Exhibit No.:	
Issue:	IRP
Witness:	Kayla Messamore
Type of Exhibit:	Rebuttal Testimony
Sponsoring Party:	Evergy Missouri Metro and Evergy Missouri West
Case No.:	EO-2020-0262 (Lead - Consolidated) EO-2020-0263 (Consolidated)
Date Testimony Prepared:	December 4, 2020

MISSOURI PUBLIC SERVICE COMMISSION

CASE NOS.: EO-2020-0262 (Lead - Consolidated)
EO-2020-0263 (Consolidated)

REBUTTAL TESTIMONY

OF

KAYLA MESSAMORE

ON BEHALF OF

EVERGY MISSOURI METRO
and EVERGY MISSOURI WEST

Kansas City, Missouri
December 2020

REBUTTAL TESTIMONY

OF

KAYLA MESSAMORE

Case Nos. EO-2020-0262 (Lead - Consolidated)
EO-2020-0263 (Consolidated)

Q: Please state your name and business address.

A: My name is Kayla Messamore. My business address is 1200 Main, Kansas City, Missouri 64105.

Q: By whom and in what capacity are you employed?

A: I am employed by Evergy Metro, Inc. and serve as Director of Long Term Planning for Evergy Metro, Inc. d/b/a as Evergy Missouri Metro ("Evergy Missouri Metro"), Evergy Missouri West, Inc. d/b/a Evergy Missouri West ("Evergy Missouri West"), Evergy Metro, Inc. d/b/a Evergy Kansas Metro ("Evergy Kansas Metro"), and Evergy Kansas Central, Inc. and Evergy South, Inc., collectively d/b/a as Evergy Kansas Central ("Evergy Kansas Central") the operating utilities of Evergy, Inc. (collectively, the "Company").

Q: Who are you testifying for?

A: I am testifying on behalf of Evergy Missouri Metro and Evergy Missouri West (collectively, "Evergy" or "the Company").

Q: What are your responsibilities?

A: My responsibilities include leadership of Evergy's long-term planning activities, which include Energy Resource Management ("ERM"), Transmission Planning, Distribution Planning, and Operations Technology. Specifically related to this testimony, the activities of ERM include integrated resource planning, wholesale

energy purchase and sales evaluations, fuel budgeting, renewable energy standards compliance, and capital project evaluations.

Q: Please describe your education, experience and employment history.

A: I hold a Bachelor of Business Administration from the University of Texas at Austin. I worked as a strategy consultant in the power and utilities industry beginning in 2014 and have worked in strategy and planning at Evergy since 2018.

Q: Have you previously testified in a proceeding at the Missouri Public Service Commission ("MPSC" or "Commission") or before any other utility regulatory agency?

A: No.

Q: What is the purpose of your rebuttal testimony?

A: The purpose of my rebuttal testimony is to respond to the Direct Testimony of OPC witness Lena Mantle. Specifically, I am responding to Witness Mantle's third recommendation related to short-term capacity contracts. Her other recommendations are addressed by Company Witnesses Carlson, File and Starkebaum.

Q: Please summarize your testimony.

A: Witness Mantle is recommending a disallowance of $1,979,572 based simply on a modeling assumption from the 2017 Integrated Resource Plan ("IRP"). This modeling assumption had no impact on the Company's preferred resource plan decisions and had no impact on the actual cost of purchased power or fuel during

the FAC review period in this case. Given there has been no harm to the Company's retail customers, this proposed disallowance should be rejected.

Q: Could you expand upon Witness Mantle's justification of this recommendation based on your understanding?

A: As documented in her testimony, Witness Mantle's recommendation is described as "Evergy Metro Acted Imprudently by Not Entering Into Short-Term Capacity Contracts". However, based on the actual content of the testimony, Witness Mantle's recommendation appears to be more abstract and to center primarily around an assumption used in Evergy's 2017 IRP modeling and not necessarily around Evergy's decision whether or not to enter into short-term capacity contracts. As I understand it, witness Mantle claims that: 1) Evergy should have recognized that there was a limited market for capacity contracts and, 2) that if Evergy had recognized such a limited market it would have resulted in the selection of a different preferred plan and, 3) that different preferred plan would have financially benefited Evergy ratepayers and thus Evergy should be penalized for this claimed loss of potential "benefit".

Q: Do you agree with Ms. Mantle's recommendation?

A: No. First, OPC seems to extrapolate that because the potential for short-term capacity contracts was modeled in the 2017 IRP, thus the Company acted imprudently by not entering into capacity contracts as part of its resource acquisition strategy during the prudence review period. However, as Company witness John Carlson describes in his rebuttal testimony, no short-term capacity contracts were available to enter into during this period. Ms. Mantle's Direct

testimony (p. 14) also describes the challenges with making such sales due to SPP market conditions. Second, and most fundamentally, the assumption of such bilateral capacity contracts was not critical in determining the preferred plan and thus had no impact on the resource decisions made as a result of the resource planning process. Third, witness Mantle cannot show any actual harm to customers caused by Evergy's inclusion of such assumptions in developing its preferred plan.

Q: Why are capacity sales modeled in the Company's resource plan?

A: Given the "lumpiness" of generation capacity additions (meaning that capacity is typically added in large "chunks" corresponding to new power plants), it is not uncommon for a utility to have some amount of capacity above that required to meet regional reserve margin requirements, which in the Company's case is 12%. While at times the opportunity to sell this excess can be limited, it does have some value.

Q: Do you agree with OPC's contention (pp. 15 and 17, Mantle Direct) that the Company's resource plan modeling was imprudent?

A: No. It is not unreasonable to believe that the capacity a utility may have that exceeds their requirements has some value.

Q: Do agree with OPC's contention (p. 18, Mantle Direct) that it was certain that the off-system sales would not be made?

A: No. As Company Witness John Carlson discusses, the Company is always on the lookout for potential sales. Although there were no agreements available during this prudence review period, that does not mean it is unreasonable to assume, in

IRP analysis undertaken in 2017, that there could have been. As Witness Carlson discusses, the Company maintains relationships with many potential counterparties who can and do seek out capacity purchases/sales depending on their needs at any given time.

Q: Is the purpose of the IRP process to enable parties to make prudence adjustments against the Company if the assumptions contained in the IRP do not come to pass?

A: No. The IRP is a planning process mandated by the Commission's rules. These rules do not impose a yardstick to measure the Company's performance. As stated in 20 CSR 4240-22.010 (2) (B), one of the fundamental objectives of the resource planning process is that the utility "shall…use minimization of the present worth of long-run utility costs as the primary selection criterion in choosing the preferred resource plan". There is no implication here that the calculated present worth of long-run utility costs (NPVRR) modeled should then *determine* actual customer costs going forward. These costs are established through general rate cases, FAC proceedings, and any other proceedings which exist *for the purpose of* assessing customer costs. Within the IRP, NPVRR is calculated across a variety of scenarios which are established through combinations of critical uncertain factors and then the ultimate outcome of the IRP is the selection of a preferred plan and resource acquisition strategy based primarily on the minimization of NPVRR. The outcome of the IRP is thus the selection of a preferred plan and not the NPVRR associated with this preferred plan.

Q: Does OPC's assertion that the Commission should "hold Evergy to the standard of its own modeling" (p. 18, Mantle Direct) make sense?

A: No. As discussed above, the IRP process is not a yardstick to measure the Company's performance. To expand upon the prior point, the NPVRR values used as the primary factor in selecting a preferred plan are an expected value across many different scenarios with a variety of assumptions such as load growth, natural gas prices, and carbon prices. As a result, the NPVRR calculated is a composite across many scenarios and thus could never be considered a "standard" which Evergy should be held to when Evergy operates in only one scenario (which will likely not exactly align with any of the modeled scenarios) at any given time. As long as changing an assumption used in calculating NPVRR has no impact on which Preferred Plan would be selected (i.e., as long as it is not "critical") it is simply a modeling assumption and has no impact on customers.

Q: Have you now conducted modeling to confirm that this assumption is not critical?

A: Yes. Per 20 CSR 4240-22.020(8), a "critical uncertain factor is any uncertain factor that is likely to materially affect the outcome of the resource planning decision". Thus, to determine whether this assumption was critical, the Company assessed the NPVRR of eight resource plans across 18 different scenarios with and without the assumption of value for short-term capacity sales. The Company then compared the ranking of the eight plans in these two different sets of results (across all 18 scenarios) to determine if changing the capacity sale assumption impacted the plan ranking and, most importantly, whether the preferred plan

(originally Plan KABHA) would have changed without this assumption included. A summary of these modeling results is attached as Schedule KDM-1.

Q: What were the results of this modeling?

A: As previously stated, the exclusion of these capacity sales had no material impact on the ranking of resource plans and thus Evergy's preferred plan selection was not impacted by this assumption. As a result, no customer harm was incurred because of this assumption.

Q: Do you agree with OPC's assessment (p. 16, Mantle Direct) that the structure of the FAC recovery had any impact on why the Company did not enter into a short-term capacity sale?

A: No. As described in Company Witness John Carlson's testimony, no agreements were available for such a sale. Ms. Mantle's testimony also supports the challenges the Company has shown to exist with making such sales.

Q: Do you agree with OPC's assessment (p. 16, Mantle Direct) that "the risk associated with including capacity contracts in the resource planning process lies completely with customers"?

A: No. As described above, the inclusion of these contracts in the modeling is not critical and had no impact on preferred plan selection. As a result, no risk for customers was created through the use of this assumption. In addition, the Company's resource planning decisions are subject to review in rate cases. If an actual resource decision was found to be imprudent, it would be addressed by the Commission.

Q: Do you agree with OPC's assessment (p. 17, Mantle Direct) that customers were harmed as a result of Evergy's modeling assumption?

A: No. As described above, the inclusion of these contracts in the modeling is not critical and had no impact on preferred plan selection. Therefore, there was no harm to customers caused by using this assumption.

Q: Do you agree with OPC's imprudence estimate amount (p. 19, Mantle Direct)?

A: No. There was no imprudence. Customers did not pay more due to the inclusion of a capacity sales assumption in the IRP model and therefore no disallowance is warranted.

Q: Does this conclude your testimony?

A: Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Third Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of Evergy Missouri West Inc., d/b/a Evergy Missouri West	))))	File No. EO-2020-0262
In the Matter of the Third Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of Evergy Metro, Inc., d/b/a Evergy Missouri Metro	))))	File No. EO-2020-0263

AFFIDAVIT OF KAYLA MESSAMORE

STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

Kayla Messamore, being first duly sworn on his oath, states:

1. My name is Kayla Messamore. I work in Kansas City, Missouri, and I am employed by Evergy Metro, Inc. and serve as Director of Long Term Planning for Evergy Metro, Inc. d/b/a Evergy Missouri Metro ("Evergy Missouri Metro) and Evergy Missouri West, Inc. d/b/a Evergy Missouri West ("Evergy Missouri West").

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Evergy Missouri Metro and Evergy Missouri West consisting of nine (9) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Kayla Messamore

Subscribed and sworn before me this 4th day of December 2020.

Notary Public

My commission expires: 4/26/2021

ANTHONY R WESTENKIRCHNER
Notary Public, Notary Seal
State of Missouri
Platte County
Commission # 17279952
My Commission Expires April 26, 2021

Table 1: Original 2017 IRP Alternative Resource Plan Ranking
Expected Value NPVRR Across All 18 Scenarios

Rank (L-H)	Plan	NPVRR ($mm)	Delta	Retirements	Additions	DSM level
1	KABHA	$21,586	$0.0	M2, M3: Dec 31, 2018	None	RAP- w DSR
2	KABCA	$21,700	$113.9	M2, M3: Dec 31, 2018	None	RAP-
3	KBCCA	$21,705	$118.9	M2, M3: Dec 31, 2018, LC1: Dec 31, 2025	207mw CT in 2036	RAP-
4	KABEA	$21,719	$133.4	M2, M3: Dec 31, 2018	414mw CT in 2036	MEEIA/KEEIA
5	KAACA	$21,722	$135.6	M2, M3: Dec 31, 2021	None	RAP-
6	KABBA	$21,725	$139.1	M2, M3: Dec 31, 2018	None	RAP
7	KABCW	$21,809	$223.0	M2, M3: Dec 31, 2018	200mw Additional Wind	RAP-
8	KABAA	$21,811	$224.9	M2, M3: Dec 31, 2018	None	MAP

Table 2: 2017 IRP Alternative Resource Plan Ranking Without Capacity Sales
Expected Value NPVRR Across All 18 Scenarios

Rank (L-H)	Plan	NPVRR ($mm)	Delta	Retirements	Additions	DSM level
1	KABHA	$21,625	$0.0	M2, M3: Dec 31, 2018	None	RAP- w DSR
2	KABCA	$21,739	$113.9	M2, M3: Dec 31, 2018	None	RAP-
3	KBCCA	$21,740	$115.1	M2, M3: Dec 31, 2018, LC1: Dec 31, 2025	207mw CT in 2036	RAP-
4	KABEA	$21,753	$128.0	M2, M3: Dec 31, 2018	414mw CT in 2036	MEEIA/KEEIA
5	KAACA	$21,761	$135.6	M2, M3: Dec 31, 2021	None	RAP-
6	KABBA	$21,765	$139.1	M2, M3: Dec 31, 2018	None	RAP
7	KABCW	$21,848	$223.0	M2, M3: Dec 31, 2018	200mw Additional Wind	RAP-
8	KABAA	$21,850	$224.9	M2, M3: Dec 31, 2018	None	MAP

Table 3: Original 2017 IRP Alternative Resource Plan Ranking With Capacity Sales
No CO_2 Restrictions Scenarios Expected Value NPVRR

Rank (L-H)	Plan	NPVRR ($mm)	Delta	Retirements	Additions	DSM level
1	KABHA	$21,080	$0	M2, M3: Dec 31, 2018	None	RAP- w DSR
2	KABCA	$21,181	$101	M2, M3: Dec 31, 2018	None	RAP-
3	KABEA	$21,189	$109	M2, M3: Dec 31, 2018	414mw CT in 2036	MEEIA/KEEIA
4	KAACA	$21,202	$122	M2, M3: Dec 31, 2021	None	RAP-
5	KABBA	$21,209	$129	M2, M3: Dec 31, 2018	None	RAP
6	KBCCA	$21,227	$147	M2, M3: Dec 31, 2018, LC1: Dec 31, 2025	207mw CT in 2036	RAP-
7	KABAA	$21,300	$220	M2, M3: Dec 31, 2018	None	MAP
8	KABCW	$21,312	$232	M2, M3: Dec 31, 2018	200mw Additional Wind	RAP-

Table 4: 2017 IRP Alternative Resource Plan Ranking Without Capacity Sales
No CO_2 Restrictions Scenarios Expected Value NPVRR

Rank (L-H)	Plan	NPVRR ($mm)	Delta	Retirements	Additions	DSM level
1	KABHA	$21,119	$0	M2, M3: Dec 31, 2018	None	RAP- w DSR
2	KABCA	$21,220	$101	M2, M3: Dec 31, 2018	None	RAP-
3	KABEA	$21,223	$104	M2, M3: Dec 31, 2018	414mw CT in 2036	MEEIA/KEEIA
4	KAACA	$21,242	$122	M2, M3: Dec 31, 2021	None	RAP-
5	KABBA	$21,249	$129	M2, M3: Dec 31, 2018	None	RAP
6	KBCCA	$21,262	$143	M2, M3: Dec 31, 2018, LC1: Dec 31, 2025	207mw CT in 2036	RAP-
7	KABAA	$21,340	$220	M2, M3: Dec 31, 2018	None	MAP
8	KABCW	$21,351	$232	M2, M3: Dec 31, 2018	200mw Additional Wind	RAP-

Table 5: Original 2017 IRP Alternative Resource Plan Ranking With Capacity Sales CO_2 Restrictions Scenarios Expected Value NPVRR

Rank (L-H)	Plan	NPVRR ($mm)	Delta	Retirements	Additions	DSM level
1	KABHA	$22,345	$0	M2, M3: Dec 31, 2018	None	RAP- w DSR
2	KBCCA	$22,423	$77	M2, M3: Dec 31, 2018, LC1: Dec 31, 2025	207mw CT in 2036	RAP-
3	KABCA	$22,479	$133	M2, M3: Dec 31, 2018	None	RAP-
4	KABBA	$22,499	$154	M2, M3: Dec 31, 2018	None	RAP
5	KAACA	$22,501	$155	M2, M3: Dec 31, 2021	None	RAP-
6	KABEA	$22,515	$170	M2, M3: Dec 31, 2018	414mw CT in 2036	MEEIA/KEEIA
7	KABCW	$22,555	$210	M2, M3: Dec 31, 2018	200mw Additional Wind	RAP-
8	KABAA	$22,577	$232	M2, M3: Dec 31, 2018	None	MAP

Table 6: 2017 IRP Alternative Resource Plan Ranking Without Capacity Sales CO_2 Restrictions Scenarios Expected Value NPVRR

Rank (L-H)	Plan	NPVRR ($mm)	Delta	Retirements	Additions	DSM level
1	KABHA	$22,385	$0	M2, M3: Dec 31, 2018	None	RAP- w DSR
2	KBCCA	$22,458	$73	M2, M3: Dec 31, 2018, LC1: Dec 31, 2025	207mw CT in 2036	RAP-
3	KABCA	$22,518	$133	M2, M3: Dec 31, 2018	None	RAP-
4	KABBA	$22,538	$154	M2, M3: Dec 31, 2018	None	RAP
5	KAACA	$22,540	$155	M2, M3: Dec 31, 2021	None	RAP-
6	KABEA	$22,549	$164	M2, M3: Dec 31, 2018	414mw CT in 2036	MEEIA/KEEIA
7	KABCW	$22,594	$210	M2, M3: Dec 31, 2018	200mw Additional Wind	RAP-
8	KABAA	$22,617	$232	M2, M3: Dec 31, 2018	None	MAP

Table 7: Original 2017 IRP Alternative Resource Plan Ranking
No CO_2 Restrictions Scenarios NPVRR (million $s)

	HIGH GAS		MID GAS		LOW GAS	
HIGH LOAD	Endpoint	2	Endpoint	4	Endpoint	6
	PLAN	NPVRR	PLAN	NPVRR	PLAN	NPVRR
	KABHA	$ 21,075	KABHA	$ 21,301	KABHA	$ 21,491
	KAACA	$ 21,185	KABCA	$ 21,405	KABCA	$ 21,585
	KABCA	$ 21,186	KABEA	$ 21,414	KABEA	$ 21,585
	KABEA	$ 21,205	KAACA	$ 21,428	KBCCA	$ 21,611
	KABBA	$ 21,212	KABBA	$ 21,433	KABBA	$ 21,616
	KBCCA	$ 21,263	KBCCA	$ 21,456	KAACA	$ 21,624
	KABCW	$ 21,295	KABAA	$ 21,522	KABAA	$ 21,710
	KABAA	$ 21,297	KABCW	$ 21,531	KABCW	$ 21,730

	HIGH GAS		MID GAS		LOW GAS	
MID LOAD	Endpoint	8	Endpoint	10	Endpoint	12
	PLAN	NPVRR	PLAN	NPVRR	PLAN	NPVRR
	KABHA	$ 20,847	KABHA	$ 21,089	KABHA	$ 21,295
	KAACA	$ 20,955	KABCA	$ 21,190	KABEA	$ 21,387
	KABCA	$ 20,955	KABEA	$ 21,199	KABCA	$ 21,387
	KABEA	$ 20,973	KAACA	$ 21,214	KBCCA	$ 21,409
	KABBA	$ 20,981	KABBA	$ 21,219	KABBA	$ 21,419
	KBCCA	$ 21,027	KBCCA	$ 21,237	KAACA	$ 21,427
	KABCW	$ 21,069	KABAA	$ 21,310	KABAA	$ 21,514
	KABAA	$ 21,069	KABCW	$ 21,321	KABCW	$ 21,536

	HIGH GAS		MID GAS		LOW GAS	
LOW LOAD	Endpoint	14	Endpoint	16	Endpoint	18
	PLAN	NPVRR	PLAN	NPVRR	PLAN	NPVRR
	KABHA	$ 20,617	KABHA	$ 20,876	KABHA	$ 21,099
	KABCA	$ 20,724	KABCA	$ 20,976	KABEA	$ 21,187
	KAACA	$ 20,725	KABEA	$ 20,982	KABCA	$ 21,190
	KABEA	$ 20,740	KAACA	$ 21,000	KBCCA	$ 21,205
	KABBA	$ 20,751	KABBA	$ 21,005	KABBA	$ 21,222
	KBCCA	$ 20,787	KBCCA	$ 21,015	KAACA	$ 21,229
	KABAA	$ 20,838	KABAA	$ 21,096	KABAA	$ 21,316
	KABCW	$ 20,844	KABCW	$ 21,111	KABCW	$ 21,342

Table 8: 2017 IRP Alternative Resource Plan Ranking Without Capacity Sales
No CO_2 Restrictions Scenarios NPVRR (million $s)

	HIGH GAS		MID GAS		LOW GAS	
HIGH LOAD	Endpoint	2	Endpoint	4	Endpoint	6
	PLAN	NPVRR	PLAN	NPVRR	PLAN	NPVRR
	KABHA	$ 21,114	KABHA	$ 21,341	KABHA	$ 21,530
	KAACA	$ 21,224	KABCA	$ 21,444	KABEA	$ 21,619
	KABCA	$ 21,226	KABEA	$ 21,448	KABCA	$ 21,624
	KABEA	$ 21,239	KAACA	$ 21,467	KBCCA	$ 21,646
	KABBA	$ 21,251	KABBA	$ 21,472	KABBA	$ 21,655
	KBCCA	$ 21,298	KBCCA	$ 21,491	KAACA	$ 21,664
	KABCW	$ 21,335	KABAA	$ 21,561	KABAA	$ 21,749
	KABAA	$ 21,336	KABCW	$ 21,571	KABCW	$ 21,769

	HIGH GAS		MID GAS		LOW GAS	
MID LOAD	Endpoint	8	Endpoint	10	Endpoint	12
	PLAN	NPVRR	PLAN	NPVRR	PLAN	NPVRR
	KABHA	$ 20,886	KABHA	$ 21,129	KABHA	$ 21,335
	KAACA	$ 20,994	KABCA	$ 21,229	KABEA	$ 21,421
	KABCA	$ 20,995	KABEA	$ 21,233	KABCA	$ 21,427
	KABEA	$ 21,007	KAACA	$ 21,253	KBCCA	$ 21,445
	KABBA	$ 21,021	KABBA	$ 21,258	KABBA	$ 21,458
	KBCCA	$ 21,062	KBCCA	$ 21,272	KAACA	$ 21,466
	KABCW	$ 21,108	KABAA	$ 21,349	KABAA	$ 21,553
	KABAA	$ 21,108	KABCW	$ 21,360	KABCW	$ 21,575

	HIGH GAS		MID GAS		LOW GAS	
LOW LOAD	Endpoint	14	Endpoint	16	Endpoint	18
	PLAN	NPVRR	PLAN	NPVRR	PLAN	NPVRR
	KABHA	$ 20,657	KABHA	$ 20,916	KABHA	$ 21,138
	KABCA	$ 20,764	KABCA	$ 21,015	KABEA	$ 21,221
	KAACA	$ 20,765	KABEA	$ 21,016	KABCA	$ 21,229
	KABEA	$ 20,774	KAACA	$ 21,039	KBCCA	$ 21,240
	KABBA	$ 20,790	KABBA	$ 21,044	KABBA	$ 21,261
	KBCCA	$ 20,823	KBCCA	$ 21,050	KAACA	$ 21,268
	KABAA	$ 20,878	KABAA	$ 21,135	KABAA	$ 21,356
	KABCW	$ 20,883	KABCW	$ 21,150	KABCW	$ 21,381

Table 9: Original 2017 IRP Alternative Resource Plan Ranking With CO_2 Restrictions Scenarios NPVRR (million $s)

	HIGH GAS		MID GAS		LOW GAS	
HIGH LOAD	Endpoint	1	Endpoint	3	Endpoint	5
	PLAN	NPVRR	PLAN	NPVRR	PLAN	NPVRR
	KABHA	$ 22,434	KABHA	$ 22,619	KABHA	$ 22,767
	KBCCA	$ 22,540	KBCCA	$ 22,698	KBCCA	$ 22,821
	KABCA	$ 22,576	KABCA	$ 22,753	KABCA	$ 22,894
	KAACA	$ 22,576	KABBA	$ 22,773	KABBA	$ 22,916
	KABBA	$ 22,593	KAACA	$ 22,776	KABEA	$ 22,922
	KABEA	$ 22,622	KABEA	$ 22,791	KAACA	$ 22,933
	KABCW	$ 22,633	KABCW	$ 22,827	KABCW	$ 22,987
	KABAA	$ 22,667	KABAA	$ 22,850	KABAA	$ 22,997

	HIGH GAS		MID GAS		LOW GAS	
MID LOAD	Endpoint	7	Endpoint	9	Endpoint	11
	PLAN	NPVRR	PLAN	NPVRR	PLAN	NPVRR
	KABHA	$ 22,155	KABHA	$ 22,355	KABHA	$ 22,519
	KBCCA	$ 22,259	KBCCA	$ 22,432	KBCCA	$ 22,572
	KABCA	$ 22,296	KABCA	$ 22,489	KABCA	$ 22,646
	KAACA	$ 22,297	KABBA	$ 22,509	KABBA	$ 22,668
	KABBA	$ 22,314	KAACA	$ 22,512	KABEA	$ 22,673
	KABEA	$ 22,342	KABEA	$ 22,525	KAACA	$ 22,685
	KABCW	$ 22,355	KABCW	$ 22,564	KABCW	$ 22,740
	KABAA	$ 22,389	KABAA	$ 22,587	KABAA	$ 22,751

	HIGH GAS		MID GAS		LOW GAS	
LOW LOAD	Endpoint	13	Endpoint	15	Endpoint	17
	PLAN	NPVRR	PLAN	NPVRR	PLAN	NPVRR
	KABHA	$ 21,873	KABHA	$ 22,088	KABHA	$ 22,268
	KBCCA	$ 21,973	KBCCA	$ 22,162	KBCCA	$ 22,318
	KABCA	$ 22,013	KABCA	$ 22,220	KABCA	$ 22,394
	KAACA	$ 22,015	KABBA	$ 22,241	KABBA	$ 22,417
	KABBA	$ 22,031	KAACA	$ 22,244	KABEA	$ 22,419
	KABEA	$ 22,056	KABEA	$ 22,255	KAACA	$ 22,433
	KABCW	$ 22,074	KABCW	$ 22,298	KABCW	$ 22,489
	KABAA	$ 22,106	KABAA	$ 22,319	KABAA	$ 22,499

Table 10: 2017 IRP Alternative Resource Plan Ranking Without Capacity Sales With CO_2 Restrictions Scenarios NPVRR (million $s)

	HIGH GAS		MID GAS		LOW GAS	
HIGH LOAD	Endpoint	1	Endpoint	3	Endpoint	5
	PLAN	NPVRR	PLAN	NPVRR	PLAN	NPVRR
	KABHA	$ 22,473	KABHA	$ 22,658	KABHA	$ 22,806
	KBCCA	$ 22,576	KBCCA	$ 22,733	KBCCA	$ 22,856
	KABCA	$ 22,616	KABCA	$ 22,792	KABCA	$ 22,933
	KAACA	$ 22,616	KABBA	$ 22,812	KABBA	$ 22,955
	KABBA	$ 22,633	KAACA	$ 22,815	KABEA	$ 22,956
	KABEA	$ 22,656	KABEA	$ 22,825	KAACA	$ 22,972
	KABCW	$ 22,673	KABCW	$ 22,866	KABCW	$ 23,026
	KABAA	$ 22,707	KABAA	$ 22,890	KABAA	$ 23,037

	HIGH GAS		MID GAS		LOW GAS	
MID LOAD	Endpoint	7	Endpoint	9	Endpoint	11
	PLAN	NPVRR	PLAN	NPVRR	PLAN	NPVRR
	KABHA	$ 22,195	KABHA	$ 22,395	KABHA	$ 22,559
	KBCCA	$ 22,295	KBCCA	$ 22,468	KBCCA	$ 22,607
	KABCA	$ 22,336	KABCA	$ 22,528	KABCA	$ 22,685
	KAACA	$ 22,337	KABBA	$ 22,548	KABEA	$ 22,707
	KABBA	$ 22,353	KAACA	$ 22,551	KABBA	$ 22,708
	KABEA	$ 22,375	KABEA	$ 22,559	KAACA	$ 22,724
	KABCW	$ 22,395	KABCW	$ 22,604	KABCW	$ 22,779
	KABAA	$ 22,428	KABAA	$ 22,627	KABAA	$ 22,790

	HIGH GAS		MID GAS		LOW GAS	
LOW LOAD	Endpoint	13	Endpoint	15	Endpoint	17
	PLAN	NPVRR	PLAN	NPVRR	PLAN	NPVRR
	KABHA	$ 21,913	KABHA	$ 22,127	KABHA	$ 22,308
	KBCCA	$ 22,009	KBCCA	$ 22,197	KBCCA	$ 22,354
	KABCA	$ 22,052	KABCA	$ 22,260	KABCA	$ 22,433
	KAACA	$ 22,054	KABBA	$ 22,280	KABEA	$ 22,453
	KABBA	$ 22,070	KAACA	$ 22,284	KABBA	$ 22,456
	KABEA	$ 22,090	KABEA	$ 22,289	KAACA	$ 22,473
	KABCW	$ 22,114	KABCW	$ 22,337	KABCW	$ 22,528
	KABAA	$ 22,145	KABAA	$ 22,359	KABAA	$ 22,538