



California Energy Commission
<b>DOCKETED</b>
<b>15-HYDRO-01</b>
TN # 75707
MAY 06 2015

## MEMORANDUM

**TO:** Jim Woodward, California Energy Commission

**FROM:** Tom Miller, Assistant City Manager

**COPY:** Trent Drenon, Assistant Electric Utility Director

**DATE:** May 6, 2015

**SUBJECT:** CEC Docket No. 15-HYDRO-01

TAM

Per letter dated May 1, 2015, from CEC Executive Director Oglesby, please find the City of Shasta Lake's (City) responses to the Drought Hydropower Questions for Publicly Owned Utilities 2015.

**Q1.** The 2015 forecasted firm energy requirements for the City are 190,000 MWhs.

**Q2.** The City does not generate any electrical energy; hydro or otherwise. The City is a long-time customer of Western and the Bureau of Reclamation. The City has a base resource allocation from the Central Valley Project (CVP). Listed below are the kWhs provided from the City's Western contracts since 1993:

1993	60,933,676	
1994	62,293,638	
1995	61,416,097	
1996	50,458,481	
1997	50,693,500	
1998	64,362,500	
1999	60,826,900	
2000	62,349,000	
2001	62,545,294	
2002	59,143,100	
2003	61,791,700	
2004	57,603,300	
2005	21,850,021	
2006	47,620,341	
2007	20,922,421	
2008	19,469,921	
2009	16,963,802	
2010	19,920,795	
2011	29,532,795	
2012	22,320,339	
2013	23,376,292	
2014	14,803,838	8,572,454
2015	753,380	March YTD
2016		
2017		

Q3. 2014 was the lowest amount of hydro-electric energy procured by the City.

Q4. Same as Q3.

Q5. Forecast: (From Western's website forecast starting April 2015) Actual first three months plus Western forecast is estimated to be 14,009,795 kWh.

Base Resource			
Project Capacity Available for BR (MW)	Energy Available for Base Resource (GWh)	Capacity Factor (%)	City's Allocation (kWh) 0.0080537
N	O	P	
639.2	191.3	41.6	1,540,803
841.1	266.1	42.5	2,143,362
1,189.1	352.1	41.1	2,835,415
1,055.1	359.8	45.8	2,897,564
886.4	255.2	38.7	2,055,460
704.8	96.8	19.1	779,989
609.2	51.2	11.3	412,202
641.6	59.4	12.9	478,529
531.4	14.0	3.6	113,091
437.0	0.0	0.0	-
601.3	65.0	15.5	523,231
543.3	65.3	16.2	526,228
	1,776.3		14,305,875

Q6. No. The City does not expect any system or local reliability concerns due to the low hydro conditions.

Q7. The City does not expect under any circumstances that the adverse drought conditions will create severe or critical operational concerns.

Q8. The City expects an increase in cost of replacement power as experienced in 2014. There will be greater utilization of the City's supplemental energy contract. The cost differential is approximately \$0.05 per kWh. The estimated increase in cost is \$430,000 or roughly equivalent to a 4% rate increase. The City uses a Power Cost Adjustment (PCA) rider to complement the existing rate structure. The PCA will absorb this incremental increase in purchase power costs for 2015.

Q9. The City estimates the purchase of additional CO2 allowances for the replacement energy in both 2014 and 2015. Approximately 4,500 additional allowances at \$12.50 per allowance is \$56,250 for each year.

Q10. The City does not expect any other local impacts.

Q11. No. Water curtailments will not affect the City's energy procurements.

Q12. No. But, CVP generation was less than other prior years.

Q13. Energy imports from the Pacific Northwest may increase. Any transmission curtailments/constraints on the COI/COTP will impact negatively reliability and cost of purchase power.