

**BEFORE THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA**

IN THE MATTER OF THE APPLICATION OF )  
OKLAHOMA GAS AND ELECTRIC COMPANY )  
FOR COMMISSION PREAPPROVAL PURSUANT )  
TO 17 O.S. SECTION 286(C) FOR ACQUISITION )  
OF CAPACITY THROUGH ASSET PURCHASE )

Cause No. PUD 2018 **00159**

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CORPORATION COMMISSION  
OF OKLAHOMA

Direct Testimony (REDACTED)

of

Judah L. Rose

on behalf of

Oklahoma Gas and Electric Company

December 28, 2018

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## I. INTRODUCTION AND SUMMARY

1 **Q. STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.**

2 A. My name is Judah L. Rose. I am an Executive Director of ICF. My business address is  
3 9300 Lee Highway, Fairfax, Virginia 22031.  
4

5 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING?**

6 A. I am testifying on behalf of Oklahoma Gas and Electric (“OG&E”).  
7

8 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND, PROFESSIONAL  
9 QUALIFICATIONS, AND EMPLOYMENT EXPERIENCE.**

10 A. I have a degree in economics from the Massachusetts Institute of Technology and a  
11 Master’s Degree in Public Policy from the John F. Kennedy School of Government at  
12 Harvard University. I have worked at ICF for nearly 37 years. I am Chair of ICF’s Energy  
13 Advisory and Solutions practice. I have also served as a member of the Board of Directors  
14 of ICF and am one of three people among ICF’s roster of 5,000 professionals to have  
15 received ICF’s honorary title of Distinguished Consultant.  
16

17 **Q. WHAT IS ICF?**

18 A. ICF (NASDAQ:ICFI) has revenues of approximately \$1.2 billion dollars per year,  
19 approximately 5,000 employees and provides professional services and technology  
20 solutions across 13 market areas. Approximately 1,100 work in the area of energy. Our  
21 advisory and implementation services assist clients in strategy and policy analysis,  
22 procurement, program management, project evaluation, and other services. Our energy  
23 practice employs top experts who use an integrated approach to energy markets, applying  
24 cutting-edge technical skills and proprietary modeling tools to provide clients with a  
25 complete picture of the energy landscape—from electric power to fuels to renewables.  
26

27 **Q. WHO ARE ICF’S CLIENTS?**

28 A. In the power and energy space, ICF’s clients cover the full spectrum of possible clients  
29 including: utilities, government agencies, Independent Power Producers (IPPs), law firms,

1 financial investors such as private equity firms, consumers, industry associations (e.g.  
2 Edison Electric Institute), environmental interest groups and Regional Transmission  
3 Organizations (RTOs) and Independent System Operators (ISO).

4 In the utility sector, for over 40 years, ICF worked with nearly all major United  
5 States and Canadian electric utilities. For example, ICF implements approximately 150  
6 energy efficiency programs for 50 utilities. In addition, ICF has provided forecasts and  
7 other consulting services to major United States and Canadian electric utilities. In the U.S.,  
8 ICF has worked on planning and forecasting issues with utilities such as AES, American  
9 Electric Power, Arizona Public Service, Delmarva Power, Dominion Energy, Duke  
10 Energy, Entergy, Eversource, Exelon, FirstEnergy, Florida Power & Light, Long Island  
11 Power Authority, National Grid, Nevada Power, PacifiCorp, Pacific Gas and Electric,  
12 Public Service Electric and Gas, PEPCo, Public Service of New Mexico, Sempra, Southern  
13 California Edison, and Tucson Electric.

14 In the government sector, ICF has been the principal power consultant to the U.S.  
15 Environmental Protection Agency (“EPA”) for over 40 years, specializing in the analysis  
16 and computer modeling of air emission programs, especially cap and trade programs, and  
17 their impacts on the power, coal and other energy industries. We also have worked with  
18 the Federal Energy Regulatory Commission (“FERC”) on transmission issues and the U.S.  
19 Department of Energy (“DOE”) on energy security. In addition, we have worked with state  
20 regulators and energy agencies, including those in California, Connecticut, Kentucky, New  
21 Jersey, New York, Ohio, Texas, and Michigan, as well as with numerous foreign  
22 governments.

23 ICF’s work with RTOs includes the Mid-Continent Independent Transmission  
24 System Operator (“Midwest ISO”), the Electric Reliability Council of Texas, the Western  
25 Electric Coordinating Council, West Connect, and the Florida Regional Coordinating  
26 Council.

27  
28 **Q. WHAT TYPE OF WORK DO YOU TYPICALLY PERFORM?**

29 A. I have extensive experience in wholesale electric power markets, utility planning including  
30 Integrated Resource Planning, Resource Adequacy and Grid Reliability, and procurement

1 of generation supply. This includes assistance in the design and implementation of  
2 competitive procurement or sales as well as the quantitative and qualitative analysis. For  
3 example, my colleagues, who were also supporting OG&E in this process, have experience  
4 in the design and implementation of multiple utility scale solicitations including all-source  
5 solicitations, land-based wind solicitations, multi-technology renewable solicitations  
6 (including solar, wind, geothermal, wand waste heat), solar solicitations, and offshore wind  
7 solicitations, and I am directing a competitive solicitation for the State of South Carolina  
8 that may lead to the potential sale of a major electric utility. We have analyzed Power  
9 Purchase Agreements (PPAs) for wind, solar, and thermal power plants, and regularly work  
10 on aspects of competitive solicitations in the Mergers and Acquisition context. I also work  
11 extensively on resource adequacy and the procurement of generation capacity to meet  
12 reserve margins and local sourcing requirements. This work involves forecasting wholesale  
13 electricity prices, including capacity prices, power plant operations and revenues,  
14 transmission flows, and fuel prices (e.g., coal, natural gas). I also have extensive experience  
15 in assessing environmental regulations and their impacts on supply and demand conditions  
16 in wholesale power markets, as well as on valuing individual power plants in the context  
17 of projected market conditions.

18  
19 **Q. WHAT EXPERIENCE DO YOU HAVE IN PROVIDING EXPERT TESTIMONY**  
20 **RELATING TO THE POWER SECTOR?**

21 A. I have testified as an expert over 130 times in approximately 45 venues. I have testified  
22 before or made presentations to the FERC, an international arbitration tribunal, numerous  
23 courts, arbitration panels, and before state regulators and legislators in 24 U.S. states and  
24 Canadian provinces: Arizona, Arkansas, California, Connecticut, Florida, Indiana,  
25 Kentucky, Louisiana, Manitoba, Massachusetts, Minnesota, Missouri, Nevada, New  
26 Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Quebec, Rhode Island,  
27 South Carolina, Texas, and West Virginia. I have testified extensively on electric power  
28 prices and markets, PPAs, utility planning, and the development and acquisition of new  
29 generation resources and transmission. In addition, I have authored numerous articles in

1 industry journals and spoken at scores of industry conferences. For specific details, please  
2 see my resume, attached hereto as Attachment 1.

3 **Q. HAVE YOU TESTIFIED PREVIOUSLY IN THE STATE OF OKLAHOMA?**

4 A. Yes. I have testified before the Oklahoma Corporation Commission (OCC) several times  
5 on generation procurement, utility planning and electricity generation market conditions  
6 on behalf of IPPs and consumers. This includes testimony related to both thermal power  
7 plants and renewables. See Attachment 1 for my curriculum vitae.

8  
9 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

10 A. The purpose of my testimony is to describe the OG&E 2018 Request for Proposals (RFP)  
11 for Capacity, and also to discuss ICF's assistance to OG&E on this matter. On October 8,  
12 2018, OG&E issued an RFP for capacity to meet Southwest Power Pool (SPP) resource  
13 adequacy requirements. The 2018 RFP sought up to 500 MW of qualified reserve capacity  
14 in support of OG&E's reserve obligations to SPP. ICF assisted in the design, development  
15 and implementation of the RFP including assisting in drafting the RFP requirements and  
16 evaluative criteria and their weights, assistance in managing technical aspects of the RFP,  
17 and providing an independent review of the RFP responses.

18  
19 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS?**

20 A. Based on my involvement and taking into consideration the objectives of the RFP , I  
21 conclude that OG&E's RFP was a strong test of the market for long-term capacity in SPP  
22 that produces competitive results. I further conclude that the process which OG&E  
23 implemented for this RFP was designed with explicit recognition and acknowledgement of  
24 the OCC rules on competitive procurement and that the execution of the RFP and  
25 evaluation of the responses was successfully completed considering the OCC rules<sup>1</sup>. I also  
26 conclude that the resulting selection of the AES Shady Point and Oklahoma Cogeneration

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<sup>1</sup> OAC 165:35 Corporation Commission, Subchapter 34 Competitive Procurement, page 89. See also:  
"The RFP will be issued subsequent to the final IRP, pursuant to the Oklahoma Corporation Commission  
(OCC) Electric Utility Rules OAC 165:35-37". OG&E IRP, page 21.

1 facilities were consistent with the RFP criteria and weighting thereof and reflect the most  
2 reasonable alternatives for the Company.

3 My basis for these conclusions is further elaborated on in my testimony.

4 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

5 A. First, I discuss certain background issues related to the Company's need and RFP process.  
6 Second, I discuss the OCC rules for competitive procurement and how the RFP was  
7 designed consistently with these rules and satisfied the goals of these rules. Third, I discuss  
8 the evaluation of the responses to the RFP, specifically, the qualitative evaluation and  
9 elements of the quantitative analysis. Next, I discuss the results of the RFP evaluation.  
10 Finally, I discuss my conclusions based on each of the above.

11  
12 **II. BACKGROUND – NEED FOR CAPACITY SOLICITATION**

13 **Q. SUMMARIZE THE KEY BACKGROUND ISSUES.**

14 A. OGE immediately needs more capacity in order to comply with minimal resource adequacy  
15 requirements of SPP (OGE's capacity shortfall is 3% to 7% of OGE's peak demand). The  
16 SPP market has excess capacity creating the potential to purchase long-term capacity at a  
17 cost below full replacement costs. Moreover, capacity prices can potentially increase  
18 rapidly if there are retirements and/or load growth, and hence, the opportunity to save  
19 customers money may be transitory. Therefore, OGE designed a competitive procurement  
20 process to test the market for long term capacity purchases that lock-in prices below full  
21 replacement costs and shift as much risk to the sellers.

22  
23 **II. a. Type of Product**

24 **Q. WHAT ARE THE CURRENT CONDITIONS IN THE SPP MARKET?**

25 A. There are four conditions of the SPP market that are relevant to capacity procurement.

- 26 • First, SPP reports excess generation capacity. Specifically, the reserve margin of  
27 SPP is approximately in the range of 30% versus a target of 12%<sup>2</sup> (see Exhibit 1). Excess

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<sup>2</sup> The 2017 State of the Market Report published by the Market Monitoring Unit of SPP, page 31. As noted, penalties are imposed if a utility is short when the SPP reserve margin is at 20% or less. The report indicates that the measure on page 31 may overstate supply because firm transmission capacity

1 capacity creates greater potential to obtain capacity at a cost lower than full replacement  
2 costs than during periods when the reserve margins are lower and excess capacity is lower.

3 **Exhibit 1**

4 **Figure 2–16 Peak available capacity percent**

Year	Peak available capacity (MW)	Peak load (MWh)	Peak available capacity percent
2014	61,302	45,301	35%
2015	61,499	45,279	36%
2016	67,319	50,622	33%
2017	66,509	51,181	30%

8 Source: SPP MMU 2017 Annual State of the Market Report

- 9
- 10 • Second, the amount of excess capacity is declining, and the SPP reserve margin  
11 was 6% higher (i.e. 36%) two years earlier.
  - 12 • Third, the reserve margin can decrease quickly. It is useful to illustrate the potential  
13 for rapid tightening of the capacity situation over time, and hence, the potential for higher  
14 capacity prices. The following is an illustration of how fast the ratio of two numbers  
15 (capacity and demand) can decrease – i.e. how fast the actual reserve margin can decrease  
16 when there are retirements of non-wind capacity and growing peak demand. The  
17 mathematics is shown not as a forecast but to highlight the rapidity with which markets  
18 with excess capacity can come into balance when both the numerator (capacity) and the  
19 denominator (peak demand) change at the same time to lower reserve levels.
    - 20 ○ Non-wind capacity decreased 1.5 GW per year over the last two reported years.<sup>3</sup>  
21 If this trend continues until 2023, the amount of reserve margin capacity would decrease  
22 by 9 GW from 66.5 GW to 57.5 GW. Even if peak load does not grow at all, all else

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requirements are not included. The report also reports actual summer peak of 51,181 MW on page 18. Nameplate capacity is reported on page 25 at 87,079 MW of which 17,596 MW is wind capacity. If wind is derated 90% for purposes of determining contribution to reserve margin requirements, the remainder of capacity is derated by approximately 7%. This measure is also approximate as it assumes no weather normalization.

<sup>3</sup> See SPP MMU State of the Market Report, 2017, page 26.

1 equal, the 2023 reserve margin would equal 12% which is the target and the capacity  
2 market prices could increase<sup>4</sup>.

3 ○ If peak demand unexpectedly also grew at 2.0% per year<sup>5</sup>, which would be higher  
4 than the SPP forecast, the reserve margin would be zero in 2023.

5 ○ If SPP raises its target closer to the planning reserve margins of other RTOs, the  
6 market could tighten quicker still.

7 • Fourth, SPP also reports energy prices “remained low”.<sup>6</sup> Furthermore, the vast  
8 majority of the queued new capacity is zero variable cost capacity, i.e. wind and solar,  
9 creating the potential for even lower energy prices, all else equal<sup>7</sup>. Energy market  
10 conditions appear likely to be depressed placing extra emphasis on procuring capacity in a  
11 manner which focuses on capacity issues and risks.

12 **Q. WHAT ARE THE IMPLICATIONS OF SPP MARKET CONDITIONS TO**  
13 **CAPACITY PURCHASES?**

14 A. Today’s market conditions in SPP cause OG&E to prefer long term arrangements. This is  
15 because, given the long capacity position in SPP, OG&E can lock in very low capacity  
16 prices on long term agreements which provide valuable protections to customers in the  
17 event that SPP market conditions continue to transition through falling reserve levels,  
18 which would produce increasing capacity prices<sup>8</sup>. This can result in savings for customers.

19 **Q. HOW DID THIS PREFERENCE AFFECT THE RFP?**

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<sup>4</sup> The reserve level might be lower, all else equal, if some of the capacity cannot be accredited due to lack of firm transmission.

<sup>5</sup> For example, resurgent industrial activity might lead to resurgent peak electricity demand growth. Over the 10 years 1997 to 2007, Oklahoma industrial growth was 6.2% per year versus -1.7 % during 2014-2017. GDP by state, all industry total, Bureau of Economic Analysis, SAGDP2N.

<sup>6</sup> SPP MMU, Summer 2018 Quarterly Report, page 9.

<sup>7</sup> Ibid, page 32.

<sup>8</sup>

1 A. PPAs were required to be for 30 years. This facilitated locking-in the current market  
2 conditions, and meeting SPP planning criteria, but also facilitated comparison with existing  
3 and new powerplants which typically have very long lifetimes.  
4  
5  
6

7 **II. b. Long Term Product Risks**

8 **Q. CAN LONG TERM ARRANGEMENTS INCREASE CERTAIN RISKS?**

9 A. Yes. Long term arrangements increase the potential for certain types of risks, and hence,  
10 long term arrangement require special attention to risk management such as measures to  
11 transfer risks to power providers.  
12

13 **Q. CAN YOU GIVE EXAMPLES OF THE LONG TERM RISKS?**

14 A. Yes, changes in SPP rules and regulations appertaining to capacity requirements create risk  
15 and these risks increase over time. For example:

- 16 • **Change to Capacity Rule Risks** – SPP can change capacity rules, subject to FERC  
17 approval, and moreover, SPP can change rules without “grandfathering” – i.e. without  
18 locking in previous arrangements, accreditation levels, etc. For example:
  - 19 ○ Rules regarding treatment of intermittent renewables can and likely will  
20 change over time in terms of the percentage of nameplate that counts towards  
21 reserve margin.
  - 22 ○ Rules regarding location and deliverability can and likely will change over  
23 time as there are risks that capacity might not be accredited if local sourcing  
24 requirements are adopted as exist in many organized markets (e.g. SPP might  
25 require certain MWs to be sourced locally from or firmly delivered to a utility  
26 service territory as opposed to within any part of SPP).
  - 27 ○ Rules regarding the penalties imposed for lack of performance can change.  
28 Other RTO regions recently started applying penalties measured in thousands  
29 of dollars per MWh of under- performance as opposed to penalties based on  
30 MW deficiency in a capacity period.

1 **Q. HOW DID LONG TERM RISKS AFFECT THE RFP?**

2 A. The RFP sought to transfer the long-term risks to the seller in order to protect the  
3 customers. This was especially in the area of rules and regulatory changes and  
4 performance. As a result, there was added emphasis on the qualitative assessment of the  
5 facilities' ability to meet accredited capacity requirements over the long term and the ability  
6 to pass these risks from customers to the sellers.

7 **II. c. SPP Market for Capacity**

8 **Q. IS THERE AN OPEN MARKET EXCHANGE FOR CAPACITY IN SPP?**

9 A. No. While capacity is transacted in the SPP market, these transactions are largely through  
10 bi-lateral contracts as there is no clearinghouse for capacity within SPP.

11  
12 **Q. HOW CAN OG&E BEST TEST THE MARKET ABSENT AN OPEN EXCHANGE?**

13 A. As OG&E indicated in its IRP, conducting a solicitation to invite capacity owners to submit  
14 their best offers would provide an indication of reasonable capacity prices given market  
15 conditions at the time.

16  
17 **Q. DOES OG&E'S 2018 RFP FOR CAPACITY REFLECT A REASONABLE TEST  
18 OF THE MARKET?**

19 A. Yes. I believe the OG&E 2018 RFP for Capacity is well designed and suitable test for  
20 current market conditions.

21  
22 **Q. PLEASE EXPLAIN WHY YOU CONSIDER THE 2018 RFP FOR CAPACITY A  
23 REASONABLE MARKET TEST.**

24 A. OG&E's RFP was consistent with the action plan contained in OG&E's Integrated  
25 Resource Plan (IRP) which considered a solicitation to test market conditions.

26 The RFP was designed with the following focus:

- 27 ○ **SPP Accredited Capacity** – SPP requires reliable capacity to operate the system.  
28 While the energy characteristics were to be considered, the focus was on SPP  
29 accredited capacity. For example, OG&E sought market outcomes that decreased  
30 and/or eliminated SPP accreditation and cost risks due to rule changes, transmission

1 delivery problems, operational problems, delays in coming on line and energy  
2 market uncertainties that affect the costs of capacity (higher capacity costs can be  
3 accompanied by more expected energy savings but also risks of unexpected  
4 collapse in energy market prices that could in the end raise costs to customers), or  
5 that provided OG&E control over those risks. This contrasts with RFPs by utilities  
6 with excess capacity but seeking alternative energy sources.

- 7 ○ **Long Term Procurement and Risk Management** – OG&E designed the RFP to  
8 focus on long term procurement. The first reason was to minimize costs to  
9 consumers. Long term procurement locks-in low cost capacity likely to be  
10 available in the near term. This is because the SPP market has excess capacity  
11 lowering the cost of capacity, all else equal. Furthermore, the excess capacity might  
12 erode or disappear thereby raising capacity prices closer to full replacement costs.

### 14 III. OCC PROCUREMENT RULES AND RFP DESIGN

#### 15 III. a. OCC Procurement Rules

#### 16 **Q. PLEASE DESCRIBE THE OCC PROCUREMENT RULES.**

17 A. The purpose of OCC Rules<sup>9</sup> is to establish a “fair, just, and reasonable process that best  
18 serves the public interest....making the most efficient use Oklahoma’s .....assets.”. The  
19 process provides the opportunity for a presumption of prudence, but the utility may  
20 exercise managerial discretion without seeking a presumption of prudence.<sup>10</sup> The process  
21 addresses purchasing or self-building of electric generation<sup>11</sup>. The process should be  
22 “open, transparent, fair, and non-discriminatory”. There are extra requirements applicable  
23 when there is bidding by an affiliate of the utility.<sup>12</sup> The RFP should at a minimum identify  
24 clearly:

- 25 • Amount of MW and types of products being solicited,

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<sup>9</sup> OAC 165:35 Corporation Commission, Subchapter 34 Competitive Procurement, page 89

<sup>10</sup> 35-34-1 (a).

<sup>11</sup> Ibid

<sup>12</sup> 35-34-3 c and b (1) I, iii,

- 1 • Term,
- 2 • All price and non-price factors to be considered,
- 3 • Respective weights for each price and non-price factor, and
- 4 • Analysis of transmission including role of SPP.<sup>13</sup>
- 5 • No unilateral bid refreshing and use of final best offer in evaluation.<sup>14</sup>
- 6 • Pro Forma agreements
- 7 • The process should permit the Commission to have input into the process<sup>15</sup>.
- 8 • Notice needs to be provided<sup>16</sup>.
- 9

10 **Q. WERE THE PROCUREMENT RULES UTILIZED FOR THE OG&E CAPACITY**  
11 **RFP?**

12 A. The design of the OG&E RFP was designed to be consistent with the above mentioned  
13 OCC requirements.

14  
15 **Q. HOW DID OG&E COMPLY WITH THE OCC RULES?**

16 A. OG&E sought to comply with the goals and specifications of OCC competitive  
17 procurement rules. Areas the OG&E considered in its RFP Design include:

- 18 1. Providing a clear statement of product sought, term, terms and conditions, quantity,  
19 measurement of quantity, etc. before the RFP and the nexus with the IRP which showed  
20 careful consideration of OG&E's needs.
- 21 2. Providing a clear statement of Evaluative Criteria before RFP including scoring, threshold  
22 and evaluative criteria.
- 23 3. Establishing a set of conditions and features that matched the objectives
- 24 4. Inclusion of form agreements for asset purchase and power purchase alternatives
- 25 5. Submitting a draft RFP for comments in a timely manner

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<sup>13</sup> 35-34-3 (a) (3) and (d) 4.

<sup>14</sup> 35-34-3 (d) 2.

<sup>15</sup> For example, 35-34-4 (d) (1) (B)

<sup>16</sup> 35-34-3 (1) 30 days.

1 Establishing a forum for Bidders through a technical conference and question and answer  
2 process in a timely manner. All Bidders were invited to request additional information,  
3 either during the Technical Conference or through the RFP Website.

- 4 6. Utilizing a consultative process to engage and inform the Commission and staff throughout  
5 the process.
- 6 7. Establishing clear schedule including dates and locations for all key events of the process.
- 7 8. No unilateral rebidding, use of best offer
- 8 9. No Affiliate Bidding – This is not a necessary condition for compliance but facilitates the  
9 process in terms of fairness.
- 10 10. Clear indication of use of financial impact as a criteria

11  
12 **Q. WERE THERE ADDITIONAL ELEMENTS THAT ESTABLISHED A FAIR RFP**  
13 **FOR PARTICIPANTS?**

14 A. Yes. The process relied on multiple aspects to ensure transparency for Bidders, and to  
15 maintain the confidentiality of individual bidders. For example, all questions and answers  
16 were posted for access to all Bidders, also, random numbers were used to identify Bidders  
17 in public discussions and maintain Bidder confidentiality.

18 To ensure a fair and consistent evaluation of responses, clear protocols prior to  
19 evaluating criteria. OG&E acted in good faith with all Bidders, and utilized evaluation  
20 protocols that permitted the RFP response review to be conducted in a fair and transparent  
21 manner. The protocols were applied to all Bidders, regardless of their capacity type or  
22 whether they were proposing a capacity purchase or acquisition. Also, to facilitate the  
23 review process, standardized forms were provided to all Bidders to aid in the collection  
24 and review of information on a consistent basis.

25 Further evidence of the transparency and fairness is reflected in the draft RFP  
26 review process where the sufficiency of documentation provided by OG&E was  
27 unchallenged by Bidders.

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**Q. WAS THE RFP DESIGNED TO FOSTER PARTICIPATION AND FACILITATE A COMPETITIVE RESPONSE?**

A. Yes. For example, the RFP was designed as all-source procurement which facilitates competition. This allowed for a range of powerplant types, including renewable and non-renewable to participate. Further, the RFP included options for sale of the Bidder facility through an APA or for contracting through a PPA. This also facilitated the ability for Bidders to provide a full range of alternatives or to emphasize their preferred alternative. Likewise, the RFP was open to both existing and new facilities, again, allowing for a diverse set of participants to respond.

**III. b. RFP Description**

**Q. DESCRIBE THE SOLICITATION FOR ELECTRIC GENERATION CAPACITY.**

A. On October 8, 2018, OG&E issued a solicitation to purchase capacity to meet SPP Resource Adequacy requirements<sup>17</sup>. Selected characteristics of the RFP included:

- A statement of solicitation for up to a total amount of accredited capacity equal to 500 MW. Specifically<sup>18</sup>:

*This RFP allows Bidders to offer proposals for up to approximately 500 MW of capacity qualified to serve OG&E's reliability obligations as defined in Southwest Power Pool's (SPP's) Resource Adequacy Requirements as per Attachment AA section 4 of the SPP Open Access Transmission Tariff ("OATT") as approved by the Federal Energy Commission on August 8, 2018. OG&E will accept proposals for capacity which qualifies to provide accredited capacity for reserve and peak purposes in compliance with SPP requirements; ...*

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<sup>17</sup> OG&E, RFP for Capacity, October 8 2018.

<sup>18</sup> RFP, pages 2,3

- 1 • The requirement that accredited capacity must be available to OG&E in the summer of  
2 2019, 2020, or 2021. Specifically<sup>19</sup>:
- 3 *OG&E requires capacity be available to satisfy OG&E's resource adequacy obligations*  
4 *beginning as early as June 1, 2019 but no later than June 1, 2021.*
- 5 • The minimum reserve capacity offer allowed per bid at 50 MW.
- 6 • A requirement to locate and be interconnected generation resources within SPP's  
7 transmission system. Specifically<sup>20</sup>:
- 8 *Proposals must be for single generation facilities, or co-located generation facilities, that*  
9 *are located in and interconnected to SPP's transmission network.*
- 10 • A requirement to measure accredited capacity in accordance with SPP accreditation  
11 requirements.
- 12 • Options for all-source generation participation (e.g. thermal, renewable, existing, new,  
13 sale, PPA meeting the other requirements – e.g. capacity accreditation- could participate).  
14 Specifically<sup>21</sup>:
- 15 *This is an All Generation Sources RFP, meaning that any utility scale electric generation*  
16 *source may be considered, consistent with the requirements described herein.*
- 17 • A requirement for a minimum 30 year period for any PPA proposal and terms and  
18 conditions tailored to seeking long term market solutions to the long term risks of SPP rules  
19 in accordance with SPP Resource Adequacy requirements per OATT Attachment AA.  
20 *Model form agreements for the APA and PPA are attached to this RFP<sup>22</sup>*
- 21 • No affiliate bidding<sup>23</sup>:
- 22 *Neither OG&E nor any affiliated companies will submit a self-build option in response to*  
23 *this RFP.*
- 24 • Information regarding a Technical Conference

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<sup>19</sup> Ibid, page 3

<sup>20</sup> Ibid, page 3

<sup>21</sup> Ibid page 2

<sup>22</sup> RFP, page 9

<sup>23</sup> Ibid page 2



1 RFP for OG&E review and comment.<sup>27</sup> The draft included proposed threshold and  
2 evaluation requirements, including a draft for scoring system.

3 **Q. PLEASE DESCRIBE THE DRAFTING PROCESS.**

4 A. Prior to drafting the RFP, ICF worked with OG&E to identify their requirements for  
5 capacity and understand critical price and non-price factors to be utilized to assess the  
6 bidders. To do so, ICF participated in several meetings (in person and phone discussions).  
7 Based on these exchanges, ICF generated a draft RFP for OG&E review. The areas of  
8 focus included:

- 9 • **Establishing Criteria:** ICF worked with OG&E to identify the key criteria and  
10 requirements for its capacity RFP. These included the types of capacity allowed,  
11 the size, the timing for capacity bids, and the PPA or asset purchase agreement  
12 (APA) contract structures to be reviewed. As noted, the result of that process was  
13 to accept up to 500 MW of capacity available to OG&E to meet SPP requirements  
14 beginning in summer as of 2019, 2020, or 2021. The minimum acceptable bid was  
15 50 MW. Also, ICF confirmed that no OG&E affiliate was bidding.
- 16 • **Identifying Bidder Threshold Requirements:** ICF assisted OG&E in designing  
17 threshold requirements for bidders including items that establish the bidders as  
18 eligible for participation. Threshold requirements included:
  - 19 1. Completeness: Proposals must be complete including all forms and required  
20 other information;
  - 21 2. Size, Timing, and Term: Proposals must be between 50 MW and 500 MW  
22 accredited capacity and available to begin supply to OG&E between 2019 and  
23 2021. Capacity must be available to support OG&E planning reserve  
24 obligations. The term of any PPA must be for a minimum of 30 years;
  - 25 3. Property Site Control: Bidders must demonstrate a high level of site control  
26 through executed land leases, options to lease, easements, or other instruments  
27 of conveyance;

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<sup>27</sup> ICF reviewed and provided comments from a commercial perspective on the form agreements.

- 1           4. Unconditional: Proposals are not conditioned upon any contingencies;
- 2           5. Experience: Bidders proposing to develop new projects must have
- 3                 successfully completed one similar project successfully in the past; and
- 4           6. Bidder Financial Ability: Bidders must demonstrate financial strength and
- 5                 credit worthiness as a counter-party.

- 6           • **Designing Price and Non-Price Factors Criteria and Relative Weighting**: ICF assisted
- 7                 OG&E in determining appropriate price and non-price (qualitative) factors and their
- 8                 weightings.

9  
10           Price factors accounted for 50% of the overall evaluation score and included:

- 11                 ○ Net Present Value of Customer Impacts – 40%
- 12                 ○ OG&E Financial Impacts – 10%

13  
14           The qualitative portion of the evaluation covered six categories and accounted for 50% of

15           the evaluation score including:

- 16                 ○ Contract Risk, Costs and Benefits – 15%
- 17                 ○ Operational Characteristics and Viability – 10%
- 18                 ○ Locational Benefits, Reliability, Resiliency, and Security – 10%
- 19                 ○ Overall Project Development Risks – 5%
- 20                 ○ Resource Diversity and Scalability – 5%
- 21                 ○ Environmental Impacts – 5%

22  
23           Once the drafting was complete, the draft RFP, including supporting documentation, was

24           submitted to the Commission and an appropriate time period was allowed for comments.

25           The draft RFP met the requirements of the OCC competitive procurement rules which

26           require, *inter alia*, that the RFP should at a minimum identify clearly:

- 27                 ○ Term,
- 28                 ○ Amount of MW and types of products being solicited,
- 29                 ○ All price and non-price factors to be considered,
- 30                 ○ Respective weights for each price and non-price factor, and

1           o Statement regarding the analysis of transmission

2 **Q. PLEASE DESCRIBE THE SUPPORT ICF PROVIDED AFTER THE DRAFT RFP**  
3 **WAS FILED.**

4 A. Once the draft was filed, a comment period began. ICF worked with OG&E to collect  
5 comments including those from other parties and finalize a draft RFP suitable for filing  
6 with the OCC. On October 5, 2018, a technical conference was held at which ICF and  
7 OG&E presented to interested parties regarding the RFP process and evaluative criteria.  
8 At the conference, parties were invited to submit questions and comments regarding the  
9 RFP. After due consideration of all comments, certain modifications were made to the  
10 draft RFP, and a Final RFP was issued and posted to the OG&E RFP website.

11           After the final was posted, ICF worked with OG&E to review and answer questions  
12 received from interested parties and assisted in the evaluation of responses received.  
13

14 **IV. c. Threshold Criteria**

15 **Q. PLEASE EXPLAIN THE CHOICE OF THE THRESHOLD CRITERIA.**

- 16 A. The choice of the threshold criteria reflected the following considerations
- 17 • Completeness: Proposals must be complete including all forms and required other  
18 information. This information was important input into the evaluative processes, and  
19 without it a comparison across alternatives would not be possible.
  - 20 • Size, Timing, and Term: Proposals must be between 50 MW and 500 MW accredited  
21 capacity and available to begin supply to OG&E between 2019 and 2021. The low end  
22 of the range was to avoid diseconomies of scale in terms of OG&E administration,  
23 operations, and planning. The high end of the range was designed meet the capacity  
24 need, but also allow for bidders to offer economies associated with an entire unit of plant.
  - 25 • Capacity must be available to support OG&E planning reserve obligations.
  - 26 • The term of any PPA must be for a minimum of 30 years. The term was designed to  
27 facilitate comparison across different long-term options including purchase of existing  
28 and new plants which can have long lives and are frequently analyzed over a 30 year  
29 period.

- 1 • Property Site Control: To mitigate execution risks, bidders must demonstrate a high level
- 2 of site control through executed land leases, options to lease, easements, or other
- 3 instruments of conveyance.
- 4 • Unconditional: Proposals are not conditioned upon any contingencies.
- 5 • Experience: To address execution and timing risks, bidders proposing to develop new
- 6 projects must have successfully completed one similar project successfully in the past.
- 7 • Bidder Financial Ability: To address consumer and execution risks, bidders must
- 8 demonstrate financial strength and credit worthiness as a counter-party. While experience
- 9 is also addressed elsewhere, this was considered a minimum requirement given the near-
- 10 term need.

11

12 **IV. d. Qualitative Evaluative Criteria**

13 **Q. WHY DID THE RFP GIVE 50% WEIGHT TO QUALITATIVE CRITERIA?**

14 A. I believe the overall emphasis on qualitative factors was appropriate in this case for the

15 following reasons:

- 16 • First, power plants involve a wide range of issues that require qualitative assessment as
- 17 evidenced by the following six questions which elaborate on the six categories of
- 18 qualitative criteria. While the qualitative criteria are discussed below, it is useful to
- 19 highlight how many important issues exist. The list below of 34 items is only a partial
- 20 representation of the total number of issues addressed through the qualitative criteria:

- 21 ○ Contract risks
- 22 ○ Contract assignment
- 23 ○ Liabilities
- 24 ○ Critical path plans
- 25 ○ Site control
- 26 ○ Rights of way
- 27 ○ Permitting status
- 28 ○ Technology risks
- 29 ○ Fuel risks
- 30 ○ Fuel transportation
- 31 ○ Back up fuel
- 32 ○ Ability to adapt to future environmental regulations
- 33 ○ Development experience
- 34 ○ Operations experience
- 35 ○ SPP experience

- 1           ○ Financial capability
  - 2           ○ Economic benefits to local communities
  - 3           ○ Community engagement
  - 4           ○ Identification of key equipment
  - 5           ○ Equipment lifetime
  - 6           ○ Transmission interconnection and delivery capabilities
  - 7           ○ firm transmission rights and any deliverability assessments
  - 8           ○ Delivery to OG&E territory
  - 9           ○ Peak hour performance and impacts of hot and cold weather extreme
  - 10          ○ O&M plan
  - 11          ○ Complementarity with OG&E system
  - 12          ○ Resource diversity
  - 13          ○ Resource scalability
  - 14          ○ Localized reliability issues
  - 15          ○ Expected asset or contract performance
  - 16          ○ Support to local Transmission and Distribution
  - 17          ○ Ability to minimize grid disruptions
  - 18          ○ Resiliency
  - 19          ○ Operational Flexibility
  - 20          ○ Voltage Support
- 21          ● Second, the need for qualitative assurance is especially high when the principal concern
  - 22            is for capacity to meet reserve margin requirements. Reliability and compliance with
  - 23            SPP rules is a critical consideration for OG&E. Therefore, unexpected problems and
  - 24            delays especially need to be avoided. This contrasts with RFPs where the focus is on
  - 25            energy alternatives and existing capacity requirements are secured already.
  - 26          ● Third, given the emphasis on reliable supply alternatives, it is necessary to address
  - 27            emerging market issues that are not captured through pricing, these include resiliency, new
  - 28            ancillary service products, and locational requirements.
  - 29          ● Fourth, qualitative concerns are particularly pressing when the need is very near term,
  - 30            measured in a few months up to a couple of years, and hence, unexpected problems and
  - 31            delays especially need to be avoided.
  - 32          ● Fifth, the issues are particularly pressing when the commitment is for a long period of time.
  - 33            This is because certain decisions (e.g., environmental) can have cumulative impacts that
  - 34            rise over time and OG&E must also anticipate possible future changes in rules over a long
  - 35            period.

1 • Sixth, all-source RFPs increase the potential diversity of resource responses and as such,  
2 result in the potential for significant differences in resources' ability to provide the same  
3 quality of capacity supply. With this in mind, for an RFP designed to secure capacity, the  
4 relevance of the qualitative factors increases. This is because of the range of technologies  
5 and issues, but also because of the need to assess new and existing plants and PPAs on a  
6 comparable basis.

7 • Seventh, there was already extra emphasis not reflected in the point score on costs and  
8 customer rate impacts reflected in the focus on locking in long-term cost savings.  
9

10 **Q. PLEASE DISCUSS THE RELATIVE SCORING AMONG QUALITATIVE**  
11 **FACTORS.**

12 A. Overall, the scoring was reasonable based on our participation and observations. Emphasis  
13 was given to relevant factors based on the risks and relative concerns of the individual  
14 factors.  
15

16 **Q. PLEASE ELABORATE ON CONTRACT RISK, COSTS AND BENEFITS.**

17 A. This was the first of six qualitative criteria. Contract risk and benefits was assessed based  
18 on the extent to which pricing is firm; existing permits, easements, leases, and fuel, power  
19 supply, and other contracts are in good order and assignable; and/or the cost containment  
20 measures effectively limit cost risk for OG&E customers<sup>28</sup>. This included a review of all  
21 liabilities assumed under the proposed contract agreements. Additionally, proposals were  
22 assessed on the extent to which the Bidder accepted all provisions relevant to the proposal  
23 submitted of the model APA or PPA agreements or shifted risk to buyers and their  
24 customers. OG&E had a strong preference and expectation for minimal changes to the  
25 proposed terms in the model APA and PPA to manage risks in these long-term transactions.  
26

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<sup>28</sup> This discussion is taken from the RFP, op cit, page 11

1 For APA proposals that involve contract assignment or other obligation transfer  
2 (for example, assignment of fuel transport agreements, service agreements, etc), OG&E  
3 considered the terms and conditions associated with such assignment. Where applicable,  
4 Bidders were required to provide an indication of such assignments as well as copies of the  
5 relevant contracts/agreements.  
6

7 **Q. PLEASE ELABORATE ON OPERATIONAL CHARACTERISTICS AND**  
8 **VIABILITY.**

9 A. This was the second of six qualitative criteria. Projects were assessed on their expected  
10 contract or asset life performance<sup>29</sup>. Projects with demonstrable longevity as a capacity  
11 resource at consistent levels over time were preferred. New and existing projects were  
12 requested to provide an O&M plan, an assessment of the peak operational performance of  
13 their facility, an assessment of the facility to continue to provide reliable reserve capacity  
14 and peak supply over time, an assessment of the ability of the facility to continue operation  
15 in extreme hot and cold weather temperatures, an assessment of the project lifetime  
16 expectations (i.e., remaining useful asset life), and an estimate of the reasonable capital  
17 investment (cost and timing) expected to maintain the facility in sound operational order  
18 over time.

19 Operational flexibility was considered based on the cyclic on/off capability, ramp  
20 rates and other start-up characteristics, automatic generation control, the ability to provide  
21 ancillary services such as voltage support and balancing services, and the overall expected  
22 impact on transmission conditions including voltage and frequency. OG&E further  
23 considered how complimentary the characteristics of the proposed alternatives are to the  
24 overall OG&E portfolio. Bidders were requested to provide appropriate information to  
25 document the resource operational flexibility.

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<sup>29</sup> This discussion is taken from the RFP, op cit, page 11

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**Q. PLEASE ELABORATE ON LOCATIONAL BENEFITS, RELIABILITY, RESILIENCY, AND SECURITY.**

A. This was the third of six qualitative criteria. Projects were assessed on their expected contract or asset life performance<sup>30</sup>. OG&E preferred generation resources which provide locational benefits, including the ability to allow OG&E to maintain or increase the ability of its portfolio to respond at SPP’s direction to localized reliability issues. Likewise, OG&E sought resources which minimize disruptions, decrease response time to disruptions, and provide support to the local transmission and distribution system where applicable. To the extent that a generation facility, by virtue of its location and operational characteristics, can enhance the reliability options that OG&E provides to large customers with particular needs that was a positive attribute.

OG&E’s security review included resiliency to physical and cyber threats and vulnerabilities. Bidders were requested to provide a risk mitigation plan which specifically addressed all measures and actions taken by the Bidder to minimize risk exposure to such threats and vulnerabilities.

For this category, OG&E considered the economic benefits, including job creation for the OG&E customer base, tax benefits, or other benefits accruing to OG&E customers. Bidders were requested to provide their assessment of their expected impact on the local economy in support of this review.

**Q. PLEASE ELABORATE ON OVERALL PROJECT DEVELOPMENT RISKS.**

A. This was the fourth of six qualitative criteria. This category was intended to assess the likelihood that the generation project could be successfully developed as proposed, based on a number of factors which influence project development feasibility and risk of development<sup>31</sup>. Factors influencing the status of project development as well as the

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<sup>30</sup> This discussion is taken from the RFP, op cit, page 11

<sup>31</sup> This discussion is taken from the RFP, op cit, page 12

1 likelihood the project would be developed on schedule were assessed. For this category,  
2 OG&E evaluated factors including:

3 Critical Path Schedule: To demonstrate credibility of the project schedule and ability to  
4 achieve commercial operation date, Bidders were required to provide a detailed project  
5 schedule with critical path milestones for the project that include activities from the  
6 period of selection as the winning Bidder to the commercial operation date. OG&E  
7 reviewed and evaluated the project schedule to ensure there was a high likelihood the  
8 project could reach commercial operations as proposed. This review included the risks of  
9 delays in securing the necessary environmental permits. This review also included the  
10 risks of securing transmission interconnection and delivery capabilities. Bidders were  
11 required to provide a list of all required permits that must be obtained. In addition,  
12 Bidders were required to identify any rights-of-way that need to be acquired for the  
13 construction of supporting facilities (water pipelines, fuel lines, transmission lines, rail  
14 spurs, etc.) and to provide a plan and schedule for securing the rights-of-way.

15  
16 Site Control: To demonstrate site control, Bidders were required to 1) document they  
17 have obtained site control and provide documentation on which necessary permits have  
18 been obtained or 2) demonstrate how site control and permits will be obtained. To meet  
19 the site control requirement, each Bidder was required to identify a site and provide a  
20 copy of documentation establishing that such Bidder has and/or will have control over the  
21 site for the entire term of the contract. Eligible documentation includes a demonstration  
22 of site ownership, an option to purchase the site, or a binding letter of intent from the  
23 landowners for the full term of the contract. Each Bidder was required to be able to  
24 obtain site control prior to signing a contract with the Company.

25  
26 Technology: Bidders were required to provide information about specific technology and  
27 equipment proposed for the project, including a description of the track record of the  
28 technology and equipment. Each Bidder was required to provide a detailed description  
29 and specifications for the proposed equipment (including, for example, the turbine, steam  
30 generator, cooling equipment and environmental control equipment proposed for thermal

1 generation projects, or modules, inverters, and racking for solar photovoltaic projects).  
2 OG&E reserved the right to conduct further due diligence on the equipment. OG&E  
3 preferred proposals that demonstrate that the generation design and equipment proposed  
4 is technologically mature and the Bidder has included a reasonable plan to address how  
5 the project will conform to change in environmental requirements in the future. For  
6 existing facilities, Bidders were required to demonstrate the continued longevity of the  
7 facility including identification of expected capital investment to maintain the facility in  
8 good operation status continuing for a minimum of five years.

9  
10 Fuel: As applicable to their generation technology, Bidders were required to provide a  
11 detailed strategy for securing and delivering fuel to the plant site. If the project is in the  
12 early stages of development, OG&E required a fuel supply and transportation plan that  
13 demonstrates that the fuel supply arrangements adequately conform to the type of  
14 project/technology proposed (e.g., gas-fired combined cycle). OG&E preferred proposals  
15 that demonstrate a secure and reliable fuel supply or strategy, including for any back-up  
16 fuels to be used, which demonstrates the ability of Bidder to secure a reliable supply for  
17 the project.

18  
19 Bidder Experience: Bidders were required to demonstrate experience and management  
20 capability to successfully develop and operate the project proposed. OG&E was  
21 particularly interested in project teams that demonstrated success in projects of similar  
22 type, size, and technology and demonstrated an ability to work together effectively to  
23 bring the project to commercial operation in a timely fashion. In addition, OG&E valued  
24 experience that Bidders had in successfully developing and operating projects within the  
25 SPP footprint.

26  
27 Resource Financing: For facilities to be developed, Bidders were required to demonstrate  
28 their ability to finance the proposed project. The financing plan was required to address  
29 how the facility will be financed including the sources and mechanisms for financing.  
30 Further, each Bidder was required to provide the project's initial financing structure, and

1 proposed capital structure, estimated sources for debt and equity financing, and a  
2 description of any pre- and post-construction equity ownership agreements. Bidders were  
3 required to include the estimated constructed costs as well as the financing costs for the  
4 project. Each Bidder's response was required to provide a description of the current  
5 status of the financing plan.

6 Community Engagement: Bidders were required to provide the status and completeness  
7 of the project stakeholder engagement plan for any proposed facilities.  
8

9 **Q. PLEASE ELABORATE ON RESOURCE DIVERSITY AND SCALABILITY.**

10 A. This was the fifth of six qualitative criteria. OG&E preferred flexibility in the  
11 availability of capacity to scale over time, allowing OG&E to be responsive to growing  
12 capacity requirements<sup>32</sup>. Likewise, OG&E aspired to maintain a balanced capacity  
13 portfolio, which will allows OG&E to respond effectively to overall system needs in the  
14 short and long term. Consideration was also given to the deliverability of the resource to  
15 OG&E territory.

16 Resource diversity was assessed through consideration of the impact to the  
17 balance of the OG&E portfolio and the Company's goals of maintaining a reasonable  
18 balance among natural gas, coal, and economically viable renewable, energy storage, and  
19 demand-side resources.

20 Resource scalability was assessed by OG&E based on the benefits that the  
21 proposal provides to the existing OG&E portfolio in meeting reserve requirements on a  
22 timely basis.

23 To assess deliverability, Bidders were required to provide information regarding  
24 the resource firm transmission rights and any deliverability assessments which have been  
25 performed for the generation facility.  
26

27 **Q. PLEASE ELABORATE ENVIRONMENTAL IMPACTS ON OVERALL**  
28 **PROJECT DEVELOPMENT RISKS.**

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<sup>32</sup> This discussion is taken from the RFP, op cit, page 13

1 A. This was the sixth of six qualitative criteria. Environmental impact will assess the  
2 environmental benefit provided by the proposed resource including the potential to  
3 reduce air emissions. Generation facilities will also be assessed for their site impact  
4 including their impact on land and water use. Bidders shall provide their expected  
5 emissions rates and supporting evidence for this expectation based on actual data for the  
6 resource or similar resources. Bidders must also provide environmental impact  
7 statements for the proposed generation facility(ies).

8  
9 **IV. e. APA and PPA Development and Protocol Development**

10 **Q. PLEASE DISCUSS APA AND PPA DEVELOPMENT.**

11 A. ICF reviewed of draft APA and PPA terms from commercial business practice, power  
12 market, and energy technology perspectives, but did not address legal issues and played a  
13 limited role. ICF was focused on PPA issues that would test the ability of the marketplace  
14 to provide long term risk management related to SPP capacity requirements including  
15 timeliness, accredited capacity, deliverability, and changes in rules.

16  
17 **Q. PLEASE ELABORATE ON EVALUATION PROTOCOL DEVELOPMENT.**

18 A. ICF assisted in developing appropriate guidelines/protocols in advance of opening and  
19 evaluating bids. Protocols were used to enable the fair treatment of all Bidder responses.

20  
21 **IV. f. RFP Response**

22 **Q. Please Describe the Response to the RFP.**

23 A. The response to the RFP was very strong. In total, 94 proposals were received from a total  
24 of 19 companies and reflected 26 project sites. The size of projects proposed was variable  
25 with the largest proposal at 1,000 MW (nameplate) while the smallest was 50 MW  
26 (nameplate). The proposals were distributed across multiple types of capacity as included  
27 significant share of both PPA and APA.

28 The majority of proposals, 78 in total, were offers for renewable capacity, and 9  
29 proposals for thermal facilities were received. Several offers for storage only were also

1 received. The majority of bids were for new or under development facilities at 85 proposals  
2 while 9 offers for existing facilities were received.

3 I consider the response to the RFP to be very strong because: (1) the total number  
4 of bids is high, (2) the number of companies bidding is high, (3) the diversity of  
5 technologies is high including a diverse range of thermal and renewable technologies, as  
6 well as storage<sup>33</sup>, (4) the diversity of delivery locations into the SPP market is high, (5) the  
7 diversity of size of offered capacity, (6) large numbers of both APA and PPA offers were  
8 made, and (7) the total amount of capacity very high compared to the need. A strong  
9 response, all else equal, is beneficial for customers because it is indicative of competition  
10 and options and tends to lead to the best-scoring offers being low-cost with well-managed  
11 risks.

12  
13 **IV. g. RFP Evaluation**

14 **Q. PLEASE DISCUSS ICF'S ROLE IN BID EVALUATION.**

15 A. ICF supported OG&E in its evaluation of bids received including addressing Threshold,  
16 Price and Non-Price review. ICF's role in the price review was limited to the financial  
17 impact to OG&E (imputed debt). ICF's non-price review was extensive and covered all  
18 six qualitative items:

- 19 ○ Contract Risk, Costs and Benefits
- 20 ○ Operational Characteristics and Viability
- 21 ○ Locational Benefits, Reliability, Resiliency, and Security
- 22 ○ Overall Project Development Risks
- 23 ○ Resource Diversity and Scalability
- 24 ○ Environmental Impacts

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<sup>33</sup> As noted, SPP does not provide storage capacity value, but storage affects energy costs and revenues, and in some cases, were part of combinations of resources within bid.

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**Q. IN ADDITION TO CUSTOMER RATE IMPACT, WERE OTHER FACTORS CONSIDERED IN THE PRICE SCORE?**

A. Yes. Financial impact to OG&E was considered in the form of debt equivalency. Consistent with OCC Rules, this factor was clearly identified in the RFP. Specifically, RFP indicated:

“OG&E will take into consideration any projected costs of direct or inferred debt. Inferred debt results when credit rating agencies infer an amount of debt associated with a power supply contract and, as a result, take the added debt into account when reviewing OG&E’s credit standing.”

**Q. HOW MUCH WEIGHT WAS THIS GIVEN?**

A. This was 10% of the total weight.

**Q. PLEASE DESCRIBE THE DEBT EQUIVALENCY ANALYSIS USED IN THE RFP.**

A. To assure consistent treatment of PPA and APA proposals, it is important to assess the debt equivalency of a PPA on a manner consistent with ownership treatment. The debt equivalency issue arises when rating agencies impute debt to PPAs, thereby assigning a higher debt-to-equity ratio for comparative rating purposes (the consequence could be a derating and/or higher interest expenses) against the rate-based option. Typically the PPAs are considered as imputed debt if they are long-term and/or are a large size.

To capture imputed debt, the present value of the stream of capacity payments was considered, and multiplied by the assumed risk factor of debt equivalence. The assumed debt equivalence was 25% which is the risk factor employed by Standards & Poor in its debt equivalency determination and is consistent with typical ranges employed.

PPAs proposals were ranked according to the present value of the imputed debt screen and scored based on the imputed debt criteria – the lowest imputed debt resource receiving the highest score.

- 1 **Q. PLEASE DISCUSS RESULTS OF THE THRESHOLD CRITERIA REVIEW.**
- 2 A. Of the 94 bids, 21 bids were considered fully conforming - i.e. met the requirements for
- 3 evaluation (see Table 1). Those that were not considered conforming were either
- 4 determined to be infeasible or were not-conforming to the requirements of the RFP.
- 5 Infeasible proposals were identified based on OG&E's own assessment of the ability of the
- 6 facility to obtain the necessary transmission in adequate time to meet the proposed online
- 7 date. Several proposals may have been non-conforming for multiple reasons and/or
- 8 infeasible, in such cases, the proposal is counted only for one reason.

**Table 1**  
**Bid Non-Conformance by Reason**

Threshold Factor or Conformance	Reason	Quantity
Size, Timing, Term	Qualified capacity too low (MW)	11
Size, Timing, Term	Infeasible due to transmission	13
Size, Timing, Term	Term	4
Completeness	Incomplete	4
Non-conforming	Energy offered in Addition to Capacity	21
Non-conforming	Material Change to PPA or APA	15
Non-conforming	Construction risk assigned to O&E	5
<b>Total</b>		<b>73</b>

- 9 **Q. WHAT WAS YOUR ROLE IN THE THRESHOLD EVALUATION?**
- 10 A. ICF assisted in the review of the threshold factors for consistency to the stated criteria; ICF
- 11 did not review PPAs or APAs for conformance.
- 12
- 13 **Q. WHAT WERE YOUR GENERAL OBSERVATIONS ABOUT THE THRESHOLD**
- 14 **EVALUATION?**
- 15 A. The threshold factors were reasonable and consistent with such factors utilized in industry
- 16 RFPs. The largest number of offers which were eliminated for threshold factors were
- 17 identified in the size, timing, and term categories. This category reflects the foundational

1 requirements of the RFP and reflect reasonable rationale for elimination. Outside of the  
 2 threshold categories, the majority of elimination from evaluation were proposals offering  
 3 energy. Energy offers were entirely outside the scope of the RFP and should not be  
 4 considered in the context of this RFP.

5

6 **Q. WHAT WERE YOUR GENERAL OBSERVATIONS ABOUT THE SCORING OF**  
 7 **THE CONFORMING BIDS?**

8 A. The highest ranked ten bids for quantitative factors were (see Table 2):

**Table 2**  
**Quantitative Scoring – Top 10**

Rank	Bid	Score (Maximum 50)
█	████████████████████	█
█	████████████████████	█
█	████████████████████	█
█	████████████████████	█
█	██████████████	█
█	██████████████	█
█	██████████████	█
█	██████████████	█
█	██████████████	█
█	██████████████	█

The top ten qualitative scoring bids were (see Table 3):

**Table 3**  
**Qualitative Scoring – Top 10**

Rank	Bid	Score (Maximum 50)
█	██████	█
█	██████	█
█	██████████	█
█	██████████	█
█	██████████	█

[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

1 The combined score resulted in the final ranking (see Table 4):

**Table 4  
Combined Scoring – Top 10**

Rank	Bid	Score (Maximum 100)
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

2 The two winning bids were AES Shady Point and Oklahoma Cogeneration. [REDACTED]  
3 [REDACTED]  
4 [REDACTED]  
5 [REDACTED] The  
6 acquisition costs for both Generating Facilities is approximately \$53.5 million. Since these  
7 facilities total approximately 500 MW, the cost of this new capacity equals approximately  
8 \$107/kW. This is a very low cost for capacity especially when compared to full  
9 replacement costs. Also, since the value of the capacity comes mostly from that low capital

1 investment and does not rely on market revenues to demonstrate value for customers, there  
2 is less market risk associated with these projects.

3

4 **Q. PLEASE DESCRIBE THE QUALITATIVE SCORES FOR THESE PROPOSALS.**

5 A. Table 5 compares the qualitative scores for the top overall bids with the overall scores of  
6 the bids with the highest quantitative scores.

**Table 5  
Qualitative Scoring by Category**

Bidder	Contract Risk, Costs and Benefits (15)	Operational Characteristics and Viability (10)	Locational Benefits, Reliability, Resiliency, and Security (10)	Overall Project Development Risks (5)	Resource Diversity and Scalability (5)	Environmental (5)	Total
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

7 [REDACTED]  
8 [REDACTED]  
9 [REDACTED]  
10 [REDACTED]  
11 [REDACTED]  
12 [REDACTED]  
13 [REDACTED]  
14 [REDACTED]  
15 [REDACTED]  
16 [REDACTED]  
17 [REDACTED]

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[REDACTED]

**Q. WHAT WERE YOUR GENERAL OBSERVATIONS ABOUT THE OG&E PROCESS AND YOUR INVOLVEMENT?**

A. I conclude that based on my involvement and taking into considerations the objectives of the RFP in terms of addressing a pressing need for capacity, OG&E sought to comply with and succeeded in complying with OCC Competitive Procurement Rules<sup>34</sup> especially when one considers the specific products required and the need for quick action to meet SPP rules. In addition to my observations and participation in the process, I base this conclusion on such factors as:

- No Affiliate Bidding – This is not a necessary condition for compliance but facilitates the process in terms of fairness.
- Clear Statement of Evaluative Criteria within RFP including scoring, threshold and evaluative criteria.

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<sup>34</sup> OAC 165:35 Corporation Commission, Subchapter 34 Competitive Procurement, page 89. See also: *“The RFP will be issued subsequent to the final IRP, pursuant to the Oklahoma Corporation Commission (OCC) Electric Utility Rules OAC 165:35-37”*. OG&E IRP, page 21.

- 1 • Clear Statement of product sought, term, terms and conditions, quantity,  
2 measurement of quantity, etc. before the RFP and the nexus with the IRP which  
3 showed careful consideration of OG&E's needs.
- 4 • Provision of model APA and PPAs
- 5 • Set of conditions and features that matched the objectives
- 6 • Consultative processes involving the commission, questions and answers from  
7 participants, opportunities for input (e.g. Technical Conference, Q&A process),  
8 notice, and other process features including emphasis on objective evaluation of  
9 bids.
- 10 • All Sources bidding which facilitates competition. This allowed for a range of  
11 powerplant types, including renewable and non-renewable, new and existing, APA  
12 and PPA.
- 13 • No unilateral rebidding use of final best offer in evaluation
- 14 • The number of proposals, the diversity in terms of companies, generation types,  
15 locations, APA versus PPA and on-line status (existing and new).
- 16 • The objective scoring
- 17 • The process was open, transparent, fair, and non-discriminatory.

## 18 19 V. CONCLUSIONS

### 20 Q. WHAT ARE YOUR CONCLUSIONS

21 A. On October 8, 2018, OG&E issued an October 2018 RFP for capacity to meet SPP resource  
22 adequacy requirements. The RFP was part of the action plan contained in OG&E's IRP.  
23 Specifically, OG&E, in its IRP, concluded that OG&E immediately needs more capacity  
24 and recommends a market test of solutions comparable to the new build options identified  
25 in the IRP. Therefore, the RFP had a reasonable and detailed analytic basis.

26 OG&E believed low cost capacity might be available because the SPP market has  
27 excess capacity creating the opportunity to achieve cost savings for customers.  
28 Furthermore, OG&E was concerned the excess capacity might erode or disappear thereby  
29 raising capacity prices closer to replacement costs. OG&E sought long term market  
30 options to secure capacity at a cost below full replacement costs and lock in savings for

1 customers. Long term solutions can have more risks, and OG&E designed its RFP to find  
2 market solutions to these long term risks via purchase of an existing plant, purchase of a  
3 new plant, or a long term PPA.

4 ICF assisted OG&E in designing and implementing a competitive procurement  
5 process to test the market for capacity. Based on ICF's role, and observations, that process  
6 is in substantial compliance with Oklahoma Corporation Commission Competitive  
7 Procurement Rules<sup>35</sup> especially when one considers the specific products required.  
8 Specifically, ICF assisted in the design, development and implementation of the solicitation  
9 including scoring, weighting, and implementing qualitative evaluation of proposals  
10 received.

11  
12 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

13 **A.** Yes. I also reserve the right to supplement my testimony

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<sup>35</sup> OAC 165:35 Corporation Commission, Subchapter 34 Competitive Procurement, page 89