

UPDATED LOAD AND RESOURCES INFORMATION

We provide below, an updated Load and Resources (L&R) analysis that summarizes our capacity position through the planning period, and an Expansion Plan that outlines the generation additions we are considering to address the resource needs of our customers. For clarity, we provide this resource summary in a format that builds on the L&R information included in our March 16, 2015 Supplement.

The final row of Table 1 below provides our updated capacity position before adding any of the new resources proposed in our revised proposal. More specifically, it shows we expect to have sufficient capacity to meet our customers' needs through 2023. However, starting in 2024 we have a capacity deficit that grows from 177 MW to over 3,500 MW by 2030.

Table 1: Updated Load and Resources (MW)

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Forecasted Load	9,442	9,525	9,597	9,649	9,674	9,694	9,754	9,748	9,766	9,798	9,868	9,962	10,136	10,151	10,251
MISO System Coincident	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
Coincident Load	8,970	9,048	9,117	9,167	9,190	9,209	9,266	9,261	9,278	9,308	9,375	9,464	9,629	9,644	9,739
MISO Planning Reserve	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%
Obligation	9,607	9,691	9,764	9,818	9,843	9,863	9,924	9,919	9,937	9,969	10,041	10,136	10,313	10,328	10,430
Existing Resources	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Load Management	1,009	1,021	1,033	1,044	1,056	1,067	1,078	1,090	1,101	1,103	1,098	1,094	1,089	1,085	1,080
Coal	2,372	2,395	2,395	2,395	2,395	2,395	2,395	2,395	2,395	2,395	2,395	2,395	2,395	2,395	2,395
Nuclear	1,648	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643
Natural Gas	3,451	3,476	3,476	3,465	3,465	3,465	3,465	3,465	3,137	2,824	2,298	2,047	1,812	1,812	1,812
Biomass/RDF/Hydro/Wind	1,341	1,339	1,316	1,279	1,205	1,437	1,430	1,383	1,310	461	451	407	318	300	299
Solar*	25	33	137	143	149	156	164	174	187	202	220	242	268	300	338
Existing Resources	9,846	9,906	9,999	9,970	9,913	10,163	10,176	10,150	9,772	8,627	8,105	7,827	7,525	7,535	7,568
Position Jan 2, 2015 RP															
Initial Filing	239	216	235	152	70	300	251	231	-165	-1,341	-1,936	-2,309	-2,788	-2,794	-2,862
<i>* Solar includes 2014 Solar RFP (Docket No. E002/M-14-162)</i>															
Planned Resource Additions	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Black Dog 6	0	0	0	208	208	208	208	208	208	208	208	208	208	208	208
Calpine MEC2	0	0	0	278	278	278	278	278	278	278	278	278	278	278	278
Geronimo	0	0	70	69	69	69	68	68	68	67	67	67	66	66	66
Community Solar Garden - Additions**	20	36	53	72	94	103	103	102	102	101	101	100	100	99	98
Additional Approved Resources	20	36	123	628	649	658	657	656	655	654	654	653	652	651	650
Position Mar 16, 2015 RP															
Supplement Filing	260	251	358	779	719	958	909	887	490	-687	-1,282	-1,657	-2,136	-2,143	-2,212
<i>** Solar Additions represent the revised solar implementation due to Community Solar Gardens.</i>															
Proposal	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Sherco 2 Cease Coal Operation	0	0	0	0	0	0	0	-667	-667	-667	-667	-667	-667	-667	-667
Sherco 1 Cease Coal Operation	0	0	0	0	0	0	0	0	0	0	-694	-694	-694	-694	-694
Proposed Coal Reductions	0	0	0	0	0	0	0	-667	-667	-667	-1,361	-1,361	-1,361	-1,361	-1,361
Position Oct 2, 2015 RP															
Reply Comments Filing	260	251	358	779	719	958	909	220	-177	-1,354	-2,643	-3,017	-3,497	-3,503	-3,573

As shown in Table 2 below, our proposal adds thermal and renewable resources in an incremental manner to limit customer rate impacts while also supporting a smooth transition of our generation fleet through 2030.

Table 2: Revised Proposal Expansion Plan¹
(MW Additions, Nameplate Ratings)
(Accredited capacity is less - see Table 3)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Large Solar	-	-	-	200	-	200	100	100	100	100	100	100	-	400	-	-	1,400
Wind	-	-	-	-	800	-	-	200	200	-	400	200	-	-	-	-	1,800
North Dakota CT	-	-	-	-	-	-	-	-	232	-	-	-	-	-	-	-	232
Sherco Gas Conversion/CT	-	-	-	-	-	-	-	-	-	-	562	-	-	-	-	-	562
Sherco CC	-	-	-	-	-	-	-	-	-	-	-	778	-	-	-	-	778
CT	-	-	-	-	-	-	-	-	-	-	-	464	-	-	-	-	464
CC	-	-	-	-	-	-	-	-	-	-	-	-	778	-	-	-	778

Note: The North Dakota CT is reflected in 2023 for planning purposes.

Relative to the Expansion Plan in our March 16 Supplement, we are proposing to accelerate the acquisition of 400 MW of large solar and an additional 200 MW of wind for a total acquisition of 800 MW of wind and 400 MW of large solar in the 2018 to 2020 timeframe. This timing will allow the opportunity to take advantage of possible cost-reducing incentives, while at the same time adding the energy resources necessary to allow Sherco Unit 2 to cease operations. Thermal resource additions, including a combined cycle at Sherco needed for system stability, a possible conversion of a Sherco Unit to use natural gas, and a combustion turbine in North Dakota are also staggered throughout the planning period to help manage costs and facilitate a smooth fleet transition.

To demonstrate how these proposed resources will meet the capacity needs of our customers through 2030, we provide a view of our net capacity position after these resources are added to the system as Table 3 below. Table 3 begins with the net capacity position from the final row of the L&R Table 1 above, and adds the MISO accredited capacity value of each of the proposed new resources. Table 3 concludes with our net capacity position.

¹ We clarify that with respect to Solar resource additions, we no longer show the expected 697 MW of Small Solar additions through 2030 or the 287 MW of Large Solar in 2017 already approved by the Minnesota Commission in the Expansion Plan. These resources are integrated into the L&R. Therefore, the total renewables additions we propose in this Reply are consistent with the total levels we proposed in our March 16 Supplement.

**Table 3: Net Capacity Position after Resource Additions
(MW Additions, UCAP Ratings)²**

Position 10/02/2015 RP Reply Comments Filing	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Revised Proposal Resources															
Large Solar	0	0	0	0	0	261	314	366	418	471	523	523	732	732	732
Wind	0	0	0	0	0	118	148	178	178	237	266	266	266	266	266
North Dakota CT	0	0	0	0	0	0	0	208	208	208	208	208	208	208	208
Sherco Unit Gas Conversion	0	0	0	0	0	0	0	0	0	514	514	514	514	514	514
Sherco CC	0	0	0	0	0	0	0	0	0	0	763	763	763	763	763
CT	0	0	0	0	0	0	0	0	0	0	417	417	417	417	417
CC	0	0	0	0	0	0	0	0	0	0	0	763	763	763	763
Total Plan Additions	0	0	0	0	0	380	462	751	804	1,429	2,691	3,453	3,663	3,663	3,663
Revised Proposal Position after Additions	260	251	358	779	719	1,338	1,370	972	627	75	47	436	166	159	89

Note: The North Dakota CT is reflected in 2023 for planning purposes.

² MISO Unforced Capacity (UCAP) values, which are equal to the amount of accredited capacity, by resource type, that MISO allows the Company to count towards meeting its capacity obligations. Please note that MISO accreditation is by MISO Planning Year, so the timing may not align with the resource addition dates reflected in the above Table 2: Revised Proposal Expansion Plan.