

BEFORE THE CORPORATION COMMISSION OF OKLAHOMA

IN THE MATTER OF THE APPLICATION OF)
OKLAHOMA GAS AND ELECTRIC COMPANY)
FOR COMMISSION AUTHORIZATION OF A) CAUSE NO. PUD 201400229
PLAN TO COMPLY WITH THE FEDERAL CLEAN)
AIR ACT AND COST RECOVERY; AND FOR)
APPROVAL OF THE MUSTANG MODERNIZATION)
AND COST RECOVERY)

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CORPORATION COMMISSION
OF OKLAHOMA

Rebuttal Testimony

of

John J. Reed

on behalf of

Oklahoma Gas and Electric Company

January 26, 2015

1 Consumers (“OIEC”) (witness Garrett). I will discuss why their recommendations would
2 depart from sound practices that are applied in Oklahoma and throughout the country.

3
4 Finally, I will respond to the testimony of witness Roach and witness Peaco on behalf of
5 Oklahoma Cogeneration as it relates to the Mustang Plant.

6
7 **Q. Please summarize your rebuttal testimony as it relates to issues raised regarding**
8 **OG&E’s IRP analyses.**

9 **A.** The Sierra Club, in particular, offers criticisms of OG&E’s IRP process that appear to be
10 designed with one purpose in mind: to promote the retirement of OG&E’s Sooner and
11 Muskogee coal plants. OG&E did, in fact, assess the costs of converting or replacing
12 four coal units at Sooner and Muskogee and found that this would likely result in higher
13 costs and higher risk to OG&E’s customers. I explained in my Direct Testimony that
14 OG&E’s Scrub/Convert compliance plan is a reasonable course of action, based on the
15 current circumstances faced by OG&E, and is supported by the IRP modeling results.

16
17 OCC Staff witness Roach agrees that OG&E’s Scrub/Convert environmental compliance
18 plan is the preferred option. Nonetheless, despite reaching the same conclusion as
19 OG&E, he identifies purported deficiencies in OG&E’s IRP and then relies on these
20 alleged deficiencies to propose ratemaking treatment that could prevent OG&E from
21 recovering prudently incurred costs. OG&E witness Howell and I rebut Mr. Roach’s
22 alleged deficiencies.

23
24 A final IRP theme raised by certain intervenors is that OG&E should rely on wind
25 capacity and energy to satisfy environmental compliance obligations. OG&E has
26 consistently demonstrated its commitment to wind energy, playing a leading role in
27 developing wind farms and investing in the transmission capacity necessary to deliver it
28 to Oklahoma markets. However, wind energy will not contribute to the solutions for
29 OG&E’s environmental compliance challenges because of OG&E’s need to continue to
30 satisfy SPP’s capacity obligations.

1 Q. **Please summarize your testimony with respect to the recovery of costs associated**
2 **with OG&E's proposed environmental compliance plan.**

3 A. Although I did not address cost recovery in my Direct Testimony, I am compelled to
4 address the positions of the intervenors that are inconsistent with regulatory and
5 ratemaking policies throughout the country, including Oklahoma. A few intervenors
6 propose that cost recovery be deferred to OG&E's next rate case, rather than be
7 addressed as an integral part of the current IRP Update case. Witness Roach proposes
8 that the well-established prudence standard be essentially turned on its head by subjecting
9 OG&E's cost recovery to future circumstances that are clearly beyond the Company's
10 control. My rebuttal testimony will describe the appropriate application of a prudence
11 standard in these circumstances, explain why it is in customers' long-term interest to
12 address pre-approval and cost-recovery in this docket, and why timely cost recovery as
13 proposed through a rider is appropriate in these circumstances.
14

15 Q. **Please summarize your testimony as it relates to the Mustang Plant.**

16 A. As OG&E has explained, the Mustang Plant is located on a valuable site with the option
17 to maintain local reliability, increase the efficiency of the plant, and take advantage of
18 existing air permits. Existing or new gas-fired plants located elsewhere in the SPP
19 footprint would not match these benefits. Witness Roach proposes that third parties be
20 allowed to bid projects that would be developed on the OG&E Mustang site. Since the
21 site is owned and controlled by OG&E's shareholders, it is not clear whether the
22 Commission could legally impose such a condition. But regardless, for reasons that I will
23 explain, it is unlikely that having a third party develop the site would yield any lower
24 costs.
25

26 II. Issues Raised Regarding OG&E's IRP ANALYSIS

27 Q. **What issues will you be addressing in this section of your testimony?**

28 A. I will address three areas of OG&E's IRP analysis that intervenors have questioned: (a)
29 the validity of OG&E's base case assumptions, (b) the resource options the Company
30 chose to consider as part of environmental compliance plans, and (c) the manner in which
31 OG&E assessed the uncertainty associated with future regulatory and market conditions.

1 OG&E's Base Case Assumptions

2 Q. **Do the intervenors propose any changes to OG&E's base case assumptions?**

3 A. Yes. Witness Comings, on behalf of the Sierra Club, observes that OG&E did not
4 assume any incremental energy efficiency after 2021. In my Direct Testimony (see pages
5 19-20), I noted that it was unlikely that changing this assumption would have any
6 significant impact on the environmental compliance plan decision that is the focus of this
7 proceeding.

8
9 The second proposal, also advanced by the Sierra Club (witnesses Comings and Fisher),
10 asserts that OG&E should have assumed that OG&E would be subject to some form of
11 carbon regulation when it specified its base case. Witness Roach takes a slightly
12 different tack to this issue by asserting that OG&E should have evaluated the prospect
13 that OG&E would have to shutter the scrubbed Sooner units before the end of the IRP
14 analysis period (2044) in response to increased environmental regulations. Instead, after
15 incorporating the known impact of environmental policy in its base case, OG&E
16 addressed the potential impact of uncertainty, future carbon regulation as part of its
17 sensitivity and scenario analyses.

18
19 Q. **Was it reasonable for OG&E to consider the prospect of incremental carbon
20 regulation through sensitivity and scenario analyses, rather than reflect it as part of
21 the base case?**

22 A. Yes. OG&E's approach is reasonable. As I indicated, OG&E's base case already
23 incorporates a significant environmental policy impact because it assumes that all SPP
24 coal plants with announced plans to control their emissions (regardless of the reason) will
25 execute those plans and that all other SPP coal plants that are smaller than 200 MW and
26 built before 1977 will be converted to natural gas. Adding a carbon tax to the base case
27 may result in "double counting" the impact of environmental regulation, as explained by
28 OG&E witness Howell.

29 Instead, OG&E considered the potential for incremental carbon regulation through its
30 "High Conversion" scenario which assumes that all coal plants in the SPP that have not

1 yet announced plans to control emissions convert to natural gas (excluding the Sooner
2 units that OG&E plans to scrub). The important point is that OG&E recognizes that the
3 potential for future carbon regulation is real, and it has developed its environmental
4 compliance plan with full consideration to this potential through scenario and sensitivity
5 cases.

6
7 OG&E has included a proxy cost for carbon in a sensitivity case, which is calculated
8 based on parity between efficient gas generation and emission-controlled coal generation.
9 The intervenors do not challenge this carbon proxy cost calculation methodology,
10 although witness Norwood (see discussion beginning on page 21, line 10) asserts that
11 OG&E's carbon price sensitivity overstates the costs that would likely be incurred in
12 response to future carbon regulation.

13
14 **Q. Are there any other points worth making with respect to the potential for carbon
15 regulation?**

16 **A.** Yes. OG&E's proposed Scrub /Convert plan would reduce OG&E's coal plant capacity
17 by 40% by 2019. This is a significant reduction and well above most national forecasts
18 of the potential reduction in United States coal plant capacity. For example, the 2014
19 Annual Energy Outlook, published by the United States Energy Information Agency,
20 projected that 60 GW of coal-fired capacity would retire by 2020. This represents
21 approximately 20% of the coal capacity in place in 2012. Should Oklahoma be required
22 by new federal regulations to reduce its carbon emissions further, OG&E will have
23 already contributed significantly to Oklahoma's potential carbon compliance obligations.
24 I believe that OG&E's Scrub/Convert Plan effectively addresses the concern expressed
25 by witness Roach. Consequently, OG&E has adequately positioned itself to deal with
26 the prospect of new and more stringent environmental regulations.

27
28 **Q. What conclusion should the Commission reach with respect to the base case
29 assumptions in OG&E's base case.**

30 **A.** OG&E's base case assumptions are reasonable and reflect significant impacts from
31 environmental regulation. While other parties might advocate including carbon

1 regulation in their base case, the OG&E approach is also reasonable. Further, the
2 potential impact of future carbon regulation on the Company's generation portfolio is
3 effectively addressed in OG&E's environmental compliance plan with OG&E reducing
4 its coal plant capacity by 40%.

5
6 Environmental Compliance Plan Resource Options

7 **Q. What criticisms did intervenors raise with respect to the resources that OG&E**
8 **evaluated as potential resources for the environmental compliance plan?**

9 A. OG&E evaluated scrub, convert, and replace options for its coal plants. Witnesses Roach
10 and Rose criticize OG&E for not adequately considering existing or new combined cycle
11 plants as replacement options. They would have preferred that OG&E test the market
12 through a competitive solicitation.

13
14 **Q. Did OG&E consider new combined cycle units as part of its environmental**
15 **compliance plan?**

16 A. Yes. However, the replace-only options were significantly more expensive than the scrub
17 and convert options even though they were modeled as efficient combined cycle plants
18 located on the Sooner and Muskogee sites and were able to benefit from existing
19 transmission interconnections and other infrastructure that makes them less expensive
20 than greenfield development options.

21
22 **Q. Did OG&E consider existing combined cycle plants as an option?**

23 A. Yes. OG&E maintains a current perspective on the amount and sources of existing
24 capacity that might be available through a transaction, a process that led to the McClain
25 and Redbud opportunities. As explained by witness Howell, OG&E concluded that
26 existing capacity would not be available when needed by OG&E to satisfy its capacity
27 obligations. Moreover, OG&E monitors the value that existing capacity has in the
28 market as represented by reported transactions, and these prices were well in excess of
29 the cost of the options considered in the IRP. As noted in the 2014 IRP Update (see page
30 48), the price required for an existing unit to be competitive with the OG&E convert

1 option is significantly less than the current or likely future value of this capacity in the
2 SPP market.

3
4 In summary, acquiring existing capacity was not a viable option when compared to both
5 scrub and conversion options, and acquiring capacity to be constructed by a third party
6 would be even more expensive.

7
8 **Q. Did OG&E consider wind as a capacity replacement option for the Sooner or**
9 **Muskogee units?**

10 **A.** Yes. However, wind energy contributes relatively little capacity value toward OG&E's
11 obligation to the SPP market (approximately 6.1% of OG&E's name plate wind capacity
12 counts toward this obligation, according to the latest SPP formula). As I noted in my
13 Direct Testimony, given the very small capacity credit that wind provides, these resources
14 cannot play a meaningful role in continuing to meet OG&E's SPP capacity obligations while
15 also addressing its environmental compliance obligations.

16
17 As a leading developer and owner of wind energy (as well as transmission provider for
18 the delivery of wind energy to load centers), OG&E continues to be interested in
19 incremental wind additions but for energy, not capacity, reasons. The Company has
20 announced it will explore the value, to its customers, of additional commitments to wind
21 energy at such time as the cost risks associated with transmission and related congestion
22 concerns are resolved, or at least substantially mitigated. In addition, OG&E's desire to
23 build more efficient CTs on its Mustang Plant site is motivated in part by the ability of
24 those units to facilitate the growth of wind energy resources in Oklahoma and across the
25 SPP.

1 Modeling of Uncertainty

2 Q. **You have discussed how OG&E modeled the uncertainty associated with carbon**
3 **regulation. Can you comment in a more general sense on criticisms directed to**
4 **OG&E's treatment of uncertainty?**

5 A. Yes. Everyone understands that by their very nature forecasts are subject to uncertainty
6 and that this introduces risk whether one is buying a physical asset like a house or
7 investing in the stock market. Utilities have an obligation to maintain a "lowest
8 reasonable cost" portfolio while making periodic but often large and expensive resource
9 decisions. These decisions may commit the utility to use a particular fuel or to an
10 emissions profile for a few decades, recognizing that future fuel and emissions costs (and
11 new regulations) are subject to uncertainty. OG&E employed a rigorous and reasonable
12 IRP modeling process to appropriately assess the impact of these uncertainties on an
13 environmental compliance plan decision that it must make today. These periodic
14 resource commitments become an important part of OG&E's effort to hedge these risks.

15
16 Q. **Is the process of seeking the best resource options to hedge risk new to OG&E?**

17 A. No. OG&E has been managing decisions for a portfolio of long-lived, very expensive
18 generation assets and contracts to provide capacity and energy to its customers for many
19 years. The nature and degree of risks has changed over time, but the objective has
20 remained the same.

21
22 The introduction of the SPP Integrated Marketplace ("IM") presents an opportunity to
23 OG&E to reduce customer costs, but also presents a new risk that the prices paid by
24 OG&E to acquire energy to serve customers as well as the prices paid for OG&E
25 generation now depend on the actions of other SPP market participants. OG&E
26 continues to be subject to fuel price risk and environmental market and policy risks.
27 These are all addressed by OG&E to the extent possible by diversifying its resource
28 portfolio. This is the strategy that OG&E has been employing for some time by
29 substantially increasing its reliance on wind energy while also investing in energy
30 efficiency (another great hedge against fuel price volatility).

1 A major resource decision like the one that has been imposed on OG&E by the EPA also
2 represents an opportunity to address the risks inherent in the resource portfolio. OG&E
3 has explicitly reflected these risks and uncertainties in both sensitivity and scenario
4 analyses. These modeling results have appropriately informed OG&E's environmental
5 compliance plan decision. As demonstrated by the collection of IRP modeling analyses
6 performed by OG&E, the Scrub/Convert plan was determined to be the best and most
7 reasonable plan, with due consideration to the need to address future uncertainties and
8 risk. It may not be the lowest cost alternative in every case, but it provides a hedge
9 against the two most significant sources of uncertainty and risk: carbon regulation and
10 natural gas prices.

11
12 **Q. Witness Roach expressed concern that OG&E's sensitivity cases are based on**
13 **changing one assumption at a time. Please comment.**

14 **A.** Witness Roach's criticism is that OG&E performed its sensitivity cases by changing only
15 one assumption at a time. In my experience, this is a common approach to sensitivity
16 analyses which is intended to isolate and allow the consideration of the impact of a
17 change in a single key assumption on the results.

18
19 **Q. Do portfolio decisions reflect straightforward mathematical calculations?**

20 **A.** No. Nor should they. While the models are complex, as is necessary to reflect the
21 mathematics behind optimum unit dispatch across the SPP, there are other resource
22 planning objectives that must be considered (OG&E has nine in total) with some of these
23 being much harder to quantify. It is certainly appropriate to apply the correct
24 methodology and improve the accuracy of the models but informed, expert judgment
25 must also be applied and this is entirely appropriate. Moreover, at the end of the day, the
26 models are assumption-driven and assumptions are subject to uncertainty. The sensitivity
27 and scenario results help inform resource planning decisions by refining the
28 understanding of the potential impact on alternative assumptions or sets of assumptions
29 on the costs that customers pay.

1 **III. PREAPPROVAL, PRUDENCE AND COST RECOVERY**

2 **Q. Please summarize your understanding of OG&E's proposal with respect to a**
3 **prudence determination by the Commission.**

4 **A.** OG&E has requested that the Commission approve its proposed environmental
5 compliance plan. This "pre-approval" allows OG&E to finance and construct the
6 elements of the plan while also providing an opportunity for the Commission to review
7 OG&E's proposal thoroughly before OG&E proceeds.

8
9 This pre-approval represents a determination by the Commission that the decision to
10 implement a specific environmental compliance plan in order to meet a federal mandate
11 is reasonable, based on current facts and circumstances. This regulatory review and
12 approval signals to the investment community that OG&E will be allowed to recover the
13 costs of the investment as long as it executes the development effort in a prudent manner.
14 Consequently, customers benefit because it allows OG&E to finance the construction on
15 reasonable terms.

16
17 **Q. Please summarize your understanding of OG&E's proposal with respect to cost**
18 **recovery.**

19 **A.** The final element of the regulatory process is cost recovery. OG&E could wait until
20 construction is complete and the modified Sooner and Muskogee plants return to service
21 to file a rate case and request that cost recovery begin when the new rates are approved.
22 However, OG&E would be entitled to capitalize its borrowing costs during the
23 construction period, include them in the cost of the plant when it is added to rate base,
24 and recover them over the life of the plant. Oklahoma has a statute (House Bill 1910)
25 that specifically allows OG&E to begin to recover the costs of a mandated environmental
26 compliance plan through a rate "rider" until such time as it files a rate case and the costs
27 are rolled into base rates. As described in the testimony of OG&E witnesses Rowlett and
28 Richard, OG&E is requesting that OG&E begin to recover its "Construction Work in
29 Progress," or "CWIP," through the rate rider. This has the practical effect of accelerating
30 the timing of recovery for OG&E, smoothing out cost recovery over the expected life of
31 the investments, and limiting the size of OG&E's next base case rate increase.

1 Q. Why is it important that the Commission consider the financial impacts on OG&E
2 when addressing cost recovery and related issues in this Cause?

3 A. Because of the large costs involved, ratings agencies have been paying particular
4 attention to the risks that environmental compliance investments may impose on the
5 nation's electric utilities. These assessments are reflected in individual company ratings,
6 including those for OG&E. For example, Moody's Investor Service included the
7 following statement in its November 26, 2014 opinion:

8
9 Oklahoma's state legislature has also proved to be supportive to cost recovery,
10 particularly through House Bill 1910 (HB 1910), which enables the OCC to
11 allow for the pre-approval of qualifying state or Federally mandated
12 environmental costs. This bill and ongoing support for infrastructure cost
13 recovery will be increasingly important as OG&E looks to spend around \$1.1
14 billion in environmental upgrades through 2019, the bulk of which is spent
15 through 2018. The OCC has set hearings to begin March 3, 2015 in order to
16 determine the nature of OG&E's environmental recovery. The company hopes to
17 receive an order shortly thereafter.

18
19 OG&E's environmental capex is the primary risk facing OGE, from its regulated
20 operations. Therefore, OG&E's ability to recover these significant costs on a
21 timely basis will be key to the utility's ability to upstream dividends for OGE
22 debt service and financial support. Additionally, OG&E's financial performance
23 and cash flow generation is the primary contributor to consolidated performance,
24 so OGE's financial metrics, such as Cash Flow from Operations before changes
25 in Working Capital (CFO pre-WC) to debt will likely decline over the next two
26 years as these investments are made.

27
28 I am not suggesting that the Commission approve OG&E's request because it would
29 please the ratings agencies. However, it is appropriate to understand the views of ratings
30 agencies as they do have a potential impact on OG&E's borrowing costs, and ultimately
31 on the costs borne by OG&E's customers to finance its operations.

32
33 Q. A few parties, including Staff witness Roach, OIEC witness Garrett and Walmart
34 witness Chriss, propose that the Commission defer consideration of cost recovery
35 associated with OG&E's environmental compliance plan until the next rate case.
36 What concerns do you have with these proposals?

37 A. In my experience, it is both efficient and sound regulatory policy to pre-approve major
38 investment decisions and address cost recovery at the same time and in the same

1 proceeding. Preapproval is particularly appropriate when, as in this case, the investment
2 is being made to comply with a regulatory or government mandate. This provides Staff
3 and other intervenors that are concerned about the rate impacts of alternative solutions
4 (including the impact of major assumption uncertainties on future customer rates) as part
5 of an integrated decision-making process. Bifurcating the issues is inefficient from a
6 resource perspective and creates the potential that an investment decision will be subject
7 to reconsideration. Therefore, the investment community will be concerned if cost
8 recovery is not addressed as part of the decision, raising the risk profile of OG&E and, as
9 a consequence, customers will ultimately bear unnecessary costs. Moreover, as explained
10 by Witness Rowlett, the Oklahoma Legislature through House Bill 1910 (17 Okl. Stat.
11 §286) specifically endorses the recovery of mandated environmental costs outside of a
12 rate case.

13
14 As the Commission is well aware, pre-approval neither relieves the utility from the
15 obligation to implement the decision in a prudent manner, nor prevents the Commission
16 from a review of the final costs of the project. This has been a common feature in prior
17 pre-approvals granted by the OCC. All parties have benefited from the certainty that this
18 approach provides, with customers being the ultimate beneficiaries by mitigating a
19 portion of the risk associated with major construction projects.

20
21 **Q. Witness Roach asserts that consideration of alternatives is required under**
22 **Oklahoma statute before cost recovery can be granted. Has OG&E made such a**
23 **case in this proceeding?**

24 **A.** Yes. The reasoning and analysis supporting OG&E's decision to pursue the
25 Scrub/Convert case, including a thorough analysis of market and regulatory forecast
26 uncertainties is provided in the 2014 IRP Update. This documentation demonstrates that
27 OG&E has considered a wide range of alternatives.

1 Q. Is it appropriate for OG&E to recover the costs of construction associated with
2 implementing the environmental compliance plan through a rate rider that is
3 designed for this purpose?

4 A. Yes. As described in the testimony of OG&E witnesses Rowlett and Richard, OG&E
5 proposes to recover the costs of its environmental compliance plan through a proposed
6 Environmental and Generation Plan Rider ("EGP Rider"). The EGP Rider, a periodic rate
7 adjustment mechanism specifically provided for under 17 Okl. Stat. §286(B) will recover
8 the costs associated with OG&E's environmental compliance plan until such time as
9 OG&E is able to include such costs in base rates after it files its next rate case. The
10 proposed rider accommodates the recovery of CWIP. The use of rate riders for major
11 environmental capital expenditures has been adopted by a number of other state
12 regulators and is an effective means of addressing cost recovery for recovery of those
13 expenditures without necessitating the need for a full rate case.
14

15 Q. Please expand on the CWIP concept.

16 A. There are two common methods for recovering the costs associated with major, multi-
17 year construction projects. They differ primarily with respect to the timing of cost
18 recovery. The Allowance for Funds Used During Construction ("AFUDC") method
19 allows the utility to capitalize its financing costs during the construction period and
20 recover them over the life of the plant after it is placed in service. This more traditional
21 method can contribute to significant rate increases when the plant becomes part of rate
22 base, particularly if it is a large investment that required a multi-year construction effort.
23 OG&E's proposed method recovers these financing costs or CWIP during the
24 construction period and helps smooth out the rate impact of these large projects. Since
25 OG&E will recover these financing costs in one way or another, the primary beneficiary
26 of this approach is customers who benefit directly from a smoother rate path and
27 indirectly from the impacts of more timely recovery on OG&E's financial standing. The
28 use of CWIP in rate base has also been adopted by Georgia, Florida and South Carolina,
29 among other states, for some categories of major capital expenditures.

1 Q. **Witness Roach recommends that OG&E should be precluded from recovering**
2 **stranded costs if the units are shut down any time prior to 2044. Please comment.**

3 A. Witness Roach bases this recommendation on alleged deficiencies in OG&E's IRP even
4 though he agrees with the Scrub/Convert environmental compliance plan. These alleged
5 deficiencies have been addressed earlier in my testimony as well as in the rebuttal
6 testimony of OG&E witness Howell. If the commission has any remaining concerns
7 about the prudence of OG&E's plans, these concerns should be addressed now, not
8 through imposing conditions on future cost recovery.

9
10 If accepted, Dr. Roach's ratemaking proposal would turn the prudence standard on its
11 head. The prudence standard serves as a pivotal foundation for investment in the
12 regulated utility industry. It provides a set of guidelines or principles that utilities and
13 investors have come to rely on over the past several decades. The standard holds that if
14 the utility makes a prudent decision, it will be allowed to recover the costs associated
15 with the decision, even if future facts and circumstances may turn out different from
16 those reasonably anticipated at the time the decision was made. The key determinant is
17 whether OG&E made a reasonable decision based on the facts and circumstances at the
18 time the decision was made, not in retrospect with the application of hindsight based on
19 circumstances that may have changed. Cost recovery should not be dependent on future
20 events, as seems to be suggested by witness Roach.

21
22 Q. **What principles form the prudence standard?**

23 A. The National Regulatory Research Institute ("NRRI"), the regulatory research affiliate of
24 the National Association of Regulatory Utility Commissioners ("NARUC"), has
25 identified four principles to be followed by state utility commissions when evaluating the
26 prudence of a utility's actions. In The Prudent Investment Test in the 1980s, NRRI
27 identified the following four principles:

- 28 1) a presumption of prudence;
- 29 2) a rule of reasonableness under the circumstances;
- 30 3) a proscription against hindsight; and

1 4) a retrospective, factual inquiry.¹

2
3 The first principle when reviewing utility prudence matters is that there is to be a
4 presumption of prudence for utility actions and that this presumption must be rebutted
5 sufficiently in order to proceed further. This presumption of prudence rests on an opinion
6 from Justice Brandeis in a 1923 case that established the prudence standard that “every
7 investment may be assumed to have been made in the exercise of reasonable judgment,
8 unless the contrary is shown.”

9
10 The second principle requires that the action of the utility’s management be evaluated in
11 light of what was known, or reasonably knowable, at the time the decisions in question
12 were made. It requires that a public utility commission evaluate whether the decisions
13 and conclusions were appropriate given the information available at the time.

14
15 Since the utility’s actions must be judged based on the reasonableness of the
16 circumstances that existed at the time, using hindsight (the third principle) to evaluate a
17 utility’s actions will not result in a supportable finding. Thus, any evaluation of a
18 utility’s actions must be based on the information available, and the circumstances that
19 existed, at the time the decision was made. The last principle requires that a commission
20 develop a record of the facts, not opinions, as they existed at the time the utility’s
21 decision was made.

22
23 **Q. Should the Commission reject witness Roach’s proposal?**

24 **A.** Yes. Dr. Roach’s recommendation is contrary to each of these principles. By definition,
25 a future decision to shutter a scrubbed Sooner or a converted Muskogee plant due to laws
26 or regulations to be enacted in the future would be based on facts and circumstances at
27 some future date, which facts and circumstances are unknowable today.

28
29 For similar reasons, it is not appropriate to specify future operating performance of
30 Sooner and Muskogee and rely on them for purposes of fixing future cost recovery (also

¹ The Prudent Investment Test in the 1980s, Burns, Poling, Whinihan and Kelly, 1984, p. 55.

1 proposed by witness Roach), as these factors will be affected by changes to the plant and
2 factors that may be beyond the control of OG&E. The Commission would need to
3 review the facts and circumstances that may have led to a degradation of plant
4 performance before making any decision on cost recovery.

5
6 In summary, it is inappropriate and contrary to the prudence standard to constrain cost
7 recovery in a future period based on facts and circumstances that are neither known nor
8 knowable today and therefore beyond the control of OG&E.

9
10 **Q. Are there any other cost recovery proposals that raise concerns?**

11 **A.** Yes. Witness Garrett proposes that OG&E's return on equity ("ROE") be reduced as a
12 means of constraining potential cost increases. He also proposes that OG&E finance the
13 environmental compliance plan with all debt.

14
15 Each of these proposals is fundamentally flawed. The standards for establishing a
16 compensatory ROE were established in the first half of the 20th century in the *Bluefield*
17 and *Hope* decisions.² These standards ensure a compensatory return in relation to the
18 returns earned by other businesses having similar risk, adequacy of the return to provide
19 access to capital and support credit quality, and that the end result must lead to just and
20 reasonable rates. Reducing the ROE to mitigate rate impacts, as proposed by witness
21 Garrett, clearly violates these standards. An ROE that is adequate to attract capital at
22 reasonable terms enables the Company to continue to provide safe, reliable electricity
23 service while maintaining its financial integrity. To the extent the Company is provided
24 the opportunity to earn its market-based cost of capital, neither customers nor
25 shareholders are disadvantaged. It would certainly be ironic and perhaps punitive if
26 OG&E were to be rewarded for its efforts to pursue the lowest cost response to a federal
27 mandate on behalf of its customers by having its ROE reduced.

² *Bluefield Waterworks & Improvement Co., v. Public Service Commission of West Virginia*, 262 U.S. 679 (1923); *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).

1 With respect to financing, OG&E employs a corporate finance approach designed to
2 optimize financing necessary to support all of its operations as a whole. It is not possible
3 to conclude that an all-debt financing will result in the lowest reasonable financing cost
4 without considering the large construction project as part of OG&E's overall capital
5 requirements. Bond rating agencies carefully review the capital structures of utilities and
6 the debt service coverage ratios that these capital structures produce. Building up
7 OG&E's debt level beyond what is acceptable to maintain its credit rating would not be
8 in the best interests of customers or investors.

10 IV. MUSTANG

11 **Q. What is your response to certain intervenor criticisms of OG&E's decision to retire**
12 **the Mustang Plant and replace a significant portion of the capacity with more**
13 **efficient gas combustion turbines ("CTs")?**

14 **A.** I addressed the Mustang Plant briefly in my Direct Testimony (see pages 29-30), noting
15 that replacing an old, inefficient unit designed for base load operations with modern CTs
16 would fit well into the SPP IM and contribute to local reliability. OG&E's Mustang
17 modernization plan leverages the value of the site in a way that ensures that customers
18 will continue to benefit from this asset for several more decades.

19
20 Intervenor witness critiques fall into two categories. First, proponents of other generation
21 options (either existing or new), including witness Peaco on behalf of Oklahoma
22 Cogeneration and witness Garret on behalf of OIEC, support an RFP process under the
23 theory that it might uncover a lower cost option to the OG&E Mustang modernization
24 plan. A second, and subsidiary, argument is made by witness Roach that OG&E should
25 make its site available to all potential developers and then determine if someone could
26 build a plant on the site at a lower cost to customers.

27
28 **Q. What concerns do you have with respect to these proposals?**

29 **A.** Turning first to the proposal that OG&E should issue an RFP for capacity and energy,
30 OG&E is issuing RFPs for all of the major components to ensure that customers benefit
31 from competitive pressures. In addition, OG&E's site is clearly a preferred site because

1 of its location close to OG&E's largest load center but also because, as explained by
2 OG&E witnesses Burch, Turner and McAuley, it already has many of the attributes
3 required of a power plant site, including a transmission interconnection and other
4 necessary infrastructure, and environmental permits. Consequently, OG&E's existing
5 plant site will have both cost and reliability advantages over new sites, even those, if any,
6 that are located close to the Oklahoma City load center.

7
8 With respect to the second criticism/proposal, I would be surprised if the Commission has
9 the authority to require the Company's shareholders to make their property available to
10 third parties, but even if the Commission can legally approve this novel approach, there is
11 no reason to assume that the OG&E Mustang modernization plan will not be preferred at
12 the end of the day in that circumstance, as well. This is because third parties should be
13 required to pay the fair market value for what is obviously a valuable property and
14 recover that cost from ratepayers, while OG&E can only pass on to its customers the
15 almost fully depreciated value of the land and assets. The advantage to customers of
16 having a third party construct and presumably own a generating facility at the Mustang
17 site is unsupported in this record, and is counter-intuitive. As explained by OG&E
18 witnesses, OG&E is competitively bidding all major components of the purchase and
19 installation of the CTs at Mustang. There seems no logical reason to believe a third party
20 can get sufficiently better prices (or even any better prices) for new CTs at Mustang to
21 justify the complexity, legal issues and time needed to allow a third party to use the
22 Mustang site.

23
24 **Q. Isn't it possible that existing plants located elsewhere in SPP might provide a**
25 **competitive alternative?**

26 **A.** Yes, this is certainly a theoretical possibility, although as I noted above, they would not
27 provide the local reliability benefits that development of the Mustang site would provide.
28 I understand, however, that OG&E monitors SPP resources and assesses market value as
29 a routine matter and that it is unlikely that there are any such resources that will be
30 competitive with the solution proposed by OG&E – both with respect to Mustang and as

1 part of a portfolio of assets to meet OG&E's capacity needs through its environmental
2 compliance plan.

3
4 **V. CONCLUSIONS AND RECOMMENDATIONS**

5 **Q. Please summarize your principal conclusions.**

6 **A.** It is not surprising that intervenors may have different perspectives on future market and
7 regulatory conditions, but the question before the Commission is whether OG&E's
8 approach is reasonable in light of what the Company knows today. I posed five questions
9 in my Direct Testimony (see page 6) to evaluate a utility IRP. OG&E satisfies each of
10 these criteria.

- 11 1) The assumptions and forecasts underlying OG&E's IRP are reasonable;
- 12 2) OG&E's IRP considers appropriate alternatives, both in terms of alternative
13 future states and alternative resource options;
- 14 3) OG&E's nine IRP evaluation objectives capture the range of important
15 considerations expressed by Staff and other intervenors;
- 16 4) OG&E's action plan is robust and is reasonable under a range of plausible
17 outcomes; and
- 18 5) OG&E's action plan is feasible and mitigates the most important risks,
19 including the risk that gas prices will be considerably higher and that the
20 federal government will implement carbon regulation.

21
22 **Q. Do any of the intervenors propose an environmental compliance plan that meets
23 either your criteria or OG&E's resource planning criteria better than the
24 Scrub/Convert option?**

25 **A.** No. While the wind advocates would like OG&E to continue to invest in wind energy,
26 wind does not address OG&E's requirement to satisfy the SPP capacity obligation. The
27 anti-coal interests (the Sierra Club) are not satisfied with the effective retirement of 40%
28 of OG&E's coal capacity and would have OG&E convert all four coal plants to natural
29 gas. The OIEC would have OG&E scrub all four coal plants, increasing the
30 consequences that would need to be addressed by OG&E should carbon regulation

1 become a reality. Staff witness Roach expresses a few concerns regarding OG&E's IRP
2 approach, but expresses support for the Scrub/Convert environmental compliance plan.

3
4 The Scrub/Convert is clearly a reasonable decision, supported by sound analyses. It is
5 the best environmental compliance plan at this time, particularly given the future
6 regulatory and market uncertainties.

7
8 **Q. OG&E's Action Plan calls for retirement of the Mustang Plant in 2017 and**
9 **replacement with 400 MW of CTs to be constructed on the Mustang site. Is this a**
10 **reasonable decision?**

11 **A.** Yes. While select intervenors have proposed that OG&E conduct a competitive
12 solicitation, the potential marginal benefit provided by this approach is outweighed by the
13 assurance that the site will continue to provide benefits to OG&E's customers if OG&E is
14 allowed to move forward with its plan. OG&E technical experts explain why the
15 Mustang modernization plan makes sense (see the testimony of witnesses Turner,
16 McAuley, and Burch). However, OG&E should be expected to demonstrate that it has
17 leveraged the power of competition in securing major plant components.

18
19 **Q. Please summarize your recommendations.**

20 **A.** Based on my own testimony and the evidence submitted by OG&E witnesses, I
21 recommend that the Commission:

- 22 1) Preapprove OG&E's environmental compliance plan (Scrub/Convert);
- 23 2) Preapprove OG&E's plan to retire the Mustang Plant and develop CTs on the
24 site;
- 25 3) Endorse other elements of OG&E's 2014 IRP Update Action Plan; and
- 26 4) Approve the recovery of OG&E's investments through a cost recovery rider
27 and consider CWIP treatment.

28
29 **Q. Does this conclude your prepared rebuttal testimony?**

30 **A.** Yes, it does.