

Los Angeles



Department of Water & Power



# Once-Through-Cooling Study

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Putting Customers First



[www.ladwp.com](http://www.ladwp.com)

# What is OTC

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- Once-Through-Cooling (OTC) is the process of drawing ocean water and pumping it through a generating station's cooling system, then discharging it back into the ocean.

# Impact of OTC

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- Causes Adverse Environmental Impact (AEI) by pulling large numbers of fish and shellfish or their eggs into a power plant's or factory's cooling system.

# Clean Water Act – Section 316(b)

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- A statewide policy to reduce or minimize the impact of OTC on marine life
- Administered by the State Water Resources Control Board (SWRCB)
- Adopted in 2010

# Affected Facilities

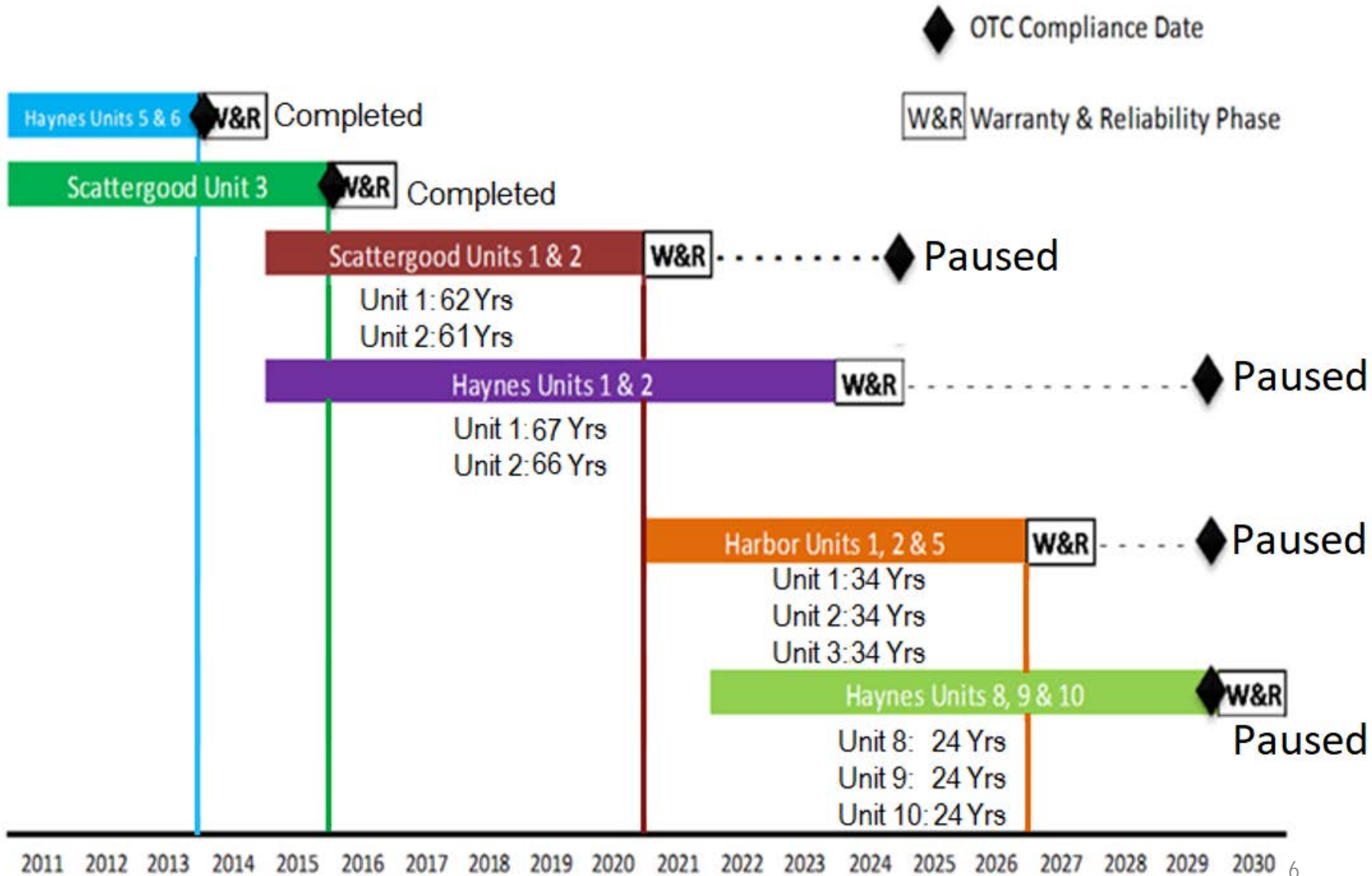
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- The 316(b) Rule will affect **1,065** existing facilities:
  - **544** Power Plants
  - **521** Manufacturing Facilities

\* Federal Register August 15, 2014 – Environmental Protection Agency



# Originally Proposed Repowering Schedule of OTC Units



# Affected LADWP Generating Stations

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- Scattergood GS – Units 1&2 **2024**
- Haynes GS – Units 1, 2, & 8 **2029**
- Harbor GS – Unit 5 **2029**



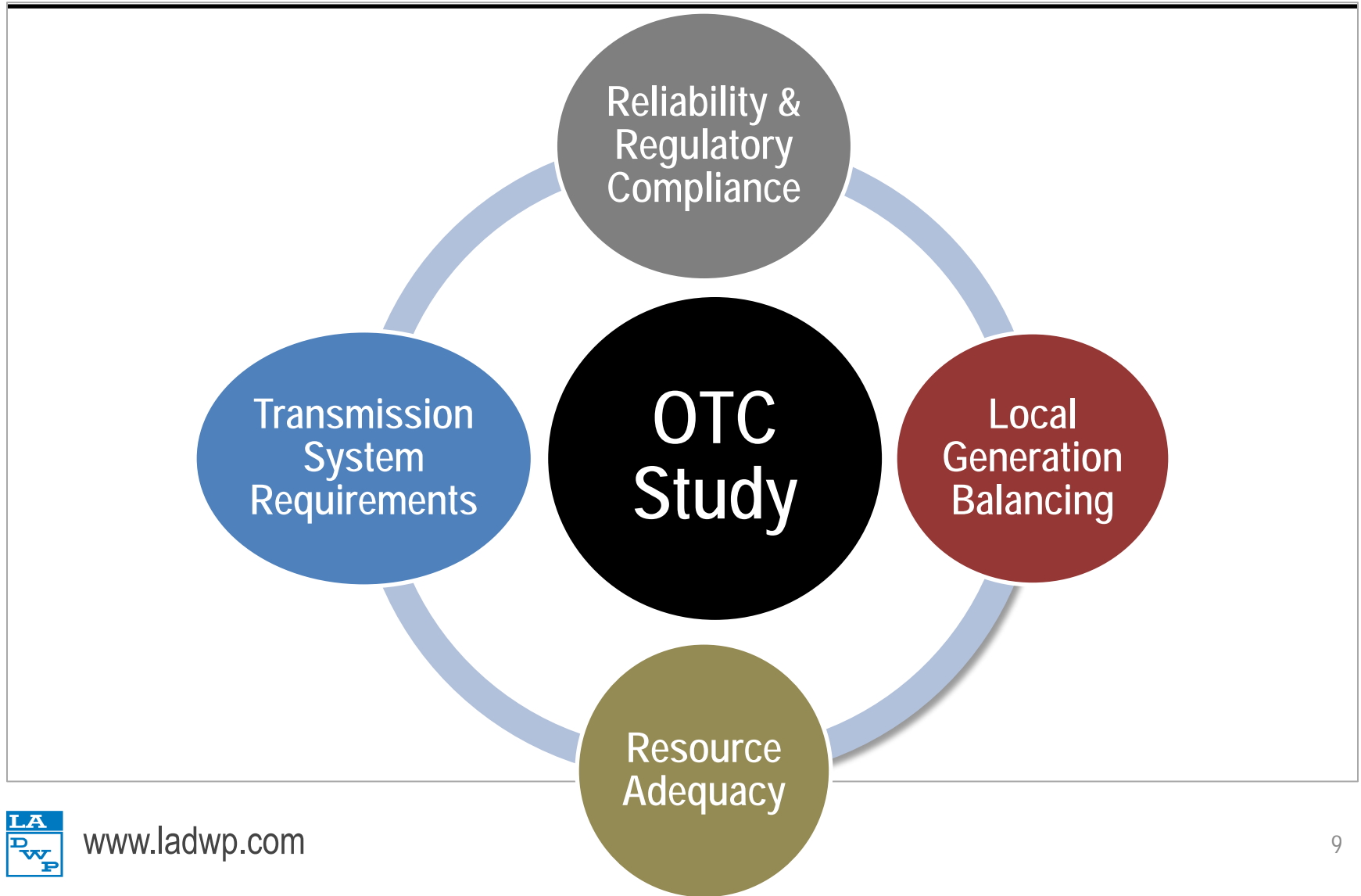
# OTC Study Objectives/Scenarios

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- To reevaluate DWP OTC repowering strategy
- To study various combinations of repowering



# System Reliability Impact

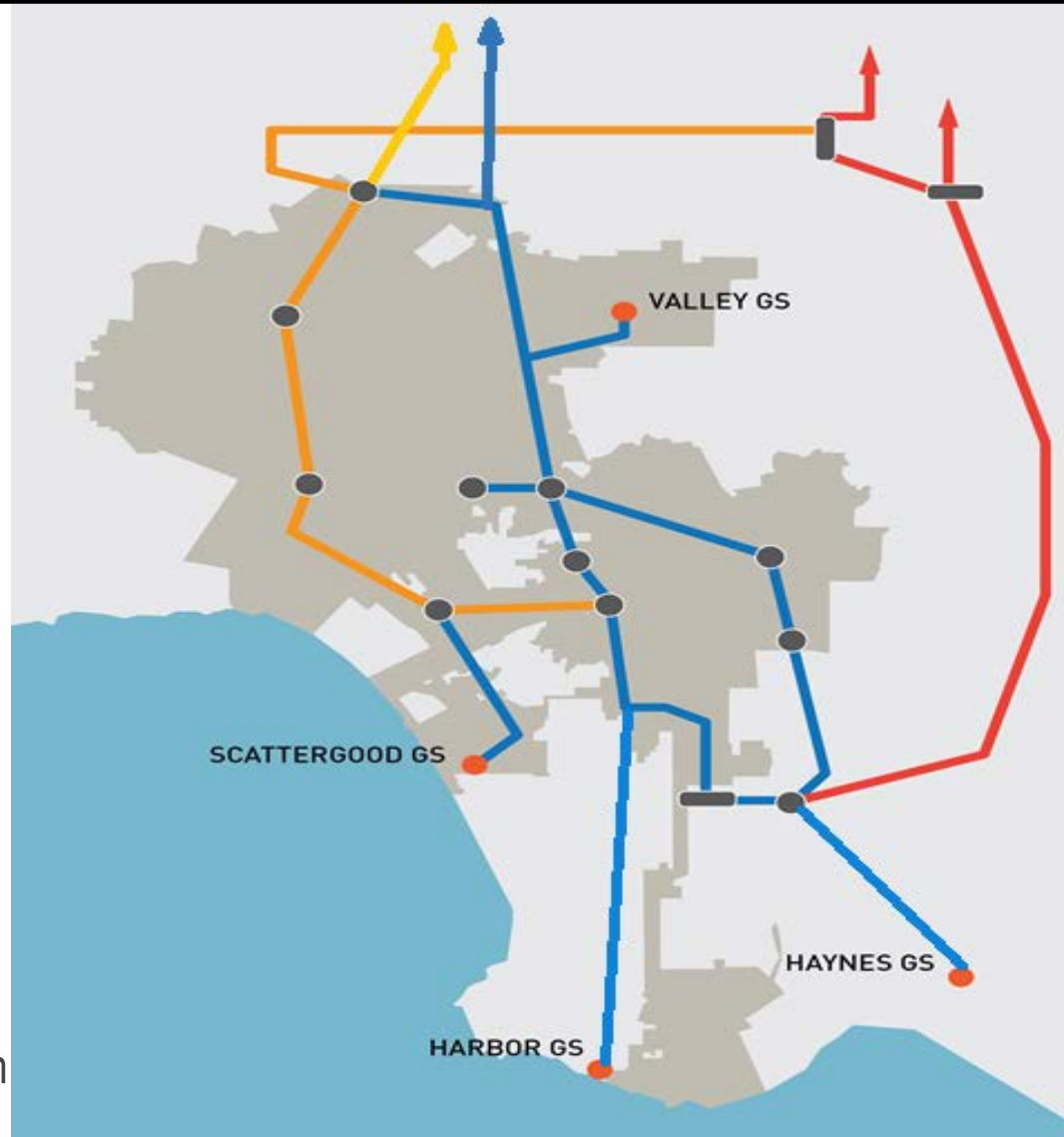


# Mitigation Alternatives

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- Renewable Energy
- Energy Storage System
- Transmission Improvement
- Distributed Energy Resources
- Combination of Various Alternatives

# DWP HV Transmission Corridors



# Timeline

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November  
2017

Data Collection

May 2018

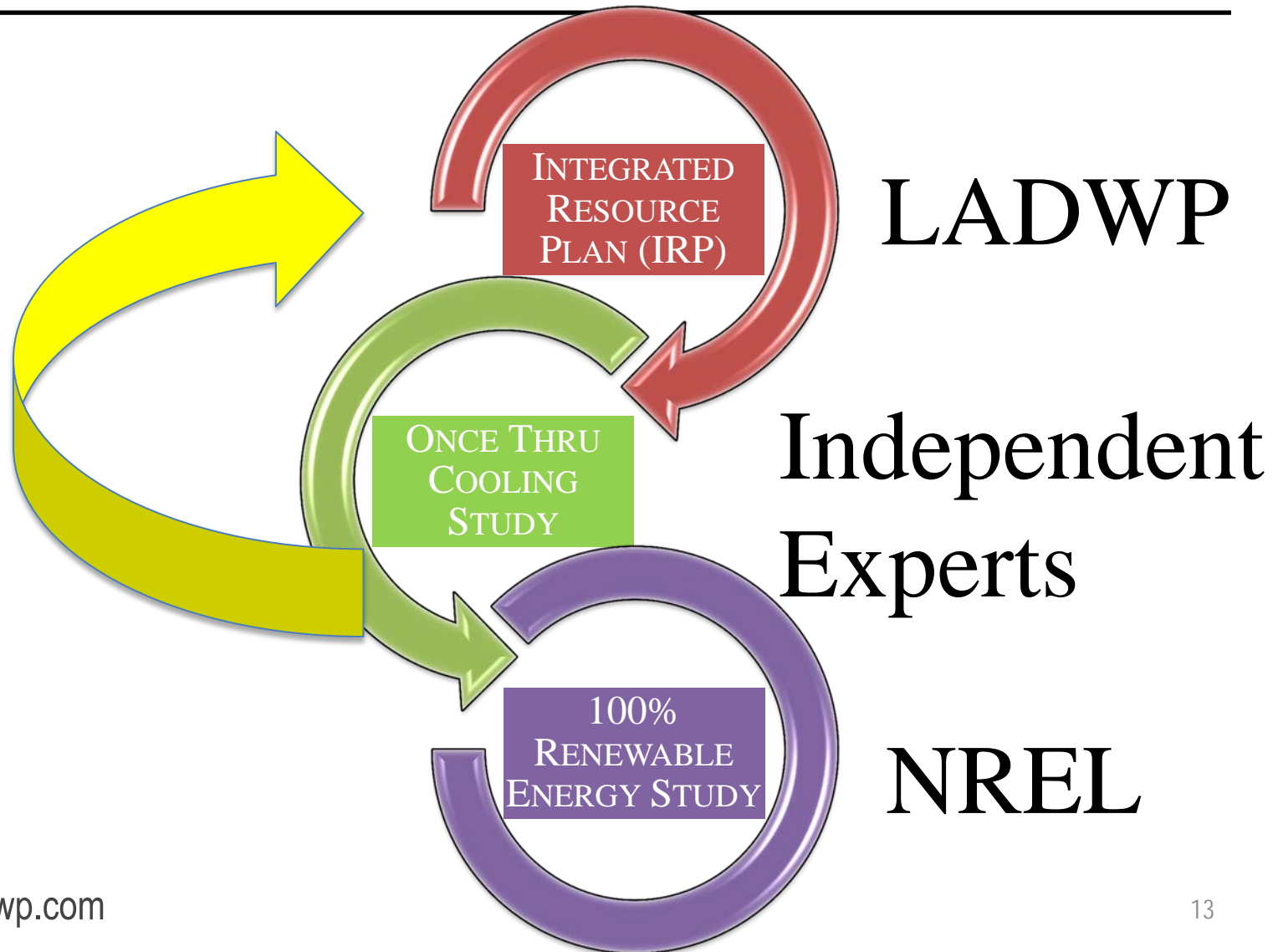
Modeling &  
Scenario Analysis

August  
2018

Final Report

# IRP, OTC, & 100% Renewable Study

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# Questions?