

California Clean Energy Future Metrics

OTC Phase-Out (Data Reference)

Section 316(b) of the Clean Water Act (CWA) requires US EPA to ensure that the location, design, construction and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impacts. Since 1972, states have enforced this requirement on a case-by-case basis in the absence of a specific federal rule. California parties expressed concerns that federal regulations were inadequate and should be addressed by a clearer, more prescriptive California rule.

The State Water Resources Control Board (Water Board) first described a California regulatory approach in March 2008 when it published a scoping document entitled *Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling* to implement Section 316(b) of the Clean Water Act, 33 U.S.C. § 1326(b).

The ISO and five state agencies (CEC, CPUC, California Coastal Commission (CCC), State Lands Commission (SLC) and California Air Resources Board (CARB)) worked closely with the Water Board to develop a policy that would achieve water quality goals while ensuring reliability of California's electricity grid.

On May 4, 2010, the Water Board approved an OTC policy that included many grid reliability edits recommended by the ISO as well as a joint implementation proposal developed by the CEC, CPUC and ISO. The policy was approved by the Office of Administrative Law on September 27, 2010 and became an effective regulation on October 1, 2010.

Nineteen power plants in California are affected by the regulation. Of those 19, 16 totaling roughly 17,000 MW are in the ISO Balancing Authority Area (BAA) and 3 are in the LADWP BAA. Compliance dates for plants named in the regulation range from 2010 to 2024. These plants are critical for system and local reliability and provide ever-increasing ancillary services needed for integration of renewable resources. Plants located in the LA Basin with plans to repower their facilities face additional regulatory challenges due to the lack of air credits in the South Coast Air Basin.

The state agencies mentioned previously are working with the Water Board staff to implement the regulation. Key recent and upcoming activities:

- April 1, 2011 – Generator owners/operators provided detailed implementation compliance plans to the Water Board.
- October 1, 2011 – Review Committee provides a report for public comment detailing the scope of the special studies.

- o March 31, 2012 – First annual SACCWIS report to the Water Board. The Water Board will consider the SACCWIS’ recommendations and direct staff to make modifications to the regulation, if appropriate, based on grid reliability.
- o October 1, 2013 – Review Committee provides to the Water Board a final report and comments detailing results of the special studies.

At the April 8, 2011 SACCWIS meeting, the Water Board staff provided an overview of the implementation plans received on April 1, 2011. Implementation plans were received from owners for all 14 fossil plants representing a total of 49 units. Four of the 49 units propose retirement while the remaining 45 propose variations of compliance. Of the 45 units, 31 will comply under Track 1 (closed cycle cooling); 14 will comply under Track 2 (comparable level to Track 1 using operational or structural controls, or both). With regard to meeting compliance dates, 36 of 49 expect to meet their compliance date (this includes the 4 retirements); 13 have requested extensions ranging from 2 to 16 years. Of the 13 requesting extensions, 11 are Track 1 and 2 are Track 2.

The values shown in the table below are drawn from the most recent April 2011 filing of owner implementation plans. This table shows each facility and unit, their SWRCB mandated compliance date, the owner proposed compliance implementation date, the existing Net Qualifying Capacity (NQC) and compliance status. The status is ‘In Compliance’ if the unit has met its compliance requirements, ‘Ahead Schedule’ if the Owner Implementation date is earlier than the SWRCB date, ‘On Schedule’ if the SWRCB date is equal to the Owner Implementation date, ‘Caution’ if deemed at risk by owner implementation schedule response, or ‘Behind Schedule’ if the implementation date is after the SWRCB date.

Facility & Unit(s)	SWRCB Compliance Date	Owner Compliance Proposal Date	Existing NQC Capacity	Compliance Status
Humboldt Bay (1,2)	12/31/2010	7/31/2010	163	In Compliance
Potrero (3)	10/1/2011	2/28/2011	206	In Compliance
South Bay	12/31/2011	N/A		In Compliance
El Segundo (3)	12/31/2015	7/1/2013	335	Ahead of Schedule
El Segundo (4)	12/31/2015	12/31/2017	335	Behind Schedule
Harbor (1,2,5)	12/31/2015	12/31/2031	229	Behind Schedule
Morro Bay (3,4)	12/31/2015	12/31/2015	650	On Schedule
Encina (1,2,3)	12/31/2017	12/31/2017	318	On Schedule
Encina (4,5)	12/31/2017	12/31/2017	628	On Schedule
Contra Costa (6,7)	12/31/2017	4/30/2013	674	Ahead of Schedule
Pittsburg (5,6)	12/31/2017	12/31/2017	629	Caution
Moss Landing (1,2)	12/31/2017	12/31/2032	1020	Behind Schedule
Moss Landing (6,7)	12/31/2017	12/31/2017	1510	On Schedule
Haynes (1,2)	12/31/2019	12/31/2027	444	Behind Schedule
Haynes (5,6)	12/31/2019	12/31/2013	535	Ahead of Schedule
Haynes (8,9,10)	12/31/2019	12/31/2035	575	Behind Schedule

Facility & Unit(s)	SWRCB Compliance Date	Owner Compliance Proposal Date	Existing NQC Capacity	Compliance Status
Huntington Beach (1,2)	12/31/2020	12/31/2022	452	Behind Schedule
Huntington Beach (3,4)	12/31/2020	12/31/2012	452	Ahead of Schedule
Redondo (5,6)	12/31/2020	12/31/2022	354	Behind Schedule
Redondo (7,8)	12/31/2020	12/31/2018	989	Ahead of Schedule
Alamitos (1,2)	12/31/2020	12/31/2022	350	Behind Schedule
Alamitos (3,4)	12/31/2020	12/31/2024	668	Behind Schedule
Alamitos (5,6)	12/31/2020	12/31/2020	993	On Schedule
Mandalay (1,2)	12/31/2020	12/31/2020	430	On Schedule
Ormand Beach (1,2)	12/31/2020	12/31/2020	1516	On Schedule
Scattergood (1,2)	12/31/2020	12/31/2024	367	Behind Schedule
Scattergood (3)	12/31/2020	12/31/2015	450	Ahead of Schedule
San Onofre (2,3)	12/31/2022	12/31/2022	2246	On Schedule
Diablo Canyon (1,2)	12/31/2024	12/31/2024	2240	On Schedule

The bar graph below is an illustration of the variance between the SWRCB policy and the owners' proposed dates from the April 2011 implementation plans.

OTC Compliance Status

