

BEFORE THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA

IN THE MATTER OF THE APPLICATION)
OF OKLAHOMA GAS AND ELECTRIC)
COMPANY FOR AN ORDER OF THE)
COMMISSION APPROVING THE) CAUSE NO. PUD 202100121
COMPANY'S 2022 DEMAND PORTFOLIO)
AND AUTHORIZING RECOVERY OF THE)
COSTS OF THE DEMAND PROGRAMS)
THROUGH THE DEMAND PROGRAM)
RIDER)

RESPONSIVE TESTIMONY OF MONTELLE CLARK

ON BEHALF OF THE OKLAHOMA SUSTAINABILITY NETWORK

OCTOBER 8, 2021

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

**RESPONSIVE TESTIMONY OF MONTELLE CLARK
ON BEHALF OF THE OKLAHOMA SUSTAINABILITY NETWORK
CAUSE NO. PUD 202100121**

I. INTRODUCTION

Q. Please state your name and positions with the Oklahoma Sustainability Network (OSN).

A. My name is Montelle Clark, and I am the Energy Policy Director of OSN.

Q. On whose behalf are you providing testimony?

A. I am providing testimony for OSN.

Q. Please describe the Oklahoma Sustainability Network.

A. OSN is a 501(c)(3) nonprofit, founded in 1999, that strives to connect and educate the people of Oklahoma concerning the many aspects of sustainability, and to contribute practical ideas linking a prosperous economy with a healthy environment and thriving communities. Our board of directors includes members with expertise ranging from environmental economics, medical science, and public policy, to public relations, transportation, and air quality policies and issues.¹

Q. Describe your responsibilities as the Energy Policy Director of OSN.

A. I've been a member of the OSN board of directors and served as OSN's Energy Policy Director since 2007. In that capacity I have directed all of OSN's participation in

¹ www.oksustainability.org

1 Corporation Commission rulemakings, utility DSM applications, rate cases,
2 environmental compliance plans, renewable energy and grid modernization proposals,
3 OCC Inquiries, and Integrated Resource Plans.
4

5 **Q. What other policy activities are you engaged in as OSN's Energy Policy Director?**

6 A. I contributed to the development of the Oklahoma First Energy Plan under Secretary of
7 Energy Michael Ming and from 2016 through 2018, I participated in Secretary Michael
8 Teague's Distributed Generation Policy Group. In 2008, I was appointed by Governor
9 Brad Henry to the Air Quality Council at DEQ, where I represented the general public on
10 rulemakings for the Clean Air Act. I was reappointed to the Council by Governor Mary
11 Fallin in 2012 and served a full 7-year term.
12

13 **Q. Please describe your professional background as it relates to your work for OSN.**

14 A. Prior to my position with OSN, my knowledge of energy policy was derived from years of
15 public engagement on air quality issues. Since joining OSN, I have attended numerous
16 webinars and conferences on energy policy and air quality from groups like the
17 Regulatory Assistance Project, EPA, and the American Council for an Energy-Efficient
18 Economy (ACEEE) and I've reviewed many publications and research papers from these
19 groups and others in order to inform OSN's activities in the Oklahoma regulatory arena.
20 OSN relies on my knowledge of the Commission and demand-side management (DSM)
21 efforts in Oklahoma and around the country. I note that while I don't have specific
22 academic qualifications, I have spent the last 15 years highly engaged in contributing to

1 and helping shape policy and programs for demand-side management in Oklahoma.

2
3 **Q. What is your history of engagement on behalf of OSN with DSM programs in**
4 **Oklahoma?**

5 A. I participated in the original Demand Programs rulemaking in 2008 and again in the 2013
6 rulemaking update, and we've been a party in each of OG&E's previous Demand
7 Portfolio proposals. I have attended every OG&E stakeholder meeting since they were
8 first launched and have closely reviewed every annual Evaluation, Measurement &
9 Verification (EM&V) report. I also review the Demand Programs offered by PSO, ONG,
10 and CenterPoint. I also monitor best practices and innovations in program design and
11 implementation, review industry reports, and maintain frequent communication with
12 efficiency program experts across the country.

13
14 A list of my engagements and efforts as Energy Policy Director of OSN is provided in
15 Exhibit MC-1.

16
17 **Q. Have you testified before the Oklahoma Corporation Commission before?**

18 A. No, I have not.

19
20 **Q. Do you ask that the Commission accept you as an expert regarding policy and program**
21 **development as it relates to demand programs?**

22 A. Respectfully, I do.

1 **II. DESCRIPTION AND BENEFITS OF DEMAND SIDE MANAGEMENT PROGRAMS**

2

3 **Q. Why does OSN actively support DSM policies and programs?**

4 A. There are multiple benefits associated with DSM that are compelling for OSN. DSM is

5 affordable and very cost-effective; it supports resiliency and equity for customers; it's

6 the lowest risk energy and capacity resource available to utilities; it reduces strains on

7 the distribution grid; it reduces smog-forming emissions and CO2 emissions; and it

8 conserves water in our drought-prone state.

9

10 **Q. Can you provide specific examples of some of the benefits that you identified above?**

11 A. For affordability we can look to OG&E's 2020 Demand Programs Annual Report, which

12 shows a Levelized Cost per kWh of \$0.027, or less than 3 cents a kWh.² This figure

13 compares well with recent data from the American Council for an Energy-Efficient

14 Economy (ACEEE), which reports an average price for saved energy of \$0.024/kWh

15 across 48 large investor-owned utilities.³ ACEEE is a leading, highly-respected, non-profit

16 research and policy organization on energy efficiency.

17

18 **Q. Are there additional national reviews of the cost savings provided by energy efficiency?**

19 A. Yes. Lawrence Berkeley National Lab (LBNL) also reviewed the cost of saved energy this

20 year. They examined 62 utilities and reported an average cost of \$0.026/kWh. Again,

² *Oklahoma Comprehensive Demand Program Portfolio 2020 Annual Report*, OG&E, July 2021, p. 8, Table 3.2.

³ *The Cost of Saving Electricity for the Largest U.S. Utilities - ACEEE Topic Brief*, 2021.
https://www.aceee.org/sites/default/files/pdfs/cost_of_saving_electricity_final_6-22-21.pdf

1 that's very close to OG&E's reported cost.⁴

2
3 **Q. In addition to a low-cost energy source, does DSM provide capacity savings and**
4 **benefits?**

5 A. The LBNL study also reviewed the cost of reducing peak demand through energy
6 efficiency programs. Three-fourths of this peak demand savings cost the utilities less
7 than \$200 per kW. And more than half of the peak demand savings actually cost less
8 than \$100 per kW. This is a much lower cost than any other capacity resource reviewed
9 by OG&E in their 2021 Integrated Resource Plan, with prices for capacity that range from
10 \$660 per kW to \$2,590 per kW.⁵

11
12 **Q. Has OG&E and its customers experienced these capacity benefits?**

13 A. Yes, for example in 2020 OG&E DSM programs saved 27 MW of peak demand.⁶ OG&E is
14 projecting an additional 104 MW of peak demand savings over the next three years of
15 the proposed portfolio.⁷

16
17 **Q. Did OG&E's 2020 Demand Programs Annual Report demonstrate that OG&E's**
18 **programs are cost-beneficial to customers?**

19 A. For cost-effectiveness, OG&E's 2020 report shows that their programs passed the Utility
20 Cost Test with a ratio of more than 3 to 1, meaning for every \$1.00 invested there is a

⁴*Still the One: Efficiency Remains a Cost-Effective Electricity Resource* - Berkeley Lab, 2021
<https://eta.lbl.gov/publications/still-one-efficiency-remains-cost>

⁵OG&E 2021 Integrated Resource Plan, p. 9, Table 6.

⁶OG&E 2020 Annual Report, p. 6

⁷ 2022-2024 Demand Program Plan for Oklahoma - p 8, Table 2 (Attachment to Amended Direct Testimony of Alek Antczak)

1 \$3.00 return. OG&E’s programs passed the Societal Cost Test at 2.58 to 1, also indicating
2 a good investment from a public interest perspective.

3
4 **Q. What about the resiliency and equity benefits for customers that you identified?**

5 A. Resiliency and equity benefits are most apparent in OG&E's Weatherization Residential
6 Assistance Program (“WRAP”). When a low-income customer's home is insulated and
7 weatherized and the HVAC ducts are sealed it reduces the customer's bills, but it also
8 makes that home better able to withstand extreme weather - and even power outages.
9 And even though all the costs of the WRAP measures are paid by the program, it still
10 easily passes the primary cost-effectiveness tests in 2020.⁸ This type of program
11 exemplifies the value of energy efficiency investments. The program lowers the energy
12 consumption on the utility system, reduces demand on the system, and the customer
13 experiences lower monthly electric bills – providing benefits for the participant, the
14 utility, and the other utility customers.

15
16 **Q. Tell us how demand-side investments reduce risk to utility customers.**

17 A. The avoided risk benefits associated with demand-side investments are often overlooked,
18 but compared to supply-side resources, demand side management (DSM) is a
19 considerably safer option. For example, DSM reduces risk to customers in a number of
20 ways, including:

21

⁸OG&E 2020 Annual Report, p. 7.

- 1 • DSM resources carry no risk of becoming stranded assets in the future;
- 2 • There are no transmission line costs, no interconnection costs, no
- 3 congestion or curtailment risks;
- 4 • No risk of construction delays or cost overruns;
- 5 • No rail lines for fuel;
- 6 • No pipeline costs;
- 7 • No eminent domain battles;
- 8 • No water supply risks or wastewater disposal issues;
- 9 • No tax credit debates; and
- 10 • DSM is not subject to future EPA rules or compliance.

11
12 None of these avoided risks are specifically quantified or monetized in the cost-
13 effectiveness tests, but these benefits are real and they accrue to all customers -
14 participants and non-participants alike.

15
16 **Q. Can you provide an example of how supply-side resources are riskier (and costlier) for**
17 **customers?**

18 A. This past February's winter weather event clearly and painfully illustrated the fuel supply
19 risks associated with gas-fired generation. Coal-fired power is undermined by its
20 emissions and the likelihood of carbon constraints, and even renewables have a few risks
21 associated with location siting, transmission congestion, and curtailment. DSM has none
22 of these issues.

23
24 **Q. Are there other quantified financial benefits associated with DSM?**

25 A. Yes. For the benefits of avoided emissions associated with energy efficiency (EE)
26 programs, including reduced emissions of criteria pollutants or ozone precursors, we do
27 have specific monetary values that should be applied – at least for a *public interest*
28 perspective. EPA's updated "Public Health Benefits per kWh" report (May 2021) places

1 the value of avoided emissions from energy efficiency in a range of 1.3 - 3.09 ¢/kWh.⁹

2
3 Below is a table from that EPA report listing the values calculated for various regions of
4 the country. Oklahoma is in the Central region. This data is helpful with putting these
5 air quality benefits into context. I've highlighted the portion that reflects the values that
6 would be applicable to EE programs in Oklahoma.

7 **Table ES-1. 2019 Benefits-per-kWh Values (cents)**

Region	Project Type	3% Discount Rate	
		2019 ¢/kWh (low)	2019 ¢/kWh (high)
California	Uniform EE	0.67	1.51
	EE at Peak	0.74	1.67
	Utility Solar	0.65	1.47
	Distributed Solar	0.64	1.44
	Onshore Wind	0.63	1.41
	Offshore Wind	0.67	1.50
Carolinas	Uniform EE	1.66	3.75
	EE at Peak	1.65	3.73
	Utility Solar	1.69	3.80
	Distributed Solar	1.69	3.81
	Onshore Wind	1.66	3.75
	Offshore Wind	1.66	3.74
Central	Uniform EE	1.37	3.09
	EE at Peak	1.33	2.99
	Utility Solar	1.34	3.01
	Distributed Solar	1.34	3.02
	Onshore Wind	1.39	3.14

8
9

⁹"Public Health Benefits per kWh of Energy Efficiency and Renewable Energy in the United States: A Technical Report" – EPA, May 2021, 2nd Edition - https://www.epa.gov/sites/production/files/2021-05/documents/bpk_report_-_second_edition_-_2019.pdf

1 **Q. How does this table instruct the policy considerations for the public health benefits?**

2 A. Even if we use EPA's lowest number from Table ES-1 - 1.37 cents/kWh - the public health
3 benefits of OG&E's proposed energy savings reaches \$2.3 million annually. EPA's report
4 includes the following observation: "State and local governments are increasingly
5 interested in quantifying the public health value of emissions reductions from EE/RE so
6 that they can fully reflect these benefits in policy decision-making processes." The report
7 identifies various stakeholders for these benefits-per-kWh screening values, including
8 state and local energy agencies, air quality or public health agencies, and Public Utility
9 Commissions.¹⁰

10

11 For reductions in greenhouse gases, OG&E's 2020 Demand Programs Annual Report
12 again provides specific data. OG&E's EE programs in 2020 avoided 112,370 tons of
13 CO₂.¹¹ I believe it is important for the Commission to recognize that a ratepayer and
14 *public interest* value of avoided carbon emissions is crucial and prudent for evaluating
15 the benefits of DSM programs. Unfortunately, OG&E has chosen not to include an
16 avoided cost value or sensitivity for reduced carbon emissions in their proposed
17 portfolio,¹² but their 2021 Integrated Resource Plan utilized a value of \$20 per ton
18 starting in 2025.¹³ Applying that \$20 avoided cost to OG&E's reported 2020 avoided CO₂
19 emissions produces a value of more than \$2.2 million annually.

20

¹⁰ibid, p. 31.

¹¹OG&E 2020 Annual Report, p. 9, Table 3.6.

¹²OG&E Response to Data Request OSN 1-5.

¹³OG&E 2021 Integrated Resource Plan, p. 15, Table 7.

1 **Q. You also mention benefits associated with reduced water consumption. Can you**
2 **explain this?**

3 A. For reduced water consumption, the OG&E Annual Report shows that OG&E's EE
4 programs in 2020 saved 46.6 million gallons of fresh water usage at the thermoelectric
5 generators, whose operations require large amounts of water for cooling. Efficiency
6 measures installed at residential sites, like low-flow showerheads and faucet aerators,
7 saved an additional 36 million gallons of water annually.¹⁴ Conserving natural resources,
8 such as fresh water, provides benefits for OG&E's customers and all Oklahomans.

9

10 **III. EVALUATION OF OG&E'S PROPOSED PORTFOLIO FOR 2022-2024**

11

12 **Q. Based on your knowledge of the various benefits and characteristics of successful**
13 **demand-side efforts, what is your overall impression of OG&E's proposed portfolio for**
14 **2022-2024?**

15 A. OG&E mostly is proposing to continue their successful and proven programs from the
16 2019-2021 portfolio, but they also are introducing a number of significant and innovative
17 improvements, including, for example, a three-tiered qualification system - Bronze, Silver,
18 and Gold - for their new home construction program. Tiered incentive design encourages
19 builders to reach higher savings levels, and new construction is one of the best
20 opportunities for comprehensive energy efficiency projects that can produce decades of
21 demand reduction.

22

¹⁴OG&E 2020 Annual Report, p. 9.

1 OG&E also is proposing to implement new rebates for EnergyStar level two EV chargers,
2 rebates for wi-fi thermostats, which can be combined with time of use rates, and a
3 proactive LED lighting replacement incentive for streetlights or security lights for both
4 commercial and residential customers.

5
6 **Q. What other new components is OG&E proposing?**

7 A. OG&E also is proposing a few new research and development (R&D) projects, all of
8 which are of interest to OSN. As an example, the WRAP Enhancement Pilot is a
9 promising effort to address the challenge of customers who are eligible for the WRAP
10 low-income program, but whose home needs minor repairs before the efficiency
11 upgrades can be applied. It also includes important HVAC measures that should help
12 WRAP customers reduce one of the largest sources of high energy bills. Each of these
13 components will bring additional value and savings to the demand portfolio and allow
14 the programs to reach more customers.

15
16 **Q. Do you have any concerns about any parts of the portfolio proposed by OG&E?**

17 A. My primary concern is over the limited size of the WRAP program for lower income and
18 hard-to-reach customers. The Demand Program rules state that demand portfolios shall
19 "Address programs for low-income customers and hard-to-reach customers to assure
20 proportionate Demand Programs are deployed in these customer groups."¹⁵ Slide
21 number 13 of the Market Characterization presentation attached to the testimony of

¹⁵OAC 165:35-41-4(b)(10).

1 OG&E witness Alek Antczak indicates that 22% of OG&E's residential customers are
2 eligible for the WRAP program. OG&E has proposed an annual portfolio budget
3 averaging \$39,414,147 per year, and 22% of that budget would equal \$8,671,112, but
4 the proposed average annual budget for the WRAP program is \$6,240,033.¹⁶

5
6 **Q. Should OG&E increase the WRAP budget to address this disproportionate spending?**

7 A. Achieving proportional spending would require a substantial increase for the WRAP
8 budget, but the portfolio for the next three years offer an opportunity to make progress
9 on serving low-income residential customers. OG&E's overall proposed portfolio budget
10 is right at the \$2.50 per month residential monthly spending level for all three years, but
11 the rules allow an exceedance of that amount if the benefits and rationale can be
12 proven.¹⁷ The benefits of the WRAP program are clearly described in the annual
13 reports,¹⁸ and it's important to note that the program is cost-effective, with a Utility Cost
14 Test ratio of 2.38 and a Societal Cost Test ratio of 3.98 in 2020.¹⁹ Any result above 1
15 indicates cost-effectiveness.

16
17 **Q. What is the potential for the WRAP program and how is the current proposal too**
18 **limited?**

19 A. OG&E's 2020 Demand Programs Annual Report states that the number of potential

¹⁶Amended Direct Exhibit AA-1, p 7, Table 1.

¹⁷OAC 165:35-41-5(d)(2).

¹⁸A thorough qualitative and quantitative review of the program can be found in ADM's 2020 Demand Program Evaluation report, section 5, pp. 164-200.

¹⁹OG&E 2020 Annual Report, p. 7, section 2.4.

1 customers for the WRAP program is more than 211,000.²⁰ OG&E is proposing to reach
2 3,500 single-family and multifamily homes annually through the WRAP program over the
3 next three years. At that pace it would require many years to reach even 50% of eligible
4 customers. This demonstrates that expansion of additional funds for the WRAP program
5 is appropriate under the rule of proportional spending.

6
7 **Q. Do you have any other observations on OG&E's proposed Demand Portfolio?**

8 A. OSN has noted over the last five years that OG&E's actual annual Demand Portfolio
9 spending has fallen significantly short of the approved budgets. While 2020 might be
10 considered an exceptional year, due to the pandemic, this pattern of under-spending is
11 also seen in previous years.

12
13 **Table 2. OG&E Approved Budget v. Actually Spent**

14

Year	Approved Budget ²¹	Actually Spent ²²
2020	\$36,850,831	\$33,964,158
2019	\$36,462,637	\$35,111,399
2018	\$40,427,349	\$37,225,000
2017	\$40,067,763	\$37,587,000
2016	\$35,513,050	\$33,342,000
TOTAL	\$189,321,630	\$177,229,557

15
16 As can be seen in Table 2, the total amount left unspent over the last five years is more
17 than \$12 million. I assume that this under-spending likely is a result of efforts to stay
18 strictly within the approved budget. Unfortunately, it represents a significant missed

²⁰OG&E 2020 Annual Report, p. 4, Table 2.1.

²¹ 2019 & 2020 budgets from Cause 2018-00074 - Joint Stipulation and Settlement Agreement. 2016-2018 budgets from Cause 2015-00247 - Joint Stipulation and Settlement Agreement, OG&E Revised Attachment B.

²² Spending from OG&E 2020 Annual Report, p. 8, Table 3.1.

1 opportunity for additional cost-effective savings, along with the other important benefits
2 described above. OG&E's 2018 Demand Programs Annual Report noted that the primary
3 challenge for the Schools and Government Efficiency ("SAGE") channel, for example, is
4 that "the number of willing participants and savings opportunities far outweighs the
5 available funding."²³

6
7 **Q. Do you have a recommendation to address this under-spending?**

8 A. I recommend the Commission approve a 4% buffer for the total approved portfolio
9 budget. With uncertainties in the economy and the outlook for the pandemic, it's
10 difficult to precisely forecast the level of demand for each program. Program managers
11 will understandably err on the side of caution so as not to exceed amounts approved by
12 the Commission, but if savings opportunities exceed expectations, programs could
13 become over-subscribed, which could lead to mid-year closures. I have seen this happen
14 before. Customers are left frustrated and an opportunity is lost. With a 4% spending
15 buffer, program managers would still aim for the approved budget, but they would have
16 a reasonable amount of flexibility for meeting customer participation without being
17 penalized.

18
19 **Q. Based on your evaluation, what modifications do you recommend?**

20 A. I recommend that the Commission approve OG&E's application in this matter, but with
21 two changes.

²³2018 Oklahoma Demand Programs Annual Report, July 2019 – p. 31, para. 8.

1 First, to encourage a move toward proportional spending consistent with the Rules, I
2 recommend the Commission approve an increase in the average annual WRAP program
3 budget by 25%, raising it from \$6.24 million to at least \$7.8 million.

4
5 Second, to address under-spending of approved budgets, I recommend the inclusion of a
6 4% budget buffer mechanism for the total portfolio to encourage complete use of final
7 budgets as approved by the Commission.

8

9 **Q. Does this conclude your responsive testimony?**

10 A. Yes, it does.

11

Exhibit MC-1**Montelle Clark – Energy Policy Director, OSN
Case participation and related energy inquiries (15 years)****2021:**

- PSO Application for Approval of DSM Programs - PUD 202100041
- OG&E IRP review
- PSO IRP review

2020:

- PUD Review of rules and request for input in response to Governor Stitt's Executive Order 2020-03
- OCC Inquiry to Examine Issues Related to Energy and Public Utilities - PUD 202000083
- OG&E Application for Recovery Mechanism for Grid Enhancement Plan - PUD 202000021

2019:

- PSO Request for Cost Recovery of Selected Wind Facilities - PUD 201900048

2018:

- OCC Rulemaking - 201800010, 201800011, 201800012
- OG&E Application for Approval of DSM Programs - PUD 201800074
- PSO Application for Approval of DSM Programs - PUD 201800073
- PSO IRP review
- OG&E IRP review

2017:

- PSO IRP Update review

2016-2021:

- DSM Stakeholder Meetings with OG&E, PSO, ONG, CenterPoint

2016-2018:

- Distributed Generation Policy Group - Directed by Secretary of Energy & Environment Michael Teague.

2016:

- ONG Application for Approval of DSM Programs - PUD 201600132
- OG&E Rate Case - PUD 201500273

2015:

- Development of "Energy Efficiency and Demand Response Potential Assessment" for OG&E

and PSO.

- OG&E Application for Approval of DSM Programs - PUD 201500247
- PSO Application for Approval of DSM Programs - PUD 201500244
- PSO IRP review
- OG&E IRP review

2014:

- OCC DSM Rulemaking - RM 201300012 and RM 201300014
- OG&E IRP update review

2013:

- ONG Application for Approval of DSM Programs - PUD 201300007
- PSO Request for Modifications to Green Energy Choice Tariff - PUD 201300101
- PSO IRP Update review

2012:

- OG&E Application for Approval of DSM Programs - PUD 201200134
- PSO Application for Approval of DSM Programs - PUD 201200128
- PSO IRP review
- OG&E IRP review

2011:

- Contributions to the development of the Oklahoma First Energy Plan - Secretary of Energy Michael Ming.
- OG&E IRP review

2010:

- PSO Request for Approval of Renewable Energy and Green Energy Choice Tariff - PUD 201000092

2009:

- OG&E Application for Approval of DSM Programs - PUD 200900200
- PSO Application for Approval of DSM Programs - PUD 200900196
- OG&E Rate Case - Advanced Metering Infrastructure - PUD 200800398
- OCC Ch 45 Rulemaking - RM 200800011

2008:

- OG&E Application for DSM "Quick Start" programs - PUD 200800059
- PSO Application for DSM "Quick Start" programs - PUD 200700449

2007:

- Initial DSM stakeholder collaborative and OCC rulemaking - RM 200700007