

Scenario number: 18-Bas hic



A personal commitment to New Mexico

Least Cost Portfolio				Lowest CO <sub>2</sub> emissions Portfolio				Most Reliable			
NPV - k \$				NPV				NPV			
Metric Tons CO <sub>2</sub>				Metric Tons CO <sub>2</sub>				Metric Tons CO <sub>2</sub>			
Loss of Load - h				Loss of Load - h				Loss of Load - h			
Year	Resource	MW	Percent	Year	Resource	MW	Percent	Year	Resource	MW	Percent
2008	Photovoltaic Distributed Generation	5	13.66	2008	Photovoltaic Distributed Generation	5	13.66	2008	Photovoltaic Distributed Generation	5	13.66
2008	BASE Energy Efficiency Program	0	13.66	2008	BASE Energy Efficiency Program	0	13.66	2008	BASE Energy Efficiency Program	0	13.66
2009	Lordsburg Plant	72	27.15	2009	Southern NM Purchase	100	18.53	2009	Lordsburg Plant	72	27.15
2009	Luna Plant	190	27.15	2010			15.12	2009	Luna Plant	190	27.15
2010			23.65	2011	New Wind 5 MW Firm	100	14.24	2010			23.65
2011	New Wind 5 MW Firm	100	15.38	2011			14.24	2011	New Wind 5 MW Firm	100	15.38
2011			15.38	2011			14.24	2011			15.38
2011			15.38	2011	Generic 1X1 Combined Cycle	240	14.24	2011			15.38
2012	Generic 1 LMS100	81	16.09	2012	Centralized Solar Hybrid	100	15.86	2012	Generic 1 LMS100	81	16.09
2013			13.67	2013			13.46	2013			13.67
2014	Generic Heavy Frame 7	150	18.30	2014	Generic Heavy Frame 7	150	18.44	2014	Generic Heavy Frame 7	150	18.66
2015			15.93	2014	Geothermal Plant	7.5	18.44	2014	Geothermal Plant	7.5	18.66
2016			13.60	2015			16.08	2015			16.29
2017	Generic Heavy Frame 7	150	18.23	2016			13.74	2016			13.95
2018	Palo Verde Lease Extension Unit 1	104	15.33	2016			13.74	2017	Generic Heavy Frame 7	150	18.57
2018	Palo Verde Lease Extension Unit 2	74	15.33	2016			13.74	2018	Generic 1X1 Combined Cycle	240	18.42
2019	Generic 1 LMS100	81	16.23	2016			13.74	2018			18.42
2020			13.93	2017	Generic Heavy Frame 7	150	18.36	2018			18.42
2021	Biomass	25	12.97	2018	Palo Verde Lease Extension Unit 1	104	15.80	2019			15.73
2021	Nuclear Unit	200	18.46	2018	Palo Verde Lease Extension Unit 2	74	15.80	2020			13.45
2022	Path 48 Transmission Expansion (a	0	18.46	2018	Geothermal Plant	7.5	15.80	2021	Generic Heavy Frame 7	150	17.72
2023	Geothermal Plant	7.5	16.16	2019			13.17	2022			14.92
2024	Geothermal Plant	7.5	13.82	2020	Centralized Solar Hybrid	100	15.12	2022			14.92
2025	Generic Heavy Frame 7	150	17.40	2021			13.10	2023	Generic 1 LMS100	81	15.65
2026			15.09	2022	Nuclear Unit	200	18.58	2023			15.65
2027	Generic 1 LMS100	81	15.78	2022	Path 48 Transmission Expansion (a	0	18.58	2023			15.65
				2023			15.99	2023			15.65
				2024			13.35	2024			13.02
				2024			13.35	2025	Nuclear Unit	200	18.52
				2025	Generic Heavy Frame 7	150	16.93	2025	Path 48 Transmission Expansion (a	0	18.52
				2025			16.93	2026			16.20
				2026			14.65	2026			16.20
				2027	Biomass	25	13.28	2026			16.20
								2027	Centralized Solar Hybrid	100	17.51
								2027			17.51

Notes:  
 Base EE  
 Mid Load  
 Mid Gas Price  
 53 \$/tonne Carbon

1478

1513

1527

Scenario number: 18-ADV hic



A personal commitment to New Mexico

Least Cost Portfolio				Lowest CO <sub>2</sub> emissions Portfolio				Most Reliable			
NPV - k \$		\$ 11,022,683		NPV		\$ 11,340,134		NPV		\$ 11,090,242	
Metric Tons CO <sub>2</sub>		156,290,456		Metric Tons CO <sub>2</sub>		149,959,901		Metric Tons CO <sub>2</sub>		155,682,622	
Loss of Load - h		50.5		Loss of Load - h		92.37		Loss of Load - h		48.08	
Year	Resource	MW	Reserve Margin Percent	Year	Resource	MW	Reserve Margin Percent	Year	Resource	MW	Reserve Margin Percent
2008	Photovoltaic Distributed Generation	5	13.66	2008	Photovoltaic Distributed Generation	5	13.66	2008	Photovoltaic Distributed Generation	5	13.66
2008	ADV Energy Efficiency Program	0	13.66	2008	ADV Energy Efficiency Program	0	13.66	2008	ADV Energy Efficiency Program	0	13.66
2009	Lordsburg Plant	72	27.15	2009	Southern NM Purchase	100	18.53	2009	Lordsburg Plant	72	27.15
2009	Luna Plant	190	27.15	2010			15.23	2009	Luna Plant	190	27.15
2010			23.75	2011	New Wind 5 MW Firm	100	14.65	2010			23.75
2011			15.53	2011			14.65	2011			15.53
2012	Generic 1 LMS100	81	16.64	2011			14.65	2012	Generic 1 LMS100	81	16.64
2013	New Wind 5 MW Firm	100	14.93	2011	Generic 1X1 Combined Cycle	240	14.65	2013	New Wind 5 MW Firm	100	14.93
2013			14.93	2012	Generic 1 LMS100	81	15.77	2013			14.93
2013			14.93	2013			13.83	2013			14.93
2014	Geothermal Plant	7.5	13.08	2014	Centralized Solar Hybrid	100	16.47	2014	Generic 1 LMS100	81	16.69
2015	Generic Heavy Frame 7	150	18.49	2014			16.47	2014			16.69
2016			16.53	2015			14.58	2015			14.79
2017			14.67	2016	Centralized Solar Hybrid	100	17.36	2016	Generic 1 LMS100	81	16.74
2018	Generic 1 LMS100	81	15.93	2017			15.48	2017			14.88
2018	Palo Verde Lease Extension Unit 1	104	15.93	2018	Nuclear Unit	200	14.03	2018	Palo Verde Lease Extension Unit 1	104	13.57
2018	Palo Verde Lease Extension Unit 2	74	15.93	2018	Path 48 Transmission Expansion (a	0	14.03	2018	Palo Verde Lease Extension Unit 2	74	13.57
2019			13.66	2019	Generic Heavy Frame 7	150	18.52	2018	Biomass	25	13.57
2020	Generic Heavy Frame 7	150	18.37	2020			16.54	2019	Generic Heavy Frame 7	150	18.08
2021	Geothermal Plant	7.5	16.97	2021			14.84	2020			16.11
2022			14.51	2022	Biomass	25	13.49	2021			14.41
2023	Generic Heavy Frame 7	150	18.55	2023	Generic Heavy Frame 7	150	17.55	2022	Generic Heavy Frame 7	150	18.38
2024			16.15	2023			17.55	2023			16.09
2025			14.22	2023			17.55	2024			13.74
2026	Generic 1 LMS100	81	15.44	2024			15.17	2025	Generic Heavy Frame 7	150	17.88
2027			13.40	2025			13.26	2026			15.84
				2026	Generic Heavy Frame 7	150	17.23	2027	Centralized Solar Hybrid	100	17.61
				2027			15.15	2027			17.61
				2027			15.15				

Notes:  
 Advance EE  
 Mid Load  
 Mid Gas Price  
 53 \$/tonne Carbon

1253

1401

1363

Scenario number: 18-MAX hic



A personal commitment to New Mexico

Least Cost Portfolio				Lowest CO <sub>2</sub> emissions Portfolio				Most Reliable			
NPV - k \$				NPV				NPV			
Metric Tons CO <sub>2</sub>				Metric Tons CO <sub>2</sub>				Metric Tons CO <sub>2</sub>			
Loss of Load - h				Loss of Load - h				Loss of Load - h			
Year	Resource	MW	Percent	Year	Resource	MW	Percent	Year	Resource	MW	Percent
2008	Photovoltaic Distributed Generation	5	13.66	2008	Photovoltaic Distributed Generation	5	13.66	2008	Photovoltaic Distributed Generation	5	13.66
2008	MAX Energy Efficiency Program	0	13.66	2008	MAX Energy Efficiency Program	0	13.66	2008	MAX Energy Efficiency Program	0	13.66
2009	Lordsburg Plant	72	27.15	2009	Lordsburg Plant	72	27.15	2009	Lordsburg Plant	72	27.15
2009	Luna Plant	190	27.15	2009	Luna Plant	190	27.15	2009	Luna Plant	190	27.15
2010			23.89	2010			23.89	2010			23.89
2011	New Wind 5 MW Firm	100	16.14	2011	New Wind 5 MW Firm	100	16.14	2011	New Wind 5 MW Firm	100	16.14
2011			16.14	2011			16.14	2011			16.14
2011			16.14	2011			16.14	2011			16.14
2012			13.45	2012			13.45	2012			13.45
2013	Generic 1 LMS100	81	16.08	2013	Biomass	25	13.25	2013	Generic 1 LMS100	81	16.08
2014			14.26	2013			13.25	2014			14.26
2015	Geothermal Plant	7.5	13.19	2014	Centralized Solar Hybrid	100	16.37	2015	Geothermal Plant	7.5	13.19
2016	Generic 1 LMS100	81	15.63	2015			14.90	2016	Generic 1 LMS100	81	15.63
2017			14.18	2016			13.40	2017			14.18
2018	Palo Verde Lease Extension Unit 1	104	13.29	2017	Centralized Solar Hybrid	100	16.69	2018	Palo Verde Lease Extension Unit 1	104	13.29
2018	Palo Verde Lease Extension Unit 2	74	13.29	2017			16.69	2018	Palo Verde Lease Extension Unit 2	74	13.29
2018	Biomass	25	13.29	2018	Palo Verde Lease Extension Unit 1	104	14.57	2018	Biomass	25	13.29
2019	Generic Heavy Frame 7	150	18.34	2018	Palo Verde Lease Extension Unit 2	74	14.57	2019	Generic Heavy Frame 7	150	18.34
2019			18.34	2019	Geothermal Plant	7.5	13.02	2019			18.34
2019			18.34	2020	Generic Heavy Frame 7	150	18.65	2019			18.34
2020	Geothermal Plant	7.5	17.06	2020	Geothermal Plant	7.5	18.65	2020	Geothermal Plant	7.5	17.06
2021			15.71	2021			17.28	2021			15.71
2022			13.57	2022			15.12	2022			13.57
2023	Generic Heavy Frame 7	150	18.19	2023			13.19	2023	Generic Heavy Frame 7	150	18.19
2024			16.09	2024	Generic Heavy Frame 7	150	17.59	2024			16.09
2025			14.46	2025			15.94	2025			14.46
2026	Generic 1 LMS100	81	16.11	2026			14.21	2026	Generic 1 LMS100	81	16.11
2027			14.33	2027	Generic Heavy Frame 7	150	18.57	2027	Centralized Solar Hybrid	100	18.35
				2027			13.57				

Notes:  
 Max EE  
 Mid Load  
 Mid Gas Price  
 53 \$/tonne Carbon

1128

1235

1228

Scenario number: 18-HMAX-hic



Least Cost Portfolio				Lowest CO <sub>2</sub> emissions Portfolio				Most Reliable			
NPV - k \$				NPV				NPV			
Metric Tons CO <sub>2</sub>				Metric Tons CO <sub>2</sub>				Metric Tons CO <sub>2</sub>			
Loss of Load - h				Loss of Load - h				Loss of Load - h			
Year	Resource	MW	Percent	Year	Resource	MW	Percent	Year	Resource	MW	Percent
2008	Photovoltaic Distributed Generation	5	13.66	2008	Photovoltaic Distributed Generation	5	13.66	2008	Photovoltaic Distributed Generation	5	13.66
2008	High Max Energy Efficiency Program	0	13.66	2008	High Max Energy Efficiency Program	0	13.66	2008	High Max Energy Efficiency Program	0	13.66
2009	Lordsburg Plant	72	27.15	2009	Southern NM Purchase	100	18.53	2009	Lordsburg Plant	72	27.15
2009	Luna Plant	190	27.15	2010			15.39	2009	Luna Plant	190	27.15
2010			23.93	2011	Generic 1X1 Combined Cycle	240	14.87	2010			23.93
2011	New Wind 5 MW Firm	100	16.28	2011			14.87	2011	New Wind 5 MW Firm	100	16.28
2011			16.28	2011			14.87	2011			16.28
2011			16.28	2011			14.87	2011			16.28
2012			13.70	2011			14.87	2012			13.70
2013	Generic 1 LMS100	81	16.51	2012	Generic 1 LMS100	81	16.49	2013	Generic 1 LMS100	81	16.51
2014			14.85	2013	New Wind 5 MW Firm	100	15.40	2014			14.85
2015			13.56	2013			15.40	2015			13.56
2016	Generic 1 LMS100	81	16.18	2013			15.40	2016	Generic 1 LMS100	81	16.18
2017	Geothermal Plant	7.5	15.24	2014	Centralized Solar Hybrid	100	18.68	2017	Geothermal Plant	7.5	15.24
2018	Palo Verde Lease Extension Unit 1	104	13.28	2015			17.34	2018	Palo Verde Lease Extension Unit 1	104	13.28
2018	Palo Verde Lease Extension Unit 2	74	13.28	2016			15.96	2018	Palo Verde Lease Extension Unit 2	74	13.28
2019	Generic Heavy Frame 7	150	18.56	2017	Geothermal Plant	7.5	15.02	2019	Generic Heavy Frame 7	150	18.56
2020	Geothermal Plant	7.5	17.42	2018	Nuclear Unit	200	14.11	2020	Geothermal Plant	7.5	17.42
2021			16.19	2018	Path 48 Transmission Expansion (a)	0	14.11	2021			16.19
2022			14.17	2019	Centralized Solar Hybrid	100	16.96	2022			14.17
2023	Biomass	25	13.49	2020	Geothermal Plant	7.5	15.85	2023	Biomass	25	13.49
2024	Generic Heavy Frame 7	150	18.10	2021			14.65	2024	Generic Heavy Frame 7	150	18.10
2025			16.56	2022	Biomass	25	13.77	2025			16.56
2026			14.94	2023	Generic Heavy Frame 7	150	18.61	2026			14.94
2027			13.27	2024			16.62	2027	Centralized Solar Hybrid	100	17.37
				2025			15.10	2027			17.37
				2026			13.50				
				2027	Generic Heavy Frame 7	150	18.10				

Notes:  
 High Max EE  
 Mid Load  
 Mid Gas Price  
 53 \$/Tonne Carbon