

Appendix F – Additional GMO Alternative Resource Plan Results

Plans contained in this appendix have been modeled for a variety of reasons:

- Plans that represent major changes in the view of the analysis universe – e.g. the Load Loss scenarios. A significant change such as this produces results that cannot be compared to the plans ranked in the Integrated Analysis framework.
- Plans that have been modeled to address specific stakeholder concerns, as a result from the last Triennial IRP filing.
- Plans viewed by GMO as providing useful information to the company planning process.

Plan Ranking:

Total Revenue Requirement - Other Plans						
Rank (L-H)	Plan	NPVRR (\$mm)	Delta	Retirements	Additions	DSM level
1	EEEGA	\$11,323.9	\$0.0	LR 4/6(2019), Sib 1&2 (2023)	Load Loss	Long-term Load Loss
2	AICGG	\$11,610.2	\$286.3	LR 4/6(2016), Sib 1&2 (2019)	2xRPS Wind @ Lower Cost	RAP
3	AEFGA	\$11,690.7	\$366.8	LR 4/6(2016), Sib 1&2 (2019)	CT 2028 193mw	RAP
4	EICGA	\$11,763.5	\$439.6	Sib 1&2 (2019)	Load Loss	Long-term Load Loss
5	AICGZ	\$12,258.3	\$934.4	Sib 1&2 (2019)	All Wind Case	RAP

Probable Environmental Costs:

Probable Environmental Costs	
Plan	PEC NPVRR (\$mm)
AEFGA	\$347
AICGG	\$345
AICGZ	\$395
EEEGA	\$401
EICGA	\$363

Economic Impact:

Plan AEFGA

Year	Revenue Requirement (\$MM)	Levelized Annual Rates (\$/kw-hr)	Rate Increase	Times Interest Earned	Debt to Capital	Internal Cash to Construction Expense
2014	783	0.09	2.51%	3.30	59.44	0.77
2015	818	0.09	3.36%	2.53	59.42	0.82
2016	875	0.10	6.50%	2.57	59.41	0.71
2017	895	0.10	2.83%	2.64	57.93	0.69
2018	965	0.11	7.93%	2.82	57.91	0.67
2019	1,006	0.11	4.54%	3.29	57.83	0.51
2020	1,093	0.12	8.40%	3.11	56.82	1.02
2021	1,166	0.13	6.76%	3.10	50.00	0.56
2022	1,187	0.13	1.36%	2.78	50.00	1.00
2023	1,270	0.14	6.34%	3.02	50.00	1.15
2024	1,285	0.14	0.13%	3.50	50.00	1.47
2025	1,304	0.14	0.85%	3.20	50.00	0.81
2026	1,334	0.15	1.18%	3.03	50.00	1.81
2027	1,355	0.15	0.25%	2.98	50.00	1.15
2028	1,444	0.15	4.76%	3.14	50.00	0.85
2029	1,474	0.15	0.69%	2.99	50.00	1.71
2030	1,510	0.16	0.53%	2.96	50.00	1.51
2031	1,564	0.16	1.69%	2.99	50.00	1.55
2032	1,613	0.16	0.81%	2.98	50.00	1.62
2033	1,680	0.16	2.36%	2.95	50.00	1.49

Plan AICGG

Year	Revenue Requirement (\$MM)	Levelized Annual Rates (\$/kw-hr)	Rate Increase	Times Interest Earned	Debt to Capital	Internal Cash to Construction Expense
2014	783	0.09	2.51%	3.30	59.44	0.77
2015	793	0.09	0.15%	2.55	59.42	0.62
2016	884	0.10	11.04%	2.61	59.41	0.73
2017	904	0.10	2.81%	2.68	57.93	0.71
2018	981	0.11	8.61%	2.93	57.91	0.51
2019	1,038	0.12	6.13%	3.73	51.36	0.45
2020	1,119	0.13	7.59%	3.52	51.34	1.11
2021	1,189	0.14	6.30%	3.41	50.00	0.54
2022	1,202	0.14	0.61%	2.81	50.00	1.22
2023	1,278	0.14	5.73%	3.04	50.00	1.28
2024	1,288	0.14	-0.26%	3.46	50.00	1.44
2025	1,296	0.14	0.06%	3.26	50.00	0.75
2026	1,320	0.14	0.65%	3.04	50.00	2.08
2027	1,335	0.14	-0.20%	3.01	50.00	1.77
2028	1,370	0.15	0.90%	3.01	50.00	1.95
2029	1,395	0.15	0.43%	2.99	50.00	1.79
2030	1,424	0.15	0.18%	2.97	50.00	1.56
2031	1,473	0.15	1.54%	2.98	50.00	1.15
2032	1,565	0.15	3.94%	3.15	50.00	0.82
2033	1,621	0.16	1.75%	2.97	50.00	1.64

Plan AICGZ

Year	Revenue Requirement (\$MM)	Levelized Annual Rates (\$/kw-hr)	Rate Increase	Times Interest Earned	Debt to Capital	Internal Cash to Construction Expense
2014	783	0.09	2.51%	3.30	59.44	0.77
2015	793	0.09	0.15%	2.55	59.42	0.62
2016	884	0.10	11.04%	2.61	59.41	0.73
2017	904	0.10	2.81%	2.68	57.93	0.71
2018	985	0.11	9.09%	2.85	57.91	0.73
2019	1,013	0.12	3.14%	3.30	57.51	0.52
2020	1,099	0.12	8.21%	3.11	56.53	1.03
2021	1,173	0.13	6.77%	3.10	50.00	0.56
2022	1,194	0.14	1.36%	2.78	50.00	1.01
2023	1,277	0.14	6.29%	3.03	50.00	1.16
2024	1,292	0.14	0.15%	3.50	50.00	1.48
2025	1,310	0.15	0.81%	3.20	50.00	0.81
2026	1,341	0.15	1.20%	3.03	50.00	1.82
2027	1,362	0.15	0.27%	3.00	50.00	1.58
2028	1,404	0.15	1.29%	2.99	50.00	1.75
2029	1,437	0.15	0.96%	2.98	50.00	1.62
2030	1,648	0.17	12.69%	3.73	50.00	0.29
2031	2,257	0.23	34.68%	4.53	50.00	0.23
2032	2,258	0.22	-2.15%	2.92	50.00	4.25
2033	2,283	0.22	-0.64%	2.89	50.00	3.84

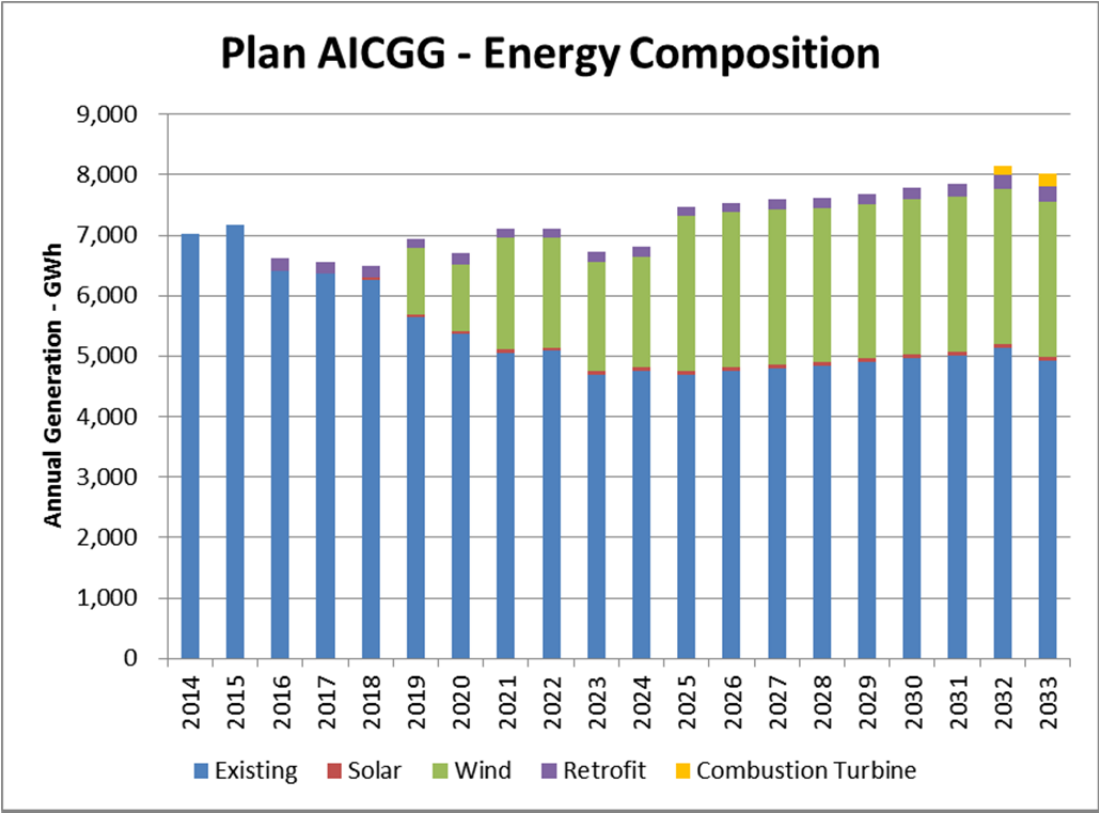
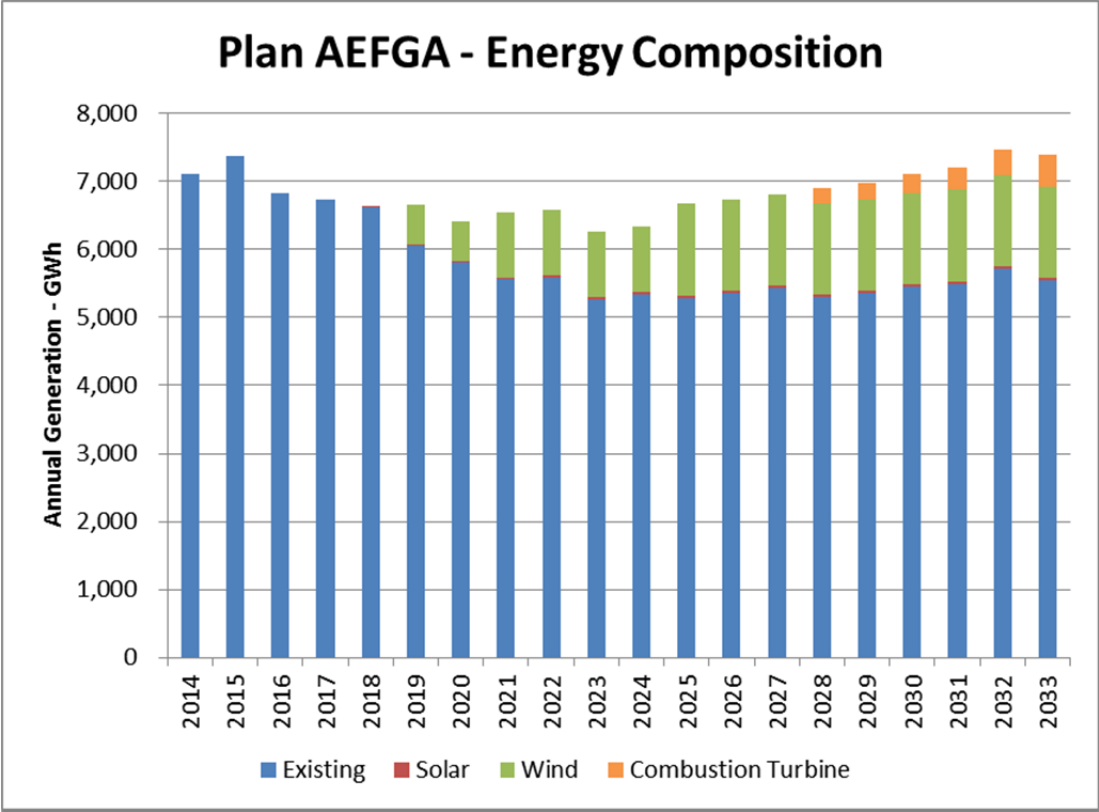
Plan EEEGA

Year	Rev Req	Rates	Rate Change % by Year	Times Int Earned	Debt to Capital	Int Cash to Const Exp
2014	768	0.09	2.20%	3.30	59.44	0.75
2015	777	0.09	0.02%	2.55	59.42	0.61
2016	846	0.10	8.40%	2.61	59.41	0.72
2017	865	0.10	2.87%	2.68	57.93	0.71
2018	945	0.11	9.30%	2.88	57.91	0.68
2019	978	0.12	3.75%	3.32	56.72	0.51
2020	1,063	0.13	8.52%	3.21	52.66	1.02
2021	1,137	0.13	6.95%	3.22	50.00	0.58
2022	1,212	0.14	6.17%	2.81	50.00	1.24
2023	1,240	0.15	1.61%	3.01	50.00	1.15
2024	1,256	0.15	0.17%	3.48	50.00	1.47
2025	1,276	0.15	0.83%	3.18	50.00	0.81
2026	1,305	0.15	1.07%	3.01	50.00	1.81
2027	1,324	0.15	0.07%	2.98	50.00	1.57
2028	1,361	0.15	1.06%	2.98	50.00	1.74
2029	1,392	0.15	0.80%	2.96	50.00	1.61
2030	1,426	0.15	0.53%	2.94	50.00	1.41
2031	1,479	0.15	1.75%	2.96	50.00	1.46
2032	1,522	0.16	0.57%	2.96	50.00	1.53
2033	1,582	0.16	2.12%	2.92	50.00	1.42

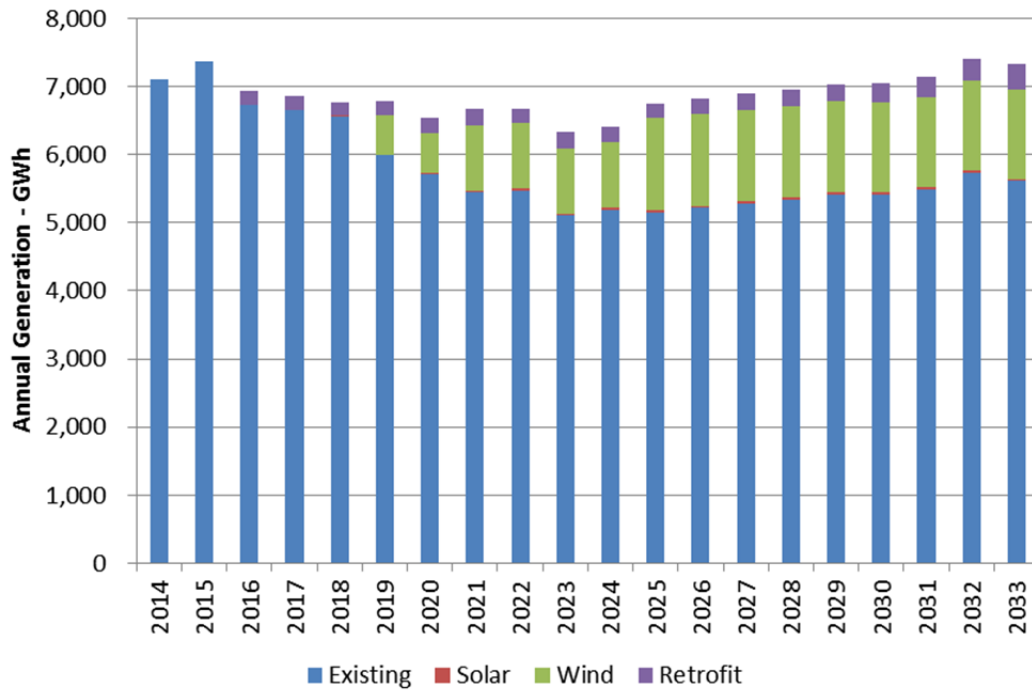
Plan EICGA

Year	Rev Req	Rates	Rate Change % by Year	Times Int Earned	Debt to Capital	Int Cash to Const Exp
2014	771	0.09	2.16%	3.30	59.44	0.79
2015	778	0.09	-0.20%	2.54	59.43	0.67
2016	842	0.10	7.77%	2.58	59.41	0.75
2017	861	0.10	2.88%	2.64	57.93	0.77
2018	905	0.11	5.15%	2.85	57.92	0.57
2019	974	0.12	7.94%	3.28	58.23	0.52
2020	1,062	0.13	8.84%	3.11	58.95	1.02
2021	1,139	0.13	7.24%	3.12	50.00	0.70
2022	1,153	0.14	0.79%	2.81	50.00	1.60
2023	1,223	0.14	5.45%	2.86	50.00	1.41
2024	1,253	0.15	1.29%	3.52	50.00	1.29
2025	1,264	0.15	0.09%	3.14	50.00	0.75
2026	1,293	0.15	1.15%	2.96	50.00	1.69
2027	1,326	0.15	1.16%	2.97	50.00	1.34
2028	1,355	0.15	0.35%	2.92	50.00	1.63
2029	1,385	0.15	0.77%	2.89	50.00	1.49
2030	1,430	0.15	1.30%	2.91	50.00	1.26
2031	1,471	0.15	0.95%	2.89	50.00	1.36
2032	1,513	0.15	0.53%	2.88	50.00	1.42
2033	1,583	0.16	2.77%	2.88	50.00	1.33

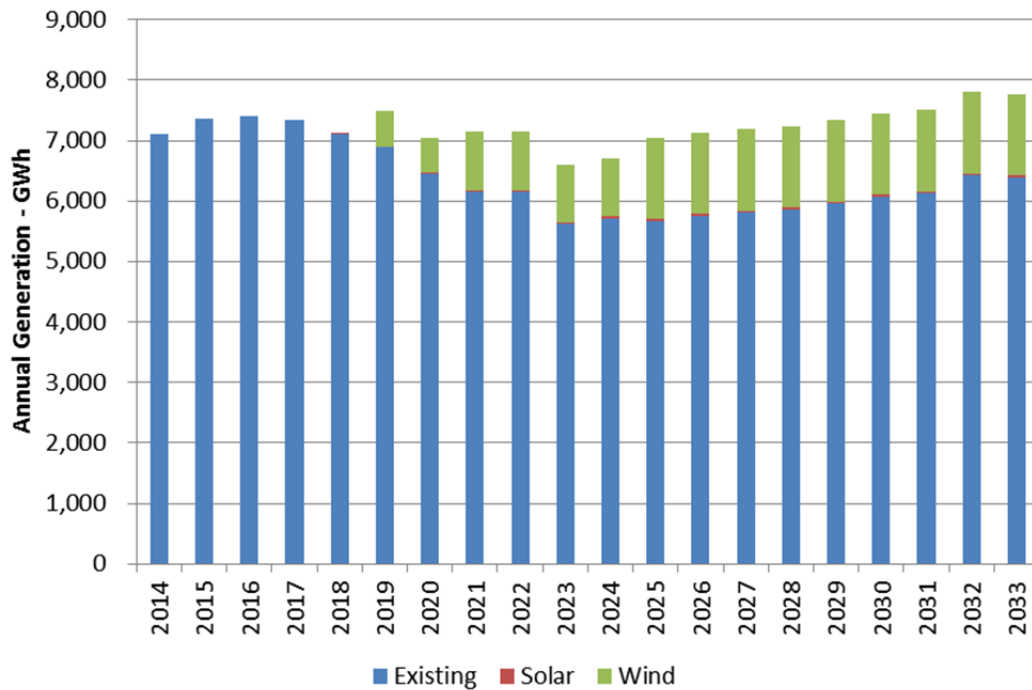
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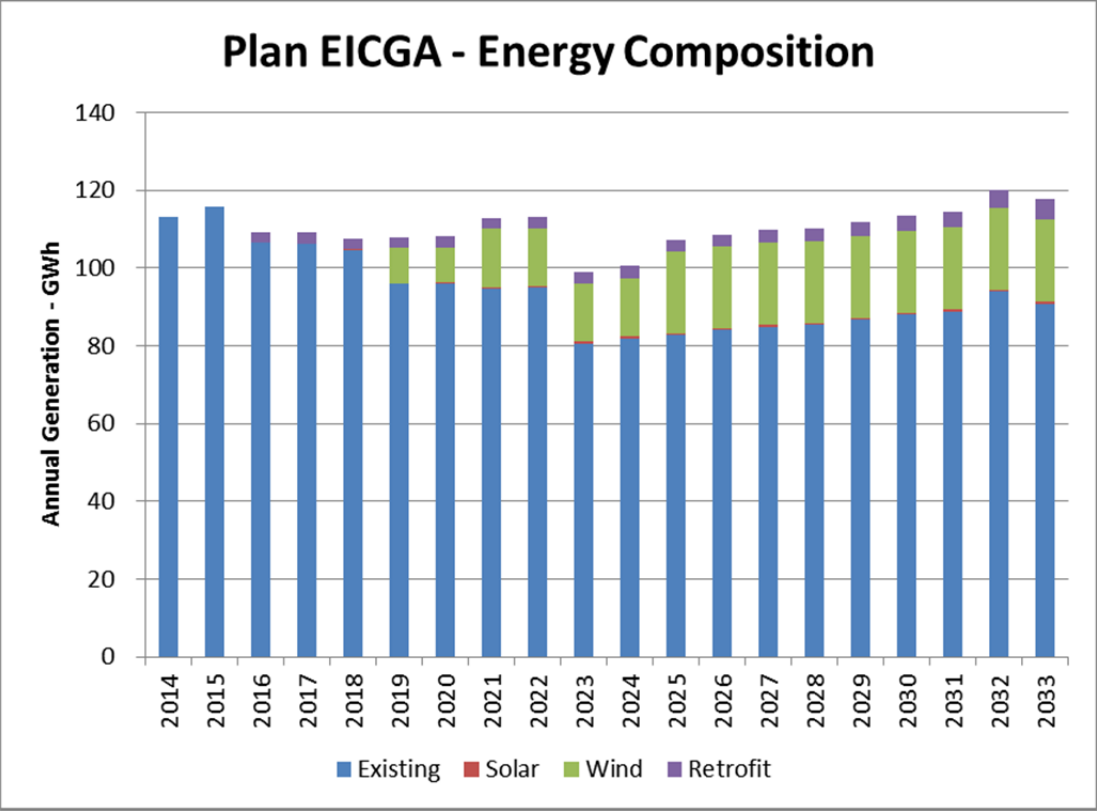


Plan AICGZ - Energy Composition

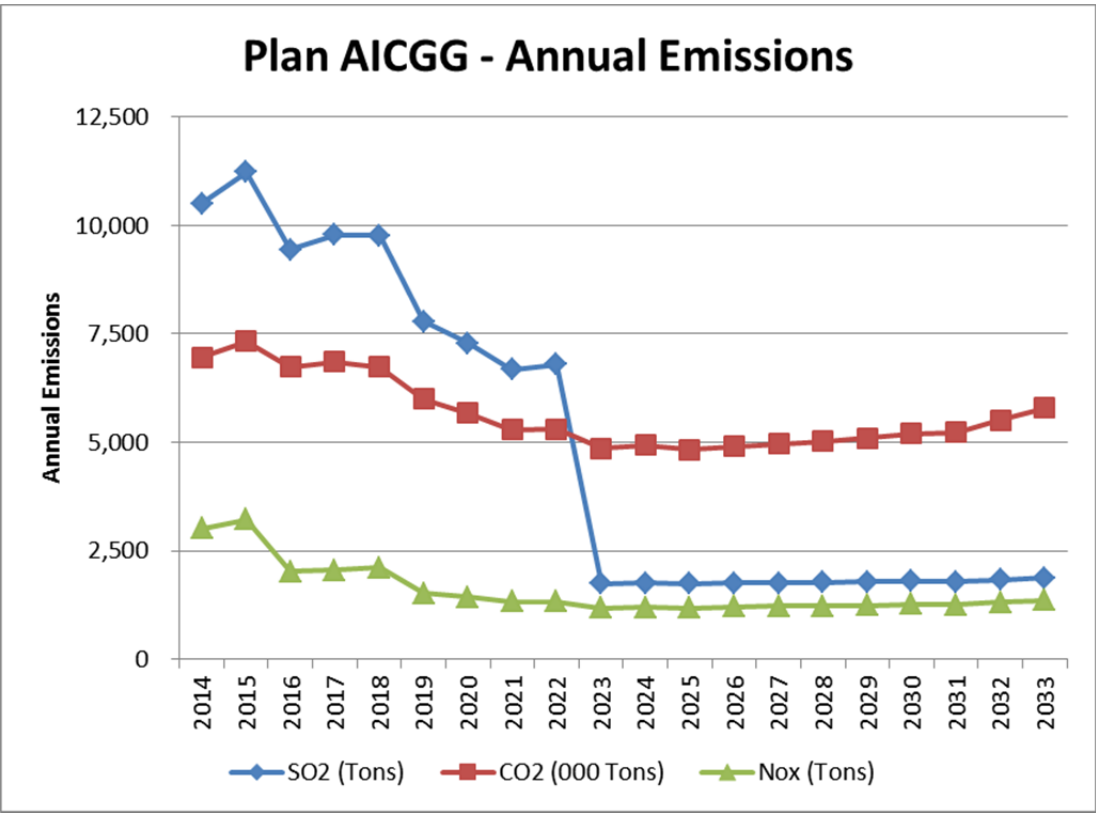
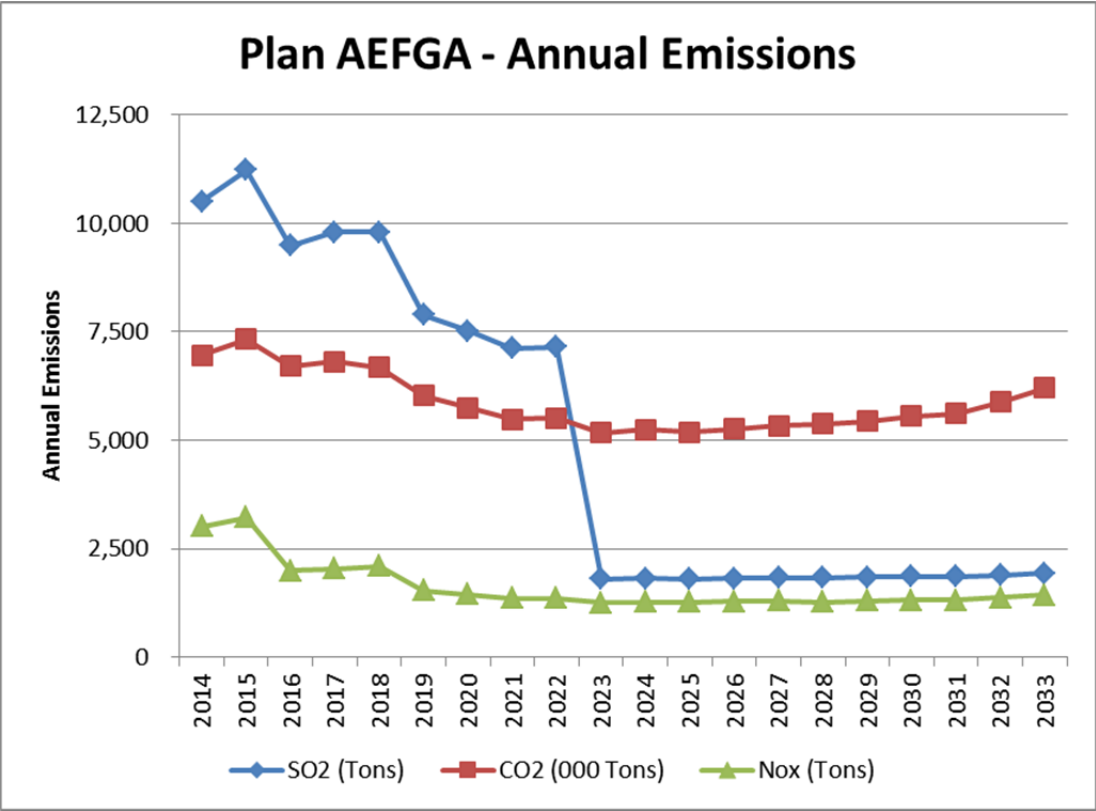


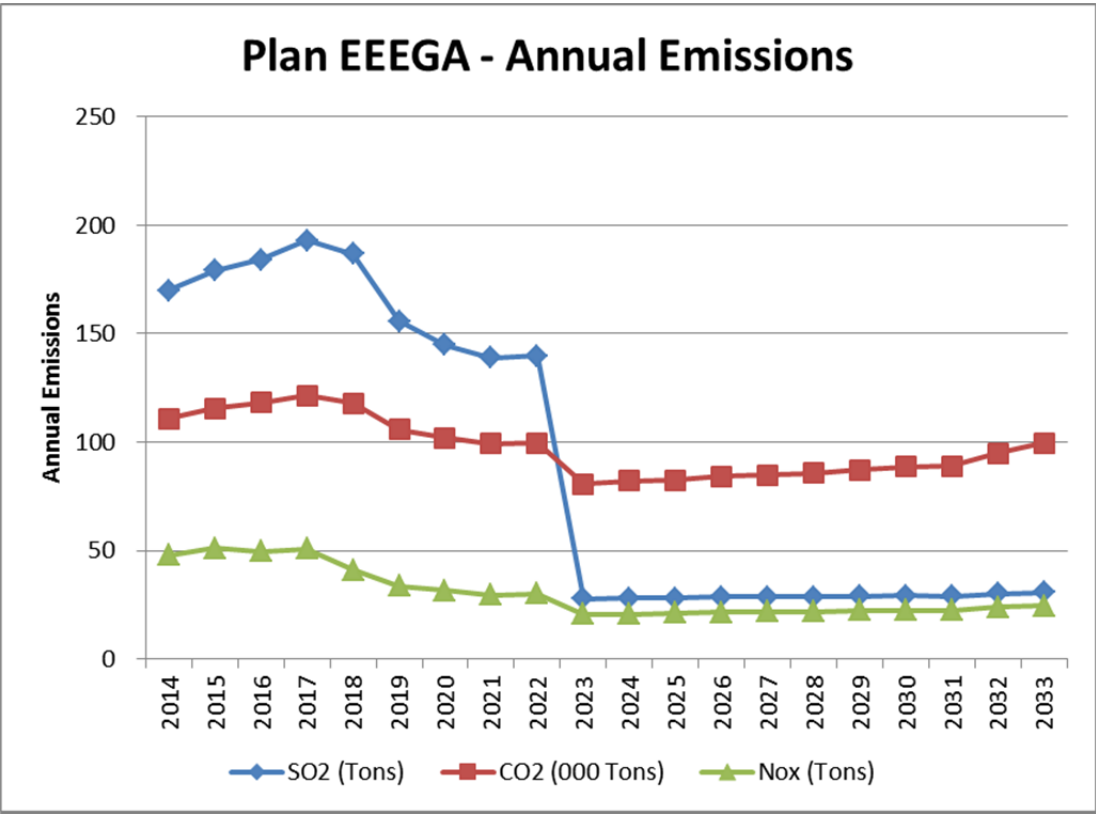
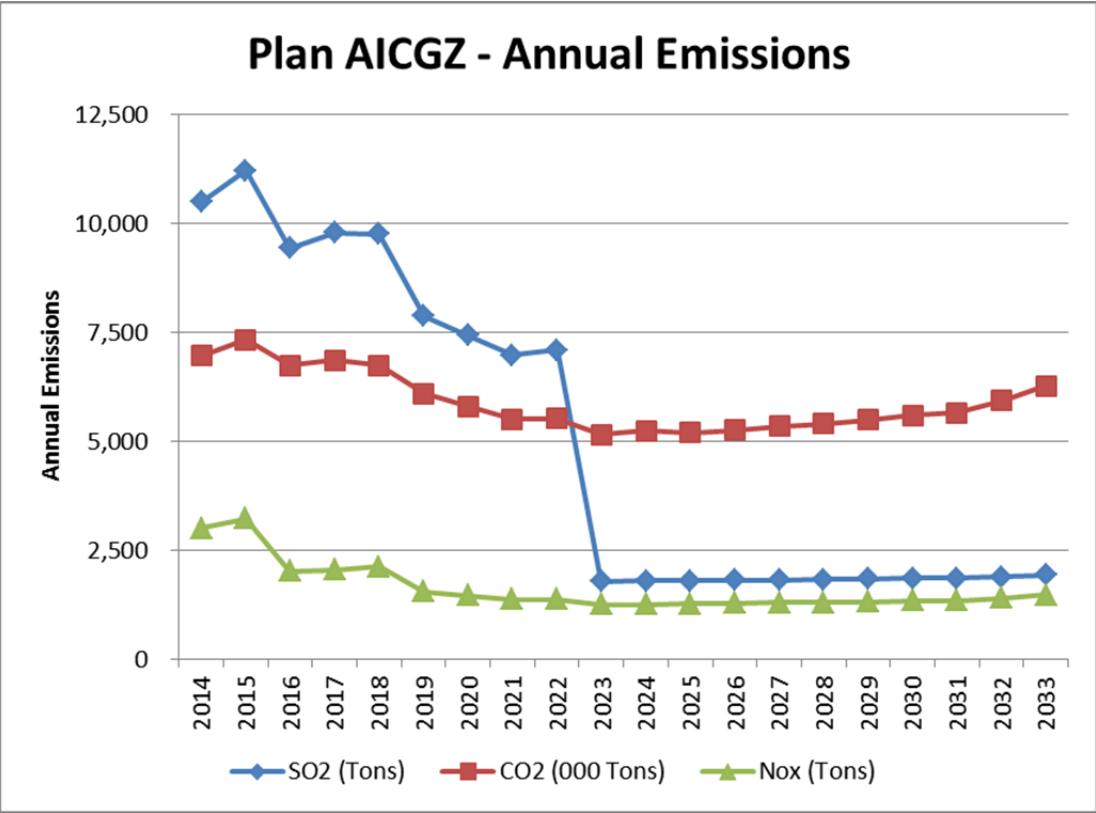
Plan EEEGA - Energy Composition





Emissions





Plan EICGA - Annual Emissions

