



NEXTCENTURY
BUILDING LA'S WATER & POWER FUTURE

2012 Integrated Resource Plan Overview & Action Items

January 2013

Power Supply Transformation

Over the next 15 years, LADWP will replace over 70% of its power supply to become more sustainable and to comply with state environmental mandates.

Throughout this transformation, LADWP's top priority is maintaining power system reliability to keep the power flowing to our customers, 24/7.

Power Supply Transformation Elements

Achieve at Least 10% Energy Efficiency by 2020

Reach 33% Renewable Energy by 2020

Interim Target: 25% by 2016

Includes solar, wind, hydroelectric, geothermal, & biogas energy resources

Includes expanded local solar program (Solar Incentive and new Feed-in Tariff programs)

Rebuild Coastal Power Plants to Eliminate

Ocean Water Cooling & Integrate Renewables

Haynes, Scattergood & Harbor Generating Stations

Eliminate Coal from LADWP's Power Supply

Navajo Generating Station

Intermountain Power Plant

Invest in Power Reliability Program

Replace aging and inadequate infrastructure

Major Accomplishments

LADWP is making progress toward meeting goals & mandates, guided by long-term Integrated Resource Planning.

- Achieved 20% Renewables.
- Record investment in Energy Efficiency in 2012 (more than doubled budget).
- Eliminating Ocean Water Cooling at coastal power plants (Haynes 5 & 6).
- Record-level Solar Incentive Program participation. Approved installation of 100th MW of customer-installed rooftop solar in 2012.
- Approved 150 MW Feed-in Tariff Solar Program. First 100 MW starting Q1 2013.
- Approved largest municipal utility-scale solar developments in U.S. history; completed Adelanto Solar Power Plant.
- Upgraded Interstate Transmission Lines to bring more renewables to LA.
- Reduced CO₂ Emissions to 21% below 1990 levels.

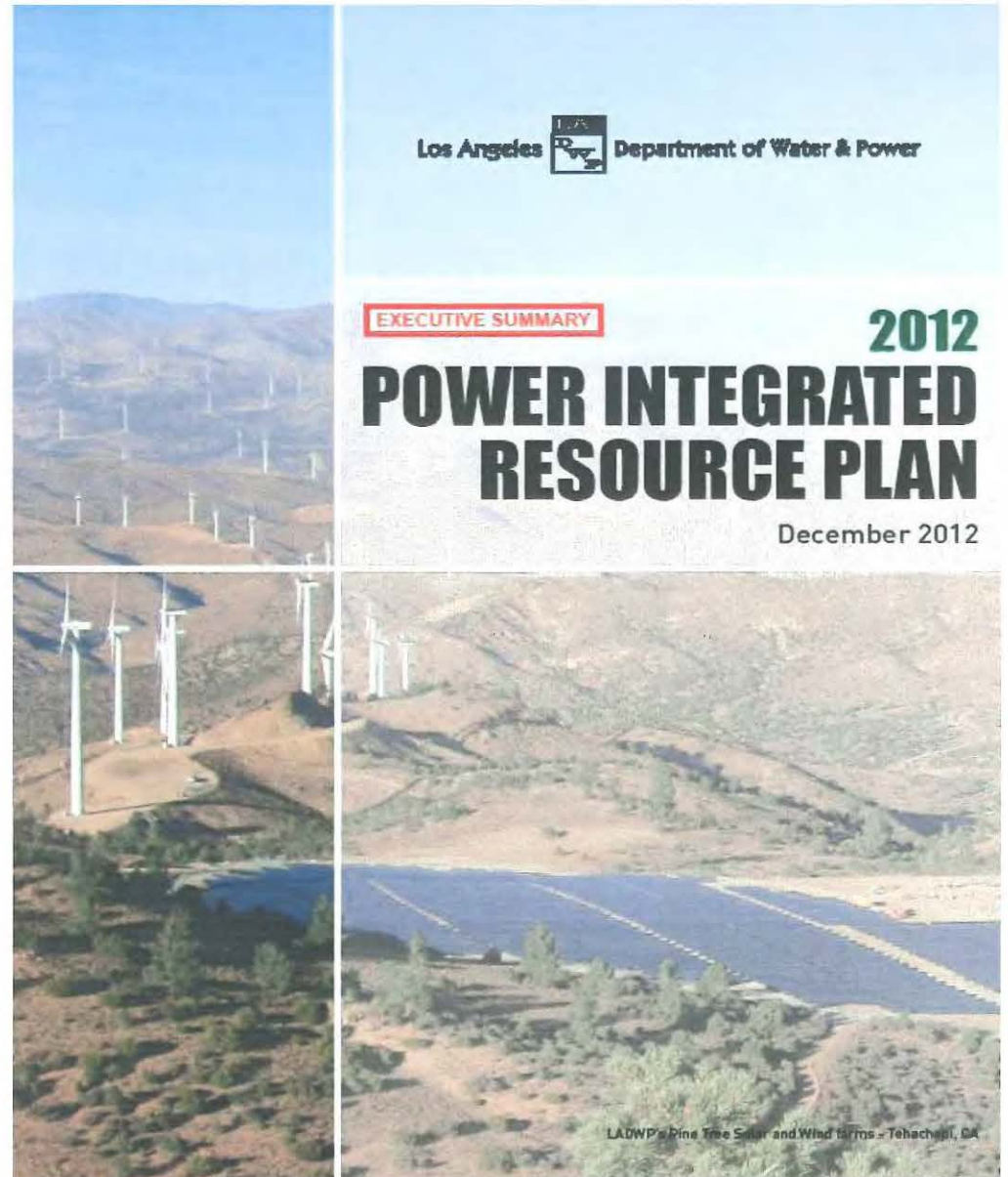
2012 Integrated Resource Plan Completed (IRP)

LADWP's Integrated Resource Plan is Our Power Supply Transformation Road Map

Updated Annually

Extensive Stakeholder Outreach Began in Spring 2012 and Continued through the Year

The full IRP is available online at www.ladwp.com/lapowerplan



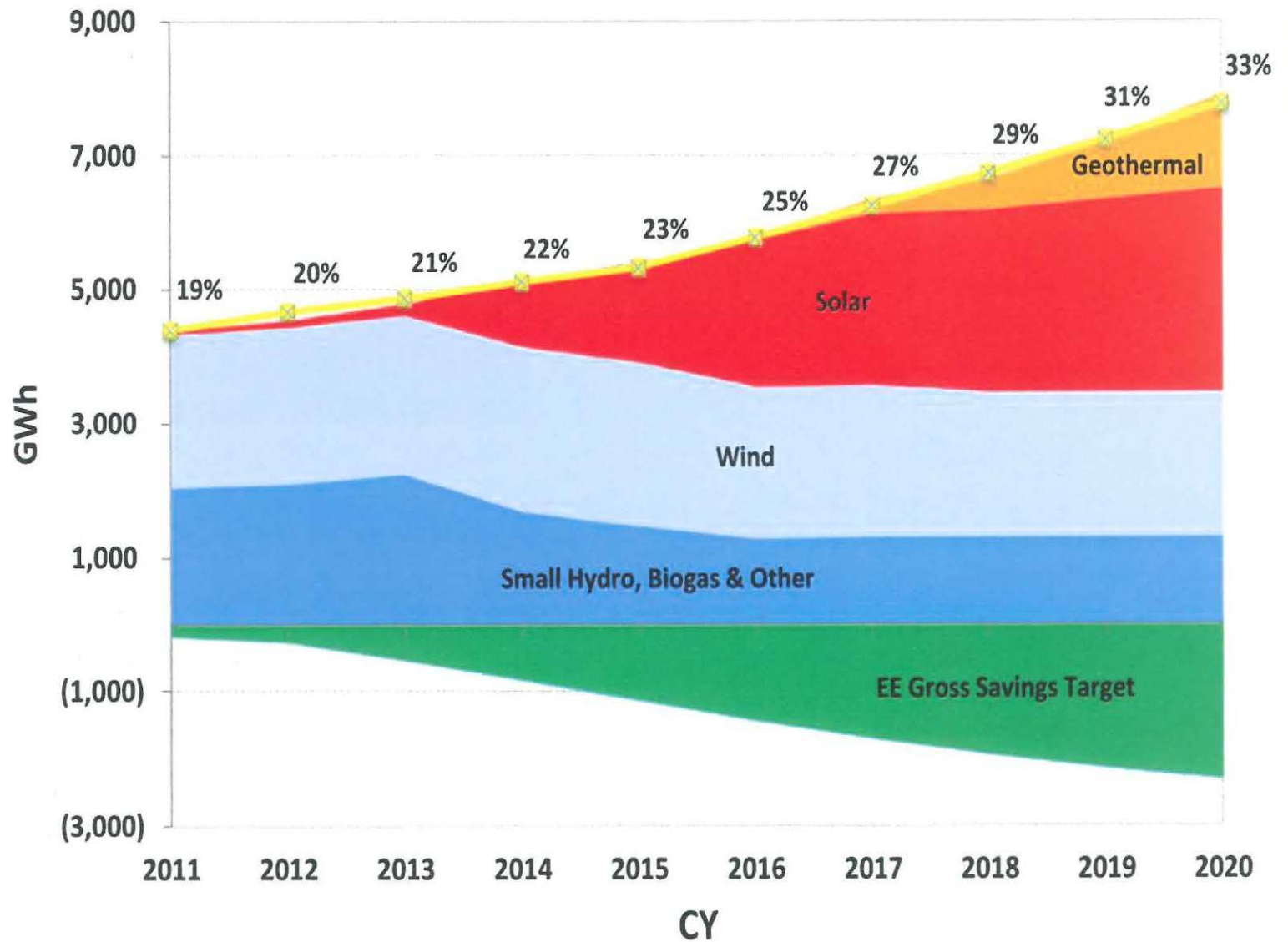
Coal Replacement

4 cases evaluated based on alternative replacement dates for the Navajo and IPP coal power plants.

Energy Efficiency and Distributed Generation

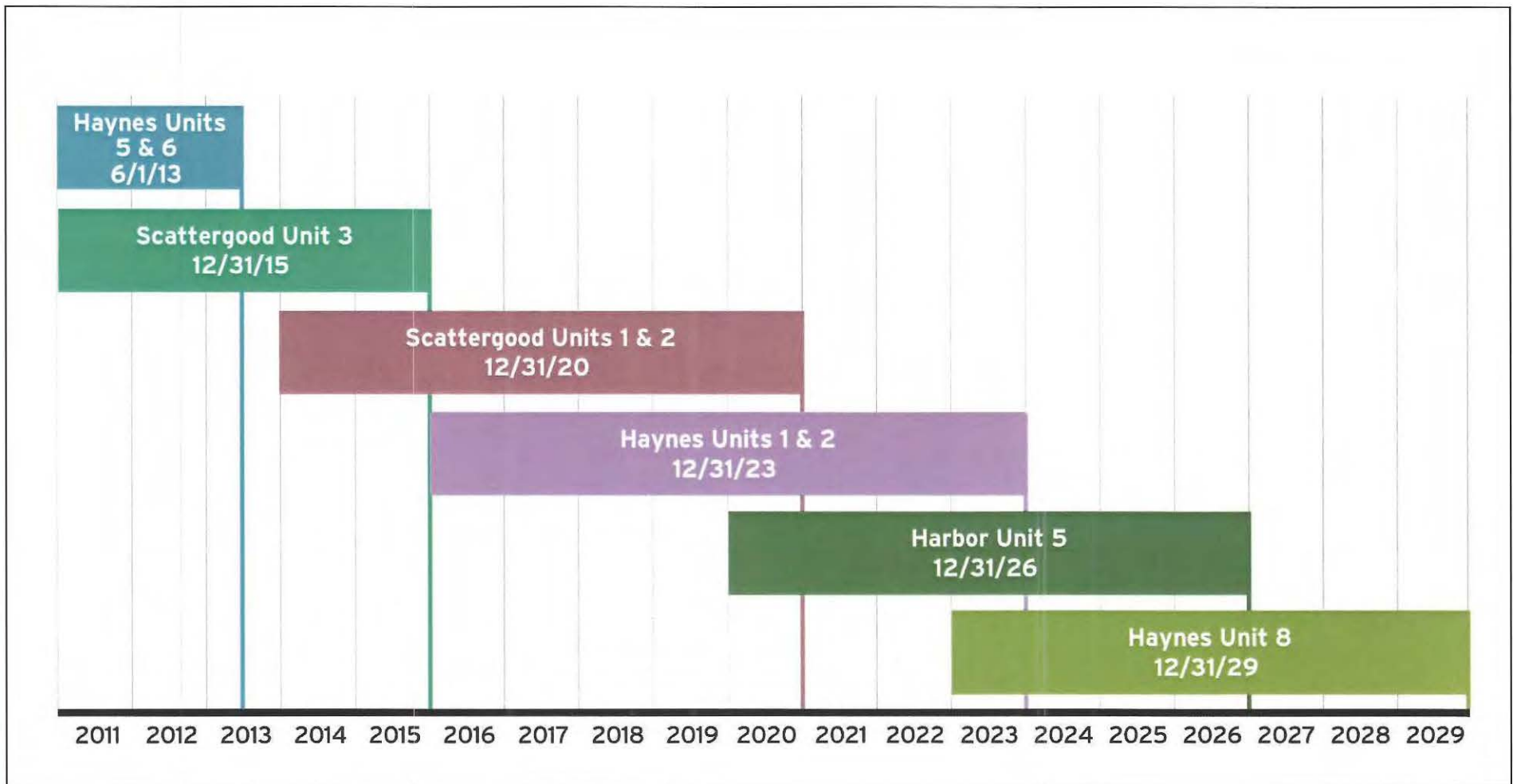
4 cases evaluated based on high and low scenarios for energy efficiency and local distributed generation.

Road to 33% Renewable Energy by 2020



Road to Once-Through-Cooling Compliance

LADWP must replace 9 generating units at 3 Coastal Power Plants. No unit can be taken off-line until its replacement is ready--like replacing the engine of a 747 while in mid-flight.



Eliminating Coal from LA's Power Supply

Navajo Generating Station

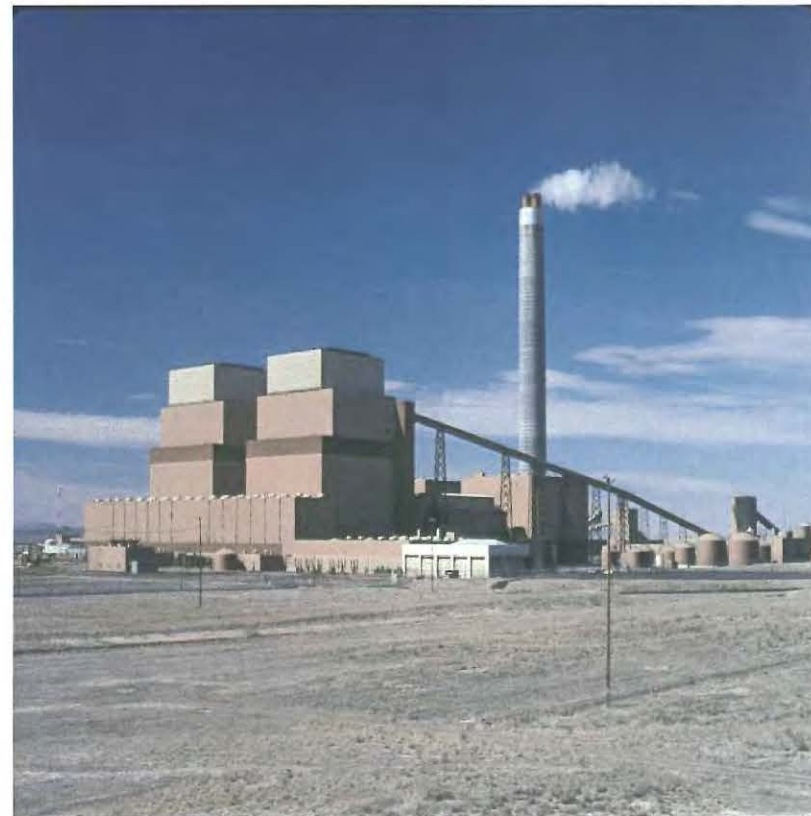
Negotiations are ongoing to sell LADWP's share of Navajo GS by 2015



Estimated Cost : \$50M per Year

Intermountain Power Plant

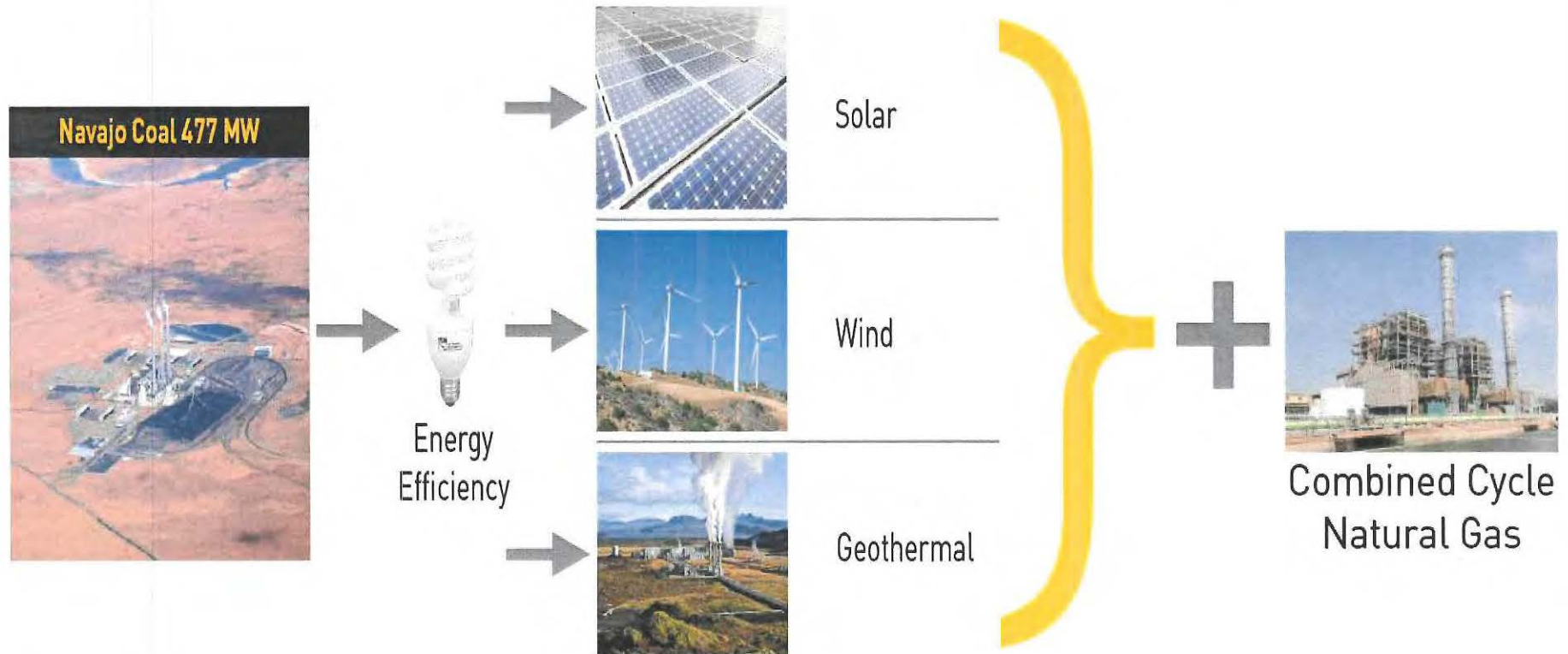
LADWP and SoCal City Customers are finalizing agreement to end coal from IPP



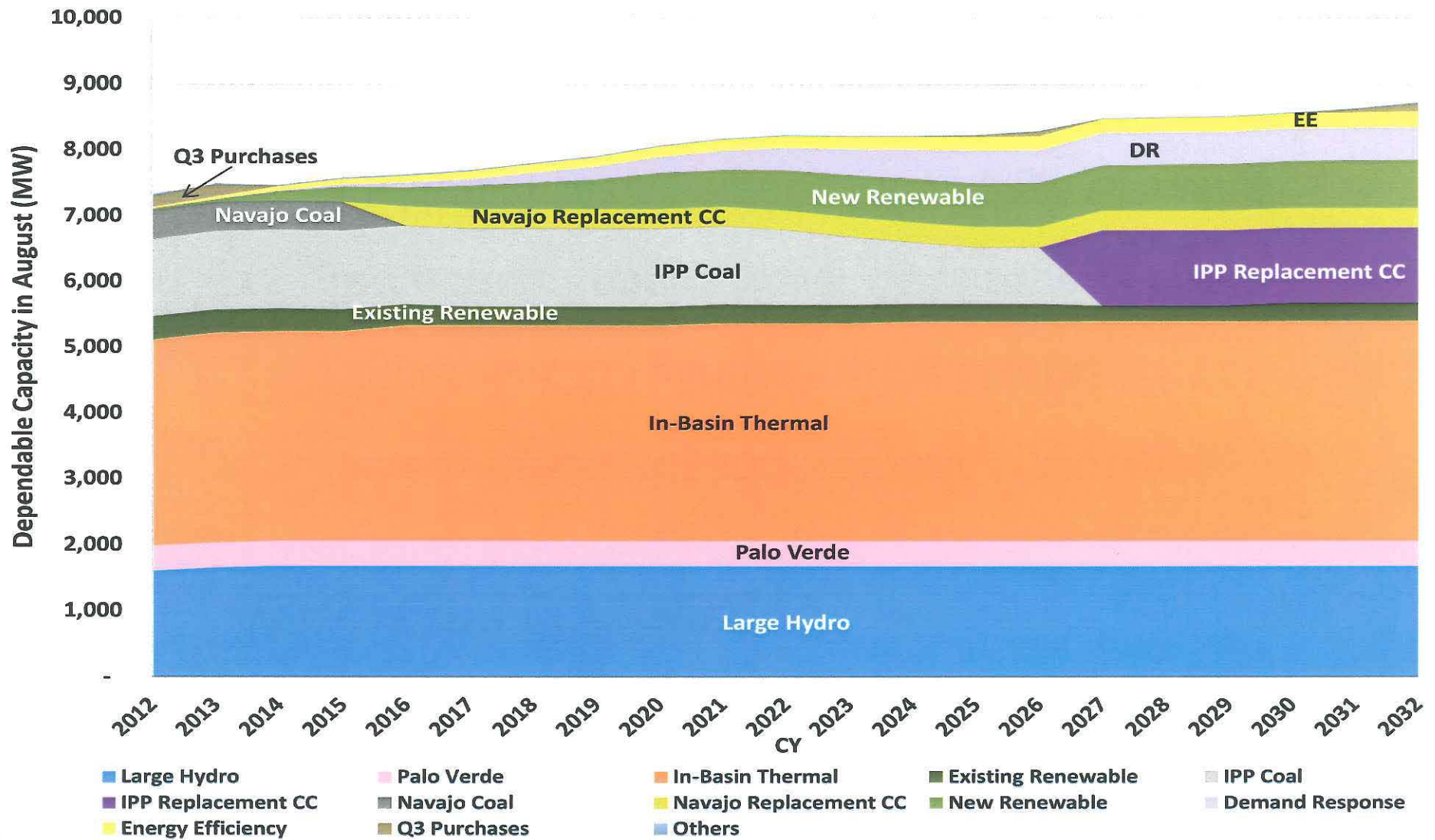
Estimated Cost Range: \$100M to \$300M per Year

Coal Transition & Supply Integration

We are moving forward with eliminating coal from our energy mix. To maintain reliable energy supply without coal requires careful integration of all transformation elements.



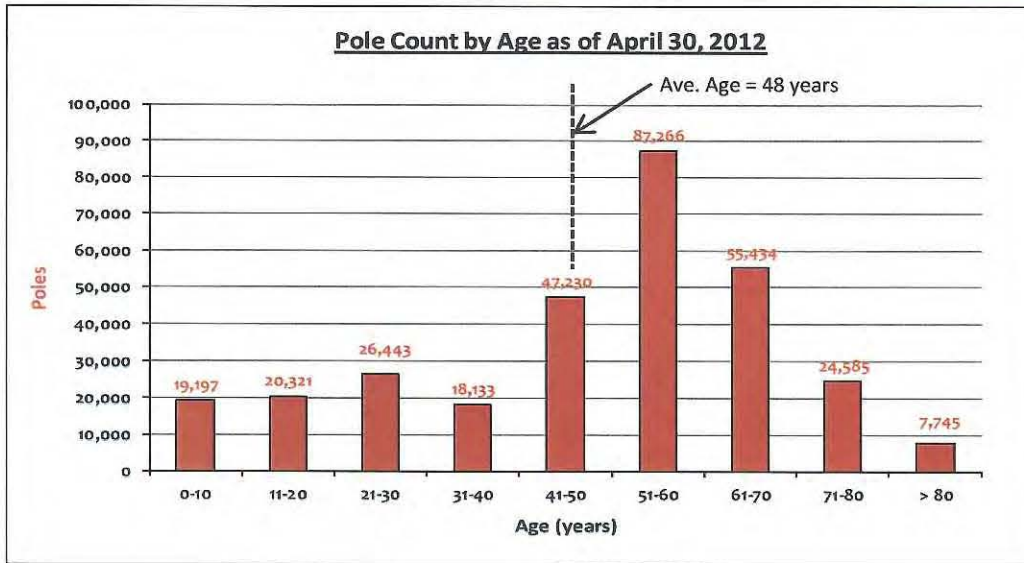
Resource Adequacy – Dependable Capacity



Why is the PRP Needed?

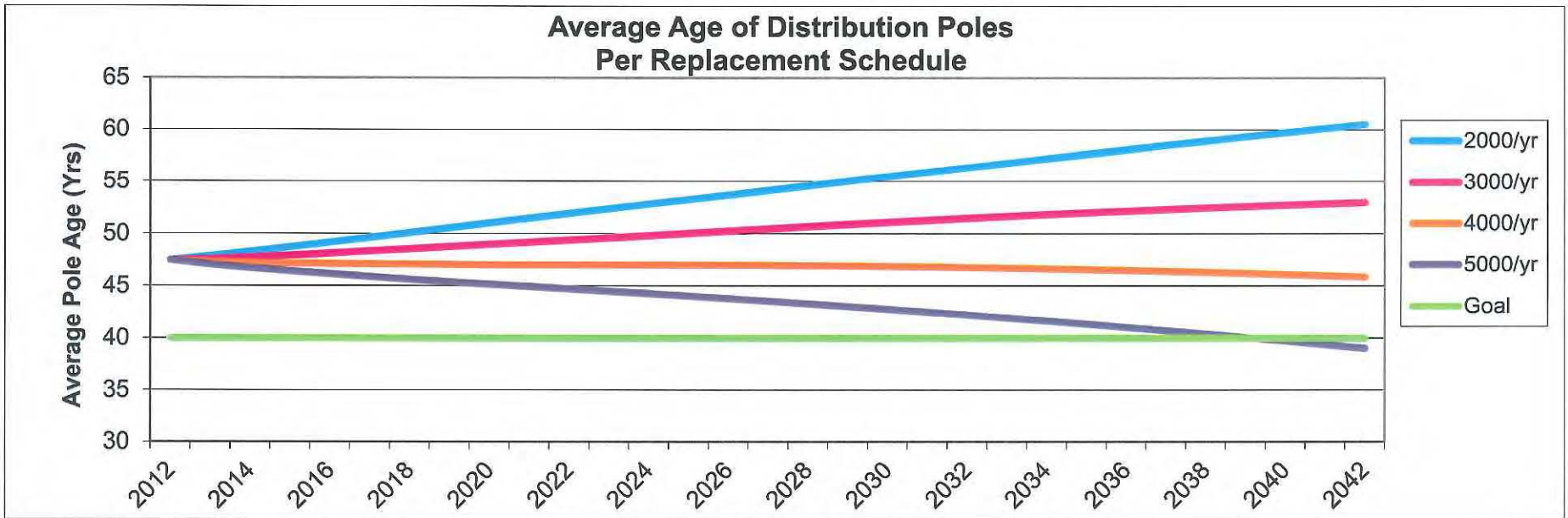
- Increasing Length and Number of Outages
- Higher Risk of Failures During Storms
- Temporary Repairs Never Get Properly Fixed
- Backlog of Maintenance Jobs Keeps Growing
- Assets Approach End of Life

PRP – Example of Aging Infrastructure



Reducing the Average Pole Age Requires Sustained Commitment to Adequate Replacement Rates

Preferred funding provides replacement of 5,000 poles per year



PRP – Example of Aging Infrastructure (con't)

Underground Cable Replacement

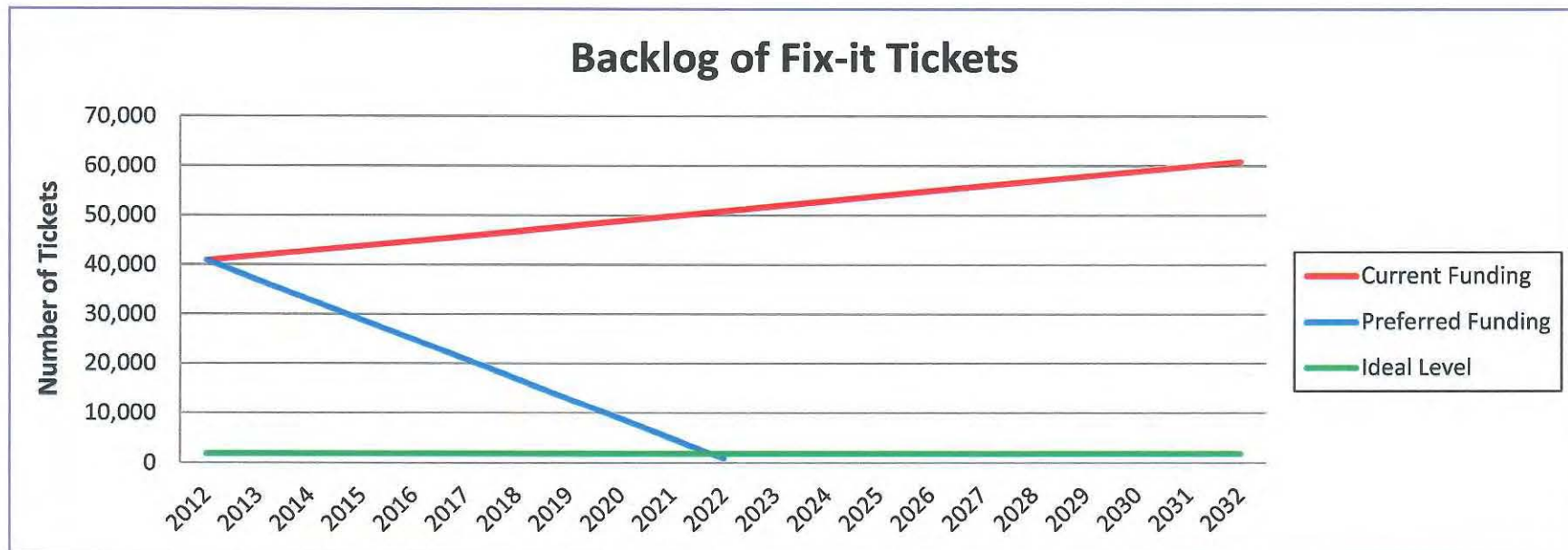
- Approximately 4,200 Miles Throughout System
- Current Annual 2012-13 Replacement Rate = 14 miles
→ Equivalent Replacement Cycle = 300 years
- Preferred Replacement Target Rate = 60 miles/year
→ Equivalent Replacement Cycle = 70 years



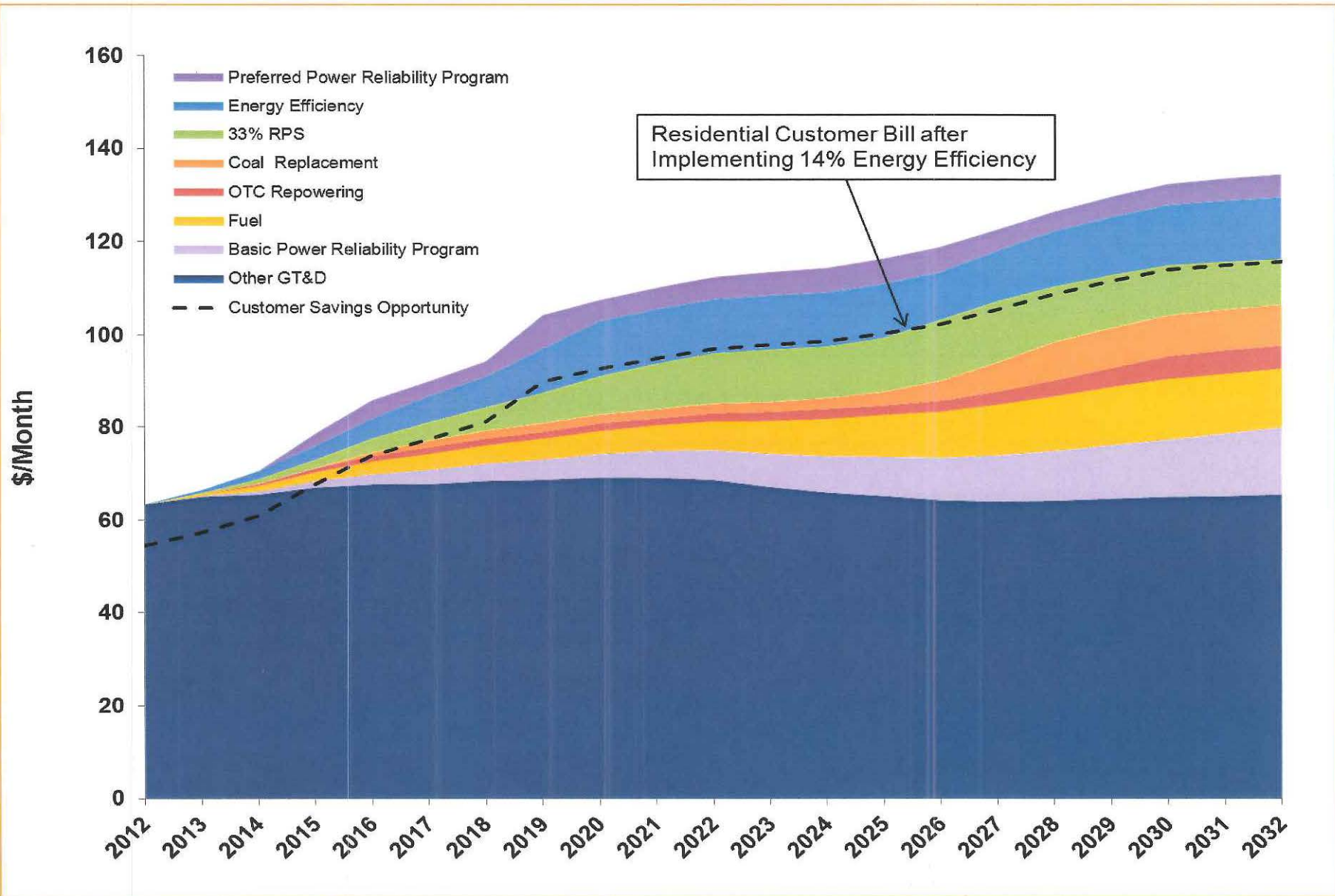
PRP – Repair Backlog

Work Backlog – “Fix-it Tickets”

- Current backlog is at 41,000. Ideal level is 2,000.
- At current funding level, backlog increases by 1,000 per year.
- Preferred funding reduces backlog by 4,000 per year.
- With preferred funding, will achieve acceptable level by 2022.

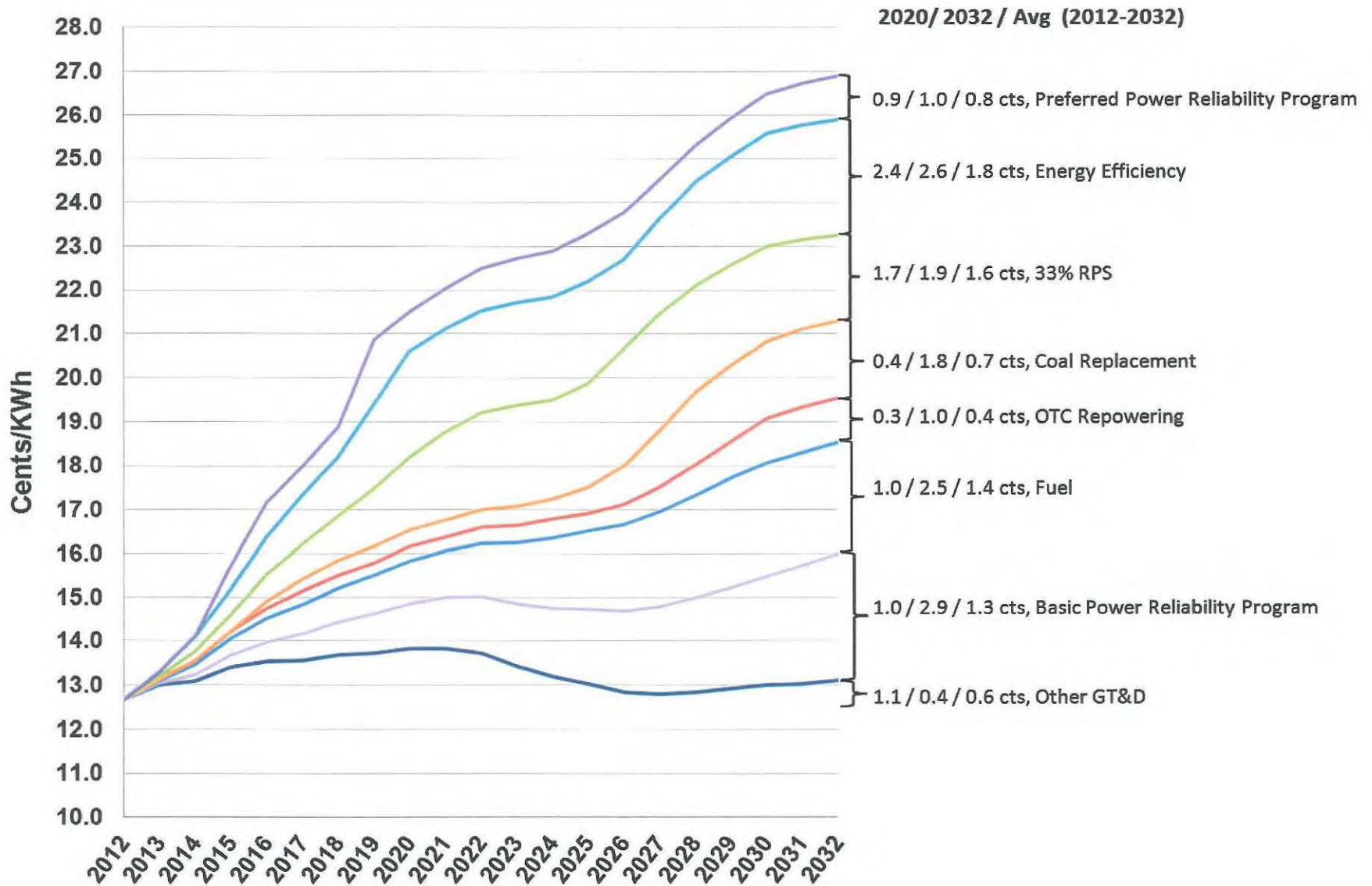


Residential Monthly Bill - (500 kWh/Mo. Average Usage)



Residential Customer Bill after Implementing 14% Energy Efficiency

Average Retail Rate Increase Contribution

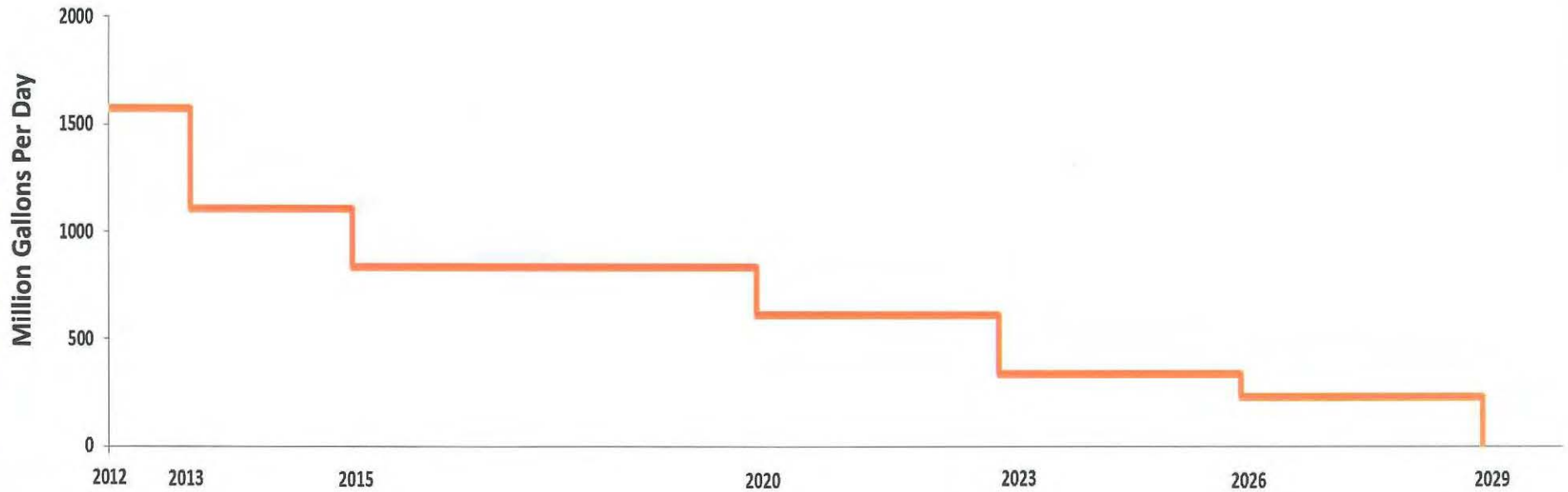


Human Resources Plan

1. Skills Identification
2. Staffing and Recruiting
3. Training and Professional Development

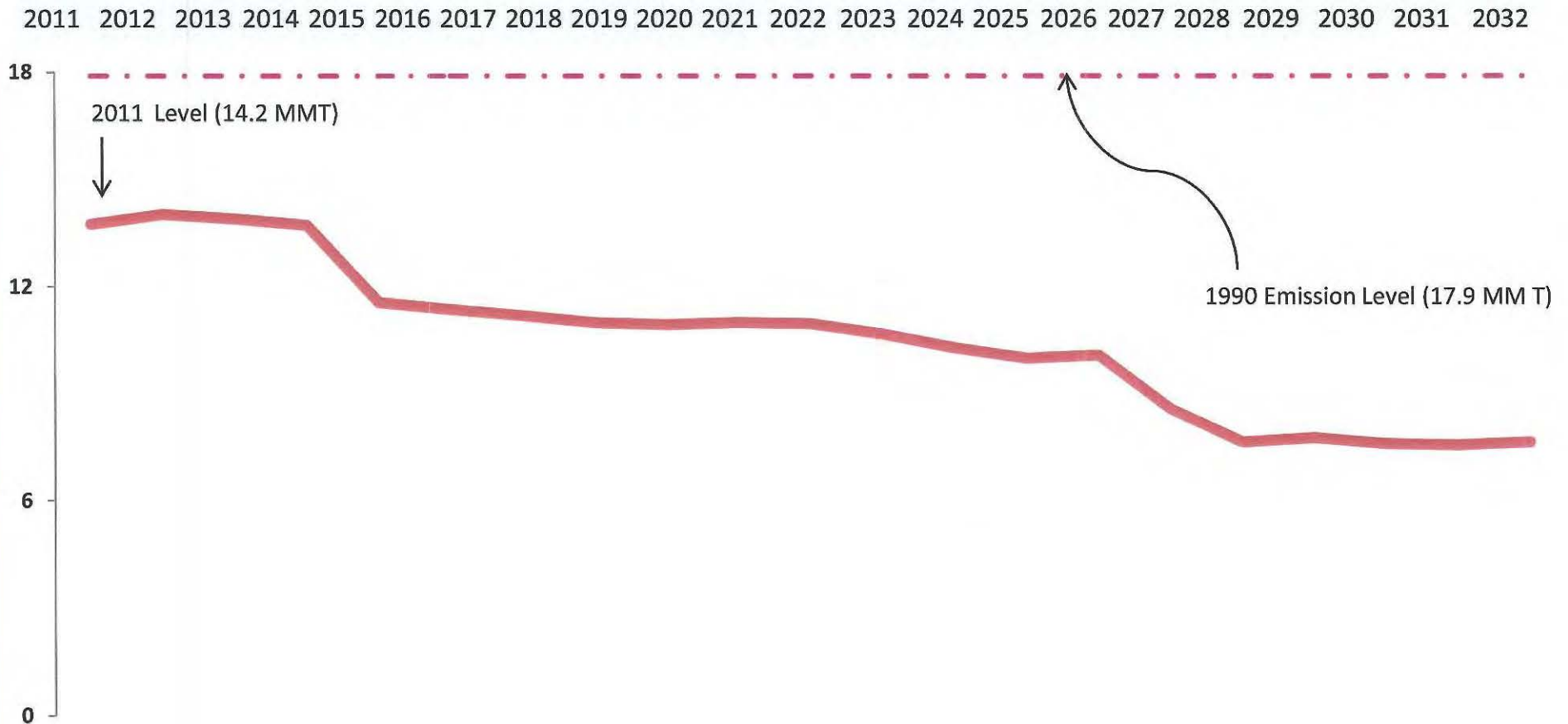
Once-Through Cooling Water Reduction Intake

Reduced Ocean Water Intake 42% Between 1990 and 2013



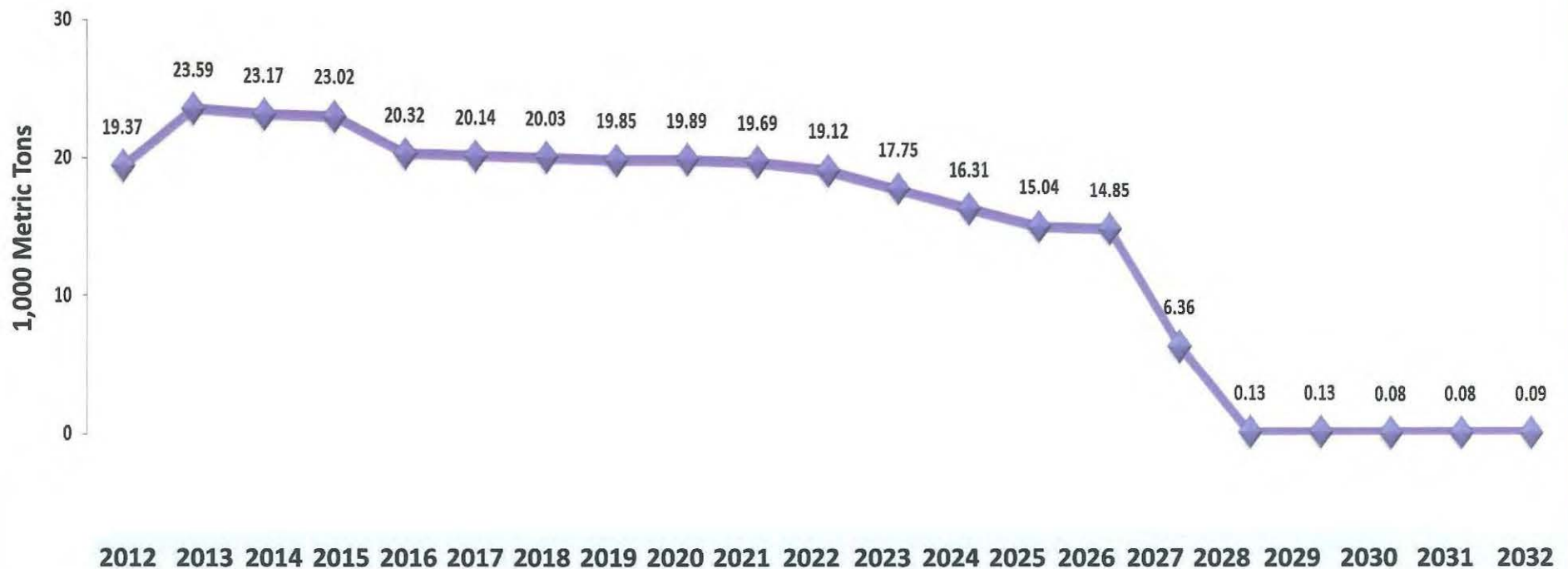
Los Angeles' Clean Energy Future

LADWP's CO₂ emissions are 21% below 1990 level, and expected to be 55% below 1990 level by 2028.



Los Angeles' Clean Energy Future (con't)

NOX emissions will decrease substantially over the next 20 years



Upcoming Board Actions: 2013

ACTION	TIMING
Roll Out 150 MW FiT Program	100 MW program approved Jan. 11; Introduce 50 MW program March 2013
Approve Contract to End LA's Reliance on IPP Coal (2 nd Amend. Power Sales Contract)	February 2013 Pending approvals from SoCal utility customers and Utah owners
Scattergood Unit 3 Repowering; finalizing contracts for construction and equipment	February 2013
Geothermal Energy Contract	February 2013
Issue RFP for Beacon Solar Development	March 2013
Mohave Wind Energy Project	Mid-2013
Sign IPP Renewal Contract for Natural Gas	Fall 2013
Complete Energy Efficiency Potential Study	Fall 2013
Purchase of Combined Cycle Natural Gas Plant to Replace Navajo Coal	RFP closed; finalize purchase by end of 2013
Sale of Navajo Coal	December 2013

2012 Integrated Resource Plan Overview

Questions and Discussion