – Sensitivity 30-year NPVCC in Million $

Portfolio Name	Base Case	Low Gas	High Gas	Low Load	CO_2 Tax	Low Solar Cost	High Solar Cost
Solar/CT	$1,182	$1,395	$886	$1,269	$901	$826	$1,302
Battery then Solar/CT	$1,256	$1,378	$1,060	$1,316	$1,103	$967	$1,347
Solar/Battery Hybrid then Solar/CT	$1,391	$1,547	$1,165	$1,463	$1,182	$1,095	$1,500
Wind then Solar/CT	$1,415	$1,906	$828	$1,602	$651	$1,043	$1,506
Solar then CT Only	$1,191	$1,263	$1,054	$1,247	$1,067	$1,041	$1,220
Solar then CT/CC	$1,334	$1,289	$1,164	$1,464	$950	$1,184	$1,363
Solar Only	$1,398	$2,042	$623	$1,584	$618	$437	$1,760
Solar then RICE	$1,449	$1,713	$1,089	$1,557	$1,096	$1,019	$1,605

The sensitivity risk ranges shown above are graphically illustrated in Figure 15 through Figure 18. The bars show each portfolio's deviation in NPVCC from the Base Case in the sensitivities and scenarios. Narrow ranges indicate smaller risks from changes to assumptions. Wide ranges indicate resource portfolios that are highly impacted by assumption changes. Diversified portfolios mitigate a range of risk factors.

Figure 15 – Natural Gas Price Sensitivity Assessment, NPVCC in Million $

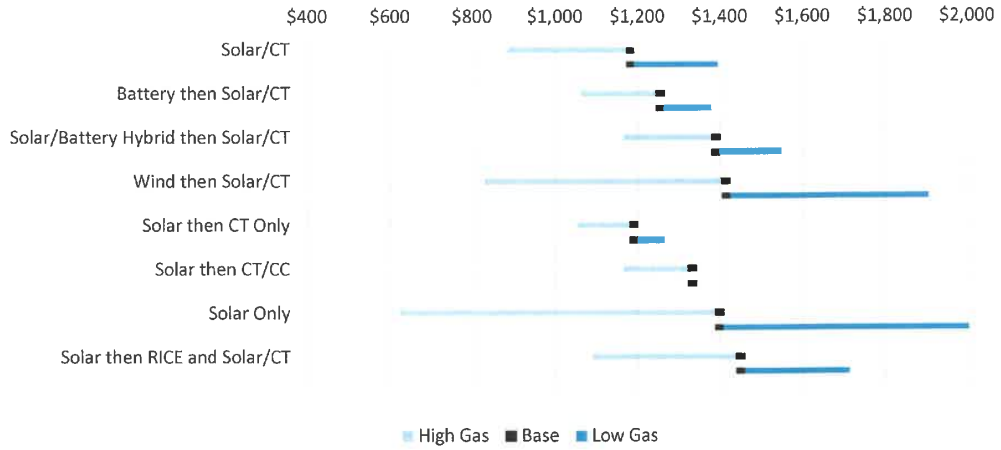


Figure 16 – Low Load Sensitivity Assessment, NPVCC in Million $

Figure 17 – CO_2 Tax Sensitivity Assessment, NPVCC in Million $

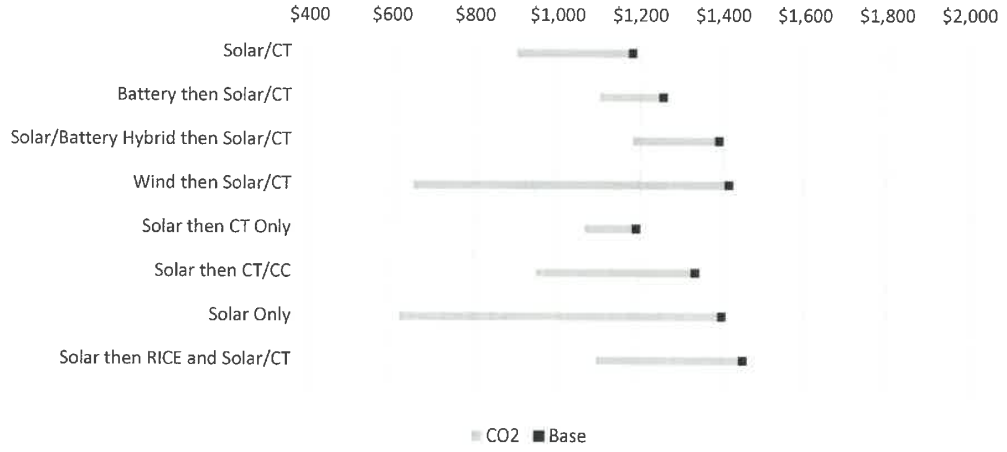
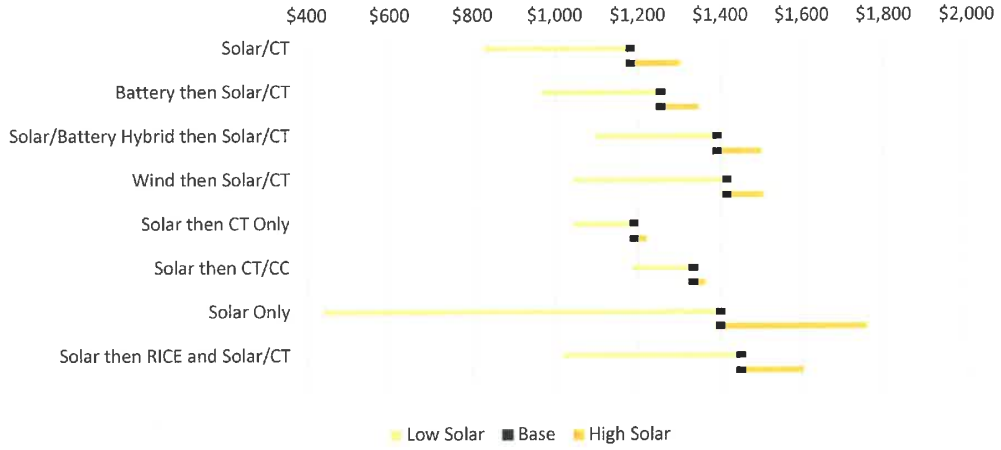


Figure 18 – Solar Capital Cost Sensitivity Assessment, NPVCC in Million $



The scenario analysis evaluates the impact of changes to multiple assumptions at the same time. As described in Section III, the three scenarios analyzed are Low Fuel Supply, High Fuel Supply and Energy Evolution. Table 12 provides a summary of the 30-year NPVCC for each portfolio in each scenario.

Table 12 – Scenario 30-year NPVCC in Million $

Portfolio Name	Base	Low Fuel Supply	High Fuel Supply	Energy Evolution
Solar/CT	$1,182	$857	$1,269	$745
Battery then Solar/CT	$1,256	$1,036	$1,310	$924
Solar/Battery Hybrid then Solar/CT	$1,391	$1,138	$1,457	$1,016
Wind then Solar/CT	$1,415	$782	$1,596	$717
Solar then CT Only	$1,191	$1,053	$1,227	$881
Solar then CT/CC	$1,334	$1,170	$1,340	$665
Solar Only	$1,398	$522	$1,641	$586
Solar then RICE	$1,449	$1,050	$1,555	$933

The risk range of the scenarios shown above are graphically illustrated in Figure 19 and Figure 20.

Figure 19 – Fuel Supply Scenario Assessment, NPVCC in Million $

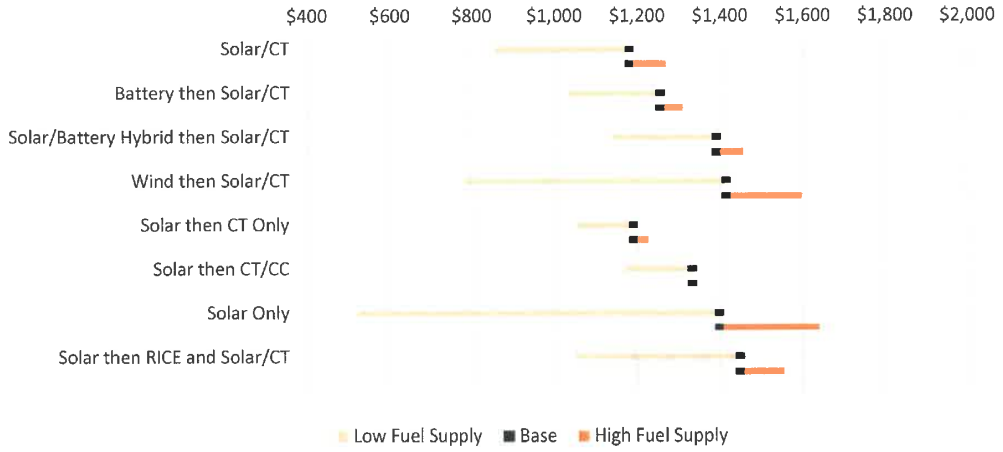
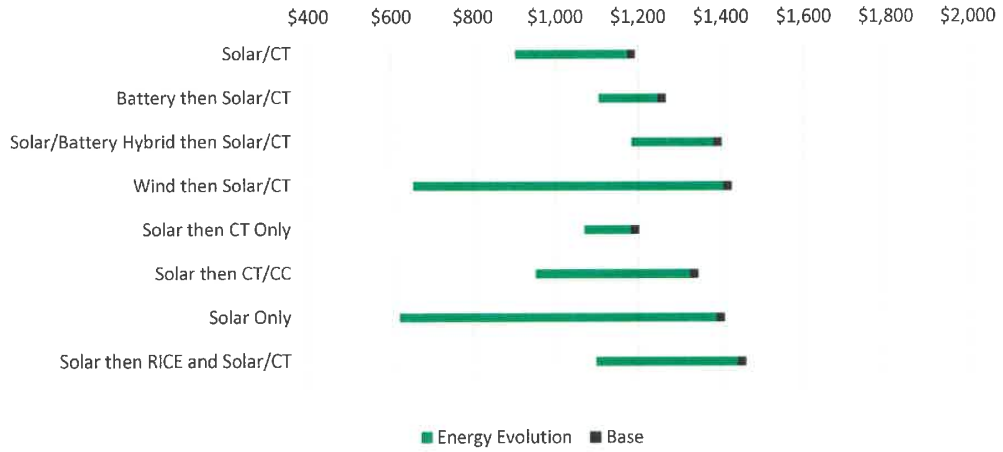


Figure 20 – Energy Evolution Scenario Assessment, NPVCC in Million $



The Sensitivity and Scenario analysis shows that OG&E's preferred plan is the Solar/CT portfolio because it has the lowest customer cost in the Base Case and it mitigates a variety of potential risks.

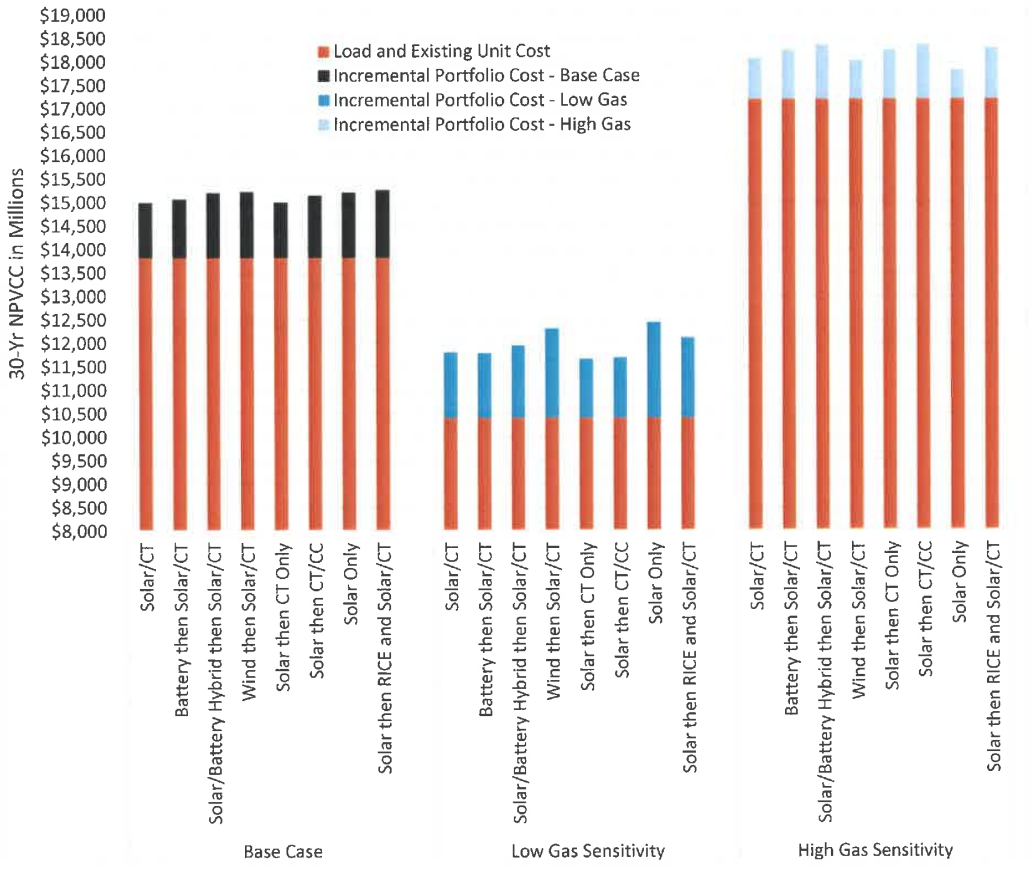
Table 13 – OG&E Preferred Plan

Portfolio Name	Type	Accredited Capacity (MW)											NMPL. MW**	NPVCC
		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total*		
Solar/CT	Solar		200		60			60			240	560	933	$1,182
	CT				212	212	264				264	952	998	

**Total = Accredited MW*
***NMPL. MW = Nameplate MW*

The portfolios focus on the incremental decisions for OG&E's generation fleet. In addition to the NPVCC of the incremental portfolios, Figure 21 shows the 30-year NPVCC of OG&E's load cost, existing generation unit net production costs and fixed O&M expenses under the natural gas sensitivities and base case assumptions.

Figure 21 – Portfolio Cost including Load and Existing Generation Units



E. Qualitative Considerations

In addition to being the lowest customer cost plan, OG&E's preferred Solar/CT plan also provides several qualitative benefits.

1. Operational Flexibility and Resiliency Benefits

Wind generation capacity in SPP has doubled over the past five years to approximately 27 GW[13] and the growth of wind generation capacity in SPP is expected to continue in the future. SPP also expects growth in Solar generation resources over the next decade[14]. Combustion turbines complement the intermittency of renewable generation to support reliability during renewable output fluctuations and can respond quickly in the SPP Integrated Marketplace.

In an April 8, 2021 article by S&P Global Platts, Lanny Nickell, SPP executive vice president and chief operating officer, addressed the need for quick-start resources in SPP.

> In addition to a robust transmission system, Nickell said geographic diversity and a diverse resource portfolio, including 14 GW of quick-start, fast-ramping gas resources, have helped to reliably integrate renewables resources in the region. "And we're not done," he said, pointing to a little over 35 GW of solar and a little less than 35 GW of wind in SPP's generator interconnection queue. "I do expect we're going to continue to see growth in renewables, so we're going to have to make sure that we continue to have the right resources that are available when we need them and that can respond quickly," he said.[15]

Additional notes from SPP's website address the need for quick-start resources.

> Fast-start resources are essential to the reliable provision of energy. These resources typically have short startup times, low minimum run time requirements, and faster than average ramp rates. These characteristics provide the needed flexibility for managing the operational challenges SPP faces.[16]

2. Fuel & Technology Diversity and Reduced Environmental Footprint

OG&E's customers express a growing interest for renewable energy and a reduced environmental footprint. The Company is committed to serving their evolving needs. The preferred plan adds solar which expands the Company's renewable resources and

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[13] SPP. (2021). *State of the market report, Fall 2020*. SPP. https://www.spp.org/documents/63908/spp%20mmu%20%20quarterly%20state%20of%20the%20market%20fall%202020.pdf, page 8

[14] SPP. (2020). *2020 Integrated transmission planning assessment report*. 2020. SPP. https://www.spp.org/documents/63434/2020%20integrated%20transmission%20plan%20report%20v1.0.pdf

[15] "In SPP, preparation, proper valuing of resilience seen as key to energy transition." *S&P Global Platts,* April 8, 2021, www.spglobal.com/platts/en/market-insights/latest-news/electric-power/040821-in-spp-preparation-proper-valuing-of-resilience-seen-as-key-to-energy-transition. Accessed 07/15/2021.

[16] "SIR17 HITT R3B Fast-Start Resource. *SPP*, March 18, 2020, www.spp.org/documents/61833/sir17_hittr3bfaststartresource_sppbod_ferc.pdf, Accessed 7/15/2021.

enhances Fuel & Technology Diversity. In addition, the Solar/CT plan contributes to OG&E's technology diversity by replacing legacy steam gas resources with modern quick-start combustion turbines. Combustion turbines have the flexibility to utilize hydrogen as a fuel. Using hydrogen as a fuel is currently being anticipated by the electric industry for its potential ability to reduce emissions. The balance of solar and hydrogen-capable combustion turbines is consistent with OG&E's expectation to reduce CO_2 emissions to 50 percent below 2005 levels by 2030 and lowering OG&E's carbon intensity.

F. Conclusion

OG&E will have capacity needs beginning in 2023. In this 2021 IRP, the Company analyzed a wide variety of potential resource portfolios to determine the best generation portfolio that satisfies OG&E's future Capacity Obligations. The portfolio analysis shows the lowest Expected Cost to Customers in the Base Case is a combination of solar and combustion turbine resources. The risk analysis demonstrates this blend of resources mitigates Exposure to Risks across the range of sensitivities and scenarios analyzed. The balanced approach of solar and combustion turbines fulfills the objective of Fuel & Technology Diversity and improves Operational Flexibility, Resiliency and the Portfolio Age of OG&E's generation fleet while also being Adaptable to changing assumptions in the future.

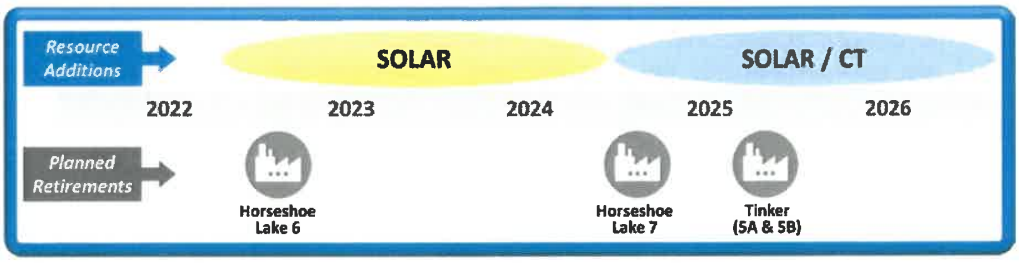
The solar resources in the preferred plan expands OG&E's renewable generation fleet. Combustion turbines can respond quickly in the SPP to enable and support the growth of renewable generation resources into the region. This plan allows the Company to cost-effectively meet capacity needs going forward with newer technology including hydrogen-capable combustion turbines and zero-emitting resources, consistent with OG&E's Environmental Stewardship objective and lowering OG&E's carbon intensity.

OG&E will issue an RFP(s) for resources identified in the Solar/CT plan to meet the capacity requirements and other IRP objectives of the company for future generation designed to increase efficiency, advance cleaner generation and maintain affordability.

V. Action Plan

The Five-Year Action Plan outlined below identifies the steps OG&E will take to address its capacity needs from 2022-2026.

1) OG&E will retire Horseshoe Lake unit 6 in 2023.
2) OG&E plans to retire Horseshoe Lake unit 7 and Tinker units 5A and 5B in 2025.
3) OG&E will issue an RFP(s) for the resources identified in the preferred plan as shown below.



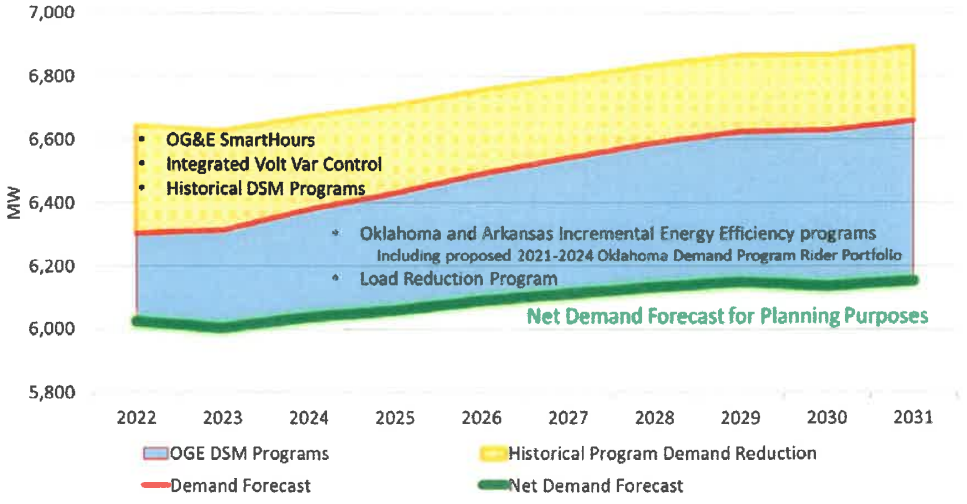
VI. Schedules

This section is intended to provide a summary of each section as described in the OCC's Electric Utility Rules, Subchapter 37 of Chapter 35, section 4 (c).

A. Electric Demand and Energy Forecast

The retail energy forecast is based on retail sector-level econometric models representing weather, growth and economic conditions in OG&E's Oklahoma and Arkansas service territories. The peak demand forecast relies on an hourly econometric model. Historical and forecast weather-adjusted retail energy sales are the main driver for the peak demand forecast projections. Historical DSM programs implemented by OG&E since 2007 are incorporated into the load forecast. The peak demand forecast is further reduced by planned future OG&E DSM program implementations to determine the net demand used for planning purposes, as shown in the figure below.

OG&E DSM Impact on Demand Forecast



Energy Sales Forecast (GWh)

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Energy Forecast[17]	29,897	30,053	30,225	30,395	30,620	30,858	31,113	31,389	31,695	31,978
OG&E DSM[18]	615	803	991	1,179	1,353	1,499	1,622	1,725	1,812	1,986
Net Energy	29,283	29,250	29,234	29,215	29,267	29,359	29,491	29,664	29,883	29,992

[17] Includes SmartHours, Historical Demand Program Rider programs and Integrated Volt Var Control.
[18] Represents estimates for incremental energy efficiency programs in Oklahoma and Arkansas, the Load Reduction Program, and existing and future OG&E distributed energy resources.

Peak Demand Forecast (MW)

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Demand Forecast[17]	6,303	6,313	6,379	6,431	6,491	6,543	6,589	6,626	6,630	6,659
OG&E DSM[18]	278	309	340	372	403	432	456	477	494	505
Net Demand	6,025	6,004	6,039	6,059	6,088	6,111	6,133	6,149	6,136	6,154

B. Existing Generation Resources

This schedule provides a summary of existing resources.

OG&E Existing Thermal Resources

Unit Type	Unit Name	First Year In Service	Summer Capacity (MW)
Coal Fired Steam (1,854 MW)	Muskogee 6	1984	503
	Sooner 1	1979	516
	Sooner 2	1980	515
	River Valley 1	1990	160
	River Valley 2	1990	160
Gas Fired Steam (3,130 MW)	Muskogee 4	1977	423
	Muskogee 5	1978	442
	Horseshoe Lake 6	1958	168
	Horseshoe Lake 7	1963	211
	Horseshoe Lake 8	1969	403
	Seminole 1	1971	485
	Seminole 2	1973	500
	Seminole 3	1975	498
Combined Cycle (1,113 MW)	McClain[19]	2001	378
	Redbud[19]	2002	615
	Frontier	1989	120
Combustion Turbine (553 MW)	Horseshoe Lake 9	2000	45
	Horseshoe Lake 10	2000	43
	Tinker (Mustang 5A)	1971	33
	Tinker (Mustang 5B)	1971	31
	Mustang 6	2018	57
	Mustang 7	2018	57
	Mustang 8	2018	58
	Mustang 9	2018	58
	Mustang 10	2018	57
	Mustang 11	2018	57
	Mustang 12	2018	57

[19] Represents OG&E owned interest: 77% of McClain and 51% of Redbud.

OG&E Existing Renewable Resources

Unit Type	Unit Name	First Year In Service	Nameplate Capacity (MW)	Summer Capacity (MW)
Wind (52 MW)	Centennial	2006	120	15
	OU Spirit	2009	101	9
	Crossroads	2012	228	28
Solar (18 MW)[20]	Mustang	2015	3	2
	Covington	2018	9	8
	Chickasaw Nation	2020	5	4
	Choctaw Nation	2020	5	4

OG&E Existing Power Purchase Contracts

	Unit Name	Contract Start date	Nameplate Capacity (MW)	Summer Capacity (MW)
Power Purchase (47 MW)	Keenan	2010	152	21
	Taloga	2011	130	10
	Blackwell	2012	60	9
	Southwestern Power Administration	1979	7	7

C. Transmission Capability and Needs

OG&E's transmission system is directly interconnected to seven other utilities' transmission systems at over 50 interconnection points. Indirectly, OG&E is connected to the entire Eastern interconnection through the SPP regional transmission organization. The SPP footprint covers 552,000 square miles, serves over 18 million customers and has members in 14 states across all of Kansas and Oklahoma and parts of Arkansas, Iowa, Louisiana, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, South Dakota, Texas and Wyoming. In compliance with FERC Order 890 for transmission planning, SPP performs annual expansion planning for the entire SPP footprint. OG&E provides input to the SPP planning process, and SPP is ultimately responsible for the planning of the OG&E system.

Each year, SPP produces the SPP Transmission Expansion Plan[21] (STEP) which provides a comprehensive listing a of all transmission projects in the SPP. These projects are derived from several SPP analysis efforts including: upgrades required to satisfy requests for Transmission Service (TS) or Generator Interconnection (GI), approved projects for the annual Integrated Transmission Planning (ITP) assessments, sponsored upgrades from each SPP member if applicable, and any remaining approved projects from previous studies. The purpose of the ITP process is to maintain reliability, provide

[20] Solar is connected to distribution and is embedded in the Net Demand Forecast. OG&E expects 10 MW of additional nameplate distributed solar resources will be in service by the end of 2021.
[21] SPP. (2021). *2021 SPP Transmission Expansion Plan Report*. SPP. https://www.spp.org/documents/56611/2021%20step%20report.pdf

economic benefits and meet public policy needs in both the near and long-term to create a cost-effective, flexible and robust transmission grid with improved access to the SPP region's diverse resources. The reports for each SPP study are provided on the SPP website[22] and SPP provides a comprehensive tracking spreadsheet for all projects[23]. The projects located on the OG&E system are provided in Schedule J.

D. Needs Assessment

This schedule provides the needs assessment for new generating resources for the next 10 years.

Planning Margin (MW unless noted)

		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Capacity	Owned Capacity	6,702	6,534	6,534	6,323	6,259	5,856	5,856	5,856	5,856	5,371
	Purchase Contracts	47	47	47	47	47	47	47	47	47	16
	Total Capacity	6,749	6,581	6,581	6,370	6,306	5,903	5,903	5,903	5,903	5,386
Demand	Demand Forecast	6,303	6,313	6,379	6,431	6,491	6,543	6,589	6,626	6,630	6,659
	OG&E DSM	278	309	340	372	403	432	456	477	494	505
	Net Demand	6,025	6,004	6,039	6,059	6,088	6,111	6,133	6,149	6,136	6,154
Margin	Reserve Margin[24]	12%	10%	9%	5%	4%	-3%	-4%	-4%	-4%	-13%
Needs	Needed Capacity	0	145	183	417	514	942	967	985	970	1,507

E. Resource Options

This schedule provides a description of the resource options available to OG&E to address the needs identified in Schedule D.

[22] SPP. *Integrated Transmission Planning*. ITP reports: https://www.spp.org/engineering/transmission-planning/

[23] SPP. (2021). *2021 SPP Transmission Expansion Plan Report, Appendix 1*. https://www.spp.org/Documents/56610/2021%20STEP%20Report%20Appendix%201.xlsx

[24] Reserve Margin % = ((Total Net Capacity) - (Net System Demand)) / Net System Demand

New Generation Resources (2021 Dollars)

Technology	Model	Nameplate Capacity (MW)	Nameplate Overnight Capital Cost ($/kW)	Summer Peak Capacity	Fixed O&M Cost ($/kW)	Variable O&M Cost ($/MWh)
Wind	Land-Based	250	$1,470	50	$46.00	N/A
Batteries	Lithium Ion	100	$1,310	100	$21.00	N/A
Solar	Photovoltaic Single Axis	100	$1,350	60	$16.90	N/A
Solar/Battery Hybrid	Single Axis/Lithium Ion	100	$2,590	100	$37.90	N/A
RICE	Reciprocating Engine 1x	19	$2,430	19	$38.80	$4.50
	Reciprocating Engine 6x	111	$1,320	111	$14.50	$4.50
Combustion Turbine (CT)	AGT 1x	62	$1,690	58	$4.50	$0.90
	AGT 7x	432	$1,100	404	$5.60	$0.90
	LMS100 1x	111	$1,090	101	$2.60	$5.70
	LMS100 4x	444	$860	405	$3.20	$5.70
	E Class 1x	85	$1,120	77	$6.50	$7.20
	E Class 5x	427	$840	386	$6.80	$7.20
	F Class	221	$690	212	$3.20	$1.80
	G/H Class	278	$660	264	$3.50	$2.20
Combined Cycle (CC)	1x1 J Class	531	$930	503	$3.50	$1.50
	1x1 J Class Fired	637	$780	613	$3.50	$2.20
	2x1 G/H Class Fired	1,001	$700	944	$2.50	$2.30
	2x1 F Class	729	$850	662	$2.40	$1.50
	2x1 F Class Fired	880	$750	828	$2.40	$2.30
	1x1 F Class Fired	441	$960	411	$4.30	$2.40

F. Fuel Procurement and Risk Management Plan

On May 14, 2021, OG&E filed its annual Fuel Supply Portfolio and Risk Management Plan with the OCC as part of Cause No. PUD 200100095. The filed document can be found at the OCC.

G. Action Plan

The Five-Year Action Plan outlined below identifies the steps OG&E will take to address its capacity needs from 2022-2026.

1) OG&E will retire Horseshoe Lake unit 6 in 2023.
2) OG&E will retire Horseshoe Lake unit 7 and Tinker units 5A and 5B in 2025.
3) OG&E will issue an RFP(s) for the resources identified in the preferred plan.

H. Requests for Proposals

As noted in the Action plan, OG&E will conduct an RFP(s) for the resources identified in the preferred plan. The RFP(s) will be issued subsequent to the final IRP, pursuant to the Oklahoma Corporation Commission's (OCC) Electric Utility Rules OAC 165:35-37.

I. Modeling Methodology and Assumptions

This schedule is a technical appendix for the data, assumptions, and descriptions of models needed to understand the derivation of the resource plan. The table below explains the source of each assumption and provides a reference for where this information is found in the IRP.

Assumption	Source	Reference
Load Forecast	OG&E	Page 3
Existing Generation Resources	OG&E	Page 4
Resource Changes	OG&E	Page 6
Future Resource Options	Burns & McDonnell, NREL, EIA	Page 8
Fuel Price Projections	EIA	Page 11
Risk Assessment	OG&E, EIA, NREL	Page 11
Integrated Market Prices	OG&E	Page 15
Planning Reserve Margin	OG&E	Page 17
Modeling Methodology	OG&E	Page 17
New Resource Earliest Availability	Burns & McDonnell	Page 18

OG&E utilizes two software programs for production cost modeling:

1. PROMOD® - Fundamental Electric Market Simulation software from Hitachi ABB Power Grids that incorporates generating unit operating characteristics, transmission grid topology and constraints, unit commitment/operating conditions, and market system operations. PROMOD® is used to model the SPP Integrated Marketplace.
2. GenTrader® - Power Costs, Inc. software designed to model complex portfolios of power and fuel resources, including generators, contracts, options, and ancillary services in great detail. Some of the functionalities include: multiple and concurrent fuel and emission limits, multi-stage combined-cycle modeling, ancillary services like regulations and spinning reserve as well as energy limited contracts. GenTrader® is used to simulate OG&E's net production costs within the SPP IM.

J. Transmission System Adequacy

As described in Schedule C, OG&E is a member of and provides input to SPP, who is ultimately responsible for the planning of the OG&E system. SPP evaluates system adequacy and develops a transmission expansion plan to determine what improvements are necessary to ensure reliable transmission service. The projects located on the OG&E system needed to meet the transmission needs are provided in the following table.

Year	Description	Type of Upgrade	Project Type	Current Cost Estimate ($M)	STEP Upgrade Type	NTC ID
2021	Gracemont 345 kV Substation Upgrade for GEN-2015-093 Interconnection	Substation Upgrade	Generator Interconnection	$2.13	GI	N/A
2021	Tap Cleveland - Sooner 345 kV Substation GEN-2015-066 Interconnection	Substation Upgrade	Generator Interconnection	$10.31	GI	N/A
2021	Henessey 138 kV Ckt 1 Terminal Upgrades	Substation Upgrade	Generator Interconnection	$0.14	GI	210556
2021	Westmoore 138 kV Breakers	Substation Upgrade	Regional Reliability	$0.27	ITP	210540
2021	Santa Fe 138 kV Breakers	Substation Upgrade	Regional Reliability	$0.41	ITP	210540
2021	Cleo Corner - Cleo Junction 69kV Ckt 1 Terminal Upgrades	Substation Upgrade	Regional Reliability	$0.02	ITP	210540
2021	Forest Hill 69 kV Terminal Upgrade	Substation Upgrade	Regional Reliability	$0.03	TS	210554
2022	Border - Woodward Tap 345 kV Substation	New Substation	Economic	$11.50	ITP	210587
2022	Chisholm - Woodward Border 345 kV Ckt 1 (OGE)	New Line	Economic	$1.26	ITP	210587
2023	Gracemont 138 kV Ckt 2 Terminal Equipment	Substation Upgrade	Economic	$0.41	ITP	210589
2023	Cushing - Shell Pipeline Area Cushing Tap 69 kV Ckt 1 Rebuild	Line Rebuild	Regional Reliability	$5.36	ITP	210589
2025	Minco - Pleasant Valley - Draper 345 kV Substation equipment upgrades	Substation Upgrade	Economic	$38.59	ITP	210587

Transmission system expansion provides benefits to members throughout the SPP; therefore, the costs of all projects constructed in the SPP are shared through various cost allocation methods, depending on the type of project.

K. Resource Plan Assessment

This IRP assessed the need for additional resources to meet reliability, cost and price, environmental, and other criteria established by state and federal law and regulation. All criteria were met by all portfolios considered in this IRP. These criteria were also met in scenarios and uncertainties which included variations in load growth, fuel prices, emissions prices, environmental regulations, technology improvements, and fuel supply, among others. This plan provides a comprehensive analysis of the proposed options.

L. Proposed Resource Plan Analysis

This IRP demonstrates that all proposed alternatives meet all planning criteria as outlined in Schedules D and K. The proposed action plan outlined in Schedule G best meets these criteria. Documentation of the planning analysis and assumptions used in preparing this analysis are described in Schedule I.

M. Physical and Financial Hedging

OG&E's diverse mix of generation assets and its Fuel Cost Adjustment tariff help mitigate customer exposure to price volatility of a single fuel type. Generation fleet diversity promotes economic dispatch of generation for the benefit of OG&E's customers and this economic dispatch capability helps ensure OG&E's customers will incur the lowest reasonable costs. OG&E also has physical fuel storage of both coal and natural gas.

Financial Hedging of a commodity such as power plant fuel is aimed at reducing the volatility in price. Financial hedging comes at a cost in the form of transaction costs, margin calls and premiums required to lock in pricing. OG&E's customers have been protected to a large extent from the historic volatility in natural gas prices by OG&E's diversified portfolio approach to fuel and purchased power. Currently, the Company is evaluating whether any changes to its fuel procurement strategies are necessary.

On May 14, 2021, OG&E filed its annual Fuel Supply Portfolio and Risk Management Plan with the OCC as part of Cause No. PUD 200100095. The filed document can be found at the OCC.

VII. Appendices

Direct Exhibit KMR-1

Appendix A – Demand Forecast Range and Energy by Class

PEAK DEMAND FORECAST

OG&E's load forecasting framework relies on independently produced forecasts of service area economic and population growth, actual and normal weather data, and projections of OG&E electricity prices for price-sensitive customer classes. The peak demand forecast is based on an hourly econometric model of weather and economic effects on OG&E's hourly load responsibility series. A probabilistic range of outcomes is produced to show how often peak demands could reach each level. The *1 out of 2 years* or "expected" forecast shows the peak demand level given the 50th percentile of the load forecast distribution, using all available historical weather data. In this case, there is a 50% probability the peak load will reach this load level or higher. OG&E is required by SPP to plan for this 50% probability in the reserve margin calculation.

Peak Demand (MW) Forecasts by Weather Probability before OG&E DSM

Event of Occurrence	Occurrence Probability	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1 out of 30 Years	3%	6,706	6,717	6,849	6,901	6,963	6,937	6,993	7,028	7,061	7,103
1 out of 10 Years	10%	6,588	6,584	6,768	6,820	6,881	6,789	6,894	6,932	6,983	7,049
1 out of 4 Years	25%	6,490	6,501	6,569	6,621	6,682	6,726	6,777	6,812	6,816	6,846
1 out of 2 Years	**50%**	6,303	6,313	6,379	6,431	6,491	6,543	6,589	6,626	6,630	6,659
3 out of 4 Years	75%	6,142	6,125	6,213	6,265	6,324	6,308	6,439	6,441	6,460	6,512
9 out of 10 Years	90%	5,957	5,952	6,119	6,171	6,230	6,172	6,250	6,291	6,343	6,402
29 out of 30 Years	97%	5,839	5,849	6,031	6,083	6,143	6,089	6,163	6,208	6,254	6,311

ENERGY FORECAST

The energy forecast is generated from a regression analysis of historical energy, economic growth patterns and annual weather. OG&E's energy is divided into six market segments (Residential, Commercial, Industrial, Oil Field, Street Lighting and Public Authority). Within each segment, a variety of different models is prepared and tested against actual historical sales to determine which model provides the highest quality forecast for that market segment.

Energy Forecast by Customer Revenue Class before OG&E DSM

GWH	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Residential	9,465	9,466	9,479	9,486	9,521	9,569	9,629	9,696	9,767	9,854
Commercial	6,894	6,890	6,902	6,932	6,994	7,060	7,132	7,209	7,291	7,356
Industrial	4,256	4,288	4,286	4,252	4,202	4,133	4,044	3,951	3,857	3,892
Petroleum	4,248	4,359	4,487	4,628	4,775	4,937	5,115	5,308	5,518	5,568
Street Lighting	51	48	44	41	40	40	39	39	38	38
Public Authority	3,045	3,055	3,068	3,085	3,103	3,120	3,137	3,153	3,169	3,198
Total Retail Sales	27,960	28,105	28,266	28,425	28,635	28,859	29,096	29,355	29,641	29,906
Losses	1,938	1,948	1,959	1,970	1,984	2,000	2,016	2,034	2,054	2,072
Energy Forecast	29,897	30,053	30,225	30,395	30,620	30,858	31,113	31,389	31,695	31,978

Appendix B – Arkansas Request – Sooner and Muskogee 6 Retirement Dates

In general, electric utilities expect all types of generation assets to be in service over the long-term, typically with service lives ranging from 25 to 65 years. Many factors are considered when determining appropriate retirement dates, such as asset condition, expected lifecycle costs, fuel supply and potential risks. The current projected retirement dates for the Sooner and Muskogee coal units are based on OG&E's depreciation studies and are shown in the table below:

Unit Name	First Year In Service	Projected Retirement Year
Muskogee 6	1984	2049
Sooner 1	1979	2044
Sooner 2	1980	2045

At this time, OG&E has not changed its retirement schedule for its coal-fired units at the Muskogee and Sooner generating stations. OG&E will continue to monitor changing assumptions and environmental regulations and include any revised analysis in future IRPs.

Direct Exhibit KMR-1

Appendix C – Portfolio Annual Cost Components

Portfolio Annual Cost Components

	Solar/CT			
($Millions)	Return on Rate Base	Expenses	Production Cost	Customer Cost
2021	18	-	-	18
2022	49	-	-	49
2023	52	26	(21)	57
2024	74	26	(21)	78
2025	80	40	(28)	92
2026	87	47	(30)	104
2027	89	56	(32)	113
2028	91	63	(41)	113
2029	110	64	(44)	130
2030	146	64	(45)	165
2031	132	101	(80)	154
2032	125	102	(83)	144
2033	118	103	(87)	134
2034	112	103	(89)	126
2035	106	103	(92)	118
2036	106	104	(93)	117
2037	101	105	(94)	111
2038	95	105	(97)	103
2039	89	106	(98)	97
2040	83	106	(102)	88
2041	78	107	(105)	80
2042	74	108	(107)	75
2043	69	108	(109)	68
2044	65	109	(111)	62
2045	60	110	(114)	56
2046	56	110	(116)	50
2047	52	111	(118)	45
2048	48	112	(121)	39
2049	44	112	(123)	33
2050	40	113	(125)	27
2051	35	114	(128)	22
30 Yr NPV	1,063	844	(725)	1,182

	Battery then Solar/CT			
($Millions)	Return on Rate Base	Expenses	Production Cost	Customer Cost
2021	10	-	-	10
2022	29	-	-	29
2023	39	17	(3)	53
2024	61	17	(3)	75
2025	69	31	(9)	91
2026	77	38	(10)	104
2027	80	47	(12)	115
2028	80	54	(19)	115
2029	100	55	(21)	134
2030	137	55	(21)	171
2031	124	92	(55)	161
2032	118	93	(57)	154
2033	112	93	(60)	145
2034	107	94	(61)	139
2035	101	94	(63)	132
2036	102	95	(64)	132
2037	96	95	(65)	127
2038	91	96	(67)	120
2039	86	97	(68)	115
2040	80	97	(70)	107
2041	76	98	(73)	101
2042	72	98	(73)	97
2043	68	99	(75)	92
2044	64	100	(77)	87
2045	60	100	(78)	82
2046	56	101	(80)	77
2047	52	102	(81)	73
2048	49	102	(83)	68
2049	45	103	(84)	64
2050	41	104	(86)	59
2051	38	105	(88)	55
30 Yr NPV	954	744	(442)	1,256

Portfolio Annual Cost Components

	Solar/Battery Hybrid then Solar/CT			
($Millions)	Return on Rate Base	Expenses	Production Cost	Customer Cost
2021	20	-	-	20
2022	50	-	-	50
2023	52	29	(10)	71
2024	72	30	(9)	93
2025	79	44	(16)	107
2026	86	51	(18)	119
2027	88	60	(19)	129
2028	90	68	(28)	130
2029	109	68	(29)	148
2030	145	68	(30)	183
2031	130	106	(65)	172
2032	123	106	(67)	163
2033	116	107	(70)	153
2034	111	108	(72)	146
2035	104	108	(75)	138
2036	105	109	(76)	138
2037	99	109	(76)	132
2038	93	110	(79)	124
2039	87	111	(80)	118
2040	81	111	(83)	110
2041	76	112	(86)	103
2042	72	113	(87)	98
2043	67	114	(89)	92
2044	63	114	(90)	87
2045	58	115	(92)	81
2046	54	116	(94)	75
2047	50	117	(96)	70
2048	45	118	(98)	65
2049	41	118	(100)	60
2050	37	119	(102)	54
2051	33	120	(104)	49
30 Yr NPV	1,048	895	(551)	1,391

	Wind then Solar/CT			
($Millions)	Return on Rate Base	Expenses	Production Cost	Customer Cost
2021	61	-	-	61
2022	137	-	-	137
2023	46	107	(73)	79
2024	62	108	(77)	92
2025	64	123	(87)	100
2026	67	131	(95)	103
2027	66	140	(99)	107
2028	74	149	(113)	109
2029	89	150	(118)	121
2030	120	151	(124)	147
2031	102	190	(161)	130
2032	90	191	(168)	113
2033	165	193	(176)	181
2034	157	194	(178)	173
2035	149	196	(186)	158
2036	147	197	(193)	152
2037	139	199	(194)	143
2038	131	201	(195)	137
2039	123	203	(203)	122
2040	115	204	(192)	127
2041	108	206	(217)	97
2042	101	208	(215)	94
2043	95	210	(220)	84
2044	88	212	(224)	75
2045	81	214	(229)	66
2046	75	215	(234)	57
2047	69	218	(238)	48
2048	62	220	(243)	39
2049	56	222	(248)	30
2050	50	224	(252)	21
2051	43	226	(257)	13
30 Yr NPV	1,212	1,845	(1,642)	1,415

Portfolio Annual Cost Components

	Solar then CT Only			
($Millions)	Return on Rate Base	Expenses	Production Cost	Customer Cost
2021	18	-	-	18
2022	50	-	-	50
2023	49	26	(21)	53
2024	63	26	(21)	68
2025	77	34	(22)	89
2026	85	40	(24)	101
2027	78	54	(25)	107
2028	84	54	(26)	112
2029	97	55	(28)	123
2030	109	55	(29)	135
2031	100	74	(31)	143
2032	97	74	(32)	139
2033	91	75	(33)	132
2034	87	75	(34)	127
2035	82	75	(36)	122
2036	82	75	(36)	121
2037	77	76	(37)	116
2038	73	76	(37)	111
2039	68	77	(38)	107
2040	63	77	(40)	101
2041	59	77	(41)	95
2042	55	78	(41)	91
2043	51	78	(42)	87
2044	48	79	(43)	83
2045	44	79	(44)	79
2046	40	79	(45)	75
2047	37	80	(46)	71
2048	34	80	(47)	67
2049	31	81	(48)	64
2050	28	81	(49)	60
2051	25	82	(50)	56
30 Yr NPV	884	654	(347)	1,191

	Solar then CC/CT			
($Millions)	Return on Rate Base	Expenses	Production Cost	Customer Cost
2021	18	-	-	18
2022	51	-	-	51
2023	56	26	(21)	61
2024	85	26	(21)	89
2025	96	34	(22)	108
2026	95	53	(32)	117
2027	118	54	(32)	140
2028	134	54	(35)	153
2029	122	79	(46)	155
2030	118	79	(47)	150
2031	117	81	(45)	153
2032	110	80	(48)	142
2033	104	81	(51)	134
2034	106	80	(53)	134
2035	101	82	(52)	131
2036	97	82	(54)	124
2037	92	84	(53)	123
2038	88	82	(57)	113
2039	84	83	(57)	109
2040	79	83	(60)	102
2041	75	85	(61)	99
2042	71	85	(62)	94
2043	67	85	(63)	89
2044	62	86	(65)	84
2045	58	87	(66)	79
2046	54	87	(68)	74
2047	51	88	(69)	69
2048	47	88	(70)	65
2049	44	89	(72)	61
2050	41	90	(73)	57
2051	38	90	(74)	53
30 Yr NPV	1,093	729	(488)	1,334

Portfolio Annual Cost Components

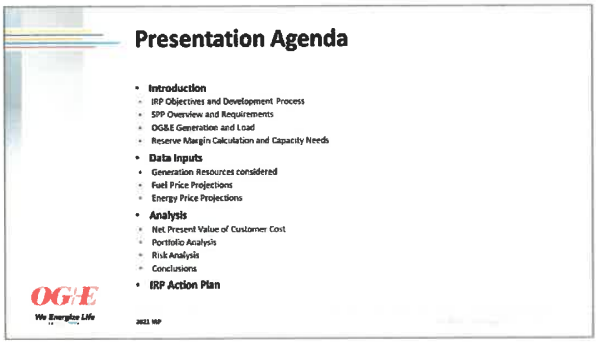
	Solar Only			
($Millions)	Return on Rate Base	Expenses	Production Cost	Customer Cost
2021	18	-	-	18
2022	47	-	-	47
2023	57	26	(21)	61
2024	97	26	(21)	102
2025	133	56	(47)	141
2026	181	70	(64)	187
2027	166	121	(115)	172
2028	168	122	(122)	168
2029	189	129	(137)	181
2030	245	130	(142)	233
2031	222	186	(210)	198
2032	215	187	(219)	183
2033	200	188	(229)	160
2034	191	189	(235)	146
2035	180	191	(243)	128
2036	178	192	(246)	124
2037	169	193	(248)	114
2038	160	194	(256)	99
2039	152	195	(261)	86
2040	144	196	(268)	72
2041	136	198	(277)	56
2042	128	199	(281)	46
2043	121	200	(287)	34
2044	114	202	(294)	22
2045	106	203	(300)	10
2046	99	204	(306)	(3)
2047	92	206	(312)	(15)
2048	84	207	(318)	(27)
2049	77	209	(324)	(39)
2050	70	210	(330)	(50)
2051	62	212	(336)	(62)
30 Yr NPV	1,751	1,524	(1,876)	1,398

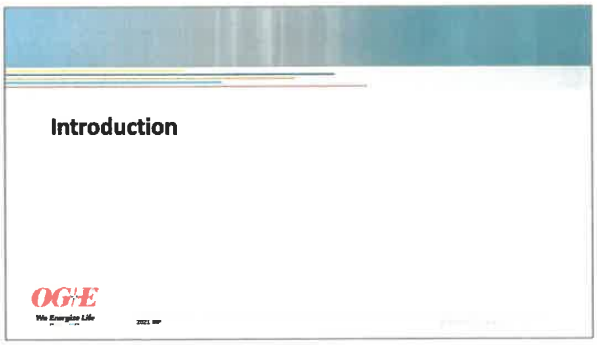
	Solar then RICE and Solar/CT			
($Millions)	Return on Rate Base	Expenses	Production Cost	Customer Cost
2021	18	-	-	18
2022	51	-	-	51
2023	55	26	(21)	59
2024	73	26	(21)	77
2025	95	41	(22)	113
2026	121	49	(24)	146
2027	114	79	(47)	146
2028	124	80	(49)	154
2029	140	87	(60)	166
2030	174	87	(63)	199
2031	159	125	(97)	186
2032	153	126	(101)	178
2033	144	126	(105)	165
2034	138	127	(108)	156
2035	130	128	(112)	146
2036	129	129	(114)	144
2037	122	129	(115)	136
2038	115	130	(118)	127
2039	108	131	(120)	119
2040	102	132	(124)	109
2041	96	132	(128)	99
2042	90	133	(130)	94
2043	85	134	(133)	86
2044	80	135	(136)	79
2045	74	136	(139)	72
2046	69	137	(141)	65
2047	64	138	(144)	58
2048	59	139	(147)	51
2049	54	140	(150)	44
2050	49	141	(153)	38
2051	45	142	(156)	31
30 Yr NPV	1,283	1,037	(870)	1,449

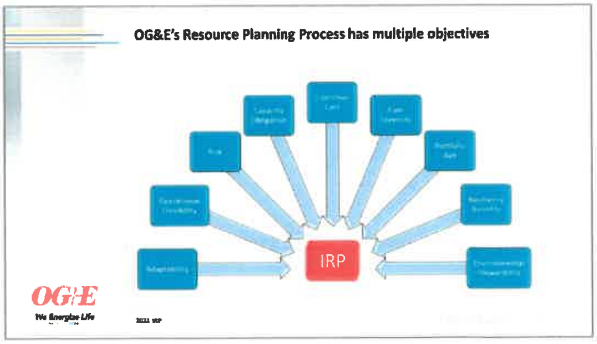
Direct Exhibit KMR-1

Appendix D – OG&E 2021 IRP Oklahoma Technical Conference

Direct Exhibit KMR-1







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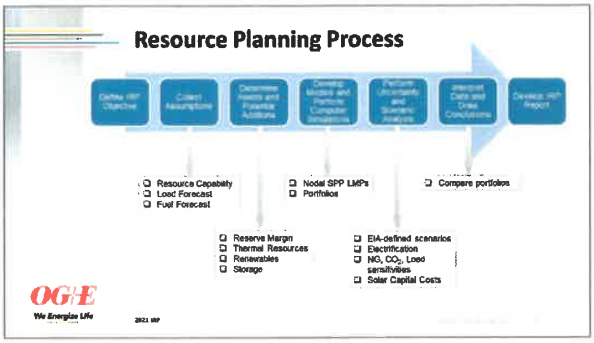
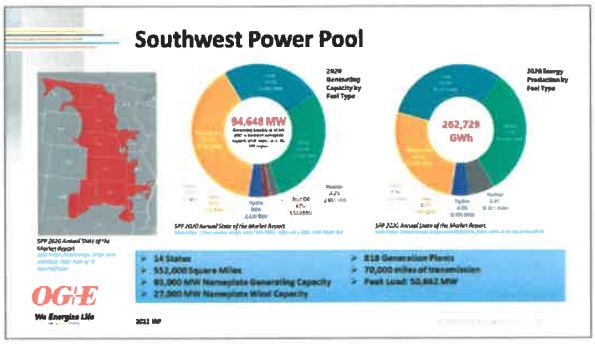
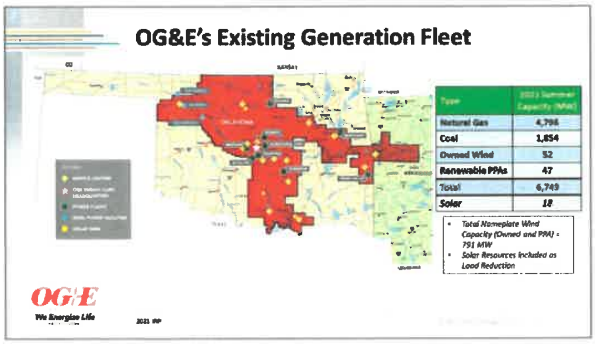
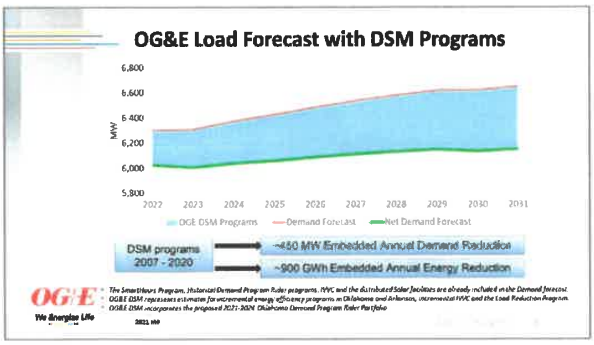








Direct Exhibit KMR-1

Planning Reserve Margin and Capacity Needs

		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Capacity	Owned Capacity	6,702	6,534	6,534	6,323	6,259	5,856	5,856	5,856	5,856	5,371
	Purchase Contracts	47	47	47	47	47	47	47	47	47	15
	Total Capacity	6,749	6,581	6,581	6,370	6,306	5,903	5,903	5,903	5,903	5,386
Demand	Demand Forecast	6,303	6,313	6,379	6,431	6,491	6,543	6,589	6,626	6,630	6,659
	OG&E DSM	278	309	340	372	403	432	456	477	494	505
	Net Demand	6,025	6,004	6,039	6,059	6,088	6,111	6,133	6,149	6,136	6,154
Margin	Reserve Margin*	12%	10%	9%	5%	4%	-3%	-4%	-4%	-4%	-13%
Needs	Needed Capacity	0	145	183	417	514	942	987	985	970	1,507

Planned Retirements

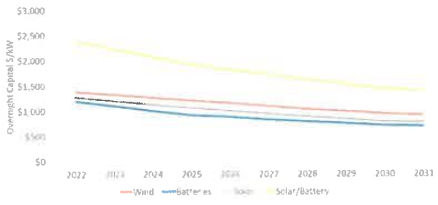
*Reserve Margin % = ((Total Net Capacity) - (Net System Demand)) / Net System Demand

Data Inputs

Resource Options Analyzed

Technology	Model	Nameplate Capacity (MW)	Nameplate Overnight Capital Cost ($/kW)	Summer Peak Capacity
Wind	Land-Based	250	$1,470	50
Batteries	Lithium Ion	100	$1,310	100
Solar	Photovoltaic Single Axis	100	$1,350	60
Solar/Battery Hybrid	Single Axis/Lithium Ion	100	$2,590	100
Reciprocating Engine (RICE)	Reciprocating Engine 1x	19	$2,430	19
	Reciprocating Engine 6x	111	$1,320	111
Combustion Turbine (CT)	AGT 1x	62	$1,690	58
	AGT 7x	432	$1,100	404
	LMS100 1x	111	$1,690	101
	LMS100 4x	444	$860	405
	E Class 1x	85	$1,120	77
	E Class 6x	427	$840	386
	F Class	221	$580	212
	G/H Class	278	$660	264
Combined Cycle (CC)	1x1 J Class	531	$830	503
	1x1 J Class Fired	637	$780	613
	2x1 G/H Class Fired	1,001	$700	944
	2x1 F Class	729	$850	662
	2x1 F Class Fired	860	$750	828
	1x1 F Class Fired	441	$960	411

Renewable Nameplate Overnight Cost Projections in 2021$ ($/kW$_{AC}$)



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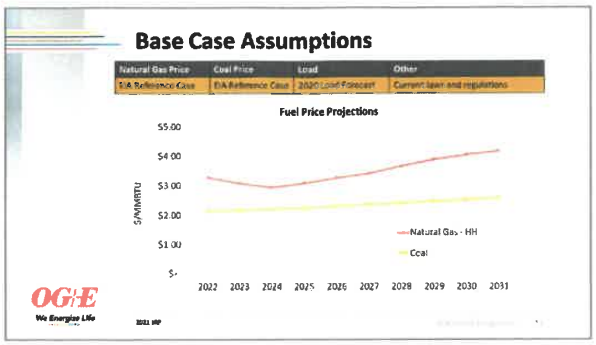

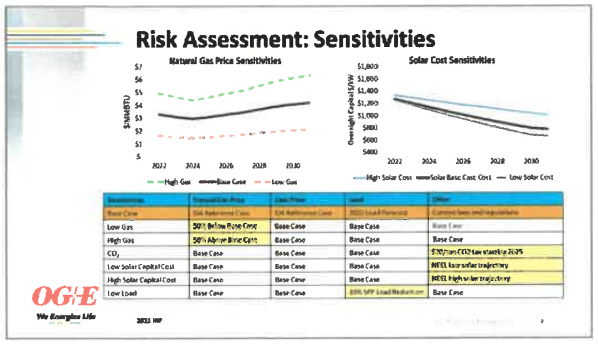

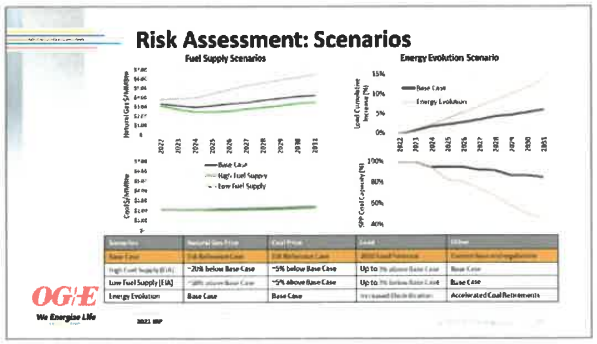

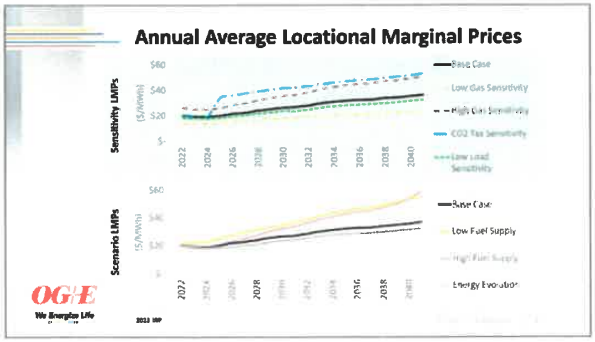

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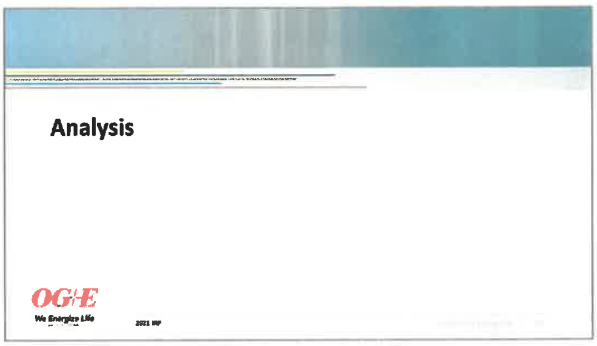

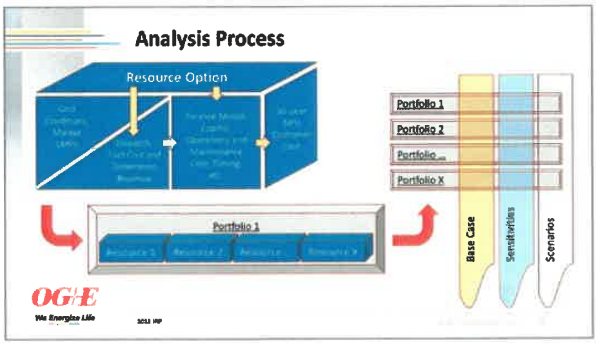

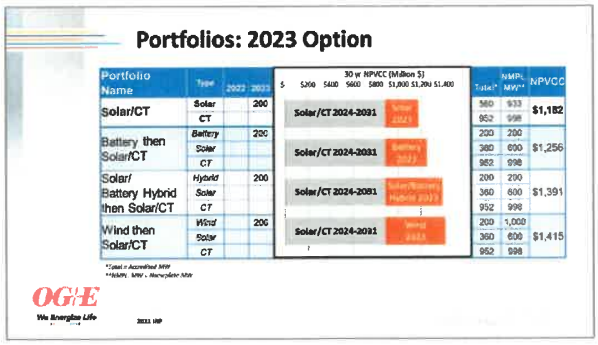

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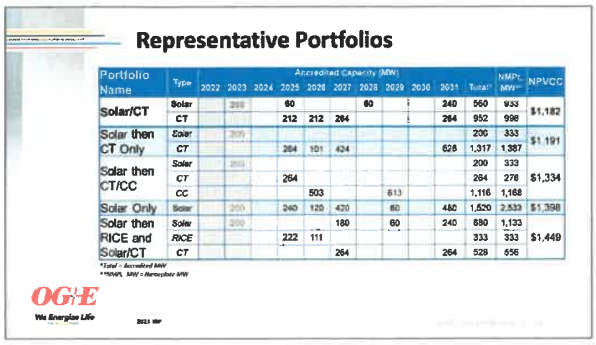
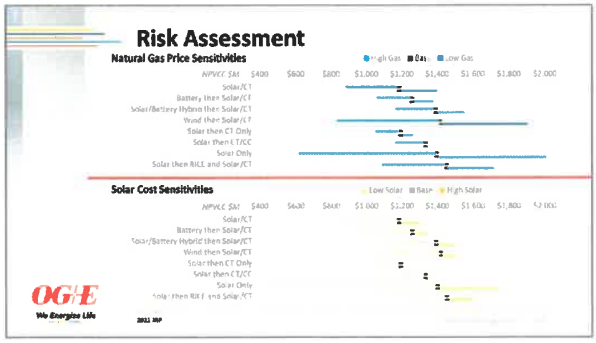


Representative Portfolios

Portfolio Name	Type	Accredited Capacity (MW) 2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	NMPL MW*	NPVCC
Solar/CT	Solar		200		60			60		240	560	933		$1,182
	CT				212	212	284			264	952	998		
Solar then CT Only	Solar		200								200	333		$1,191
	CT				264	101	424			628	1,317	1,387		
Solar then CT/CC	Solar		200								200	333		
	CT				264						264	278		$1,334
	CC					503		613			1,116	1,168		
Solar Only	Solar		200		240	120	420		60	460	1,520	2,533		$1,398
Solar then RICE and Solar/CT	Solar		200				180		60	240	680	1,133		
	RICE				222	111					333	333		$1,449
	CT						264			264	528	656		

*Total = Accredited MW
**NMPL MW = Nameplate MW

OGE We Energize Life 2021 IRP



Risk Assessment

Natural Gas Price Sensitivities

High Gas Base Low Gas

NPVCC $M $400 $600 $800 $1,000 $1,200 $1,400 $1,600 $1,800 $2,000

Solar/CT
Battery then Solar/CT
Solar/Battery Hybrid then Solar/CT
Wind then Solar/CT
Solar then CT Only
Solar then CT/CC
Solar Only
Solar then RICE and Solar/CT

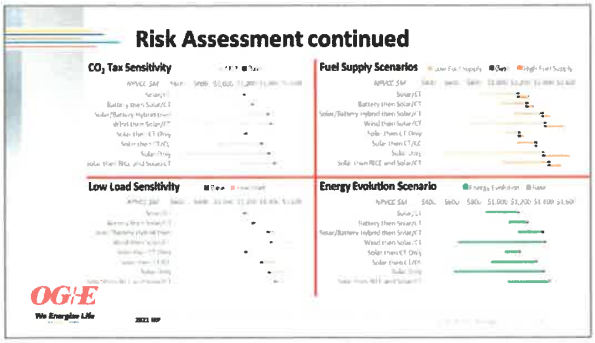
Solar Cost Sensitivities

Low Solar Base High Solar

NPVCC $M $400 $600 $800 $1,000 $1,200 $1,400 $1,600 $1,800 $2,000

Solar/CT
Battery then Solar/CT
Solar/Battery Hybrid then Solar/CT
Wind then Solar/CT
Solar then CT Only
Solar then CT/CC
Solar Only
Solar then RICE and Solar/CT

OGE We Energize Life 2021 IRP



Risk Assessment continued

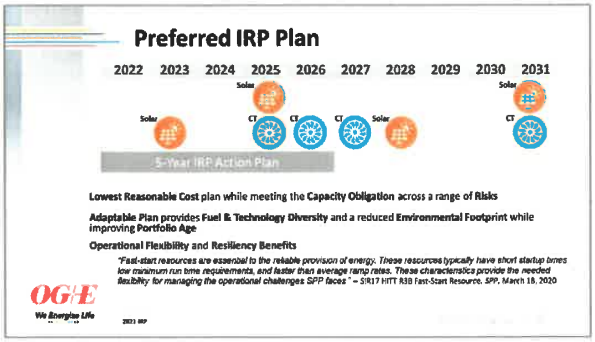
CO_2 Tax Sensitivity

Fuel Supply Scenarios

Low Load Sensitivity

Energy Evolution Scenario

OGE We Energize Life 2021 IRP



Preferred IRP Plan

2022 2023 2024 2025 2026 2027 2028 2029 2030 2031

Solar Solar CT CT CT Solar Solar CT

5-Year IRP Action Plan

Lowest Reasonable Cost plan while meeting the **Capacity Obligation** across a range of **Risks**

Adaptable Plan provides **Fuel & Technology Diversity** and a reduced **Environmental Footprint** while improving **Portfolio Age**

Operational Flexibility and Resiliency Benefits

"Fast-start resources are essential to the reliable provision of energy. These resources typically have short startup times low minimum run time requirements, and faster than average ramp rates. These characteristics provide the needed flexibility for managing the operational challenges SPP faces." – SR17 HITT R3B Fast-Start Resource, SPP, March 18, 2020

OGE We Energize Life 2021 IRP

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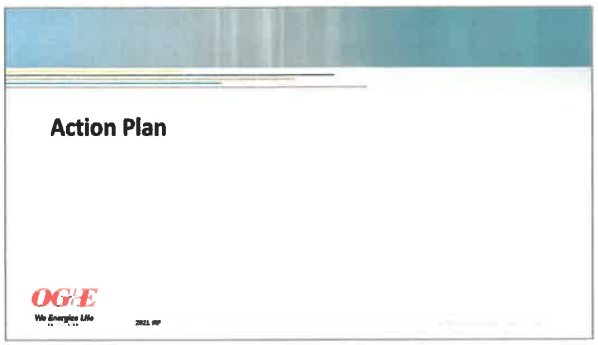

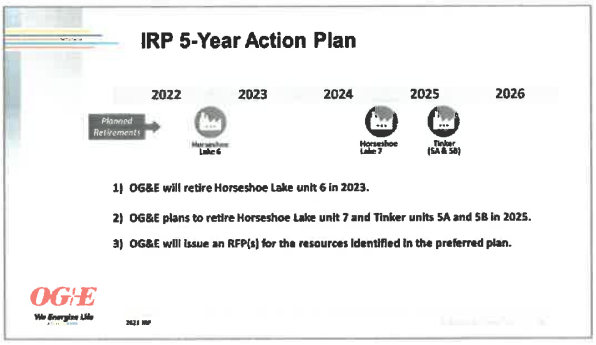

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OG&E 2021 IRP – Oklahoma Technical Conference
August 19, 2021
Meeting Minutes

The Oklahoma IRP Technical Conference regarding OG&E's 2021 Integrated Resource Plan (IRP) was held on August 19, 2021 from 10:30 am to 12:00 pm. The meeting was conducted as a webinar and included a presentation provided by members of OG&E's Resource Planning and Regulatory teams.

Presenters:

Name	OG&E Role
Kelly Riley	Manager, Resource Planning
Zac Hager	Specialist Resource Planner
Aaron Castleberry	Senior Resource Planner
Emily Shuart (Facilitator)	Director, Regulatory Affairs and Compliance

External Stakeholders:

Name	Organization
Dana Murphy	Oklahoma Corporation Commission (OCC)
Geoffrey Rush	Oklahoma Corporation Commission
Lauren Willingham	Oklahoma Corporation Commission
Nicole King	Oklahoma Corporation Commission
EJ Thomas	Oklahoma Corporation Commission
Richard McKay	Oklahoma Corporation Commission
Isaac Stroup	Oklahoma Corporation Commission
Marydoris Casey	Oklahoma Corporation Commission
Andrew Scribner	Oklahoma Corporation Commission
Chase Snodgrass	Oklahoma Attorney General (AG)
Todd Bohrmann	Oklahoma Attorney General
Montelle Clark	Oklahoma Sustainability Network (OSN)
Tom Schroedter	Oklahoma Industrial Energy Consumers (OIEC)
Scott Norwood	Oklahoma Industrial Energy Consumers
Ryan Baker	City of Oklahoma City (OKC)
Michelle Merchant	Indian Nations Council of Governments (INCOG)
Adriane Jaynes	Indian Nations Council of Governments
Deborah Thompson	OK Energy Firm, PLLC
Danny Musher	Key Capture Energy
Matt Miller	Sierra Club
Jordan Iglesias	Sierra Club
Lauren Hogrewe	Sierra Club
Chip Clark	OG&E Shareholders Association
Ron Stakem	Cheek Falcone, PLLC

Emily Shuart began the meeting at 10:30 am by explaining the meeting structure and process for asking questions in the virtual format.

- Scott Norwood (OIEC)
  - *Question*: Explain the difference between the DSM projections shown in the graph and the load reductions for specific programs noted in the report. The report shows 100 MW on voltage control, 100 MW from SmartHours and 30-40 MW incrementally per year from Energy Efficiency (EE), which seems to be different than what is shown on the graph.
    - *Response*:
      - Several DSM program numbers from the report are already included in the gross load forecast but OG&E wanted to make sure stakeholders were aware of existing programs that benefit customers on an ongoing basis.
      - In addition to what we already have in place (EE/IVVC/SmartHours) we will also have more EE programs. We wanted to incorporate those new programs from a gross load perspective so that they are included when calculating future capacity needs.
      - The Load Reduction Rider program is included in the DSM program shaded area.
  - *Question*: Why is there not more demand reduction built into this forecast?
    - *Response*: The level of demand reduction programs is set in a separate process before the Commission.
  - *Comment*: The 30-40 MW per year incremental from EE plus other programs mentioned in the report made it seem like the numbers in the report do not equate to total demand reduction programs shown in the graph. Parties agreed to defer question.
  - *Question*: Demand reductions related to Smart meters, residential TOU, etc. does not seem to be listed here. Are the benefits of these programs baked into OG&E's load forecast? Do you have anything specific related to Smart Meter related programs?
    - *Response*:
      - Existing programs are modeled in the forecast. The shaded demand reduction area here is intended to reflect incremental savings. SmartHours has been in place for long enough that it is baked into our gross load forecast.
      - We not only have Smart Hours, but we also have a Variable Peak Price (VPP) program and a residential Time-of-Use (TOU) program. Customers have the ability to monitor their daily usage through smart meters and better understand their usage.

- Montelle Clark (OSN)
  - *Question*: Are the projected DSM numbers based on estimated achievable savings under the $2.50 EE cap?
    - *Response*: Yes

- *Comment*: I would like to see what was achievable if DSM was modeled without a cap. A 2017 EPRI study showed Oklahoma was on track to only get 25% of possible DSM savings.
- *Question*: It would be useful to stakeholders to treat DSM just like a resource comparable to the supply side. DSM cost estimates can be seen in other markets around 3¢ per kWh. Has OG&E considered modeling DSM in this way?
  - *Response*: OG&E has not looked at that for this IRP.
- *Question*: I am having trouble reconciling OG&E's stated desire to get rid of EE programs with other statements saying EE programs benefit customers. What is OG&E's ongoing position on DSM resources, and would you be willing to go past the $2.50 cap?
  - *Response*: OG&E is currently very supportive of the DSM programs and recently filed requesting three more years on the programs. In recent years, the stakeholders involved in EE dockets have supported a sustainable approach, which helps OG&E support the continued use of the programs.

- Scott Norwood (OIEC)
  - *Question*: I understand you are retiring older Horseshoe Lake units. I did not see a whole lot on what is triggering those retirements. What was the thinking on the timing of those retirements?
    - *Response*: For all those units, the retirements have already been pushed out more than a decade. All are operating past their originally expected lives. They are getting more difficult to run and it is increasingly difficult to find replacement parts for them.

- Montelle Clarke (OSN)
  - *Question*: Are the Fixed O&M costs are annual?
    - *Response*: Yes.
  - *Comment*: OG&E stated standalone batteries have higher costs due to higher O&M. The O&M numbers shown here are higher than those seen in other reports.
  - *Question*: What was the assumption on battery discharge duration?
    - *Response*: 4 hours
  - *Question*: Were the unique qualities (load leveling, arbitrage) of batteries recognized or monetized in the analysis? For example, do batteries have benefits over CTs (black start, frequency, etc.)?
    - *Response*: IRP assumes battery would charge and discharge daily based on arbitrage dispatch and that economic arbitrage is included in the analysis. OG&E is interested in all the different functional aspects batteries would have for the utility and the power grid. SPP is also discussing characteristics and services supplied by batteries. OG&E and the industry is very interested in the functional benefits of batteries. OG&E, other utilities and SPP will

continue to monitor additional benefits to the overall system provided by batteries.

- *Comment*: The Resource Option table shows higher battery cost and much higher battery O&M costs than what has appeared in other reports. Your report disqualifies batteries primarily due to the high O&M costs. I question the numbers and whether OG&E is capturing the rapidly falling costs of batteries.
  - *Response*: OG&E is not disqualifying batteries in the analysis.
  - *Follow-Up Response*: OG&E reviewed the fixed O&M costs for batteries, which include both regular maintenance and cell augmentation to maintain the battery at the rated capacity throughout the lifetime. Including the augmentation is consistent with NREL assumptions for battery resources and the fixed O&M values OG&E used in the IRP Draft are in line with the NREL values for battery fixed O&M. For the overnight capacity costs for batteries OG&E developed continued price reduction curves for the resources. The declining prices are utilized in the IRP for the cost as the resource is added. The 2021 IRP Draft utilized a cost of $1,110/kW for the overnight capital cost for batteries going into service in 2023, which is in line with comments from stakeholder during the Technical Conference.
- *Question*: If you are going to do an RFP, can you give the Commission/Stakeholders some assurance that batteries have not been overlooked by including them in the RFP to get latest prices?
  - *Response*: OG&E is still developing the RFP.
- *Comment*: Please review battery prices (ex. Tesla) available to Oklahoma today.
  - *Follow-Up Response*: OG&E's expected continued decline of battery prices is consistent with the pricing referenced during the Technical Conference.

- Scott Norwood (OIEC)
  - *Question*: Wind accredited wind capacity seems low, is that what you are actually getting in SPP?
    - *Response*: We are expecting 20% capacity accreditation for new wind resources. Our existing, older wind farms accredited at a level lower than 20% of nameplate, based on historical performance.
  - *Question*: What have you assumed here for tax credits on renewables?
    - *Response*: Tax credits are accounted for in the NPVCC but not included in the capital costs on page 11.
  - *Question*: Regarding River Valley/Frontier acquisition projects, OG&E got advantageous prices on existing capacity. Did you model any PPA/purchase for existing capacity?
    - *Response*: No, OG&E did not model those options.
  - *Question*: Would OG&E open the RFP for short-term capacity and existing generation resources?

    - *Response*: OG&E does not have the details at this time as the RFP is not complete.

- Deborah Thompson (AARP)
    - *Question*: How does your model address nameplate vs accreditation?
        - *Response*: The model takes into account how much would be required to meet accreditation need and the resource would be dispatched accordingly.
    - *Comment*: This is where DSM could be modeled, and you can decide if DSM would be selected over other resources.

- Danny Musher (Key Capture Energy)
    - *Comment*: OG&E's battery costs do not match what is in the market now. Glad to hear hourly resolution was used in the IRP analysis; however, there are additional benefits, as mentioned, before in sub hourly resolution. Key Capture Energy does have a fleet of batteries in Texas so they have internal expertise in optimizing batteries and would be happy to have their experts look at assumptions in OG&E modeling to ensure we are taking proper things into account. OG&E's analysis should take into account the full range of benefits batteries could provide.

- Montelle Clarke (OSN)
    - *Comment*: One challenge with DSM is figuring out the cost per saved kW. The Lawrence Berkeley National Laboratory (LBNL) recently released a report showing DSM peak demand savings at costs between $100-200 per kW.

- Scott Norwood (OIEC)
    - *Question*: In the modeling is OG&E picking up the basis differential from Henry Hub for natural gas prices?
        - *Response*: The modeling includes the basis differential from Henry Hub.

- Matt Miller (Sierra Club)
    - *Question*: Does the modeling assume the coal units will be dispatched in self commit vs market commit and what capacity factors are being projected for coal in the future?
        - *Response*: Economic dispatch is being modeled for coal. Projected coal capacity factors are not available during the meeting, but OG&E will follow up after the meeting and see if we can provide the information.

- Scott Norwood (OIEC)
    - *Question*: Although coal units are scheduled for mid-2040s retirements, would it be possible at some point in the future to include an appendix that includes retirement dates on existing units that impact near-term capacity

requirements and possibly looking at early retirement on coal if dispatching is reduced or eliminated in the future?
    - *Response*: OG&E will consider the request.
    - *Follow-Up Response*: Generation unit retirement dates can be found in the Depreciation Study.

- Matt Miller (Sierra Club)
    - *Question*: On coal retirement dates, I saw years for Sooner and Muskogee 6, nothing for River Valley. Do you have retirement dates for River Valley?
        - *Response*: River Valley is scheduled for retirement in 2048.
    - *Question*: Are the currently scheduled retirement dates serious estimates of retirements or are they manufacturer retirement estimates?
        - *Response*: All generating assets are long term assets. Those assets help serve our customers and provide fuel diversity. The world is changing, and we will continue to review our fleet to ensure we have the right assets in place at the right time.

- Montelle Clarke (OSN)
    - *Question*: On CO_2 sensitivity, can you explain whether OG&E is considering a CO_2 tax as literally the only potential CO_2 limitation or it is a proxy for any potential CO_2 constraint that might be implemented?
        - *Response*: The idea of the sensitivity is to change assumptions and see how it impacts results. There are a lot of different ways to model things, but OG&E decided to utilize the CO_2 tax to see how things in a "different world" might drive impacts/changes and use that as a proxy for any future potential CO_2 constraint.
    - *Comment*: It would be helpful to include a table of annual CO_2 emissions of where you are now and where you think you will be in the next ten years.

- Scott Norwood (OIEC)
    - *Question*: Were commodity prices included in the SPP price modeling?
        - *Response*: Yes.

- Montelle Clarke (OSN)
    - *Comment*: Energy Evolution scenario is valuable for the analysis.
    - *Question*: Is managed charging of electric vehicles (EVs) included in your modeling in the Energy Evolution scenario?
        - *Response*: The energy evolution case was developed many months ago and looked at some of the federal energy policies that are being discussed but does not go into specific topics like managed charging.
    - *Question*: Was the Energy Evolution combined with the CO_2 scenario?
        - *Response*: No.

- Scott Norwood (OIEC)
  - *Question*: Do you plan to include near term revenue requirements as a proxy for rate impacts on customers over the next few years in the report, as you have in the past?
    - *Response*: OG&E expects those details to be included in the final IRP.

- Dana Murphy (OCC Commissioner – current Chairman)
  - *Comment:* This presentation has been easy to understand and follow and I appreciate that.
  - *Question*: Coming out of SPP Cost Allocation Working Group was a report on batteries as a resource and utilizing them as a transmission resource and treat them as a wired solution. Is there any thought about batteries being utilized as both resource adequacy and transmission solution?
    - *Response*: SPP is trying to figure out whether a battery being used as a transmission resource could still be available for resource adequacy. No decision has been made yet.
  - *Question*: With the recommendations that came out of SPP winter event report, in looking at resource adequacy particularly on the gas side, how is that taken into account in the IRP? Developments in flight at SPP right now may have more of an impact than anyone realizes right now.
    - *Response*: Issues like these illustrate why OG&E appreciates being able to participate in groups like SPP Supply Adequacy Working Group (SAWG). OG&E is a voting member of SAWG and has been actively involved in discussions of resource adequacy issues and proposals. There is still a lot of work to be done at SPP to develop recommendations related to resource adequacy.
    - *Follow-up*: Commissioner Murphy encourages OG&E to stay in contact with Jason Chaplin (OCC/PUD SPP representative) regarding SPP issues, especially related to resource adequacy. These issues are tied in with IRP matters.

- Danny Musher (Key Capture Energy)
  - *Question*: It is becoming best practice in the market to let all technologies respond to RFP so current market data is reflected and considered. Key Capture Energy would like to have ability to bid and compete. Would OG&E consider opening up the RFP to batteries?
    - *Response*: RFP is next area of focus and a lot of details still need to be worked out.

- Montelle Clarke (OSN)
  - *Comment*: Echo Danny's comments on opening RFP to batteries.
  - *Question*: Chosen portfolio mitigates some risks, but some other portfolios mitigate more risks like CO_2. How do you build in flexibility to modify decisions in the future if major events change?

- *Response*: OG&E plans to move forward with a plan that gives us the most flexibility so we can best keep up with a changing world.

- *Comment*: OSN would like to see a pie chart in the report showing the percentage of OG&E renewable energy mix and where that might go in the future with this plan.

Direct Exhibit KMR-2

2022 OG&E Flexible Resource RFP
DATE 9/21/2022

OKLAHOMA GAS AND ELECTRIC COMPANY

2022 FLEXIBLE RESOURCE REQUEST FOR PROPOSALS

Direct Exhibit KMR-2

Table of Contents

Direct Exhibit KMR-2

Definitions

Except in those certain instances where the context states another meaning, the following terms, when used in this Request for Proposals document, shall have the meanings below. These Request for Proposals definitions do not supplant the definitions used in the Form Build Transfer Agreement attached to this Request for Proposals.

"Accredited Capacity" means capacity that meets the resource adequacy requirements as determined in accordance with SPP Planning Criteria.

"APA" means an Asset Purchase Agreement to acquire all property and rights and certain project assets associated with a project for a new-build Generation Facility.

"Balance of Plant" means all other equipment and materials including all the supporting components and auxiliary systems of the Generation Facility needed to deliver the energy, other than power generating units themselves, but which will be completed and transferred to OG&E per the Form EPC. This includes but is not limited to the Project interconnection facilities, control systems, security system, meteorological stations, telemetry system, telecommunications systems, all buildings, Project roads, and fencing.

"Bid" means one offer made in response to the Request for Proposals.

"Bidder" means a single legal entity submitting one or more offers in response to the Request for Proposals.

"Capacity" means the quantity of electric power produced by a Generation Facility at a point in time, as measured in kilowatts or megawatts in alternating current ("AC"). For Energy Storage, "power capacity" represents the maximum instantaneous electric output that a given Energy Storage system is rated to produce when starting from a fully charged state, while "energy capacity" has an elapsed time dimension and represents the cumulative stored electric output potential of the Energy Storage system.

"Combination Bid" means a Bid that includes more than one Generation Facility technology allowed under this RFP at a single Site. A Combination Bid could include any combination of Combustion Turbine (CT), Reciprocating Internal Combustion Engines (RICE), or Energy Storage meeting the size and technical requirements of this RFP.

"Commission" when used in the singular means the Oklahoma Corporation Commission.

"Commissions" means collectively the Oklahoma Corporation Commission and the Arkansas Public Service Commission.

"CT" means a Generation Facility that uses a combustion turbine primarily fueled by Natural Gas as its technology to produce electricity and also meets this RFP's definition of Flexible Resource. A CT can have a back-up fuel.

"Energy" means an amount of electricity that is bid or offered, produced, purchased, consumed, sold or transmitted over a period of time, which is measured or calculated in megawatt hours ("MWh").

"Energy Storage" means a Generation Facility that can store electrical energy from an electricity transmission grid for up to several days and can then send the stored energy back to the same transmission grid without greater than 15% loss of energy content.

"EPC" means an engineering, procurement, and construction contract to build a new Generation Facility. The EPC is an exhibit accompanying the APA.

"Flexible Resource" means a Generation Facility with a minimum 30-year life, that can start quickly and cycle multiple times per day and meets all technical and performance requirements specified in this RFP and its Attachments.

"Generation Facility" means a new resource capable of supplying electric power along with all existing or to be constructed associated Balance of Plant, components, accessories, and instruments, as well as all equipment necessary to interconnect to SPP.

"Hydrogen-Capable" means a Generation Facility that is designed and engineered at commissioning to have the potential to safely and reliably burn hydrogen directly as a fuel, including the ability to convert the facility to using hydrogen as its primary fuel in the future.

"Integrated Marketplace" means SPP's Energy and Operating Reserve Markets and the Transmission Congestion Rights Markets.

"IRP" unless otherwise noted, shall refer to OG&E's 2021 Integrated Resource Plan found here: https://ogeenergy.gcs-web.com/static-files/6fd094d7-f7d6-4dae-8ec9-7482d0071a34.

"Natural Gas" means "a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in porous geologic formations beneath the earth's surface. The principal constituent is methane."[1]

"Permits" means all permits, exemptions, variances, registrations, licenses, certifications, inspections, approvals, waivers, consents, franchise or other authorizations required from any governmental authorities.

"Project" means a new Generation Facility intending to interconnect to the SPP transmission network.

"RICE" means a Generation Facility that uses a reciprocating internal combustion engine primarily fueled by Natural Gas as its technology to produce electricity and also meets this RFP's definition of Flexible Resource. A RICE can have a back-up fuel.

"Site" means parcel(s) of real property on which the Project shall be constructed having a single interconnection position

"SPP" means the Southwest Power Pool, the nonprofit regional transmission operator providing transmission services to OG&E and other utilities across Midwestern and Southwestern states.

[1] Definition derived from American Gas Association, *Glossary*, https://www.aga.org/natural-gas/glossary/.

1 2022 OG&E Flexible Resource Request for Proposals Overview

This document constitutes a Request for Proposals ("RFP") from qualified parties to supply Generation Facility(ies), to Oklahoma Gas and Electric ("OG&E" or "the Company"), a subsidiary of OGE Energy Corp. This RFP will be administered in a fair, just, and reasonable manner consistent with Commission rules for competitive procurements Oklahoma Administrative Code ("OAC") 165:35-34 ("Commission Rules"). All communications will be governed by the process discussed in Section 2.1 to ensure fair and equitable treatment for all Bidders.

A high-level summary of this RFP is provided in Table 1. In addition to Bids for any single eligible Generation Facility technology, Combination Bids are allowed. OG&E will not be acquiring solar, wind, or other intermittent renewable energy resources as part of this RFP, as standalone Generation Facilities nor in combination with other eligible Generation Facility technologies.

Table 1: RFP Summary

Attribute	Requirement
Minimum Capacity	Minimum of 50 megawatts ("MW") of nameplate Capacity per Bid. Bid may represent multiple Generation Facilities at a Site to sum to minimum capacity requirement.
Maximum Capacity	Maximum of 500 MW of nameplate Capacity per Bid. Multiple Generation Facilities at a Site cannot exceed the maximum Capacity.
In-Service Date	OG&E requires capacity be available to satisfy OG&E's resource adequacy obligations starting no later than May 1, 2027, with a preference for projects in service as early as possible.
Operating Duration	Capable of at least 4 hours of consecutive run time at minimum and maximum capacity, as required by SPP generation capacity accreditation guidance (Planning Criteria).
Operating Profile	Minimum ability to start multiple times each day within 15 minutes of initiation; minimum up-time of no more than one hour; maximum down-time between cycles of no more than one hour.
Contract Type	APA, including Form EPC exhibit.
Location	Within SPP in Oklahoma or Arkansas with preference for OG&E's service territory.
Transmission Interconnection	Plan for securing firm transmission service prior to the in-service date.
Self-Bid	OG&E is expected to self-bid into this RFP[2].

A Technical Conference will be held as part of the process to finalize the RFP. Bidders are encouraged but not required to attend the Technical Conference to provide comments on the draft RFP. Comments and feedback on the draft RFP are also encouraged to be submitted to OG&E via email in advance of the

[2] OG&E may submit Bid(s) in response to this RFP. OG&E Employees working on any such Bid(s) will be designated as the "Bid Team" and will not engage in any direct or indirect communications with any members of the OG&E RFP Evaluation Team (whether OG&E employees or contractors) regarding this RFP or the competitive bidding process, except publicly at the Technical Conference upon notice to other attendees at that conference. OG&E lists the names and titles of all employees who are members of the Bid Team and RFP Evaluation Team on the RFP location of OG&E's website.

Technical Conference. All feedback received through close of business on the day of the Technical Conference will be considered in establishing the final RFP. The Technical Conference will be held from 10:00 AM to 12:00 PM Central Prevailing Time ("CPT") on May 19, 2022. Interested parties may request meeting details by sending an email to FlexRes2022RFPComm@oge.com. OG&E will respond with meeting call-in information to requests received by May 17, 2022. Meeting materials displayed by OG&E at the Technical Conference will be posted on-line after the conference.

The schedule for this RFP is provided in Table 2; OG&E reserves the right to change the schedule at any time and at its sole discretion.

Table 2: Schedule for OG&E Flexible Resource RFP

Item	Date
Draft RFP Issue Date	April 28, 2022
Draft RFP Technical Conference	May 19, 2022
RFP Final Issue Date	June 6, 2022
Notice of Intent to Bid Due Date	October 6, 2022
Questions Deadline	October 7, 2022
Bid Due Date	October 27, 2022
Bid Opening Day[3]	October 28, 2022
Selection of Projects for Negotiation (expected)	January 13, 2023
Complete Negotiations (expected)	May 1, 2023

The terms and conditions of this RFP may, at any time, be changed, postponed, withdrawn, and/or canceled, including any requirement, term, or condition of this RFP, any and all of which shall be without any liability to OG&E. All changes to the schedule will be posted under "Current Opportunities" at https://www.oge.com/wps/portal/ord/who-we-are/supplierscontractors ("RFP Website"). OG&E will endeavor to notify all participants who have filed a timely Notice of Intent to Bid of any such cancellations, modifications, or schedule changes that are made prior to the Bid due date. However, it is Bidder's responsibility to monitor the RFP Website. OG&E will have no responsibility for failing to notify Bidders of any changes, postponements, withdrawals, and/or cancellations.

2 RFP Process and Requirements

This section outlines the communication requirements and Bidder requirements related to this RFP.

2.1 Communication Requirements

All communications regarding the RFP, other than Bid submissions, should be directed to: FlexRes2022RFPComm@oge.com. Any unsolicited direct contact with employees or representatives of OG&E RFP Evaluation Team concerning this RFP is not allowed and may constitute grounds for disqualification. See Section 2.2 for instructions regarding Bid submission.

[3] In compliance with the Commission Rules, Bids shall be opened virtually and participants, as indicated in section 165:35-34-3 (d) (1) (B) of the Commission Rules, may attend and monitor the opening of the Bids. Attendees will be required to register in advance.

2.1.1 Questions

2.1.1.1 Questions to OG&E

Prospective Bidders are encouraged to submit questions about this RFP on or before the deadline for submission of questions listed in the schedule. All questions, and responses to those questions, will be posted to the "RFP Website" within five (5) business days after receipt of the question to the best of OG&E's capabilities. Questions submitted will not be treated as confidential, and the question and answer may be shared for the benefit of other interested parties via the RFP Website. However, Bidder names will not be included in question and answer material posted to the RFP Website. OG&E's objective in posting these questions and answers is to ensure that all Bidders have equal access to information that may be potentially relevant to their Bids.

Should OG&E determine it is necessary to provide confidential information to provide necessary information for Bidders, then Bidders wishing to receive responses to such questions will be required to sign the Mutual Nondisclosure Agreement (in Appendix B) and receive a counter-signed copy of that agreement from OG&E before receiving the OG&E question response. The determination of whether confidential treatment is required will solely be at the discretion of OG&E.

2.1.1.2 Questions to Bidders

Following the submission of Bids, OG&E may request clarification and additional information from Bidders at any time during the evaluation process. Responses shall be considered part of the Bid and treated in accordance with Section 2.2.7. Bidders that do not respond promptly to such information requests or do not provide adequate information may be eliminated from further consideration or have the information in their Bid(s) modified by OG&E to produce a reasonable and appropriate evaluation. Bidders may not alter their Bid(s) in response to requests for additional information.

2.1.2 Notice of Intent to Bid

Notice of Intent to Bid ("NOI") is mandatory for Bids to be accepted. Submittal of NOI does not bind Bidders to submit a Bid; however, submittal of a Bid does require that a NOI has been submitted by the NOI due date. Bidders must submit a NOI for each Bid planned to be made by midnight, CPT on the date prescribed on the RFP schedule provided in Table 2 in Section 1:

2022 OG&E Flexible Resource Request for Proposals Overview. The NOI form is included as Appendix A and is to be submitted via email to FlexRes2022RFPComm@oge.com. Receipt of the NOI will be confirmed via email from OG&E to the Bidders. After receipt of the NOI, Bidders will be provided an anonymous identification code for the Bidder and each Site to include in their Bid Summary Form(s) which will be shared with authorized parties at the Opening Day for Bids. This identification code should also be used to name all Bid files submitted as detailed below.

The NOI Form is found in Appendix A. There is no fee payable to OG&E for submitting NOI(s) or Bid(s) for this RFP. However, Bidders are solely responsible for all costs they incur in preparation of their Bid(s) and participation in this RFP process.

2.2 Bid Submittal Requirements

This section outlines the content and form requirements for all Bids submitted in response to this RFP. Bids that do not all include the information requested in this section will be ineligible for further evaluation unless the information requested is not applicable or relevant to a given Bid.

2.2.1 Mutual Nondisclosure Agreement

Each Bidder is required to submit a signed Mutual Nondisclosure Agreement (Appendix B) to FlexRes2022RFPComm@oge.com. The Bidder can do so at any time between release of this RFP and ten business days prior to the Bid Due Date. In addition to setting forth nondisclosure obligations of the Bidder and OG&E with regard to any Bids, execution of the Mutual Nondisclosure Agreement is a precondition to receiving this RFP's full technical specifications. Receipt of the full technical specifications, in turn, is a precondition for submission of a Bid to ensure that the Bidder has full information upon which to submit its Bid(s). That is necessary because the Scope of Work provided in EPC Exhibit A represents only an overview of the technical requirements for this RFP's eligible Flexible Resources.

Upon receipt of an appropriately-executed Mutual Nondisclosure Agreement from a Bidder, OG&E will return by e-mail a counter-signed copy of that agreement and the full technical specifications to the Bidder within 5 business days. A single Mutual Nondisclosure Agreement from a Bidder will cover all potential Bids from that Bidder.

Bidders who completed a Mutual Nondisclosure Agreement for the question and answer part of this RFP process (per Section 2.1.1.1) will be sent the full technical specifications with their counter-signed agreement and are not required to re-submit the agreement. Execution of a Mutual Nondisclosure Agreement does not obligate a Bidder to submit a Bid under this RFP.

2.2.2 Bid Summary Form

Each Bid must include a summary providing information about the Bid which will be shared and may become public information on Opening Day.

If submitting multiple Bids for an individual Site, please clearly identify and summarize each Bid in a single Bid Summary Form (Appendix C) for the Site. Bidders are limited to four (4) Bids for each individual Site. Those Bids can be comprised of any combination of CTs, RICE and/or Energy storage as long as the

minimum and maximum requirements of this RFP are met. The Bid Summary Form will require the following information:

- Generation Facility technology(ies) – CT, RICE and/or Energy Storage
- Number of distinct Generation Facilities[4]
- Minimum and Maximum Capacities for each technology
- Energy Storage attributes (if applicable):
  - Energy Storage battery chemistry or other medium for storing electricity.
  - All energy storage must be configured with a minimum 4-hour duration (i.e., at least a 4:1 ratio of "energy capacity" to "power capacity")
- In-service Date

Bidders should utilize the identification code(s) from the NOI confirmation in the appropriate fields on the Bid Summary Form and should further name the file(s) submitted to OG&E using the naming conventions that will be provided in the NOI confirmation. Appendix C will be the only file shared with attendees at the Bid Opening.

2.2.3 Bid Narrative

Each Bid must include a written discussion submitted as an Adobe PDF document that includes responses for each of the following topics. The narrative topics should be organized under the following 13 headings, with each heading beginning on a separate page. The narrative discussion should be as concise as feasible while being thorough.

If multiple Bids are submitted for a single Site, with each Bid using the same individual Generation Facility technologies or the same combination of Generation Facility technologies, Bidders can either submit a single narrative covering all Bids or separate narratives for each Bid. This option is offered to reduce administrative burdens on Bidders, and OG&E will not penalize or reward Bidders based on the number of narrative files they submit.

1. Summary of Bid, including overview of technical specifications.
   - This section should include a discussion of the proposed technology including a description of the equipment (e.g., prime mover, fuel, balance of system, Hydrogen-Capable components for CT or RICE; or storage battery chemistry or other storage medium, storage management system, and power conversion system for Energy Storage), its performance history in similar installations, all major warranties, and any unique features associated with the Project design.
   - Please limit the summary to three (3) pages.

2. Operations and Maintenance ("O&M") Plan.
   - In the plan write-up, include a discussion of any O&M agreements and other material, existing agreements to be assumed by OG&E.[5] Services provided under such

[4] For example, if there are two (2) CTs of 25 MW in Capacity each at a Site, the Bidder would insert two (2) for this attribute and insert 50 MW as the Bid nameplate Capacity.
[5] If no formal O&M agreements are in place at the time of Project commissioning and transfer to OG&E, Bidder should explain how O&M responsibilities will be managed at the time of that asset transfer to OG&E.

agreements, including any limitations on the operations of Project equipment should be clearly specified. Irrespective of whether O&M agreements will be assumed by OG&E, summarize O&M practices with annual and periodic ongoing expenditures required to keep the Project in good working order consistent with prudent utility practices. Bidders should assume an average of 365 cycles per year in the O&M plan provided with the Bid to the maximum power capacity (for all technologies) and energy capacity (for energy storage technologies) that can be discharged from the Generation Facility.

3. Risk Mitigation Plan, including mitigating risks posed by natural disaster, physical threats and cyber threats and vulnerabilities as well as the hazards from the fuel supply and other routine operational aspects of the Project.

4. Flexibility.
   - Include a description of how the Project as configured in the Bid will provide OG&E with flexibility to meet various market and operational uses. That description should address how the Project can be dispatched for uses that differ by: scale (MW), response time, number of daily cycles, energy products (e.g., physical energy and ancillary services), and season of the year.
   - Include a brief narrative description of how flexible the Project is for the addition or reduction of capacity in the future. In that narrative, include technology, siting, Permits, and interconnection considerations
   - For CT and RICE Projects, also include a brief description of how use of hydrogen fuel would affect flexibility attributes.

5. Financing Summary.
   - Include a detailed discussion of its proposed financing plan to demonstrate reasonable ability to finance the proposed Project. Describe Bidder's sources of financing (e.g., new equity, equity contribution from guarantor/parent company) for each Project phase and all available lines of credit. Bidder should also discuss how this Project and its financing may affect the credit metrics and credit ratings of the Bidder and/or its parent company, corporate affiliate, or other credit guarantor.
   - If Bidder is relying on a guarantor for credit support, the financing plan should describe the corporate relationship between Bidder and guarantor, as well as a statement regarding the proposed guarantor's willingness to provide guarantee acceptable to OG&E.
   - If the equity contribution is from Bidder's parent company or corporate affiliate, the funding source at the parent or affiliate level (cash in hand, debt, new equity) should be described.
   - Identify and describe the source of required security at each stage of the Project's life and provide a plan for posting it. Include a demonstration of the ability to post the security.

6. Impact on Local Economic Conditions.
    - Summarize how local stakeholders have been, and will continue to be, engaged in the development of the Project. Indicate expected impacts on the local economy within OG&E service territories in Oklahoma and/or Arkansas. Factors which may be considered include use of local materials and other resources including fuels, use of local labor and other sources of job creation for the OG&E customer base, tax benefits, or other benefits accruing to OG&E customers.

7. Impact on Environmental Conditions
    - Describe the environmental effects of Project construction and operation (including fuel delivery and use) on wetlands, terrestrial environment (wildlife, including avian protection), aquatic environment (including fish and aquatic organisms), threatened and endangered species protection, agricultural areas, corridors needed to connect to the transmission grid, state-designated scenic byways, visual landscape and visibility impacts, archaeological and historical sites, landmarks and sensitive areas, noise impacts, transportation impacts including Federal Aviation Administration impacts, and any other identified impact.
    - Discuss environmental impacts and requirements related to end of life equipment disposal and, for Energy Storage, also of intra-life re-powering.
    - Discuss air permitting (if applicable) including equipment emissions rates, air permit limits, status of air permit and necessary emissions equipment needed to meet permitting limits.

8. Siting, Permitting, and Fuel Delivery Plan, including operational permits, land acquisition and site control strategy and status for all necessary uses, and undisturbed access.
    - Please include copies of pertinent land lease or other site control agreements with the submission.
    - Also describe all licenses and Permits required to construct and operate the Project and the status of acquiring or completing such licenses and Permits.
    - Include a discussion of zoning issues and existing and planned land uses in all directions surrounding the Site.
    - As pertinent, include a description of the fuel delivery plan and copies of all agreements related to delivery and use of fuel.

9. Interconnection Plan, including indication of expected network upgrade requirements and new facilities associated with new or upgraded interconnections.
    - Describe the location of the proposed point of interconnection, such as the name of an existing substation or switchyard, or the point on an existing transmission line, such as x-miles south of ABC Substation or halfway between ABC and XYZ substation.
    - Indicate if the proposed Project will require a new transmission interconnection or an expansion or modification of an existing interconnection with the SPP system.
    - Describe the new electric interconnection facilities that have been included in the Bid price, including the size, length, and location of any transmission line and size and list

of substation equipment for which the transmission customer (Bidder) will be responsible for building and owning.

- If network upgrades are included, describe the specific transmission elements to be upgraded and include a narrative description of the upgrade plan.

10. Critical Path Schedule.
    - Provide a detailed schedule with critical path milestones for the Project that includes activities from the period of selection as a winning Bidder to the commercial operation date, including all testing activities. Please make the schedule consistent with major activities and milestones delineated in the Form APA and EPC to the extent feasible.

11. Project Organization and Management. Please include the following in this section:
    - Organizational chart for the Project that lists the participants and consultants and identifies the management structure and responsibilities. That chart or another chart should include the key management personnel, titles, and lines of responsibility or reporting requirements for the Project team.
    - For each of the participating organizations (developer; architectural and engineering firm; EPC provider; fuel supplier; environmental staff or consulting firm; legal services, etc.), brief statements listing specific experience of the firm, other projects of similar nature and size, and any evidence that the participants have worked jointly on other Generation Facilities.
    - Documentation regarding the contractual relationship between the Bidder organization and all additional participants or vendors. Indicate the status of any arrangements between the Bidder and vendors.
    - Resumes of the important management and support staff dedicated to the Project.

12. Development Experience for Proposed Generation Facilities. Bidders are required to demonstrate experience and capability to successfully develop the Project as proposed. OG&E is particularly interested in a team which has demonstrated success with Generation Facilities of a similar technology, size, operational use (e.g., as Flexible Resources), and location and can demonstrate an ability to effectively work together to bring new-build Generation Facilities to commercial operation successfully.
    - Provide profiles of at least one (1) and no more than five (5) similar Generation Facilities the Bidder has successfully developed to commercial operation. Include the following information as part of each profile:
        - Name of the Generation Facility
        - Location of the Generation Facility
        - Generation Facility size, technology(ies), and fuel(s)
        - Purchasing utility or other entity
        - Development schedule and commercial operation date
        - Fuel acquisition and management summary
        - Average capacity factor of the Generation Facility over its entire term of operation

- Average availability factor of the Generation Facility over its entire term of operation
- Average annual number of dispatches and total hours of operation
- Bidder's role
- Any environmental violations

- Describe experience within the SPP Integrated Marketplace that is relevant to this RFP.
- Provide copies of report material related to safety of operations, including reports on reportable injuries; instances of accidents, injuries, or fatalities; lost workday injuries; loss of operations due to safety issues; etc. at Generation Facilities currently owned or maintained by the Bidder.
- Provide copies of reports summarizing air emissions of Generation Facilities currently owned or maintained by the Bidder.
- Describe Bidder's commitment to safety of operations including any operating practices designed to encourage safety commitments.

13. Brief Narrative Summary of any Changes Sought to Form APA and EPC. Where necessary, Bidders should provide a brief explanation of and rationale for changes sought to the APA and EPC. This is in addition to the redline mark-up of the Form APA and EPC.

To maintain confidentiality of the Bids, Bidders are asked to label their files with the identification code provided in response to the NOI, and the files should be named consistently with the conventions established in the Bid Summary Form. This same naming convention should apply to the appendix forms submitted. No individual file submitted should be larger than 10 MB. If multiple narrative files are submitted for a Bid, please separate the files into Volume I, Volume II, etc. to conform to the maximum file size.

2.2.4 Bid Certification and Attribute Forms

Each Bidder must submit a Certification and Authorization Form available in Appendix D. Bidder can submit a single Appendix D file identifying all Bids it is offering.

Bidders must complete and submit a set of Microsoft Excel ("MS Excel") Bid Attribute Forms available in Appendix E and listed in Table 3. These forms will contain essential information about each Bid, and a separate set of forms and related information must be submitted with each Bid.

Table 3: Bid Attribute Forms

Form ID	Form Title
Form A	Bidder Contact Information
Form B	Project Description
Form C	Generation Facility Technical Description
Form D	Operational Information
Form E	Expected Annual Data for Cost, Performance, and Permitting
Form F	Critical Path Schedule
Form G	Financing Information
Form H	Bid Pricing

Form ID	Form Title
Form I	Fuel Plan
Form J	Environmental Impact

To maintain confidentiality of the Bids, Bidders are asked to label their files with the identification code provided in response to the NOI and the Bid files should be named consistently with the conventions established in the Bid Summary Form.

2.2.5 Additional Required Attachments to Bids

In addition to the Bid narrative and all forms specified in Appendices A through J, please provide the information described in this section. Bidders should use identification code provided in response to the NOI along with "Attachment" for each item submitted.

If multiple Bids are submitted for a single Site, Bidders can submit a single version of relevant attachments (e.g., financial statements) covering all Bids or separate attachments for each Bid. This option is offered to reduce administrative burdens on Bidders, and OG&E will not penalize or reward Bidders based on the number of attachment files they submit.

i. To the extent not provided in the Bid Narrative, a U.S. Geological Survey-based map or maps showing the location of the proposed development Site and the anticipated placement of all major equipment at the Site including transmission-related facilities. The included content should highlight (e.g., via a colored legend) the ownership status of land area required for the Project.

ii. A copy of Bidder's preliminary SPP transmission interconnection study (if available).

iii. If the Project does not have a completed interconnection study from SPP at the time of Bid submission, the Bidder must identify the applicable section of the SPP Open Access Transmission Tariff Attachment V that would govern interconnection for the proposed Project. In addition, any proposed Project without a completed interconnection study from SPP must submit the results of a comparable study conducted by an independent engineer at Bidder's expense. If a feasibility study is required, the feasibility study should model North American Electric Reliability Corporation (NERC) TPL-001-4 contingencies P1, P2, and P3. Breaker fault contingencies may be excluded.[6]

[6] The feasibility study must also show estimated interconnection new facilities and network upgrade costs and the timeline to complete any identified new facilities and upgrades. At a minimum, the feasibility study must include a steady state thermal power flow assessment consistent with SPP's Definitive Interconnection System Impact Study (DISIS) approach. The feasibility study should identify thermal overloads and voltage violations that could occur from operation of the Project, determine new facilities and/or upgrades required to resolve the violations, and provide the estimated costs and timeline to complete the new facilities and upgrades. The feasibility study must model the Project at the interconnection location proposed in the Bid. The feasibility study should utilize the latest SPP power flow cases for the generation interconnection queue cluster in which the Project is located and include all active generator interconnection requests for that queue cluster. The study should also discuss the likelihood that the Project would require an affected system study by a neighboring region.

iv. Any reports available from qualified third parties documenting flaws or risks with the proposed Project(s) and suggested mitigation plans.

v. If applicable, reactive power capability curve and an indication of maximum reactive power productive and absorptive capability (include as MS Excel attachment).

vi. Audited financial statements for the last three (3) years for Bidder and guarantor (if applicable). If audited financial statements are not available, provide unaudited financial statements with Chief Financial Officer ("CFO") attestation. If financial statements are consolidated, provide stand-alone financial statements with CFO attestation for Bidder and any guarantor.

vii. Technology re-powering and conversion: If the Project technology is Energy Storage, specify the expected timing and cost of re-powering or augmentation of the Project's battery or other Energy Storage medium during the asset life. If the Project technology is partially or fully CT or RICE, provide narrative about the expected cost of making the CT and/or RICE units able to use hydrogen as primary fuel.

viii. Rating reports from the S&P, Moody's, or Fitch agencies for prior 36 months as attachments.

2.2.6 Redline of Form APA with EPC Exhibit

A model Form APA with an EPC exhibit is attached in Appendix F. Bidders are responsible for reviewing all terms and conditions specified in the APA and the EPC and taking their terms and conditions into consideration in developing their Bids. While Bidders are expected to provide a reasonable redline related to technical aspects of their Bid(s), OG&E has a strong preference and expectation for no to minimal changes to the proposed commercial terms and conditions in the Form APA and EPC.

The file naming conventions used for the APA and EPC redline should follow the same conventions used for other forms. Bidders can provide a single APA and EPC redline covering all of their Bids, unless their redline would differ based on the characteristics (e.g., Generation Facility technology) of their Bids.

2.2.7 RFP Submission

All Bid submissions are required to be sent electronically to: FlexRes2022RFPBids@oge.com. ***Please note this is a separate email address from that used for other RFP communications.*** OG&E will not accept paper copies of Bids, nor Bids delivered other than through the provided Bid email address. After Bids are opened on OG&E's Bid Opening Day, Bidders will receive a confirmation of receipt from OG&E's Bid email address. Bidders should contact OG&E's bid email if a confirmation is not received within one (1) Business Day after OG&E's Bid Opening Day.

Bidder will bear the risk of any failure of Bidder to submit all required information, including forms and attachments, by the Bid Due Date, as required by this RFP. Bids not delivered in accordance with the requirements of this RFP are untimely and may be eliminated from consideration in this RFP. Bids that do not include all information, forms, and attachments required by this RFP may be considered non-conforming and rejected on that basis. Bids submitted in response to this RFP will become the property of OG&E. At the conclusion of the process, all Bids will either be archived or destroyed.

2.2.8 Confidentiality of Response

Bids submitted in response to this RFP, and any contracts resulting from this RFP, will be treated as confidential. Nonetheless, Bidders should be aware that information received in response to the RFP may be subject to review by applicable regulatory agencies. Information submitted in response to the RFP may become subject to federal or state laws pertaining to public access to information as a result of any reviews conducted by the aforementioned agencies. As such, Bidders should clearly designate all sensitive information as "Confidential." Except as required by regulatory reviews, OG&E will use reasonable efforts to avoid disclosure of such confidential information to persons other than those involved with the evaluation, selection, and any subsequent negotiations.

2.2.9 Regulatory Bid Opening Summary

The Bid Summary Form will be used during virtual Bid Opening, which is scheduled for October 28, 2022. This form will be viewable to the Commission Staff, Attorney General's Office representative, and non-competitive stakeholders in attendance at the Bid Opening.

As discussed in Section 2.2.2, the Bid Summary Form must contain information about the Bid(s) submitted that will be used for tracking and identifying the Bid(s) throughout the evaluation process. To maintain confidentiality, all Bidders submitting the required NOI will be provided a unique identification code or codes for use on their Bid Summary Form(s). It is the Bidder's responsibility to utilize this/these identification code(s) on the Bid Summary Form(s). OG&E will not be responsible for any release of information regarding Bids due to Bidder failure to utilize the identification code(s) provided.

2.3 Validity of Bids

Bids shall remain valid for the entire evaluation period and, should OG&E elect to seek pre-approval from the Commission or Commissions, through the entire period of proceedings of the Commission or Commissions. During these periods, Bids shall be considered as irrevocable and may not be modified, except as agreed upon in mutual negotiations between the Bidder and OG&E in the post evaluation period.

2.4 Bidder Selection

All Bids will be evaluated as per the Bid evaluation process described in Section 3.[7] Each Bidder selected to move on to negotiations will be required to provide comprehensive information regarding its selected Project(s). Examples of such documentation may include topographical surveys, more detailed site plans and drawings, additional interconnection materials, environmental field assessments, permitting applications, and engineering studies.

2.5 Limitation of Liability

Neither this RFP nor any other aspect of this solicitation shall create an agency, partnership, joint venture, or co-tenancy relationship among the members of the OG&E Evaluation Team or any other entities involved in the development or administration of this RFP, nor any other relationship or liability beyond those (if any) explicitly adopted in writing and executed by authorized representatives of OG&E and/or

[7] No members of the OG&E Bid Team will be involved, directly or indirectly, in the evaluation of any Bids.

the appropriate entity. Neither OG&E nor any other persons or entities involved in the RFP administration and evaluation shall be liable for any act or omission. Neither this RFP nor any other aspect of this solicitation creates or is intended to create third-party beneficiaries hereunder. In no event will OG&E or participating RFP entities be liable to any person for special, incidental, punitive, exemplary, indirect, or consequential damages or lost profits, whether by statute, in tort or contract or otherwise.

3 Bid Evaluation

3.1 Introduction

The OG&E RFP Evaluation Team and its authorized agents will evaluate the Bids to determine which, if any, have the potential to provide the most economical, reliable, and viable alternatives for OG&E's customers. OG&E will use an evaluation process with three (3) components including a threshold evaluation, a non-price (qualitative) evaluation, and a price (quantitative) evaluation. Only those Bids found to have satisfied the threshold RFP requirements will be evaluated based on the identified qualitative and quantitative criteria. OG&E may select the top-ranking Bid based on the combined qualitative and quantitative score from among Bids received or may select multiple bids to comprise a portfolio able to satisfy OG&E's need. Qualitative and quantitative factors will be considered simultaneously. The total weighting of quantitative factors will be 70%, and the total weighting of qualitative factors will be 30%.

3.2 Threshold Evaluation

OG&E will review each Bid to determine whether it satisfies the threshold criteria of compliance, completeness, technical viability, and Bidder financial capability. The completeness review will ensure that the Bid follows the guidelines set forth in the RFP, includes all information required for a more thorough review, and is provided in the required format and sequence.

At OG&E's sole discretion, any Bid deemed materially incomplete, non-compliant, or technically or financially deficient may be excluded from further consideration. OG&E reserves the right to request that any Bidder clarify questions or provide additional information regarding that Bidder's Bid(s) to resolve deficiencies identified in the threshold evaluation.

The criteria to be considered in the threshold evaluation are listed below:

- Capacity: OG&E will consider each of the following capacity requirements:
  - Minimum: 50 MW of nameplate Capacity per Bid
  - Maximum: 500 MW of nameplate Capacity per Bid
  - Duration: Able to maintain minimum and maximum capacity for 4-hour duration

- In-Service Date: Capacity must be available to satisfy OG&E's resource adequacy obligations starting no later than May 1, 2027.

- Contract Type: OG&E will consider only APA Bids including the required EPC exhibit for the transfer of ownership of to-be-constructed Generation Facility(ies) to OG&E. Such to-be-constructed (i.e., new) Generation Facilities can be located at a Site with other existing Generation Facility(ies) or at a Site without any existing Generation Facility(ies). However,

Generation Facility(ies) that are existing (i.e., have already been constructed) are not eligible for this RFP.

- Product Type: OG&E will consider Flexible Resources that are:
  - Designed and optimized for daily multiple cycle (start) operation
  - Capable of continuous operation over the range of operating loads and design ambient temperatures
  - Capable of achieving a 15-minute start from initiation
  - Must be capable of a minimum run time of at least four (4) consecutive hours
  - Must have minimum up-time of no more than one hour
  - Must have a maximum down-time between cycles of no more than one hour
  - CT or RICE must be Hydrogen-Capable as defined in this RFP

- Location: Projects must interconnect within SPP and be located within Oklahoma or Arkansas.

- Transmission Interconnection: Bidders are required to submit their plan for securing firm transmission service prior to the in-service date. Plans can include but are not limited to an active interconnection application to the SPP Transmission Grid or an existing interconnection agreement to the SPP Transmission Grid with ability to expand or modify interconnection rights to accommodate Capacity of the Bid.[8] All Bidders must submit a plan that complies with SPP Transmission Interconnection requirements.

- Property Site Control: Bidders must demonstrate site control through ownership, executed land leases, options to lease, easements, rights-of-way, and/or other instruments of conveyance. To meet the site control requirement, each Bidder shall have identified a Site and must provide a copy of documentation establishing that such Bidder has and/or will have control over the Site prior to construction and development. Eligible documentation may include a demonstration of Site ownership, an option to purchase the Site, or a binding letter of intent to sell from the Site landowner(s).

- Experience: Bidders must have successfully completed at least one (1) project similar in technology, capacity, fuel, and Bidder roles across all aspects of project development.

- Bidder Financial Capability: Bidders must demonstrate financial strength and credit worthiness as a counter-party consistent with obligations.

- Completeness: Bids must be complete, including all forms, attachments, and other required information, and must in all other respects also comply with RFP requirements.

[8] Any inquiries about generation interconnection, transmission service or transmission adequacy must be directed only to the appropriate party at SPP. SPP will be OG&E's sole point of contact for all questions and requests related to interconnection applications and studies relating to resources connected to the SPP transmission system.

- Unconditional: Bids are not conditioned upon any significant contingencies, apart from any requested edits to the Form APA and EPC. Moreover, requested edits to the EPC exhibit cannot include material modifications to the equipment technical specifications nor performance requirements.

To expedite the evaluation timeline, the threshold evaluation may, at OG&E's sole discretion, be conducted simultaneously with the qualitative and quantitative evaluations.

3.3 Non-Price (Qualitative) Evaluation Criteria (30% in aggregate)

OG&E will consider the following three (3) qualitative criteria in evaluating each Bid. These are not incorporated into the quantitative evaluation (see Section 3.4 of this RFP) of each Bid.

1. Contract Risks, Costs, and Benefits (9%)
2. Overall Project Characteristics and Development Risks (16%)
3. Community and Environmental Impacts (5%)

The qualitative criteria and sub-criteria are summarized in Table 4.

Table 4: Summary of Qualitative Evaluation Criteria

Criteria	Sub-Criteria	Maximum Points Available
Contract Risks, Costs, and Benefits (9%)	Firm Price	2
	Contract Assignment	1
	Form APA (including EPC exhibit) Redline	6
Overall Project Characteristics and Development Risks (16%)	Capacity Security	3
	O&M Plan and Protection against Risks	3
	Critical Path Schedule, Site Control, and Bidder Experience	4
	Financing Capability	2
	Technology	1
	Flexibility	3
Community and Environmental Impacts (5%)	Community Impacts	3
	Environmental Impacts	2
Total Points		**30**

3.3.1 Contract Risks, Costs, and Benefits (9%)

Contract risks, costs, and benefits will be assessed based on the extent to which pricing is firm and without dependencies or contingencies and/or the cost containment measures effectively limit cost risk for OG&E customers. Where non-firm elements are included in pricing, Bidders will be assessed on the rationale for such an inclusion and the extent to which it is the interest of OG&E customers.

For contract assignment or other obligation transfer of existing Permits, easements, leases, or other contracts, OG&E will consider the terms and conditions associated with such assignment. Where applicable, Bidders should provide an indication of such assignments as well as copies of the relevant contracts.

Additionally, Bids will be assessed on the extent to which the Bidder accepts all terms and conditions of the Form APA and EPC. OG&E has a strong preference and expectation for no to minimal changes to the proposed terms in the Form APA and EPC.

3.3.2 Overall Project Characteristics and Development Risks (16%)

Each Project will be assessed for its technical characteristics, expected operational performance and safety over its lifetime, and the risks associated with its ability to achieve timely commercial operations as well as the capabilities of the Bidder to successfully develop and finance the Project.

For this criteria, OG&E will evaluate factors including:

- Capacity Security: OG&E will consider security of the Accredited Capacity credit for the project based on current SPP Planning Criteria and will also consider the potential for changes to SPP Planning Criteria. Bidders should provide their expected capacity accreditation for both summer and winter seasons according to SPP. Where such information is not available, Bidders should provide indications of their expected performance ratings for each required obligation period including data confirming the Project's designated operational performance. Bidders should also indicate expected degradation in Accredited Capacity qualification over time and a recommended augmentation schedule and associated costs as well as equipment warranties where applicable. To assess deliverability, Bidders should provide information regarding the Project's firm transmission rights and any deliverability assessments which have been performed for the Project.

- O&M Plan and Protection against Risks: Projects will be assessed on projected performance over their expected asset life. Projects with demonstrable longevity at consistent levels over time are preferred. Projects should provide an O&M plan, an assessment of the peak operational performance of their Project, an assessment of the ability of the Project to continue operation in extreme hot and cold weather temperatures, during hail storms and other extreme weather events, an assessment of the Project lifetime expectations (i.e., useful asset life), and an estimate of the reasonable capital investment (cost and timing) expected to maintain the Project in sound operational order over time. OG&E's review will consider the Project's impact to OG&E's overall resiliency to physical and cyber threats and vulnerabilities. Bidders should provide a risk mitigation plan which specifically addresses all measures and actions taken by the Bidder to minimize risk exposure to such threats and vulnerabilities. OG&E acknowledges that Energy Storage systems and hydrogen fueling of Generation Facilities are developing technologies. Bids shall not be unduly penalized for risks associated with the developing Energy Storage and hydrogen fuel technologies, provided that compliance with current utility and industry standards is demonstrated, and a mitigation plan for addressing risks is included with the Bid.

- Critical Path Schedule: OG&E will evaluate the critical path schedule submitted by the Bidder for overall credibility against industry standards and to ensure there is a high likelihood the Project can reach commercial operations as proposed. This review will include the risks of delays in securing the necessary fuel supply and Permits. This review will also include the risks of securing transmission interconnection and delivery capabilities. Bidders should identify any rights-of-way

that need to be acquired for the construction of supporting facilities (transmission lines, natural gas pipelines, etc.) and provide a plan and schedule for securing the rights-of-way.

- Site Control: Preferences will be given to Bidders with outright ownership of the proposed Site. Options to purchase will also be treated favorably as will binding letters of intent to sell from the current landowner(s). Long-term rights under leases or easements that ensure control of the land for all necessary uses, undisturbed access, rights to construct and receive adequate fuel supply, and flexibility for Project modifications will also be considered.

- Bidder Experience: Bidders are required to demonstrate experience and management capability to successfully develop and finance the Project. OG&E is particularly interested in Bidders that have demonstrated success in multiple projects of similar size, technology, and operating profile and can demonstrate an ability to work together effectively to bring the Project to commercial operation in a timely fashion. In addition, OG&E values experience that Bidders can show in successfully developing Generation Facilities within the SPP footprint.

- Financing Capability: Bidders must demonstrate their ability to finance development of the Project so it can reach commercial operation, including all EPC-related and other necessary activities. The financing plan should describe how the Project will be financed, including the sources and mechanisms for financing and distinctions in financing in different phases of the development process. Bidders should include the estimated construction costs as well as the financing costs for the project. Each Bidder's response must include the current status of its financing plan.

- Technology: Bidders must provide information about specific technology(ies) proposed for the Project, including a description of the track record of the technology(ies) and associated equipment. Each Bidder should provide a detailed description and specifications for the proposed equipment. OG&E reserves the right to conduct further due diligence on the equipment. OG&E prefers Bids that demonstrate that the design and equipment proposed are technologically mature.

- Flexibility: Preference will be given to Bids that offer OG&E added flexibility. OG&E will evaluate how the Project can (i) meet a variety of potential operational uses in its proposed configuration, and (ii) be modified in the future to meet a wider variety of future uses. As part of that evaluation, each Bid will be reviewed for flexibility in being dispatched for utility needs that differ by: scale (MW), response time, dispatch duration, number of daily cycles, energy products, and season. Documented past experience of the Bidder developing and/or operating Generation Facilities with similar flexibility attributes will be positively valued by OG&E. CT and RICE Bids will also be evaluated on how use of hydrogen fuel would affect these flexibility attributes.

3.3.3 Community and Environmental Impacts (5%)

OG&E has a preference for Projects with a Site location in OG&E's service territory in Oklahoma or Arkansas. OG&E also values several other local and community factors. In particular, Bidders should provide the status of a Project stakeholder engagement plan related to development and permitting. That

engagement plan should specifically address environmental impact, how communities or organizations will have an opportunity to participate in decisions about activities that may affect their environment and/or health, how their concerns will be considered in the decision-making process and how these communities are involved in workforce opportunities associated with the Project. Bidders should additionally include a summary of expected impacts on the local economy, which may include factors such as job creation for the OG&E customer base, use of local materials, tax benefits, or other benefits accruing to OG&E customers.

The environmental impact sub-criterion will include an assessment of the potential to reduce air emissions based on Project emission rates per MWh compared to the utility's 2020 average emission rates and industry benchmarks. For CT and RICE Projects, that assessment should differentiate between impacts without the use of hydrogen fuel and with use of hydrogen as the primary fuel in the future. Projects will also be assessed for ecological impacts from development of their Sites and the equipment used therein. As available, Bidders should include environmental impact statements for the proposed Projects.

3.4 Price (Quantitative) Evaluation Criteria (70%)

All Bids will be evaluated on price and operational performance factors in the quantitative evaluation through simulation of the impact of the Bid on the costs paid by OG&E's customers.

OG&E will evaluate all Bids based on the expected customer impact resulting from detailed simulation modeling utilizing scenarios and sensitivities similar to those described in the OG&E 2021 IRP. The analysis will account for the cost and dispatch constraints and characteristics of the Project's expected energy dispatch of Generation Facilities in the SPP Integrated Marketplace under a range of potential market conditions. The Net Present Value of Customer Cost ("NPVCC") over a 30-year operating period for the Generation Facilities will be developed using a weighted combination of asset performance in the Base (40%), High Gas (25%), Low Gas (25%), and Energy Evolution (10%) cases.

4 General Terms and Conditions

4.1 Publicity

Any publicity giving reference to this RFP and any matters related thereto, whether in the form of press releases, brochures, photographic coverage, or verbal announcement, is prohibited and shall not be made without the specific written approval of OG&E.

4.2 Governing Law / Dispute Resolution / Arbitration

This RFP shall be governed by, interpreted under and construed and enforced in accordance with the laws of the State of Oklahoma, without regard to any conflict of laws principles thereof that would call for the application of the law of any other jurisdiction.

In the event of any dispute relating to this RFP, the parties shall first attempt to resolve the dispute via informal discussions including discussions between the parties' respective senior executives. If those efforts fail to resolve the dispute then the parties agree that they shall resolve any dispute relating to this RFP via binding arbitration to be conducted by a panel of three (3) arbitrators pursuant to the Commercial

Arbitration Rules of the American Arbitration Association ("AAA") then in effect (the "Rules"), as amended herein. All such disputes shall be finally settled by binding arbitration in accordance with these provisions.

The place of arbitration shall be Oklahoma City, Oklahoma. The arbitration proceedings shall be held in the English language.

Time is of the essence for any arbitration under this RFP. As a result, the parties agree that unless they mutually agree to extend this deadline, the arbitration hearing shall take place within 150 days of filing and awards or decisions rendered within 180 days; provided that the arbitration panel may extend such deadlines in its sole reasonable discretion, and failure by the arbitrators to conclude the arbitration hearing or make such award or decision within the foregoing deadlines shall not invalidate such arbitration hearing, award or decision. The award of the arbitrators shall be accompanied by a reasoned award. The awards or decisions rendered via arbitration as provided in these provisions shall be final and binding upon the parties.

The parties hereby irrevocably submit to the in personam jurisdiction of the state and federal courts located in Oklahoma County, Oklahoma, and agree that any such court shall have sole and exclusive jurisdiction to enter all such orders as may be necessary or appropriate to enforce and/or to confirm any ruling or decision or any award rendered by the arbitration panel, including orders directing interim measures, interim awards, or Emergency Measures of Protection (as defined in the Rules) under the Rules.

By agreeing to arbitration, the parties do not intend to limit their ability to seek and obtain interim or emergency relief as provided in the Rules (including Emergency Measures of Protection) or deprive the courts identified in this RFP of their jurisdiction to enforce or confirm any interim or emergency relief granted under the Rules or issue any other order in aid of arbitration proceedings and the enforcement of any award. The arbitration panel shall have the authority to award damages for the failure of any party to respect orders directing emergency, temporary or preliminary relief issued in accordance with the Rules. The requirement to submit disputes to negotiation as discussed above shall not apply if, and to the extent, that there exists an imminent threat of irreparable injury to a party and that party seeks and obtains interim or emergency relief in accordance with the Rules in response to such threat.

Except as may be required by law, neither a party nor the arbitration panel may disclose the existence, content or results of any arbitration hereunder without the prior written consent of the parties. In addition, all negotiations, discussions, offers, counteroffers, data exchanges, proposed agreements and other communications between the parties in connection with negotiations or other Dispute resolution procedures shall be Confidential Information. Without limiting the preceding sentence, all such communications shall be deemed to be in the context of attempting to settle a disputed claim and shall not be construed as an admission or agreement as to the liability of any party, nor be admitted in evidence in any related arbitration, litigation or other adversary proceeding.

The arbitration panel shall award to the prevailing party, if any, as determined by the arbitration panel all of its reasonable attorneys' fees and costs and all of its "costs and fees". For purposes of this section "costs and fees" means all reasonable pre-award expenses of the arbitration, including the arbitration panel's fees, administrative fees, travel expenses, out-of-pocket expenses such as copying and telephone, court costs, witness fees and attorneys' fees.

Direct Exhibit KMR-3
2022 OG&E SOLAR RFP
DATE 10/12/2022

OKLAHOMA GAS AND ELECTRIC COMPANY

2022 SOLAR REQUEST FOR PROPOSALS

Direct Exhibit KMR-3
2022 OG&E SOLAR RFP
DATE 10/12/2022

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Definitions

Except in those certain instances where the context states another meaning, the following terms, when used in this Request for Proposals document, shall have the meanings below. These Request for Proposals definitions do not supplant the definitions used in the Form Build Transfer Agreement attached to this Request for Proposals.

"Accredited Capacity" means capacity that meets the resource adequacy requirements as determined in accordance with SPP Planning Criteria.

"Bid" means one offer made in response to the Request for Proposals.

"Bidder" means a single legal entity submitting one or more offers in response to the Request for Proposals.

"BTA" means Build Transfer Agreement, a document establishing the terms of a purchase and sale transaction of a Generation Facility upon mechanical completion between a utility and an entity developing the Generation Facility. The transaction is inclusive of all equipment, Permits, licenses, and contracts.

"Capacity" means the quantity of electric power produced by a Generation Facility at a point in time, as measured in kilowatts or megawatts in alternating current ("AC"). For energy storage, "power capacity" represents the maximum instantaneous electric output that a given energy storage system is rated to produce when starting from a fully charged state, while "energy capacity" has an elapsed time dimension and represents the cumulative stored electric output potential of the energy storage system.

"Commission" when used in the singular means the Oklahoma Corporation Commission.

"Commissions" means collectively the Oklahoma Corporation Commission and the Arkansas Public Service Commission.

"Energy" means an amount of electricity that is bid or offered, produced, purchased, consumed, sold or transmitted over a period of time, which is measured or calculated in megawatt hours ("MWh").

"Generation Facility" means a facility capable of supplying electric power and all associated balance of plant, parts, fixtures and equipment, as well as all equipment necessary to interconnect to SPP. Generation Facilities eligible for the Request for Proposals are either solar photovoltaic or co-located solar photovoltaic combined with an energy storage system.

"Hybrid Project" as used herein, means a co-located solar photovoltaic and energy storage Generation Facility.

"Integrated Marketplace" means SPP's Energy and Operating Reserve Markets and the Transmission Congestion Rights Markets.

"IRP" unless otherwise noted, shall refer to OG&E's 2021 Integrated Resource Plan found

here: https://ogeenergy.gcs-web.com/static-files/6fd094d7-f7d6-4dae-8ec9-7482d0071a34.

"ITC" means the federal investment tax credit for qualifying solar energy and energy storage systems, as defined by the Inflation Reduction Act of 2022.

"Permits" means all permits, exemptions, variances, registrations, licenses, certifications, inspections, approvals, waivers, consents, franchise or other authorizations required from any governmental authorities.

"Project" means a new supply-side solar photovoltaic Generation Facility or combined solar photovoltaic and energy storage Generation Facility intending to interconnect to the SPP transmission network. In this RFP, supply-side Generation Facilities using solar photovoltaic or combined solar photovoltaic and energy storage are also called Projects.

"PTC" means the federal production tax credit for qualifying solar energy systems, as defined by the Inflation Reduction Act of 2022.

"Site" means parcel(s) of real property on which the Project shall be constructed having a single interconnection queue position at an active study stage at the time of Bid submission in SPP DISIS 2021-001 or an earlier SPP DISIS study group.

"Solar-only Project" means a Project with only a solar photovoltaic Generation Facility.

"SPP" means the Southwest Power Pool, the nonprofit regional transmission operator providing transmission services to OG&E and other utilities across Midwestern and Southwestern states.

1 2022 OG&E Solar Request for Proposals Overview

This document constitutes a Request for Proposals ("RFP") from qualified outside parties to supply utility scale solar photovoltaic ("PV") Generation Facility(ies), as standalone PV assets or in paired PV and energy storage systems ("Hybrid Projects") to Oklahoma Gas and Electric ("OG&E" or "the Company"), a subsidiary of OGE Energy Corp. This RFP will be administered in a fair, just, and reasonable manner consistent with Commission rules for competitive procurements Oklahoma Administrative Code ("OAC") 165:35-34 ("Commission Rules"). All communications will be governed by the process discussed in Section 2.1 to ensure fair and equitable treatment for all Bidders. A high-level summary of this RFP is provided in Table 1.

Table 1: OG&E 2022 Solar RFP Summary

Attribute	**Requirement**
Capacity	Minimum of 50 megawatts ("MW") and maximum of 450 MW nameplate.
In-Service Date	OG&E is seeking that Solar-only Project or Hybrid Project capacity be available to satisfy OG&E's resource adequacy obligations starting in 2023. Facilities may be placed in service as early as 2023 but must be in service no later than May 1, 2027, with a preference for earlier in-service dates.
Capacity Types	PV or PV with co-located with energy storage.
Contract Type	Build Transfer Agreement.
Location	SPP, with preference for OG&E's service territory in Oklahoma or Arkansas.
Interconnection Status	Bids must be for an individual Solar-only Project, or a co-located Hybrid Project and must be active in SPP DISIS 2021-001 or earlier SPP DISIS study.

A Technical Conference will be held as part of the process to finalize the RFP. Bidders are encouraged but not required to attend the Technical Conference to provide comments on the draft RFP. Comments and feedback on the draft RFP are also encouraged to be submitted to OG&E via email in advance of the Technical Conference. All feedback received through close of business on the day of the Technical Conference will be considered in establishing the final RFP. The Technical Conference will be held from 10:30 AM to 12:00 PM Central Prevailing Time ("CPT") on October 7, 2022. Interested parties may request meeting details by sending an email to Solar2022RFPComm@oge.com. OG&E will respond with meeting call-in information to requests received by October 6, 2022.

The schedule for this RFP is provided in Table 2; OG&E reserves the right to change the schedule at any time and at its sole discretion.

Table 2: Schedule for OG&E 2022 Solar RFP

Item	**Date**
Draft RFP Issue Date	September 22, 2022
Draft RFP Technical Conference	October 7, 2022
RFP Final Issue Date	October 12, 2022
Questions Deadline	November 1, 2022
Notice of Intent to Bid Due Date	November 2, 2022
Bid Due Date	November 3, 2022

Item	Date
Bid Opening Day[1]	November 4, 2022
Selection of Projects for Negotiation (expected)	January 13, 2023
Complete Negotiations (expected)	May 1, 2023

The terms and conditions of this RFP may, at any time, be changed, postponed, withdrawn, and/or canceled, including any requirement, term, or condition of this RFP, any and all of which shall be without any liability to OG&E. All changes to the schedule will be posted under "Current Opportunities" at https://www.oge.com/wps/portal/ord/who-we-are/supplierscontractors ("RFP Website"). OG&E will endeavor to notify all participants who have filed a timely Notice of Intent to Bid of any such cancellations, modifications, or schedule changes that are made prior to the Bid due date. However, it is Bidder's responsibility to monitor the RFP Website. OG&E will have no responsibility for failing to notify Bidders of any changes, postponements, withdrawals, and/or cancellations.

2 RFP Process and Requirements

This section outlines the communication requirements and Bidder requirements related to this RFP.

2.1 Communication Requirements

All communications regarding the RFP, other than Bid submissions, should be directed to: Solar2022RFPComm@oge.com. Any unsolicited direct contact with employees or representatives of OG&E concerning this RFP is not allowed and may constitute grounds for disqualification. See Section 2.2 for instructions regarding Bid submission.

2.1.1 Questions

2.1.1.1 Questions to OG&E

Prospective Bidders are encouraged to submit questions about this RFP on or before the deadline for submission of questions listed in the schedule. All questions, and responses to those questions, will be posted to the "RFP Website" within five (5) business days after receipt of the question to the best of OG&E's capabilities. Questions submitted will not be treated as confidential, and the question and answer may be shared for the benefit of other interested parties via the RFP Website. However, Bidder names will not be included in question and answer material posted to the RFP Website. OG&E's objective in posting these questions and answers is to ensure that all Bidders have equal access to information that may be potentially relevant to their Bids.

Should OG&E determine it is necessary to provide confidential information to provide necessary information for Bidders, then Bidders wishing to receive responses to such questions will be required to sign the Mutual Nondisclosure Agreement (in Appendix B) prior to Bid submission and receive a counter-signed copy of that agreement from OG&E before receiving the OG&E question response. The determination of whether confidential treatment is required will solely be at the discretion of OG&E.

[1] In compliance with the Commission Rules, Bids shall be opened virtually and participants, as indicated in section 165:35-34-3 (d) (1) (B) of the Commission Rules, may attend and monitor the opening of the Bids. Attendees will be required to register in advance.

2.1.1.2 Questions to Bidders

Following the submission of Bids, OG&E may request clarification and additional information from Bidders at any time during the evaluation process. Responses shall be considered part of the Bid and treated in accordance with Section 2.2.7. Bidders that do not respond promptly to such information requests or do not provide adequate information may be eliminated from further consideration or have the information in their Bid(s) modified by OG&E to produce a reasonable and appropriate evaluation. Bidders may not alter their Bid(s) in response to requests for additional information.

2.1.2 Notice of Intent to Bid

Notice of Intent to Bid ("NOI") is mandatory for Bids to be accepted. Submittal of NOI does not bind Bidders to submit a Bid; however, submittal of a Bid does require that a NOI has been submitted by the NOI due date. Bidders must submit a NOI for each Bid planned to be made by midnight, CPT on the date prescribed on the RFP schedule provided in Table 2: Schedule for OG&E 2022 Solar RFP. The NOI form is included as Appendix A and is to be submitted via email to Solar2022RFPComm@oge.com. Receipt of the NOI will be confirmed via email from OG&E to the Bidders. After receipt of the NOI, Bidders will be provided an anonymous identification code for the Bidder and each Site to include in their Bid Summary Form(s) which will be shared with authorized parties at the Opening Day for Bids. This identification code should also be used to name all Bid files submitted as detailed below.

The NOI Form is found in Appendix A. There is no fee payable to OG&E for submitting NOI(s) or Bid(s) for this RFP. However, Bidders are solely responsible for all costs they incur in preparation of their Bid(s) and participation in this RFP process.

2.2 Bid Submittal Requirements

This section outlines the content and form requirements for all Bids submitted in response to this RFP. Bids that do not all include the information requested in this section will be ineligible for further evaluation unless the information requested is not applicable or relevant to a given Bid.

2.2.1 Mutual Nondisclosure Agreement

Each Bidder is required to submit a signed Mutual Nondisclosure Agreement (Appendix B) with its Bid(s). A single agreement can be submitted to cover all Bids from a Bidder. OG&E will return by email a countersigned copy of each appropriately completed Mutual Nondisclosure Agreement to the Bidder within five (5) business days.

Bidders who completed a Mutual Nondisclosure Agreement as part of the question and answer part of this RFP process (per Section 2.1.1.1) should submit that signed agreement with their Bid(s).

2.2.2 Bid Summary Form

Each Bid must include a summary providing information about the Bid which will be shared and may become public information on Opening Day. If submitting multiple Bids for an individual Site, please clearly identify and summarize each Bid in a single Bid Summary Form (Appendix C) for the Site. Bidders are limited to four (4) Bids for each individual Site. Those Bids can be comprised of any combination of:

- PV Nameplate Capacity (between 50 and 450 MW_{AC} in capacity allowed).

- Energy Storage Nameplate Power Capacity (any value not exceeding the associated PV Capacity and such that the sum of PV Capacity and Energy Storage Power Capacity of a Hybrid Project does not exceed 450 MW).
    - All energy storage must be configured with a minimum 4-hour duration (i.e., at least a 4:1 ratio of "energy capacity" to "power capacity"). OG&E will not be evaluating standalone energy storage Projects as part of this RFP nor Hybrid Projects for which the PV and energy storage components are commissioned at different times or are part of different legal transactions. OG&E issued a separate Flexible Resource RFP in June 2022 for which standalone energy storage systems are eligible to Bid.
- In-Service Date (between January 1, 2023, and May 1, 2027, with a preference for earlier in-service dates).

Bidders should utilize the identification code(s) from the NOI confirmation in the appropriate fields on the Bid Summary Form and should further name the file(s) submitted to OG&E using the naming conventions that will be provided in the NOI confirmation. Appendix C will be the only file shared with attendees at the Bid Opening.

2.2.3 Bid Narrative

Each Bid must include a written discussion submitted as an Adobe PDF document that includes responses for each of the following topics. The narrative topics should be organized under the following 12 headings, with each heading beginning on a separate page. The narrative discussion should be as concise as feasible while being thorough.

If multiple Bids are submitted for a single Site, Bidders can either submit a single narrative covering all Bids or separate narratives for each Bid. This option is offered to reduce administrative burdens on Bidders, and OG&E will not penalize or reward Bidders based on the number of narrative files they submit.

1. Summary of Bid, including overview of technical specifications.
    - This section should include a discussion of the proposed technology including a description of the equipment (e.g., solar cells, modules, inverters, and tracking equipment for PV Projects and additionally battery pack, battery management system, and power conversion system for Hybrid Projects), its performance history, all major warranties, and any unique features associated with the Project design.
    - Please limit the summary to three (3) pages.

2. Operations and Maintenance ("O&M") Plan.
    - In the plan write-up, include a discussion of any O&M agreements and other material, existing agreements to be assumed by OG&E. Services provided under such agreements, including any limitations on the operations of Project equipment should be clearly specified.

3. Risk Mitigation Plan, including mitigating risks posed by natural disaster, physical threats and cyber threats and vulnerabilities as well as the hazards from the routine operation of the Project.

- For Hybrid Projects, also highlight how particular safety risks (related to the proposed technologies) will be mitigated.

4. Financing Summary.
   - Include a detailed discussion of its proposed financing plan to demonstrate reasonable ability to finance the proposed Project. Describe Bidder's sources of financing (e.g., new equity, equity contribution from guarantor/parent company) for each Project phase and all available lines of credit. Bidder should also discuss how this Project and its financing may affect the credit metrics and credit ratings of the Bidder and/or its parent company, corporate affiliate, or other credit guarantor.
   - If Bidder is relying on a guarantor for credit support, the financing plan should describe the corporate relationship between Bidder and guarantor, as well as a statement regarding the proposed guarantor's willingness to provide guarantee acceptable to OG&E.
   - If the equity contribution is from Bidder's parent company or corporate affiliate, the funding source at the parent or affiliate level (cash in hand, debt, new equity) should be described.
   - Identify and describe the source of required security at each stage of the Project's life and provide a plan for posting it. Include a demonstration of the ability to post the security.
   - Identify whether the ITC or PTC is assumed in the Bid, with designation of construction start date for tax credit purposes as well as assumed eligibility for tax credit adders for domestic content, prevailing wage and apprentice labor, and/or energy community locations with supporting explanation.

5. Impact on Local Economic Conditions.
   - Summarize how local stakeholders have been, and will continue to be, engaged in the development of the Project.
   - Indicate expected impacts on the local economy within OG&E service territories in Oklahoma and/or Arkansas. Factors which may be considered include use of local materials and other resources, use of local labor and other sources of job creation for the OG&E customer base, tax benefits, or other benefits accruing to OG&E customers.

6. Impact on Environmental Conditions
   - Describe the environmental effects of Project construction and operation on wetlands, terrestrial environment (wildlife, including avian protection), aquatic environment (including fish and aquatic organisms), threatened and endangered species protection, agricultural areas, corridors needed to connect to the transmission grid, state-designated scenic byways, visual landscape and visibility impacts, archaeological and historical sites, landmarks and sensitive areas, noise impacts, transportation impacts including Federal Aviation Administration impacts, and any other identified impact.

- Discuss environmental impacts and requirements related to end of life equipment disposal and, for Hybrid Projects, also of intra-life re-powering of energy storage components.

7. Siting and Permitting Plan, including descriptions of operational permits, land acquisition and site control strategy and status for all necessary uses, undisturbed access, exposure to solar rays, and flexibility for Project modifications.
    - A summary of all pertinent land lease or other site control agreements and a commitment to provide all associated agreements, upon request from OG&E, following the threshold evaluation.
    - Also describe all licenses and Permits required to construct and operate the Project and the status of acquiring or completing such licenses and Permits.
    - Include a discussion of zoning issues and existing and planned land uses in all directions surrounding the Site.

8. Interconnection Plan, including indication of expected network upgrade requirements and new facilities associated with new or upgraded interconnections.
    - Describe the location of the proposed point of interconnection, such as the name of an existing substation or switchyard, or the point on an existing transmission line, such as x-miles south of ABC Substation or halfway between ABC and XYZ substation.
    - Indicate if the proposed Project will require a new transmission interconnection or an expansion or modification of an existing interconnection with the SPP system.
    - Describe the new electric interconnection facilities that have been included in the Bid price, including the size, length, and location of any transmission line and size and list of substation equipment for which the transmission customer (Bidder) will be responsible for building and owning.
    - If network upgrades are included, describe the specific transmission elements to be upgraded and include a narrative description of the upgrade plan.

9. Critical Path Schedule.
    - Provide a detailed schedule with critical path milestones for the Project that includes activities from the period of selection as a winning Bidder to the commercial operation date, including all testing activities.
    - Include descriptions of construction start dates for ITC or PTC purposes.

10. Project Organization and Management. Please include the following in this section:
    - Organizational chart for the Project that lists the participants and consultants and identifies the management structure and responsibilities. That chart or another chart should include the key management personnel, titles, and lines of responsibility or reporting requirements for the Project team.
    - For each of the participating organizations (developer; architectural and engineering firm; engineering, procurement, and construction firm; environmental staff or

consulting firm; legal services, etc.), brief statements listing specific experience of the firm, other projects of similar nature and size, and any evidence that the participants have worked jointly on other Generation Facilities.

- Documentation regarding the contractual relationship between the Bidder organization and all additional participants or vendors. Indicate the status of any arrangements between the Bidder and vendors.
- Resumes of the important management and support staff dedicated to the Project.

11. Development Experience for Proposed Generation Facilities. Bidders are required to demonstrate experience and capability to successfully develop the Project as proposed. OG&E is particularly interested in a team which has demonstrated success with Generation Facilities of a similar technology, size, and location and can demonstrate an ability to effectively work together to bring new-build Generation Facilities to commercial operation successfully.
    - Provide profiles of at least one (1) and no more than five (5) similar Generation Facilities the Bidder has successfully developed to commercial operation. Include the following information as part of each profile:
        - Name of the Generation Facility
        - Location of the Generation Facility
        - Generation Facility size and technology(ies), including energy storage power and energy capacity for any Hybrid Projects
        - Purchasing utility or other entity
        - Development schedule and commercial operation date
        - Average capacity factor of the Generation Facility over its entire term of operation
        - Average availability factor of the Generation Facility over its entire term of operation
        - Bidder's role
        - Any environmental violations
    - Describe experience within the SPP Integrated Marketplace that is relevant to this RFP.
    - Provide copies or summaries of report material related to safety of operations, including reports on reportable injuries; instances of accidents, injuries, or fatalities; lost workday injuries; loss of operations due to safety issues; etc. at Generation Facilities currently owned or maintained by the Bidder.
    - Describe Bidder's commitment to safety of operations including any operating practices designed to encourage safety commitments.

12. Brief Narrative Summary of any Changes Sought to Form BTA. Where necessary, Bidders should provide a brief explanation of and rationale for changes sought to the BTA. This is in addition to the redline mark-up of the Form BTA.

To maintain confidentiality of the Bids, Bidders are asked to label their files with the identification code provided in response to the NOI, and the files should be named consistently with the conventions

established in the Bid Summary Form. This same naming convention should apply to the appendix forms submitted. No individual file submitted should be larger than 10 MB. If multiple narrative files are submitted for a Bid, please separate the files into Volume I, Volume II, etc. to conform to the maximum file size.

2.2.4 Bid Certification and Attribute Forms

Each Bidder must submit a Certification and Authorization Form available in Appendix D. Bidder can submit a single Appendix D file identifying all Bids it is offering.

Bidders must complete and submit a set of Microsoft Excel ("MS Excel") Bid Attribute Forms available in Appendix E and listed in Table 3. These forms will contain essential information about each Bid, and a separate set of forms and related information must be submitted with each Bid.

Table 3: Bid Attribute Forms

Form ID	Form Title
Form A	Bidder Contact Information
Form B	Project Description
Form C	Project Hourly Operational Profile
Form D	Operational Information – Availability Profiles
Form E	Expected Annual Data for Cost, Performance, and Permitting
Form F	Critical Path Schedule
Form G	Financing Information
Form H	BTA Pricing

To maintain confidentiality of the Bids, Bidders are asked to label their files with the identification code provided in response to the NOI and the Bid files should be named consistently with the conventions established in the Bid Summary Form.

2.2.5 Additional Required Attachments to Bids

In addition to the Bid narrative and all forms specified in Appendices A through F, please provide the information described in this section. Bidders should use identification code provided in response to the NOI along with "Attachment" for each item submitted.

If multiple Bids are submitted for a single Site, Bidders can submit a single version of relevant attachments (e.g., solar study reports, financial statements, redlines of legal agreements) covering all Bids or separate attachments for each Bid. This option is offered to reduce administrative burdens on Bidders, and OG&E will not penalize or reward Bidders based on the number of attachment files they submit.

i. Solar study report(s) from qualified external consultants indicating historical and projected solar irradiance for the Site, solar shading, and annual and monthly energy output projected for each year of the 30-year life of the Project. Annual estimates should be provided for the P10, P50, and P90 conditions.

ii. An hourly annual electricity output profile for the first year of Project operation as a MS Excel attachment. The profile should be provided in a single column (8760 x 1 MS Excel format) with values in MWh.

iii. For Hybrid Projects, an hourly schedule (in 8760 x 1 MS Excel format) with values in MWh of how the storage will be charged from PV in the first year of operation.

iv. A U.S. Geological Survey-based map or maps showing the location of the proposed development Site and the anticipated placement of all major equipment at the Site including transmission-related facilities. The included content should highlight fully the ownership status of land area required for the Project.

v. A copy of bidder's preliminary SPP transmission interconnection study (if available).

vi. If the Project does not have a completed interconnection study from SPP at the time of Bid submission, the Bidder must identify the applicable section of the SPP Open Access Transmission Tariff Attachment V that would govern interconnection for the proposed Project. In addition, any proposed Project without a completed interconnection study from SPP must submit the results of a comparable study conducted by an independent engineer[2] at Bidder's expense. If a feasibility study is required, the feasibility study should model North American Electric Reliability Corporation (NERC) TPL-001-4 contingencies P1, P2, and P3. Breaker fault contingencies may be excluded.[3]

vii. Any reports available from qualified third parties documenting flaws or risks with the proposed Project(s) and suggested mitigation plans.

viii. If applicable, reactive power capability curve and an indication of maximum reactive power productive and absorptive capability (include as MS Excel attachment).

ix. Audited financial statements for the last three (3) years for Bidder and guarantor (if applicable). If audited financial statements are not available, provide unaudited financial statements with

[2] To create independence from the Bidder and the OG&E RFP process, the independent engineer should be an individual who is not an employee of OG&E, SPP, the specific Bidder, or a member of the Bidder's proposed team responding to this RFP; or if the independent engineer is a firm rather than a sole practitioner, the firm should not be a legal subsidiary or affiliate of OG&E, SPP, the specific Bidder, or a member of the Bidder's proposed team.

[3] The feasibility study must also show estimated interconnection new facilities and network upgrade costs and the timeline to complete any identified new facilities and upgrades. At a minimum, the feasibility study must include a steady state thermal power flow assessment consistent with SPP's Definitive Interconnection System Impact Study (DISIS) approach. The feasibility study should identify thermal overloads and voltage violations that could occur from operation of the Project, determine new facilities and/or upgrades required to resolve the violations, and provide the estimated costs and timeline to complete the new facilities and upgrades. The feasibility study must model the Project at the interconnection location proposed in the Bid. The feasibility study should utilize the latest SPP power flow cases for the generation interconnection queue cluster in which the Project is located and include all active generator interconnection requests for that queue cluster. The study should also discuss the likelihood that the Project would require an affected system study by a neighboring region.

Chief Financial Officer ("CFO") attestation. If financial statements are consolidated, provide standalone financial statements with CFO attestation for Bidder and any guarantor.

x. Rating reports from the S&P, Moody's, or Fitch agencies for prior 36 months as attachments.

2.2.6 Redline of BTA Form

A model Form BTA is attached in Appendix F. Bidders are responsible for reviewing all terms and conditions specified in the BTA and taking its terms and conditions into consideration in developing their Bids. While Bidders are expected to provide a reasonable redline related to technical aspects of their Bid(s), OG&E has a strong preference and expectation for no to minimal changes to the proposed commercial terms and conditions in the Form BTA for Bids for Solar-only Projects.

OG&E recognizes that the Form BTA may not incorporate all relevant aspects for a Hybrid Project and asks Bidders submitting Hybrid Project Bids to include requested BTA changes to incorporate energy storage systems in their redlines. OG&E will not penalize Bidders for the fact of providing redlines related to energy storage, but OG&E will weigh the nature and implications of such redlines (e.g., the degree of risk imposed on OG&E) in its evaluation.

The file naming conventions used for the BTA redline should follow the same conventions used for other forms. Bidders can provide a single BTA redline covering all Bids they submit.

2.2.7 RFP Submission

All Bid submissions are required to be sent electronically to: Solar2022RFPBids@oge.com. ***Please note this is a separate email address from that used for other RFP communications.*** OG&E will not accept paper copies of Bids, nor Bids delivered other than through the provided Bid email address. After Bids are opened on OG&E's Bid Opening Day, Bidders will receive a confirmation of receipt from OG&E's Bid email address. Bidders should contact OG&E's bid email if a confirmation is not received within one (1) Business Day after OG&E's Bid Opening Day. Emails are limited to 10 MB. Use multiple emails as needed.

Bidder will bear the risk of any failure of Bidder to submit all required information, including forms and attachments, by the Bid Due Date, as required by this RFP. Bids not delivered in accordance with the requirements of this RFP are untimely and may be eliminated from consideration in this RFP. Bids that do not include all information, forms, and attachments required by this RFP may be considered nonconforming and rejected on that basis. Bids submitted in response to this RFP will become the property of OG&E. At the conclusion of the process, all Bids will either be archived or destroyed.

2.2.8 Confidentiality of Response

Bids submitted in response to this RFP, and any contracts resulting from this RFP, will be treated as confidential. Nonetheless, Bidders should be aware that information received in response to the RFP may be subject to review by applicable regulatory agencies. Information submitted in response to the RFP may become subject to federal or state laws pertaining to public access to information as a result of any reviews conducted by the aforementioned agencies. As such, Bidders should clearly designate all sensitive information as "Confidential." Except as required by regulatory reviews, OG&E will use reasonable efforts to avoid disclosure of such confidential information to persons other than those involved with the evaluation, selection, and any subsequent negotiations.

2.2.9 Regulatory Bid Opening Summary

The Bid Summary Form will be used during virtual Bid Opening, which is scheduled for November 4, 2022. This form will be viewable to the Commission Staff, Attorney General's Office representative, and noncompetitive stakeholders in attendance at the Bid Opening.

As discussed in Section 2.2.2, the Bid Summary Form must contain information about the Bid(s) submitted that will be used for tracking and identifying the Bid(s) throughout the evaluation process. To maintain confidentiality, all Bidders submitting the required NOI will be provided a unique identification code or codes for use on their Bid Summary Form(s). It is the Bidder's responsibility to utilize this/these identification code(s) on the Bid Summary Form(s). OG&E will not be responsible for any release of information regarding Bids due to Bidder failure to utilize the identification code(s) provided.

2.3 Validity of Bids

Bids shall remain valid for the entire evaluation period and, should OG&E elect to seek pre-approval from the Commission or Commissions, through the entire period of proceedings of the Commission or Commissions. During these periods, Bids shall be considered as irrevocable and may not be modified, except as agreed upon in mutual negotiations between the Bidder and OG&E in the post evaluation period.

2.4 Bidder Selection

All Bids will be evaluated as per the Bid evaluation process described in Section 3. Each Bidder selected to move on to negotiations will be required to provide comprehensive information regarding its selected Project(s). Examples of such documentation may include topographical surveys, more detailed site plans and drawings, additional interconnection materials, environmental field assessments, permitting applications, and engineering studies.

2.5 Limitation of Liability

Neither this RFP nor any other aspect of this solicitation shall create an agency, partnership, joint venture, or co-tenancy relationship among the members of the OG&E evaluation team or any other entities involved in the development or administration of this RFP, nor any other relationship or liability beyond those (if any) explicitly adopted in writing and executed by authorized representatives of OG&E and/or the appropriate entity. Neither OG&E nor any other persons or entities involved in the RFP administration and evaluation shall be liable for any act or omission. Neither this RFP nor any other aspect of this solicitation creates or is intended to create third-party beneficiaries hereunder. In no event will OG&E or participating RFP entities be liable to any person for special, incidental, punitive, exemplary, indirect, or consequential damages or lost profits, whether by statute, in tort or contract or otherwise.

3 Bid Evaluation

3.1 Introduction

OG&E and its authorized agents will evaluate the Bids to determine which, if any, have the potential to provide the most economical, reliable, and viable alternatives for OG&E's customers. OG&E will use an

evaluation process with three (3) components including a threshold evaluation, a non-price (qualitative) evaluation, and a price (quantitative) evaluation. Only those Bids found to have satisfied the threshold RFP requirements will be evaluated based on the identified qualitative and quantitative criteria. OG&E may select the top-ranking Bid based on the combined qualitative and quantitative score from among Bids received or may select multiple bids to comprise a portfolio able to satisfy OG&E's need. Qualitative and quantitative factors will be considered simultaneously. The total weighting of quantitative factors will be 70%, and the total weighting of qualitative factors will be 30%.

3.2 Threshold Evaluation

OG&E will review each Bid to determine whether it satisfies the threshold criteria of compliance, completeness, technical viability, and Bidder financial capability. The completeness review will ensure that the Bid follows the guidelines set forth in the RFP, includes all information required for a more thorough review, and is provided in the required format and sequence.

At OG&E's sole discretion, any Bid deemed materially incomplete, non-compliant, or technically or financially deficient may be excluded from further consideration. OG&E reserves the right to request that any Bidder clarify questions or provide additional information regarding that Bidder's Bid(s) to resolve deficiencies identified in the threshold evaluation. The criteria to be considered in the threshold evaluation are listed below:

- PV Capacity: minimum of 50 MW_{AC} and maximum of 450 MW_{AC} in PV nameplate capacity.

- Energy Storage Capacity (if part of a Hybrid Project Bid): maximum power capacity equal to the lesser of (i) nameplate capacity of co-located PV Generation Facility, or (ii) maximum of 450 MW minus the PV Capacity of the co-located PV Generation Facility, and in all instances with an energy storage minimum duration of four (4) hours. There is no minimum energy storage power capacity.

- In-Service Date: available to begin supply to OG&E as early as January 1, 2023 but must be in service no later than May 1, 2027.

- Contract Type: OG&E will consider only BTA Bids for the transfer of ownership of to-be-constructed Generation Facility(ies) to OG&E. Existing Generation Facilities are not eligible for this RFP. OG&E issued a separate RFP for Existing Capacity in July 2022.

- Product Type: OG&E will consider Solar-only Project and Hybrid Project Bids.

- Location: Projects must interconnect within SPP.

- SPP Interconnection Queue Position: Projects must be in active status in SPP DISIS 2021-001 or earlier SPP DISIS study. Projects must be interconnected to the SPP Transmission Grid.

- Property Site Control: Bidders must demonstrate site control by referencing executed land leases, options to lease, easements, rights-of-way, and/or other instruments of conveyance. To meet the site control requirement, each Bidder shall have identified a Site and must indicate its willingness to provide, upon request from OG&E following the threshold evaluation, a copy of documentation establishing that such Bidder has and/or will have control over the Site prior to construction and development. Eligible documentation may include a demonstration of Site ownership, an option to purchase the Site, or a binding letter of intent to sell from the Site landowner(s).

- Experience: Bidders must have successfully completed at least one (1) similar Project at or above the maximum PV Capacity proposed. Also, for Bids including energy storage, Bidder must have completed at least one (1) co-located PV and energy storage Project with at least 5 MWh of storage energy capacity.

- Bidder Financial Capability: Bidders must demonstrate financial strength and credit worthiness as a counter-party consistent with BTA obligations.

- Completeness: Bids must be complete, including all forms, attachments, and other required information, and must in all other respects also comply with RFP requirements.

- Unconditional: Bids are not conditioned upon any significant contingencies that are reasonably within the control of the Bidder, apart from any requested edits to the Form BTA.

To expedite the evaluation timeline, the threshold evaluation may, at OG&E's sole discretion, be conducted simultaneously with the qualitative and quantitative evaluations.

3.3 Non-Price (Qualitative) Evaluation Criteria (30% in aggregate)

OG&E will consider the following three (3) qualitative criteria in evaluating each Bid. These are not incorporated into the quantitative evaluation (see Section 3.4 of this RFP) of each Bid.

1. Contract Risks, Costs, and Benefits (10%)
2. Overall Project Characteristics and Development Risks (15%)
3. Community and Environmental Impacts (5%)

The qualitative criteria and sub-criteria are summarized in Table 4.

Table 4: Summary of Qualitative Evaluation Criteria

Criteria	Sub-Criteria	Maximum Points Available
Contract Risks, Costs, and Benefits (10%)	Firm Price	3
	Contract Assignment	1
	Form BTA Redline	6
Overall Project Characteristics and Development Risks (15%)	Capacity Security	4
	O&M Plan and Protection against Risks	3
	Critical Path Schedule, Site Control, and Bidder Experience	4
	Financing Capability	3
	Technology	1
Community and Environmental Impacts (5%)	Community Impacts	3
	Environmental Impacts	2
Total Points		**30**

3.3.1 Contract Risks, Costs, and Benefits (10%)

Contract risks, costs, and benefits will be assessed based on the extent to which pricing is firm and without dependencies or contingencies and/or the cost containment measures effectively limit cost risk for OG&E customers. Where non-firm elements are included in pricing, Bidders will be assessed on the rationale for such an inclusion and the extent to which it is the interest of OG&E customers.

For contract assignment or other obligation transfer of existing Permits, easements, leases, or other contracts, OG&E will consider the terms and conditions associated with such assignment. Where applicable, Bidders should provide an indication of such assignments as well as copies of the relevant contracts.

Additionally, Bids will be assessed on the extent to which the Bidder accepts all terms and conditions of the Form BTA. OG&E has a strong preference and expectation for no to minimal changes to the proposed terms in the Form BTA for Solar-only Projects and for avoiding the imposition of any unnecessary risks for Hybrid Projects.

3.3.2 Overall Project Characteristics and Development Risks (15%)

Each Project will be assessed for its technical characteristics, expected operational performance and safety over its lifetime, and the risks associated with its ability to achieve timely commercial operations as well as the capabilities of the Bidder to successfully develop and finance the Project.

For this criteria, OG&E will evaluate factors including:

- Capacity Security: OG&E will consider security of the Accredited Capacity credit for the project based on current SPP Planning Criteria and will also consider the potential for changes to SPP

Planning Criteria. Because Project in-service dates farther in the future expose the Project to more risk of SPP Planning Criteria changes, Projects with earlier in-service are expected to be favored on this sub-criterion, other factors equal. Bidders should provide their expected capacity accreditation for both summer and winter seasons according to SPP. Where such information is not available, Bidders should provide indications of their expected performance ratings for each required obligation period including data confirming the Project's designated operational performance. Bidders should also indicate expected degradation in Accredited Capacity qualification over time and a recommended augmentation schedule and associated costs as well as equipment warranties where applicable. To assess deliverability, Bidders should provide information regarding the Project's firm transmission rights and any deliverability assessments which have been performed for the Project.

- O&M Plan and Protection against Risks: Projects will be assessed on projected performance over their expected asset life. Projects with demonstrable longevity at consistent levels over time are preferred. Projects should provide an O&M plan, an assessment of the peak operational performance of their Project, an assessment of the ability of the Project to continue operation in extreme hot and cold weather temperatures, an assessment of the Project lifetime expectations (i.e., useful asset life), and an estimate of the reasonable capital investment (cost and timing) expected to maintain the Project in sound operational order over time. Additionally, an assessment and detailed description of the Project's expected performance during significant hail weather and ability/capabilities to mitigate PV panel damage during these extreme weather events will be considered. OG&E's review will consider the Project's impact to OG&E's overall resiliency to physical and cyber threats and vulnerabilities. Bidders should provide a risk mitigation plan which specifically addresses all measures and actions taken by the Bidder to minimize risk exposure to such threats and vulnerabilities. OG&E acknowledges that energy storage systems are a developing technology. Hybrid Projects shall not be unduly penalized for risks associated with the developing energy storage technology, provided that compliance with current utility and industry standards is demonstrated, and a mitigation plan for addressing risks is included with the Bid.

- Critical Path Schedule: OG&E will evaluate the critical path schedule submitted by the Bidder for overall credibility against industry standards and to ensure there is a high likelihood the Project can reach commercial operations as proposed. This review will include the risks of delays in securing the necessary Permits. This review will also include the risks of securing transmission interconnection and delivery capabilities. Bidders should identify any rights-of-way that need to be acquired for the construction of supporting facilities (transmission lines, etc.) and provide a plan and schedule for securing the rights-of-way. Preference on this sub-criterion will be given to Projects scheduled for earlier in-service dates.

- Site Control: Preferences will be given to Bidders with outright ownership of the proposed Site. Options to purchase will also be treated favorably as will binding letters of intent to sell from the current landowner(s). Long-term rights under leases or easements that ensure control of the land for all necessary uses, undisturbed access, exposure to solar rays, and flexibility for Project modifications will also be considered.

- Bidder Experience: Bidders are required to demonstrate experience and management capability to successfully develop and finance the Project. OG&E is particularly interested in Bidders that have demonstrated success in multiple projects of similar type, size, and technology and can demonstrate an ability to work together effectively to bring the Project to commercial operation in a timely fashion. In addition, OG&E values experience that Bidders can show in successfully developing Generation Facilities within the SPP footprint.

- Financing Capability: Bidders must demonstrate their ability to finance development of the Project so it can reach commercial operation and the soundness and documentation of their approaches to prepare the Project for ITC or PTC eligibility at the levels specified in the Bid. The financing plan should describe how the Project will be financed, including the sources and mechanisms for financing and distinctions in financing in different phases of the development process. Bidders should include the estimated construction costs as well as the financing costs for the project. Each Bidder's response must include the current status of its financing plan as well as details of the ITC or PTC assumed in the Bid.

- Technology: Bidders must provide information about specific technology(ies) proposed for the Project, including a description of the track record of the technology(ies) and associated equipment. Each Bidder should provide a detailed description and specifications for the proposed equipment. OG&E reserves the right to conduct further due diligence on the equipment. OG&E prefers Bids that demonstrate that the design and equipment proposed are technologically mature.

3.3.3 Community and Environmental Impacts (5%)

OG&E has a preference for Projects with a Site location in OG&E's service territory in Oklahoma or Arkansas. OG&E also values several other local and community factors. In particular, Bidders should provide the status of a Project stakeholder engagement plan related to development and permitting. That engagement plan should specifically address environmental impact, how communities or organizations will have an opportunity to participate in decisions about activities that may affect their environment and/or health, how their concerns will be considered in the decision-making process and how these communities are involved in workforce opportunities associated with the Project. Bidders should additionally include a summary of expected impacts on the local economy, which may include factors such as job creation for the OG&E customer base, use of local materials, tax benefits, or other benefits accruing to OG&E customers.

The environmental impact sub-criterion will include an assessment of the potential to reduce air emissions based on PV hourly electricity output data and expected performance degradation information provided by Bidders and validated by OG&E as well as roundtrip efficiency losses on energy storage use (for Hybrid Projects). Projects will also be assessed for ecological impacts from development of their Sites and the equipment used therein. As available, Bidders should include environmental impact statements for the proposed Projects.

3.4 Price (Quantitative) Evaluation Criteria (70%)

All Bids will be evaluated on price and operational performance factors in the quantitative evaluation through simulation of the impact of the Bid on the costs paid by OG&E's customers.

OG&E will evaluate all Bids based on the expected customer impact resulting from detailed simulation modeling utilizing scenarios and sensitivities similar to those described in the OG&E 2021 IRP. The analysis will account for the cost and dispatch constraints and characteristics of the Project's expected energy dispatch and/or curtailment of Generation Facilities in the SPP Integrated Marketplace under a range of potential market conditions. The Net Present Value of Customer Cost ("NPVCC") over a 30-year operating period for the Generation Facilities will be developed using a weighted combination of asset performance in the Base (40%), High Gas (25%), Low Gas (25%), and Energy Evolution (10%) cases. Detailed assumptions used within the model calculating NPVCC are available in the OG&E IRP referenced above.

4 General Terms and Conditions

4.1 Publicity

Any publicity giving reference to this RFP and any matters related thereto, whether in the form of press releases, brochures, photographic coverage, or verbal announcement, is prohibited and shall not be made without the specific written approval of OG&E.

4.2 Governing Law / Dispute Resolution / Arbitration

This RFP shall be governed by, interpreted under and construed and enforced in accordance with the laws of the State of Oklahoma, without regard to any conflict of laws principles thereof that would call for the application of the law of any other jurisdiction.

In the event of any dispute relating to this RFP, the parties shall first attempt to resolve the dispute via informal discussions including discussions between the parties' respective senior executives. If those efforts fail to resolve the dispute then the parties agree that they shall resolve any dispute relating to this RFP via binding arbitration to be conducted by a panel of three (3) arbitrators pursuant to the Commercial Arbitration Rules of the American Arbitration Association ("AAA") then in effect (the "Rules"), as amended herein. All such disputes shall be finally settled by binding arbitration in accordance with these provisions.

The place of arbitration shall be Oklahoma City, Oklahoma. The arbitration proceedings shall be held in the English language.

Time is of the essence for any arbitration under this RFP. As a result, the parties agree that unless they mutually agree to extend this deadline, the arbitration hearing shall take place within 150 days of filing and awards or decisions rendered within 180 days; provided that the arbitration panel may extend such deadlines in its sole reasonable discretion, and failure by the arbitrators to conclude the arbitration hearing or make such award or decision within the foregoing deadlines shall not invalidate such arbitration hearing, award or decision. The award of the arbitrators shall be accompanied by a reasoned award. The awards or decisions rendered via arbitration as provided in these provisions shall be final and binding upon the parties.

The parties hereby irrevocably submit to the in personam jurisdiction of the state and federal courts located in Oklahoma County, Oklahoma, and agree that any such court shall have sole and exclusive jurisdiction to enter all such orders as may be necessary or appropriate to enforce and/or to confirm any ruling or decision or any award rendered by the arbitration panel, including orders directing interim measures, interim awards, or Emergency Measures of Protection (as defined in the Rules) under the Rules.

By agreeing to arbitration, the parties do not intend to limit their ability to seek and obtain interim or emergency relief as provided in the Rules (including Emergency Measures of Protection) or deprive the courts identified in this RFP of their jurisdiction to enforce or confirm any interim or emergency relief granted under the Rules or issue any other order in aid of arbitration proceedings and the enforcement of any award. The arbitration panel shall have the authority to award damages for the failure of any party to respect orders directing emergency, temporary or preliminary relief issued in accordance with the Rules. The requirement to submit disputes to negotiation as discussed above shall not apply if, and to the extent, that there exists an imminent threat of irreparable injury to a party and that party seeks and obtains interim or emergency relief in accordance with the Rules in response to such threat.

Except as may be required by law, neither a party nor the arbitration panel may disclose the existence, content or results of any arbitration hereunder without the prior written consent of the parties. In addition, all negotiations, discussions, offers, counteroffers, data exchanges, proposed agreements and other communications between the parties in connection with negotiations or other Dispute resolution procedures shall be Confidential Information. Without limiting the preceding sentence, all such communications shall be deemed to be in the context of attempting to settle a disputed claim and shall not be construed as an admission or agreement as to the liability of any party, nor be admitted in evidence in any related arbitration, litigation or other adversary proceeding.

The arbitration panel shall award to the prevailing party, if any, as determined by the arbitration panel all of its reasonable attorneys' fees and costs and all of its "costs and fees". For purposes of this section "costs and fees" means all reasonable pre-award expenses of the arbitration, including the arbitration panel's fees, administrative fees, travel expenses, out-of-pocket expenses such as copying and telephone, court costs, witness fees and attorneys' fees.

Direct Exhibit KMR-4

2022 OG&E EXISTING CAPACITY RFP
UPDATED 10/21/2022

OKLAHOMA GAS AND ELECTRIC COMPANY

2022 EXISTING CAPACITY REQUEST FOR PROPOSALS

Direct Exhibit KMR-4

2022 OG&E EXISTING CAPACITY RFP
UPDATED 10/21/2022

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Direct Exhibit KMR-4

Definitions

Except in those certain instances where the context states another meaning, the following terms, when used in this Request for Proposals document, shall have the meanings below. These Request for Proposals definitions do not supplant the definitions used in the Form Asset Purchase Agreement attached to this Request for Proposals.

"Accredited Capacity" means capacity that meets the resource adequacy requirements as determined in accordance with SPP Planning Criteria.

"APA" means an Asset Purchase Agreement to acquire all property and rights and certain project assets associated with a project for a Generation Facility.

"Bid" means one offer made in response to the Request for Proposals. A Bid may consist of one (1) or multiple Projects at a single Site. The Projects in a Bid may consist of a single Generation Facility technology or multiple Generation Facility technologies.

"Bidder" means a single legal entity submitting one or more offers in response to the Request for Proposals.

"Capacity" means the quantity of electric power produced by a Generation Facility at a point in time, as measured in kilowatts or megawatts in alternating current ("AC").

"Closing Date" means the date on which the definition of "Closing" in the APA is satisfied.

"Commercial Operation" means the status of a Generation Facility that has commenced producing electrical energy or Capacity for sale, excluding electrical energy produced during trial or test periods.

"Commission" when used in the singular means the Oklahoma Corporation Commission.

"Commissions" means collectively the Oklahoma Corporation Commission and the Arkansas Public Service Commission.

"Energy Storage" means a Generation Facility that can store electrical energy from an electricity transmission grid for up to several days and can then send the stored energy back to the same transmission grid without greater than 15% loss of energy content.

"Generation Facility" means an existing resource capable of supplying electric power along with all existing associated Balance of Plant, components, accessories, and instruments, as well as all equipment utilized to interconnect to SPP.

"Integrated Marketplace" means SPP's Energy and Operating Reserve Markets and the Transmission Congestion Rights Markets.

"IRP" unless otherwise noted, shall refer to OG&E's 2021 Integrated Resource Plan found here: https://ogeenergy.gcs-web.com/static-files/6fd094d7-f7d6-4dae-8ec9-7482d0071a34.

"Majority Ownership" means voting control of more than 50 percent of all ownership interests in a Project.

"Minority Ownership" means ownership interests in a Project, but with 50 percent or lower voting control of all ownership interests.

"Permits" means all permits, exemptions, variances, registrations, licenses, certifications, authorizations, inspections, approvals, and consents required from any governmental authorities.

"Project" means a Generation Facility with a completed interconnection agreement to the SPP transmission network and that has achieved Commercial Operation as of the Bid submission date. Projects eligible for this Request for Proposals must have a primary fuel type other than coal or fuel oil.

"Proposed Operating Period" means the length of time after the Closing Date during which the Project is proposed to continue producing Capacity for OG&E. For the purpose of Bid evaluation, the Proposed Operating Period can be of any duration.

"Site" means parcel(s) of real property on which the Project is located having a single interconnection position.

"SPP" means the Southwest Power Pool, the nonprofit regional transmission operator providing transmission services to OG&E and other utilities across Midwestern and Southwestern states.

1 2022 OG&E Existing Capacity Request for Proposals Overview

This document constitutes a Request for Proposals ("RFP") from qualified parties to supply Generation Facility(ies) to Oklahoma Gas and Electric ("OG&E" or "the Company"), a subsidiary of OGE Energy Corp. This RFP will be administered in a fair, just, and reasonable manner consistent with Commission rules for competitive procurements Oklahoma Administrative Code ("OAC") 165:35-34 ("Commission Rules"). All communications will be governed by the process discussed in Section 2.1 to ensure fair and equitable treatment for all Bidders.

A high-level summary of this RFP is provided in Table 1.

Table 1: RFP Summary

Attribute	**Requirement**
Minimum Capacity	Minimum of 50 megawatts ("MW") of nameplate Capacity per Bid. Bid may represent multiple Generation Facilities at a Site to sum to the minimum capacity requirement.
Maximum Capacity	Maximum of 1,500 MW of nameplate Capacity per Bid. Multiple Generation Facilities at a Site cannot exceed the maximum Capacity.
Closing Date	OG&E requires transaction Closing Dates between January 1, 2023, and May 1, 2025, with a preference for earlier dates within that range.
Fuel Type	Projects that utilize coal or fuel oil as their primary fuels are not eligible in this RFP. All other fuel types for Projects are eligible.
Contract Type	APA
Ownership	Bids can provide OG&E with Minority Ownership or Majority Ownership, up to and including complete ownership.
Location	Within SPP with preference for OG&E's service territory.

A Technical Conference will be held as part of the process to finalize the RFP. Bidders are encouraged but not required to attend the Technical Conference to provide comments and/or questions on the draft RFP. Comments and feedback on the draft RFP are also encouraged to be submitted to OG&E via email in advance of the Technical Conference. All feedback received will be considered in establishing the final RFP. The Technical Conference will be held from 10:30 AM to 12:00 PM Central Prevailing Time ("CPT") on July 12, 2022. Interested parties may request meeting details by sending an email to ExistingCap2022RFPComm@oge.com. OG&E will respond with meeting call-in information to requests received by July 11, 2022. Meeting materials displayed by OG&E at the Technical Conference will be posted on-line after the conference.

The schedule for this RFP is provided in Table 2; OG&E reserves the right to change the schedule at any time and at its sole discretion.

Table 2: Schedule for OG&E Existing Capacity RFP

Item	**Date**
Draft RFP Issue Date	June 21, 2022
Draft RFP Technical Conference	July 12, 2022
RFP Final Issue Date (expected)	July 21, 2022
Questions Deadline	August 16, 2022
Notice of Intent to Bid Due Date	August 19, 2022

Item	Date
Bid Due Date	August 25, 2022
Bid Opening Day[1]	August 26, 2022
Selection of Projects for Negotiation (expected)	October 26, 2022
Complete Negotiations (expected)	December 2, 2022

The terms and conditions of this RFP may, at any time, be changed, postponed, withdrawn, and/or canceled, including any requirement, term, or condition of this RFP, any and all of which shall be without any liability to OG&E. All changes to the schedule will be posted under "Current Opportunities" at https://www.oge.com/wps/portal/ord/who-we-are/supplierscontractors ("RFP Website"). OG&E will endeavor to notify all participants who have filed a timely Notice of Intent to Bid of any such cancellations, modifications, or schedule changes that are made prior to the Bid due date. However, it is Bidder's responsibility to monitor the RFP Website. OG&E will have no responsibility for failing to notify Bidders of any changes, postponements, withdrawals, and/or cancellations.

2 RFP Process and Requirements

This section outlines the communication requirements and Bidder requirements related to this RFP.

2.1 Communication Requirements

All communications regarding the RFP, other than Bid submissions, should be directed to: ExistingCap2022RFPComm@oge.com. Any unsolicited direct contact with employees or representatives of OG&E RFP evaluation team concerning this RFP is not allowed and may constitute grounds for disqualification. See Section 2.2 for instructions regarding Bid submission.

2.1.1 Questions

2.1.1.1 Questions to OG&E

Prospective Bidders are encouraged to submit questions about this RFP on or before the deadline for submission of questions listed in the schedule. All questions, and responses to those questions, will be posted to the RFP Website within five (5) business days after receipt of the question to the best of OG&E's capabilities. Questions submitted will not be treated as confidential, and the question and answer may be shared for the benefit of other interested parties via the RFP Website. However, Bidder names will not be included in question and answer material posted to the RFP Website. OG&E's objective in posting these questions and answers is to ensure that all Bidders have equal access to information that may be potentially relevant to their Bids.

Should OG&E determine it is necessary to provide confidential information to provide necessary information for Bidders, then Bidders wishing to receive responses to such questions will be required to sign the Mutual Nondisclosure Agreement (in Appendix B) and receive a counter-signed copy of that

[1] In compliance with the Commission Rules, Bids shall be opened virtually and participants, as indicated in section 165:35-34-3 (d) (1) (B) of the Commission Rules, may attend and monitor the opening of the Bids. Attendees will be required to register in advance.

agreement from OG&E before receiving the OG&E question response. The determination of whether confidential treatment is required will solely be at the discretion of OG&E.

2.1.1.2 Questions to Bidders

Following the submission of Bids, OG&E may request clarification and additional information from Bidders at any time during the evaluation process. Responses shall be considered part of the Bid and treated in accordance with Section 2.2.7. Bidders that do not respond promptly to such information requests or do not provide adequate information may be eliminated from further consideration or have the information in their Bid(s) modified by OG&E to produce a reasonable and appropriate evaluation. Bidders may not alter their Bid(s) in response to requests for additional information.

2.1.2 Notice of Intent to Bid

Notice of Intent to Bid ("NOI") is mandatory for Bids to be accepted. Submittal of NOI does not bind Bidders to submit a Bid; however, submittal of a Bid does require that a NOI has been submitted by the NOI due date. Bidders must submit a NOI for each Bid planned to be made by midnight, CPT on the date prescribed on the RFP schedule provided in Table 2 in Section 1. The NOI form is included as Appendix A and is to be submitted via email to ExistingCap2022RFPComm@oge.com. Receipt of the NOI will be confirmed via email from OG&E to the Bidders. After receipt of the NOI, Bidders will be provided an anonymous identification code for the Bidder and each Site to include in their Bid Summary Form(s) which will be shared with authorized parties at the Opening Day for Bids. This identification code should also be used to name all Bid files submitted as detailed below.

The NOI Form is found in Appendix A. There is no fee payable to OG&E for submitting NOI(s) or Bid(s) for this RFP. However, Bidders are solely responsible for all costs they incur in preparation of their Bid(s) and participation in this RFP process.

2.2 Bid Submittal Requirements

This section outlines the content and form requirements for all Bids submitted in response to this RFP. Bids that do not all include the information requested in this section will be ineligible for further evaluation unless the information requested is not applicable or relevant to a given Bid.

2.2.1 Mutual Nondisclosure Agreement

Each Bidder is required to submit a signed Mutual Nondisclosure Agreement (Appendix B) with its Bid(s). A single Mutual Nondisclosure Agreement from a Bidder will cover all potential Bids from that Bidder. OG&E will return by email a counter-signed copy of each appropriately completed Mutual Nondisclosure Agreement to the Bidder within five (5) business days. Bidders who completed a Mutual Nondisclosure Agreement as part of the question and answer part of this RFP process (per Section 2.1.1.1) should submit that signed agreement with their Bid(s)

2.2.2 Bid Summary Form

Each Bidder must include a Bid Summary Form (Appendix C) providing the following information about the Bid(s): Offered Nameplate Capacity, State (Location) and Date Capacity is Available.

Bidders should utilize the identification code(s) from the NOI confirmation in the appropriate fields on the Bid Summary Form and should further name the file(s) submitted to OG&E using the naming conventions that will be provided in the NOI confirmation. Appendix C will be the only file shared with attendees at the Bid Opening.

2.2.3 Bid Narrative

Each Bid must include a written discussion submitted as an Adobe PDF document that includes responses for each of the following topics. The narrative topics should be organized under the following 11 headings, with each heading beginning on a separate page. The narrative discussion should be as concise as feasible while being thorough.

If multiple Bids are submitted for a single Site or Project, with each Bid using the same individual Generation Facility technologies or the same combination of Generation Facility technologies, Bidders can either submit a single narrative covering all Bids or separate narratives for each Bid. This option is offered to reduce administrative burdens on Bidders, and OG&E will not penalize, or reward Bidders based on the number of narrative files they submit.

1. Summary of Bid, including overview of technical specifications.
    - This section should include a high-level discussion of the Generation Facility technology(ies) including a description of the equipment (e.g., prime mover, primary and back-up fuels (if any), balance of system), its performance and maintenance history, all major operating agreements and warranties, its remaining useful life and Proposed Operating Period, and any unique features associated with the Project design as well as a description of Site control. If the Proposed Operating Period is less than 30 years from the Closing Date, include a description of any potential actions that would enable the Generation Facility to operate up to 30 years from the Closing Date.
    - Please limit the summary to three (3) pages.

2. Operations and Maintenance ("O&M") Plan.
    - In the plan write-up, include a brief discussion and separately provide copies of all O&M agreements and other material, existing agreements to be assumed in full or in part by OG&E or retained by the Bidder if OG&E is not being offered Majority Ownership. Services provided under such agreements, including any limitations on the operations of Project equipment should be clearly specified. Irrespective of whether O&M agreements will be assumed by OG&E, summarize O&M practices including historic and projected future annual and periodic ongoing expenditures[2] required to keep the Project in good working order (for the Proposed Operating Period) consistent with prudent utility practices. Also, describe any major maintenance of the Project that has occurred in the past five (5) years and that is planned before the Closing Date. Provide tables with the service and outage history

[2] Because Bidders will include quantitative information on past and expected future O&M costs in Forms H and I of the bid attribute forms, this summary should be narrative in nature and does not need to repeat detailed data provided with forms.

for the Project. Also, include safety information for the Project consistent with the types of information requested for the Bidder's other Generation Facilities in item #10 below.

3. Risk Mitigation Plan
   - Provide a summary including mitigating risks posed by natural disaster, extreme weather, physical threats and cyber threats and vulnerabilities as well as the hazards from the primary and back-up fuel supply and other routine operational aspects of the Project.

4. Ownership Structure.
   - Include a detailed discussion of the Project's ownership, identifying all current owners of any form of Project equity and their extent of voting control and characterizing all current debt instruments and any other credit support associated with the Project.
   - Provide copies of all relevant debt agreements pertaining to the Project.
   - If Bidder is offering less than full equity ownership in the Project, describe the extent of ownership and operational control being offered to OG&E and identify other owners and their expected roles in Project operations.
   - If there is an existing Generation Facility(ies) at the Site that will not be part of the Project submitted in response to this RFP, describe such Generation Facility(ies), its current and planned future ownership, and, as applicable, how it will be contractually separated from the Project.
   - If Bidder is relying on a guarantor for credit support, the summary should describe the corporate relationship between Bidder and guarantor, as well as a statement regarding the proposed guarantor's willingness to provide a guarantee acceptable to OG&E.

5. Impact on Local Economic Conditions.
   - Summarize how local stakeholders have been, and will continue to be, engaged in the Project. Indicate historic and expected impacts of the Project on the local economy within OG&E service territories in Oklahoma and/or Arkansas. Factors which may be considered include use of local materials and other resources including fuels, use of local labor and subcontractor firms and other sources of jobs for the OG&E customer base, tax benefits, or other benefits accruing to OG&E customers. Please focus on future benefits to local communities over the entire Proposed Operating Period.

6. Impact on Environmental Conditions
   - Describe the environmental effects of Project operation (including fuel delivery and use) on wetlands, terrestrial environment (wildlife, including avian protection), aquatic environment (including fish and aquatic organisms), threatened and endangered species protection, agricultural areas, corridors needed to connect to the transmission grid, state-designated scenic byways, visual landscape and visibility impacts, archaeological and historical sites, landmarks and sensitive areas, noise

impacts, transportation impacts including Federal Aviation Administration impacts, and any other identified impact.

- Discuss air permitting (if applicable) including equipment emissions rates, air permit limits, status of air permit and necessary emissions equipment needed to meet permitting limits.
- Provide copies of environmental impact statements for the Project.

7. Site, Permit, and Fuel Delivery Descriptions, including operational permits, land cost and Site control status for all necessary uses, and undisturbed access.
    - Please include copies of pertinent land lease or other Site control agreements with the submission. If the Bidder has neither ownership of the Site nor Site control for the entire Proposed Operating Period, include a description of how Site control will be extended for that duration.
    - Include a map showing the location of all major Generation Facility equipment within the Site and the point of interconnection to SPP. For the point of interconnection, label with a name such as an existing substation or switchyard.
    - Also describe all licenses and Permits required to operate the Project and the status of any required renewals of licenses and Permits.
    - Include a discussion of zoning issues and existing and planned land uses in all directions surrounding the Site.
    - As pertinent, include a description of the fuel delivery plan and copies of all agreements related to delivery and use of primary and back-up fuels.

8. Transition Schedule.
    - Please clearly specify the expected Closing Date for OG&E to acquire the Project or an ownership stake therein.
    - Provide a detailed schedule with critical path milestones for the Project that includes activities from the period of selection as a winning Bidder to the Closing Date. Please make the schedule consistent with major activities delineated in the Form APA, such as Pre-Closing Filings identified in Article IV, to the extent feasible.

9. Project Organization and Management. Please include the following in this section:
    - Provide an organizational chart for the Project that identifies the management structure and responsibilities. That chart or another chart should include the key management personnel, titles, and lines of responsibility or reporting requirements for the Project team. If the Bidder will be retaining Majority Ownership of the Project, also describe if and how the organization chart will change after the Closing Date.
    - For each of the participating organizations, provide brief statements listing specific experience of the firm.
    - Document the contractual relationship between the Bidder organization and all additional participants or vendors. Indicate the status of any arrangements between the Bidder and vendors and any bankruptcies of the Bidder or vendors that have occurred in the past five (5) years.

- Provide resumes of the important management and support staff dedicated to the Project and identify how long they have worked on the Project.

10. Operational and Ownership Experience for Generation Facilities. Bidders are required to demonstrate experience and capability to successfully operate and maintain the Project until the Closing Date and to transfer the Project or an ownership stake therein in full working order to OG&E on that date. If the Bidder will be retaining Majority Ownership of the Project after the Closing Date, it should describe its experiences working as an equity partner in the operation of similar Generation Facilities.
    - Provide profiles of at least one (1) and no more than three (3) similar, operational Generation Facilities in which the Bidder has been involved. As feasible, OG&E prefers profiles of Generation Facilities that have an ownership structure similar to what is being proposed by Bidder for OG&E. Include the following information as part of each profile:
        - Name of the Generation Facility
        - Location of the Generation Facility
        - Generation Facility nameplate Capacity, technology(ies), and fuel(s)
        - Purchasing utility or other entity
        - Bidder equity ownership share (if retained)
        - Commercial operation date
        - Fuel acquisition and management summary
        - Average capacity factor of the Generation Facility over its entire term of operation
        - Average availability factor of the Generation Facility over its entire term of operation
        - Bidder's role
        - Any environmental violations
    - Describe experience within the SPP Integrated Marketplace that is relevant to this RFP.
    - Provide copies of report material related to safety of operations, including reports on reportable injuries; instances of accidents, injuries, or fatalities; lost workday injuries; loss of operations due to safety issues; etc. at the Project. Also, summarize relevant safety information from other Generation Facilities currently owned or maintained by the Bidder.
    - Describe Bidder's commitment to safety of operations including any operating practices designed to encourage safety commitments.

11. Brief Narrative Summary of any Changes Sought to Form APA. Bidders should provide a brief narrative explanation of and rationale for changes sought to the APA. This is in addition to the redline mark-up of the Form APA.

To maintain confidentiality of the Bids, Bidders are asked to label their files with the identification code provided in response to the NOI, and the files should be named consistently with the conventions established in the Bid Summary Form. This same naming convention should apply to the appendix forms

submitted. No individual file submitted should be larger than 10 MB. If multiple narrative files are submitted for a Bid, please separate the files into Volume I, Volume II, etc. to conform to the maximum file size.

2.2.4 Bid Certification and Attribute Forms

Each Bidder must submit a Certification and Authorization Form available in Appendix D. Bidder can submit a single Appendix D file identifying all Bids it is offering.

Bidders must complete and submit a set of Microsoft Excel ("MS Excel") Bid Attribute Forms available in Appendix E and listed in Table 3. These forms will contain essential information about each Bid, and a separate set of forms and related information must be submitted with each Bid.

Table 3: Bid Attribute Forms

Form ID	Form Title
Form A	Bidder Contact Information
Form B	Project Description
Form C	Generation Facility Technical Description
Form D	SPP Capacity Accreditation
Form E	Historic Monthly Electricity Production
Form F	Expected Monthly Electricity Production
Form G	Operational Information: Historic and Expected Availability Profile
Form H	Historic Annual Data for Cost, Performance, and Permitting
Form I	Expected Annual Data for Cost, Performance, and Permitting
Form J	Historic Monthly Fuel Consumption (if applicable)
Form K	Fuel Plan (if applicable)
Form L	Environmental Impact: Historic Air Emissions
Form M	Environmental Impact: Expected Air Emissions Rates
Form N	Ownership Information
Form O	Bid Pricing
Form P	Summer and Winter Historical EFORd[3]

To maintain confidentiality of the Bids, Bidders are asked to label their files with the identification code provided in response to the NOI and the Bid files should be named consistently with the conventions established in the Bid Summary Form.

2.2.5 Additional Required Attachments to Bids

In addition to the Bid narrative and all forms specified in Appendices A through F, please provide the information described in this section. Bidders should use the identification code provided in response to the NOI along with "Attachment" for each item submitted.

i. A copy of Bidder's completed SPP transmission interconnection agreement (if applicable).

[3] See Section 3.3.2 of this RFP for more information on EFORd.

ii. MS Excel spreadsheet with hourly output of electrical energy (in megawatt-hours ["MWh"]) from the Project for the most recent 12-month period. If the Project achieved Commercial Operation within the past year, provide hourly electricity output since Commercial Operation. Please denote periods of planned and unplanned maintenance on a tab of the spreadsheet.

iii. If applicable, reactive power capability curve and an indication of maximum reactive power productive and absorptive capability (include as MS Excel attachment).

iv. Audited financial statements for the last three (3) years for Bidder and guarantor (if applicable). If audited financial statements are not available, provide unaudited financial statements with Chief Financial Officer ("CFO") attestation. If financial statements are consolidated, provide stand-alone financial statements with CFO attestation for Bidder and any guarantor.

v. Rating reports from the S&P, Moody's, or Fitch agencies for prior 36 months as attachments.

2.2.6 Redline of Form APA

A model Form APA is attached in Appendix F. Bidders are responsible for reviewing all terms and conditions specified in the APA and taking their terms and conditions into consideration in developing their Bids. While Bidders are expected to provide a reasonable redline related to technical aspects and the proposed Project ownership stake and structure of their Bid(s), OG&E has a strong preference and expectation for no to minimal other changes to the proposed commercial terms and conditions in the Form APA.

The file naming conventions used for the APA redline should follow the same conventions used for other forms. Bidders can provide a single APA redline covering all of their Bids, unless their redline would differ based on the characteristics (e.g., Generation Facility technology) of their Bids.

2.2.7 RFP Submission

All Bid submissions are required to be sent electronically to ExistingCap2022RFPBids@oge.com: ***Please note this is a separate email address from that used for other RFP communications.*** OG&E will not accept paper copies of Bids, nor Bids delivered other than through the provided Bid email address. After Bids are opened on OG&E's Bid Opening Day, Bidders will receive a confirmation of receipt from OG&E's bid email address. Bidders should contact OG&E's bid email if a confirmation is not received within one (1) business day after OG&E's Bid Opening Day.

Bidder will bear the risk of any failure of Bidder to submit all required information, including forms and attachments, by the Bid due date, as required by this RFP. Bids not delivered in accordance with the requirements of this RFP are untimely and may be eliminated from consideration in this RFP. Bids that do not include all information, forms, and attachments required by this RFP may be considered non-conforming and rejected on that basis. Bids submitted in response to this RFP will become the property of OG&E. At the conclusion of the process, all Bids will either be archived or destroyed.

2.2.8 Confidentiality of Response

Bids submitted in response to this RFP, and any contracts resulting from this RFP, will be treated as confidential. Nonetheless, Bidders should be aware that information received in response to the RFP may

be subject to review by applicable regulatory agencies. Information submitted in response to the RFP may become subject to federal or state laws pertaining to public access to information as a result of any reviews conducted by the aforementioned agencies. As such, Bidders should clearly designate all sensitive information as "Confidential." Except as required by regulatory reviews, OG&E will use reasonable efforts to avoid disclosure of such confidential information to persons other than those involved with the evaluation, selection, and any subsequent negotiations.

2.2.9 Regulatory Bid Opening Summary

The Bid Summary Form will be used during virtual Bid Opening, which is scheduled for August 26, 2022. This form will be viewable to the Commission Staff, Attorney General's Office representative, and non-competitive stakeholders in attendance at the Bid Opening.

As discussed in Section 2.2.2, the Bid Summary Form must contain information about the Bid(s) submitted that will be used for tracking and identifying the Bid(s) throughout the evaluation process. To maintain confidentiality, all Bidders submitting the required NOI will be provided a unique identification code or codes for use on their Bid Summary Form(s). It is the Bidder's responsibility to utilize this/these identification code(s) on the Bid Summary Form(s). OG&E will not be responsible for any release of information regarding Bids due to Bidder failure to utilize the identification code(s) provided.

2.3 Validity of Bids

Bids shall remain valid for the entire evaluation period and, should OG&E elect to seek pre-approval from the Commission or Commissions, through the entire period of proceedings of the Commission or Commissions. During these periods, Bids shall be considered as irrevocable and may not be modified, except as agreed upon in mutual negotiations between the Bidder and OG&E in the post evaluation period.

2.4 Bidder Selection

All Bids will be evaluated as per the Bid evaluation process described in Section 3. Each Bidder selected to move on to negotiations will be required to provide comprehensive information regarding its selected Project(s). Examples of such documentation may include real property inventories, additional details on vendor relationships and current staffing, further documentation of Permit renewals and other renewals required prior to the Closing Date, insurance information, ownership and financing data, and internal and external assessments of the performance of individual Generation Facilities at the Site.

2.5 Limitation of Liability

Neither this RFP nor any other aspect of this solicitation shall create an agency, partnership, joint venture, or co-tenancy relationship among the members of the OG&E evaluation team or any other entities involved in the development or administration of this RFP, nor any other relationship or liability beyond those (if any) explicitly adopted in writing and executed by authorized representatives of OG&E and/or the appropriate entity. Neither OG&E nor any other persons or entities involved in the RFP administration and evaluation shall be liable for any act or omission. Neither this RFP nor any other aspect of this solicitation creates or is intended to create third-party beneficiaries hereunder. In no event will OG&E or participating RFP entities be liable to any person for special, incidental, punitive, exemplary, indirect, or consequential damages or lost profits, whether by statute, in tort or contract or otherwise.

3 Bid Evaluation

3.1 Introduction

The OG&E RFP evaluation team and its authorized agents will evaluate the Bids to determine which, if any, have the potential to provide the most economical, reliable, and viable alternatives for OG&E's customers. OG&E will use an evaluation process with three (3) components including a threshold evaluation, a non-price (qualitative) evaluation, and a price (quantitative) evaluation. Only those Bids found to have satisfied the threshold RFP requirements will be evaluated based on the identified qualitative and quantitative criteria. OG&E may select the top-ranking Bid based on the combined qualitative and quantitative score from among Bids received or may select multiple bids to comprise a portfolio able to satisfy OG&E's need. Qualitative and quantitative factors will be considered simultaneously. The total weighting of quantitative factors will be 70%, and the total weighting of qualitative factors will be 30%.

3.2 Threshold Evaluation

OG&E will review each Bid to determine whether it satisfies the threshold criteria including compliance, completeness, operational and interconnection status, Site control, and Bidder financial capability. The completeness review will ensure that the Bid follows the guidelines set forth in the RFP, includes all information required for a more thorough review, and is provided in the required format and sequence.

At OG&E's sole discretion, any Bid deemed materially incomplete, non-compliant, or technically or financially deficient may be excluded from further consideration. OG&E reserves the right to request that any Bidder clarify questions or provide additional information regarding that Bidder's Bid(s) to resolve deficiencies identified in the threshold evaluation.

The criteria to be considered in the threshold evaluation are listed below:

- Capacity: OG&E will consider each of the following capacity requirements:
  - Minimum: 50 MW of nameplate Capacity per Bid
  - Maximum: 1,500 MW of nameplate Capacity per Bid

- Closing Date for OG&E: Capacity must be available to satisfy OG&E's resource adequacy obligations starting between January 1, 2023, and May 1, 2025.

- Contract Type: OG&E will consider only APA Bids for the transfer of ownership of existing Generation Facility(ies) to OG&E. Such Generation Facilities can be located at a Site with other existing Generation Facility(ies).

- Product Type: OG&E will consider Generation Facilities that:
  - Are capable of being accredited as capacity according to SPP Planning Criteria Section 7.
  - Utilize primary fuels other than coal or fuel oil. Generation Facilities that use coal or fuel oil as their primary fuel are not eligible in this RFP.

- Location: Projects must be interconnected with the SPP transmission system.

- Transmission Interconnection Status: The Project must have a completed interconnection agreement with SPP effective prior to the Bid submission date or must be an Existing Generating Facility within SPP as defined in SPP Open Access Transmission Tariff Attachment V[4].

- Operational Status: The Project must reach Commercial Operation before the Bid submission date.

- Property Site Control: Bidders must demonstrate Site control through ownership, executed land leases, easements, rights-of-way, and/or other instruments of conveyance and that such control extends or can be readily extended for the entire Proposed Operating Period.

- Bidder Financial Capability: Bidders must demonstrate financial strength and credit worthiness as a counter-party consistent with their proposed ownership obligations up to and following the Closing Date.

- Completeness: Bids must be complete, including all forms, attachments, and other required information, and must in all other respects also comply with RFP requirements.

- Unconditional: Bids are not conditioned upon any significant contingencies that are reasonably within the control of the Bidder, apart from any requested edits to the Form APA

To expedite the evaluation timeline, the threshold evaluation may, at OG&E's sole discretion, be conducted simultaneously with the qualitative and quantitative evaluations.

3.3 Non-Price (Qualitative) Evaluation Criteria (30% in aggregate)

OG&E will consider the following three (3) qualitative criteria in evaluating each Bid. These are not incorporated into the quantitative evaluation (see Section 3.4 of this RFP) of each Bid.

1. Contract Risks, Costs, and Benefits (8%)
2. Overall Project Characteristics and Risks (17%)
3. Community and Environmental Impacts (5%)

The qualitative criteria and sub-criteria are summarized in Table 4.

Table 4: Summary of Qualitative Evaluation Criteria

Criteria	Sub-Criteria	Maximum Points Available
Contract Risks, Costs, and Benefits (8%)	Firm Price	2
	Contract Assignment	2
	Form APA Redline	4

[4] Existing Generating Facility is defined on page 10 of SPP Open Access Transmission Tariff Attachment V. https://opsportal.spp.org/documents/studies/SPP%20Tariff%20Attachment%20V%20Generator%20Interconnection%20Procedures.pdf

Criteria	Sub-Criteria	Maximum Points Available
Overall Project Characteristics and Risks (17%)	Capacity Security	6
	O&M and Protection against Risks	3
	Closing Date, Transition Schedule, and Site Control	3
	Bidder Experience and Financing Capability	3
	Fuel Delivery	2
Community and Environmental Impacts (5%)	Community Impacts	3
	Environmental Impacts	2
	Total Points	**30**

3.3.1 Contract Risks, Costs, and Benefits (8%)

Contract risks, costs, and benefits will be assessed based on the extent to which pricing is firm and without major dependencies or contingencies and/or the cost containment measures effectively limit cost risk for OG&E customers over the Proposed Operating Period, with preference for longer periods.

For contract assignment or other obligation transfer of existing Permits, easements, leases, fuel supply agreements, O&M agreements, warranties, or other contracts, OG&E will consider the terms and conditions associated with such assignment from copies of the relevant contracts. Assignment provisions will be assessed in the context of the proposed Project ownership stake being offered to OG&E and the Proposed Operating Period.

Additionally, Bids will be assessed on the extent to which the Bidder accepts all terms and conditions of the Form APA. OG&E has a strong preference and expectation for no to minimal changes to the proposed terms in the Form APA apart from those applicable to the specific technical characteristics of the Project and the OG&E ownership stake and structure being proposed by the Bidder.

3.3.2 Overall Project Characteristics and Risks (17%)

Each Project will be assessed for its technical and Capacity characteristics, historic and expected O&M and safety over its lifetime, and the risks associated with its fuel supply and continued operation as well as the surety of long-term Site control, how soon OG&E can acquire the Project, and the capabilities of the Bidder to successfully continue to operate and maintain the Project until the Closing Date and partner with OG&E if it will retain an ownership stake in the Project.

For this criterion, OG&E will evaluate factors including:

- Capacity Security: OG&E will consider security of the Accredited Capacity credit for the Project based on current SPP Planning Criteria and will also consider the potential for changes to SPP Planning Criteria. Bidders should provide their capacity accreditation for both summer and winter seasons according to SPP. Additionally, Bidders should provide the most recent five (5) years of historical Equivalent Forced Outage Rate demand ("EFORd") by season (Summer Season – June 1st through September 30th and Winter Season – December 1st through March 31st). To inform OG&E's assessment of long-term accreditation, Bidders should also indicate expected degradation in Accredited Capacity qualification over time and a recommended augmentation

schedule and associated costs as well as equipment warranties where applicable. Bidders should provide information regarding the type of interconnection service and SPP deliverability assessments which have been performed for the Project.

- O&M and Protection against Risks: Projects will be assessed on projected performance over the Proposed Operating Period, including the ability of the Project to continue operation in extreme hot and cold weather temperatures, during hail storms and other extreme weather events, an assessment of the Project lifetime expectations (i.e., useful asset life). Projects with demonstrable longevity at consistent levels over time are preferred as are Projects with longer Proposed Operating Periods. OG&E's review will consider the Project's impact to OG&E's overall resiliency to physical and cyber threats and vulnerabilities.

- Closing Date, Transition Schedule, and Site Control: OG&E prefers Projects with a Closing Date earlier within its January 1, 2023, to May 1, 2025, acquisition range for this RFP. Bidders must also include a detailed and realistic schedule to transition the proposed ownership stake and any associated obligations in the Project to OG&E by the Closing Date. Preferences will be given to Bidders with outright ownership of the proposed Site or that have long-term rights under leases or easements that ensure control of the land for all necessary uses, undisturbed access, rights to receive adequate fuel supply, and flexibility for Project modifications for the Proposed Operating Period. If land use and associated rights at the Site do not yet extend for that entire period, the demonstrated surety with which the Bidder can obtain extensions in those rights will be assessed.

- Bidder Experience and Financing Capability: Bidders are required to demonstrate experience, organizational structure, and management capability to successfully operate and maintain the Project until the Closing Date, including meeting all requirements of SPP and all governmental authorities having jurisdiction. If OG&E is not acquiring full ownership of the Project at the Closing Date, Bidders will also be assessed on their demonstrated ability to work as a long-term equity partner in the operation of similar Generation Facilities. Bidders must also demonstrate their ability to finance operation of the Project for all periods through which they will retain any ownership stake.

- Fuel Delivery: For Generation Facilities requiring a fuel, OG&E prefers Bids demonstrating a secure and reliable fuel supply, including for any back-up fuels to be used. Preferences will be given for Projects able to demonstrate reliable, secure fuel supply for longer periods. For Generation Facilities that do not require a fuel such as those powered by solar or wind, OG&E expects to evaluate this sub-criterion as if there are no fuel delivery risks.

3.3.3 Community and Environmental Impacts (5%)

OG&E has a preference for Projects with a Site location in OG&E's service territory in Oklahoma or Arkansas. OG&E also values several other local and community factors. Bidders will be assessed on expected impacts on the local economy over the Proposed Operating Period, which may include factors such as jobs for the OG&E customer base, use of local materials and subcontractor firms, tax benefits, or other benefits accruing to OG&E customers. Benefits of longer duration are preferred. Information on how the Project has provided tangible local benefits to date will help substantiate descriptions of expected

future benefits to local areas. Bidders should also describe how the environmental, health, and safety interests of communities near the Project have been considered during project construction and operation.

For environmental impacts, air emissions per MWh of electrical energy output will be evaluated based on data provided by the Bidder and industry standards for comparable technologies. Projects will also be assessed for expected ecological impacts from their Sites and the equipment used therein over the Proposed Operating Period.

3.4 Price (Quantitative) Evaluation Criteria (70%)

All Bids will be evaluated on price and operational performance factors in the quantitative evaluation through simulation of the impact of the Bid on the costs paid by OG&E's customers.

OG&E will evaluate all Bids based on the expected customer impact resulting from detailed simulation modeling utilizing scenarios and sensitivities similar to those described in the OG&E 2021 IRP. The analysis will be conducted for a 30-year evaluation time horizon and will account for the cost and dispatch characteristics of the Project's expected energy dispatch of Generation Facilities in the SPP Integrated Marketplace under a range of potential market conditions. If the Proposed Operating Period is less than 30 years, OG&E will utilize reasonable modeling assumptions for periods between (i) the end of the Proposed Operating Period, and (ii) the end of the 30-year evaluation time horizon. The Net Present Value of Customer Cost ("NPVCC") will be developed using a weighted combination of asset performance in the Base (40%), High Gas (25%), Low Gas (25%), and Energy Evolution (10%) cases.

4 General Terms and Conditions

4.1 Publicity

Any publicity giving reference to this RFP and any matters related thereto, whether in the form of press releases, brochures, photographic coverage, or verbal announcement, is prohibited and shall not be made without the specific written approval of OG&E.

4.2 Governing Law / Dispute Resolution / Arbitration

This RFP shall be governed by, interpreted under and construed and enforced in accordance with the laws of the State of Oklahoma, without regard to any conflict of laws principles thereof that would call for the application of the law of any other jurisdiction.

In the event of any dispute relating to this RFP, the parties shall first attempt to resolve the dispute via informal discussions including discussions between the parties' respective senior executives. If those efforts fail to resolve the dispute then the parties agree that they shall resolve any dispute relating to this RFP via binding arbitration to be conducted by a panel of three (3) arbitrators pursuant to the Commercial Arbitration Rules of the American Arbitration Association ("AAA") then in effect (the "Rules"), as amended herein. All such disputes shall be finally settled by binding arbitration in accordance with these provisions.

The place of arbitration shall be Oklahoma City, Oklahoma. The arbitration proceedings shall be held in the English language.

Time is of the essence for any arbitration under this RFP. As a result, the parties agree that unless they mutually agree to extend this deadline, the arbitration hearing shall take place within 150 days of filing and awards or decisions rendered within 180 days; provided that the arbitration panel may extend such deadlines in its sole reasonable discretion, and failure by the arbitrators to conclude the arbitration hearing or make such award or decision within the foregoing deadlines shall not invalidate such arbitration hearing, award or decision. The award of the arbitrators shall be accompanied by a reasoned award. The awards or decisions rendered via arbitration as provided in these provisions shall be final and binding upon the parties.

The parties hereby irrevocably submit to the in personam jurisdiction of the state and federal courts located in Oklahoma County, Oklahoma, and agree that any such court shall have sole and exclusive jurisdiction to enter all such orders as may be necessary or appropriate to enforce and/or to confirm any ruling or decision or any award rendered by the arbitration panel, including orders directing interim measures, interim awards, or Emergency Measures of Protection (as defined in the Rules) under the Rules.

By agreeing to arbitration, the parties do not intend to limit their ability to seek and obtain interim or emergency relief as provided in the Rules (including Emergency Measures of Protection) or deprive the courts identified in this RFP of their jurisdiction to enforce or confirm any interim or emergency relief granted under the Rules or issue any other order in aid of arbitration proceedings and the enforcement of any award. The arbitration panel shall have the authority to award damages for the failure of any party to respect orders directing emergency, temporary or preliminary relief issued in accordance with the Rules. The requirement to submit disputes to negotiation as discussed above shall not apply if, and to the extent, that there exists an imminent threat of irreparable injury to a party and that party seeks and obtains interim or emergency relief in accordance with the Rules in response to such threat.

Except as may be required by law, neither a party nor the arbitration panel may disclose the existence, content or results of any arbitration hereunder without the prior written consent of the parties. In addition, all negotiations, discussions, offers, counteroffers, data exchanges, proposed agreements and other communications between the parties in connection with negotiations or other Dispute resolution procedures shall be Confidential Information. Without limiting the preceding sentence, all such communications shall be deemed to be in the context of attempting to settle a disputed claim and shall not be construed as an admission or agreement as to the liability of any party, nor be admitted in evidence in any related arbitration, litigation or other adversary proceeding.

The arbitration panel shall award to the prevailing party, if any, as determined by the arbitration panel all of its reasonable attorneys' fees and costs and all of its "costs and fees". For purposes of this section "costs and fees" means all reasonable pre-award expenses of the arbitration, including the arbitration panel's fees, administrative fees, travel expenses, out-of-pocket expenses such as copying and telephone, court costs, witness fees and attorneys' fees.

Direct Exhibit KMR-5

OG&E Code of Conduct
for the
2021-2022 Competitive Bidding Processes

REQUIREMENTS

The Oklahoma Corporation Commission rules (OAC 165:35-34) specify certain requirements for electric utilities when a utility intends to propose its own self-bid in any competitive solicitation. Specifically, the Commission rules specify:

- The soliciting utility that intends to bid shall disclose publicly, in writing, the names and titles of the members of the affiliate's "Bid Team." The Bid Team develops the utility's own bid and, to assure fairness, is not involved, directly or indirectly, in the evaluation or selection of bids.
- Each soliciting utility shall disclose publicly, in writing, the names and titles of the members of its "Evaluation Team." The Evaluation Team evaluates bids, selects the successful bidder and, to assure fairness, is not involved, directly or indirectly, in the development of the utility's own bid.
- Each soliciting utility shall assure that the Bid Team and the Evaluation Team and any member of either do not engage in any communications, either directly or indirectly, regarding the RFP or the competitive bidding process (unless done as part of the bidding technical conferences open to all bidders).
- The soliciting utility and bidding affiliate shall execute an acknowledgement that the Bid Team and Evaluation Team have not and will not in the future so communicate, other than to submit and receive the bid at the appropriate time. The Bid Team and Evaluation Team may communicate as part of a bidding technical conference of which potential bidders or all actual bidders, if bids have already been submitted, are given adequate notice and opportunity to attend.

BID AND EVALUATION TEAMS

In compliance with the above requirements, OG&E has established Bid and Evaluation Teams. Any non-public communication about the RFP or competitive bidding process between the members of these two teams will be prohibited (unless those communications occur in an open and transparent way through questions and answers on the RFP technical website or as part of the bidding technical conferences open to all bidders). The Bid and Evaluation Teams are:

Direct Exhibit KMR-5

BID TEAM	Title
Robert Burch	VP, Utility Tech Services
Chris Lelak	Dir, Capital Projects
Steven Blansett	Mgr, Project Management
Ed Mayberry	Mgr, Power Supply Design Engineering
Steve Scott	Lead Commodity Manager
Taylor Weaver	Expert Project Manager
Mike Hixon	Mgr, Air Quality
Matt Grimes	Mgr. Water Quality / Operational Chemistry
Dominic Williams	Sr. Attorney
Danny Trent	Mgr, Fuels
Mary Bublis	Mgr, Land Management
Eddie Hernandez	Sr. Transmission Planning Engineer

EVALUATION TEAM	
Mat Schuermann	VP, Power Supply and Resource Planning
Kelly Riley	Dir, Resource Planning
Zac Hager	Resource Planner Specialist
Aaron Castleberry	Resource Planner Specialist
Robert Doupe	Dir, Power Supply Services
Tony Shook	Dir, McClain, Mustang, Frontier Plants
Ryan Salisbury	Mgr, Maintenance Engineering Electrical
Ford Benham	Dir, Environmental Operations
Shad Sweeney	Mgr, Asset Condition
Bobby Lutz	Lead Project Manager
Jason Nations	Dir, Enterprise Security
George Bohn	Expert Engineer
Shawn McBroom	Sr. Mgr, Commercial Operations
Gary Boerger	Lead Transmission Planning Engineer
Brian Huckabay	Dir, Distribution Eng Tech Service
Dusty Nimmo	Dir, Supply Chain

Direct Exhibit KMR-5

ACCESS TO INFORMATION

OG&E shall take steps to ensure that any sensitive information of the Evaluation Team cannot be accessed by the Bid Team. Such sensitive information shall include evaluation criteria, other bidder information or bids, or bid analysis that is not provided to other bidders in an open and transparent way. No Bid Team member shall have access to any Evaluation Team files (electronic or paper) and shall not have access to any web-based data sharing site.

PROHIBITED DISCLOSURES

Evaluation Team members may not disclose to Bid Team members any sensitive information related to the RFP or competitive bid process, including evaluation criteria, other bidder information or bids, or bid analysis that is not provided to other bidders in an open and transparent way.

OUTSIDE CONSULTANTS

Each of the aforementioned teams may seek assistance from outside consultants or attorneys in preparing or evaluating bids. However, in no circumstances may the same individuals provide consulting or legal services to both the Bid Team and Evaluation Team. If the same consulting firm or law firm has separate individuals providing services to each team, the consulting team/law firm is required to maintain strict communication restrictions between those individuals and ensure that each individual cannot access each team's sensitive information or engage in prohibited disclosures.

CONFIDENTIAL

Direct Exhibit KMR-6

CONFIDENTIAL

Direct Exhibit KMR-7

CONFIDENTIAL

Direct Exhibit KMR-8

CONFIDENTIAL

Direct Exhibit KMR-9

CONFIDENTIAL

Direct Exhibit KMR-10