





The Statewide Once-Through-Cooling (OTC) Policy

Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS)

Annual Meeting March 5, 2018

LADWP Update Grid Reliability Study 2017



Los Angeles Basin Generation

- Every in-basin unit is needed to meet the minimum Reliability Must-Run requirement.
- Basin generation is critical in order to meet customer demand particularly in the summer.
- Scattergood Units 1&2 are next units in our repowering schedule.
- Some basin units are dual fuel capable in the event of an emergency.

Transmission Reinforcements

- Install 230kV Scattergood-Olympic Cable A.
- Add reactive support in-basin and external to basin.
- Upgrade equipment: wires, transformers, circuit breakers, etc.

Resources

- Reserve margin requirement is increasing due to more Variable Energy Resources (VERs)
- RPS targets of 33% by 2020 and 50% by 2025, 55% by 2030, and 65% by 2036.
- > Every WECC audit since 2008 has determined that the LADWP Power System is reliable.



- > 2017 Long term Transmission Assessment
 - conforms to TPL-001-4. Findings show LADWP's Power System will perform reliably over the next ten years.
- 2017 Near Term Seasonal Assessment
 - Identified minimum Reliability Must Run (RMR) generators is unchanged,
- > 2017 Long-Term Transmission Assessment
 - Key segments of LADWP's transmission system must be reinforced, to the extent possible, in order to ensure continued reliable operations.
 - Transmission upgrades are in addition to maintaining current RMR generation requirements.



Findings in 2017 Grid Reliability Report mirror those reported in previous reports and continue to underscore that LADWP's OTC compliance schedule, shown on the next slide, is the most aggressive that is also feasible.



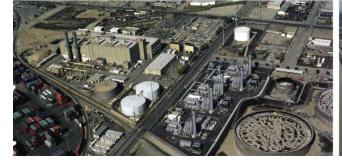
LADWP Update LADWP Coastal Power Plants Compliance Schedule Status

Station	Unit/ (Vintage)	Max. Flow (MGD)	Compliance Date (Complete conversion to Closed-Cycle Cooling)	Status	Cumulative % Flow Reduction
Haynes	5 (1966) 6 (1967)	230.4 230.4	2013	Complete	42
Scattergood	3 (1974)	270.7	2015	Complete	56
Scattergood	1 (1958) 2 (1959)	112.3 112.3	2024	On Schedule	68
Haynes	1 (1962) 2 (1963)	138.2 138.2	2029	Pending completion SGS 1&2	82
Harbor	5 (1995)	108	2029	Pending Completion HnGS 1&2	87
Haynes	8 (2005)	230	2029	Pending completion HGS 5	100

HARBOR GS



SCATTERGOOD GS









LADWP Update 2017 Grid Reliability Report Summary Scattergood Repower Project

Units 1&2 Repowering Project Status:

- Demolition of existing Unit 3 equipment is currently underway.
- ➤ Units 1 & 2 scheduled for decommissioning and shutdown of Once-Through Cooling system by December 31, 2024.



LADWP Update 2017 Grid Reliability Report Summary Scattergood Repower Project





