

Appendix B
IRP Data

Integrated Resource Plan Data

Input	Unit	Mohave NGCC (Cooling Tower and CO ₂ Removal)	Mohave NGCC (Air-Cooled Condenser and CO ₂ Removal)	Solar Site 1 (Trough)	Solar Site 2 (Trough)	Solar Site 1 (Dish)	Solar Site 2 (Dish)	Gray Mountain Phase 1	Gray Mountain Phases 1-3
Capacity	MW	846	846	300	300	425	425	150	450
<u>Outages</u>									
Schedule Maintenance Rate	% of year	6.5%	6.5%	1.0%	1.0%	1.5%	1.5%	3.0%	3.0%
Forced Outage Rate	% of year	4.0%	4.0%	1.5%	1.5%	2.0%	2.0%	3.0%	3.0%
<u>Average Heat Rates</u>									
Full Load Heat Rate	BTU/kWh	8,310	8,310	0	0	0	0	0	0
Heat Rate Points									
75.0%	BTU/kWh	8,945	8,945	0	0	0	0	0	0
50.0%	BTU/kWh	8,325	8,325	0	0	0	0	0	0
25.0%	BTU/kWh	10,075	10,075						
Heat Rate Capacity Points									
100.0%	MW	846	846	300	300	425	425	150	450
75.0%	MW	635	635	225	225	319	319	113	338
50.0%	MW	423	423	150	150	213	213	75	225
25.0%	MW	212	212	75	75	106	106	38	113
<u>Costs</u>									
Burnertip Fuel Price	\$/MMBTU	8.64	8.64	0.0	0.0	0.0	0.0	0.0	0.0
Fixed O&M	\$/kW-yr	2.32	2.08	33	33	3	3	55.32	53.05
Variable O&M	\$/MWh	6.45	6.45	30	30	11	11	0.195	0.195
<u>Emissions</u>									
CO2 Emissions	lbs/MMBTU	114	114	11	11	0	0	0	0
NOx Emissions	lbs/MMBTU	0.037	0.037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SO2 Emissions	lbs/MMBTU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<u>Repair Time</u>									
Mean Time to Repair	hrs	47	47	20	20	0	0	0	0
Min Time to Repair	hrs	4	4	4	4	0	0	0	0
Max Time to Repair	hrs	720	720	336	336	0	0	0	0
<u>Dispatch</u>									
Ramp Rate	MW/hr	2,538	2,538	0	0	0	0	0	0
Run Up Rate	MW/hr	250	250	250	250	0	0	0	0
Min Up Time	hrs	0	0	4	4	0	0	0	0
Min Down Time	hrs	0	0	2	2	0	0	0	0
Start-Up Fuel	MMBTU	22,490	22,490	0	0	0	0	0	0
Expected Plant Life Time	years	25	25	20	20	20	20	20	20

Integrated Resource Plan Data

Input	Unit	Aubrey Cliffs	Clear Creek	Sunshine Wind Park
Capacity	MW	100	75	60
<u>Outages</u>				
Schedule Maintenance Rate	% of year	3.0%	3.0%	3.0%
Forced Outage Rate	% of year	3.0%	3.0%	3.0%
<u>Average Heat Rates</u>				
Full Load Heat Rate	BTU/kWh	0	0	0
<u>Heat Rate Points</u>				
75.0%	BTU/kWh	0	0	0
50.0%	BTU/kWh	0	0	0
25.0%	BTU/kWh			
<u>Heat Rate Capacity Points</u>				
100.0%	MW	100	75	60
75.0%	MW	75	56	45
50.0%	MW	50	38	30
25.0%	MW	25	19	15
<u>Costs</u>				
Burnertip Fuel Price	\$/MMBTU	0.0	0.0	0.0
Fixed O&M	\$/kW-yr	31.91	32.24	33.33
Variable O&M	\$/MWh	0.223	0.244	0.279
<u>Emissions</u>				
CO2 Emissions	lbs/MMBTU	0	0	0
NOx Emissions	lbs/MMBTU	0.0000	0.0000	0.0000
SO2 Emissions	lbs/MMBTU	0.000	0.000	0.000
<u>Repair Time</u>				
Mean Time to Repair	hrs	0	0	0
Min Time to Repair	hrs	0	0	0
Max Time to Repair	hrs	0	0	0
<u>Dispatch</u>				
Ramp Rate	MW/hr	0	0	0
Run Up Rate	MW/hr	0	0	0
Min Up Time	hrs	0	0	0
Min Down Time	hrs	0	0	0
Start-Up Fuel	MMBTU	0	0	0
Expected Plant Life Time	years	20	20	20