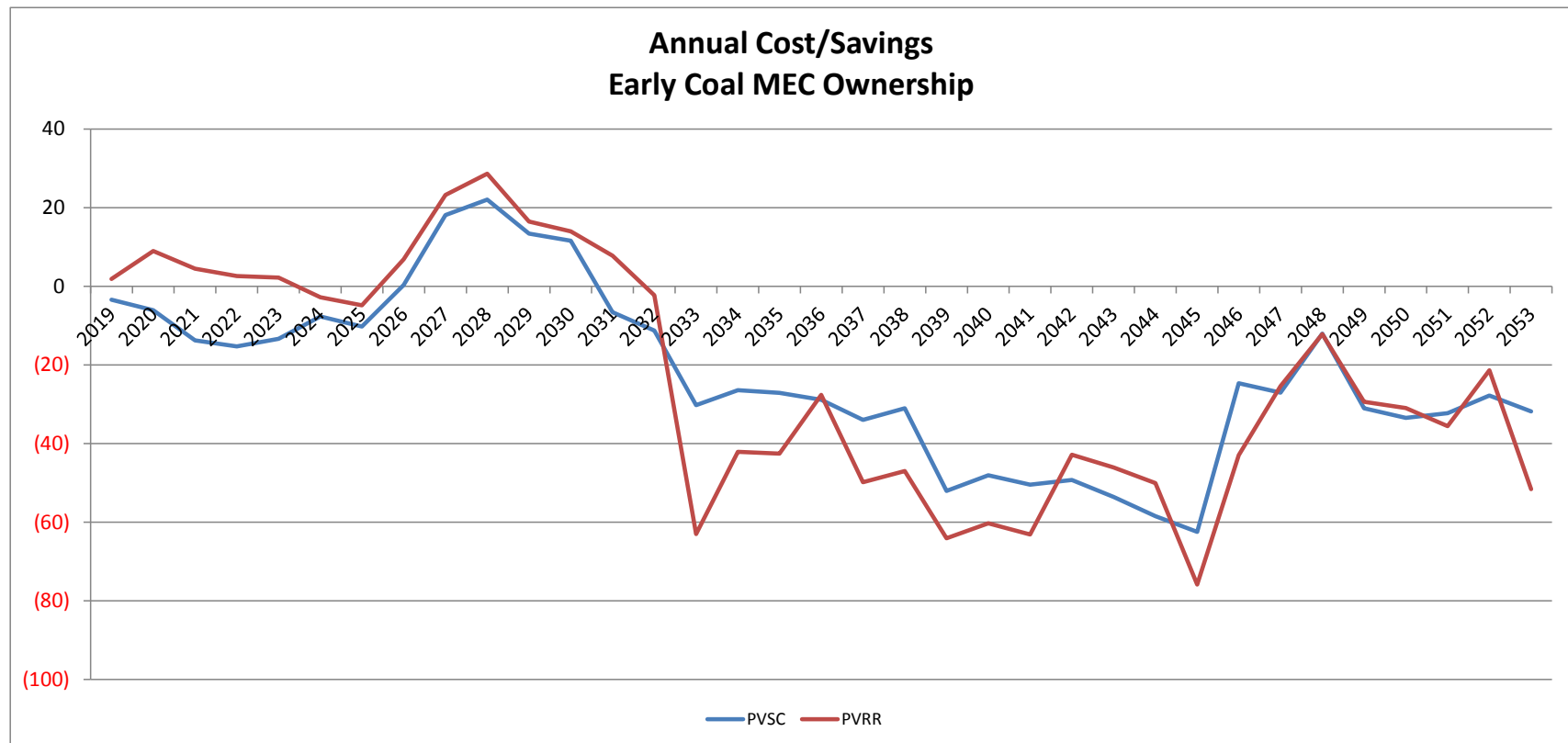


MEC Ownership with Early Coal Retirement

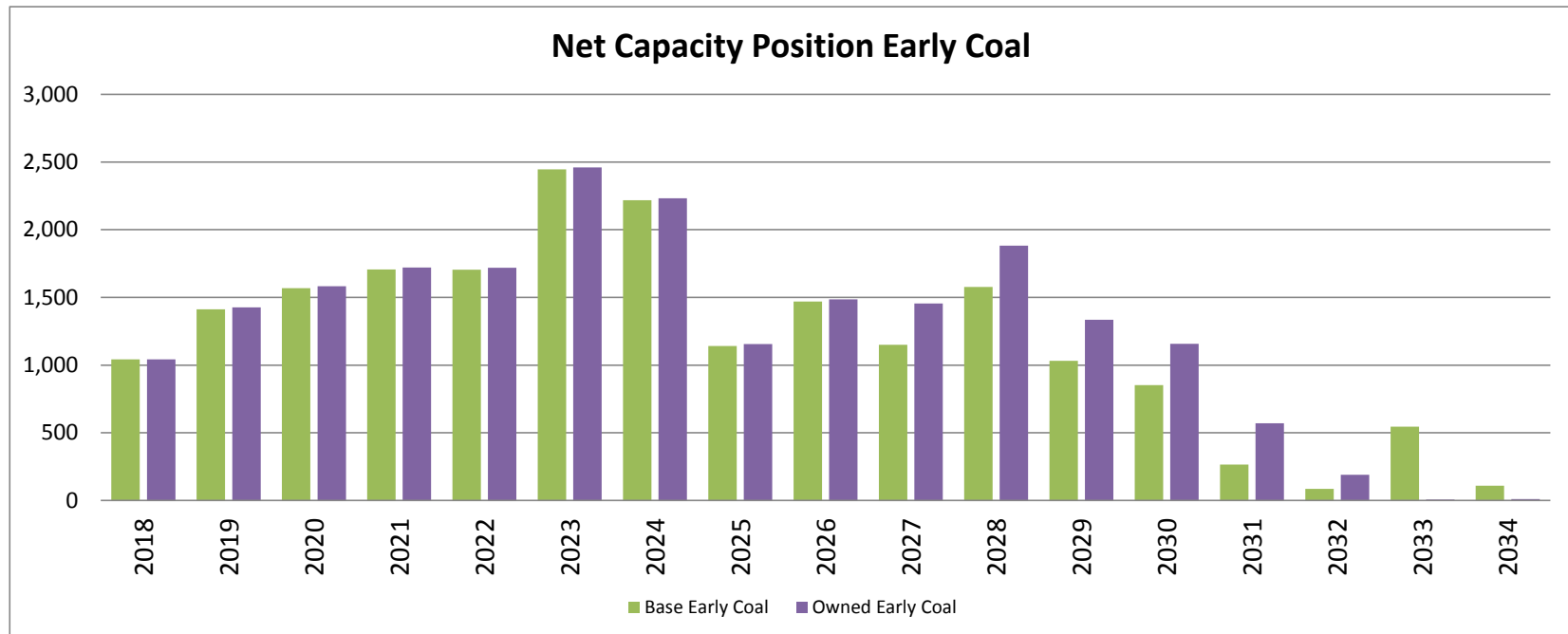
	PVSC	PVRR
Capital Cost of Mankato Purchase	915	915
Fixed Savings of Mankota PPA	(555)	(555)
Fixed Cost/Expansion Plan Cost/(Savings)	(563)	(552)
VOM Cost/(Savings)	(39)	(31)
Fuel Cost/(Savings)	(95)	(48)
Market Cost/(Savings)	259	150
CO2 Cost/(Savings)	(28)	
Externalities Cost/(Savings)	(47)	
PPA Starts/Own Start Fuel Cost/(Savings)	(39)	(35)
Total Cost/(Savings)	(193)	(156)

	Continuation of PPAs - Early Coal	Owned MEC - Early Coal	Delta
Base PVSC	52,815	52,622	(193)
Base PVSC+Low Gas	51,845	51,594	(250)
Base PVSC+High Gas	54,490	54,435	(55)
Base PVSC+ Low Load	49,349	49,226	(123)
Base PVSC+ High Load	56,693	56,490	(203)
Base PVSC+Mkts Off, No Dump Credit	53,521	53,318	(203)
Base PVSC+High MEC Ongoing Costs	52,815	52,654	(161)
Base PVSC+Low MEC Ongoing Costs	52,815	52,590	(225)
PVSC - Low Ext Costs All Years	47,452	47,268	(184)
PVSC - High Ext Costs All Years	56,980	56,737	(243)
PVSC - Low Ext Costs thru 2-24, Low Reg Costs	46,279	46,111	(169)
PVSC - No Environmental Costs	44,545	44,377	(168)
PVSC - Mid Ext, Mid Reg Costs	49,690	49,505	(185)
PVRR (No CO2)	44,848	44,692	(156)

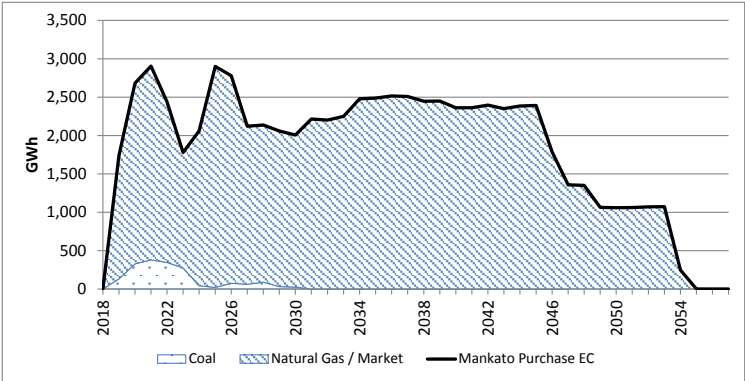


Renewable Additions by 2030

	MEC PPA with Early Coal Retirement	MEC Ownership with Early Coal Retirement
Wind Additions (MW)	2,781	2,781
Solar Additions (MW)	6,085	6,085
Total (MW)	8,866	8,866



		Energy Deltas, GWh																																								
		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	
Coal		0	132	327	380	346	274	43	19	76	62	89	32	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Natural Gas / Market		0	1610	2356	2524	2091	1505	2015	2882	2704	2060	2048	2027	1980	2214	2201	2249	2478	2488	2516	2509	2447	2449	2361	2362	2396	2350	2384	2392	1786	1358	1351	1064	1059	1062	1071	1072	248	0	0	0	0
Mankato Purchase EC		0	1742	2683	2904	2437	1779	2058	2901	2780	2122	2138	2059	2005	2214	2201	2249	2478	2488	2516	2509	2447	2449	2361	2362	2396	2350	2384	2392	1786	1358	1351	1064	1059	1062	1071	1072	248	0	0	0	0



Incremental Revenue Requirement Impact MEC Ownership - Early Coal

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Cost of Mankato Purchase - EC	46	86	83	81	78	76	75	73	70	74	67	65	65	67	68	67
Fixed Savings of Mankato PPA	(39)	(67)	(68)	(69)	(70)	(71)	(72)	(55)	(31)	(32)	(32)	(33)	(33)	(34)	(34)	(35)
VOM/Fuel/Market Cost/(Savings)	(6)	(9)	(10)	(9)	(5)	(7)	(7)	(11)	(16)	(14)	(18)	(19)	(24)	(35)	(97)	(74)
Total Cost/(Savings)	2	9	4	3	2	(3)	(5)	7	23	29	16	14	8	(2)	(63)	(42)

Expansion Plans

[illegible]

* Nameplate Capacity

[illegible]

* Nameplate Capacity

[illegible]

* Nameplate Capacity

[illegible]

EE2	0
EE3	0

* Nameplate Capacity

Owned 2050	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	Total	
MEC I		-290																																							-290	
MEC II																																									0	
Mankato Owned		627																										-627	316				-316									0
Sherco CC										727																															727	
Greenfield CT																																									0	
Wind*						750																	750																		1,500	
Solar*							1000		1000	1000	1000		1000			500		1000			500					500					500										8,000	
Previously Committed Solar*						412	304	197	147		402									29					323	236	126	25													2,201	
Battery*																																									0	
EE1																																									0	
EE2																																									0	
EE3																																									0	

* Nameplate Capacity

Owned Early Coal Retirement	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	Total	
MEC I		-290																																							-290	
MEC II																																									0	
Mankato Owned		627																										-627	316								-316					0
Sherco CC										727																														727		
Greenfield CT																																								0		
Wind*						750																	750																	1,500		
Solar*							1000		1000	1000	1000		1000			500		1000			500					500					500									8,000		
Previously Committed Solar*						412	304	197	147		402								29						323	236	126	25												2,201		
Battery*																																								0		
EE1																																								0		
EE2																																								0		
EE3																																								0		

* Nameplate Capacity

Expansion Plan Deltas

[illegible][illegible][illegible][illegible]

