

13-0340



# L.A.'S Clean Energy Future

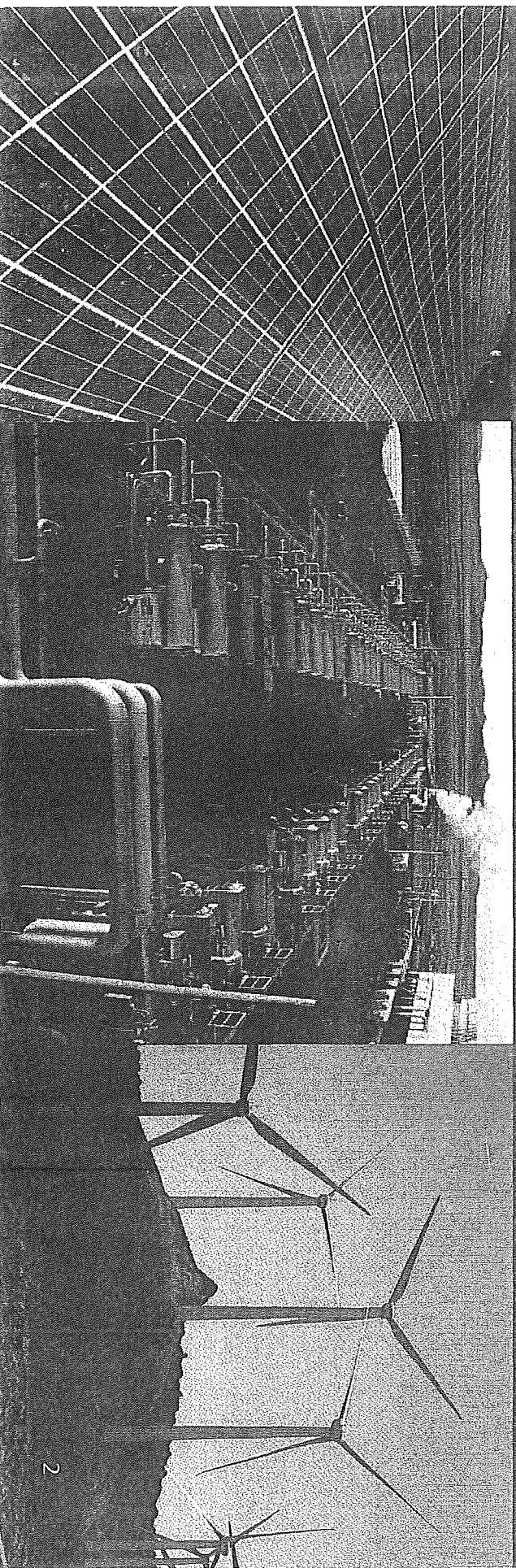
Eliminating **Coal** from  
L.A.'s Power Supply

April 2013

#4

# Our Objective:

To create a reliable, long-term and sustainable clean energy future for L.A., while complying with State mandates in a cost effective manner.



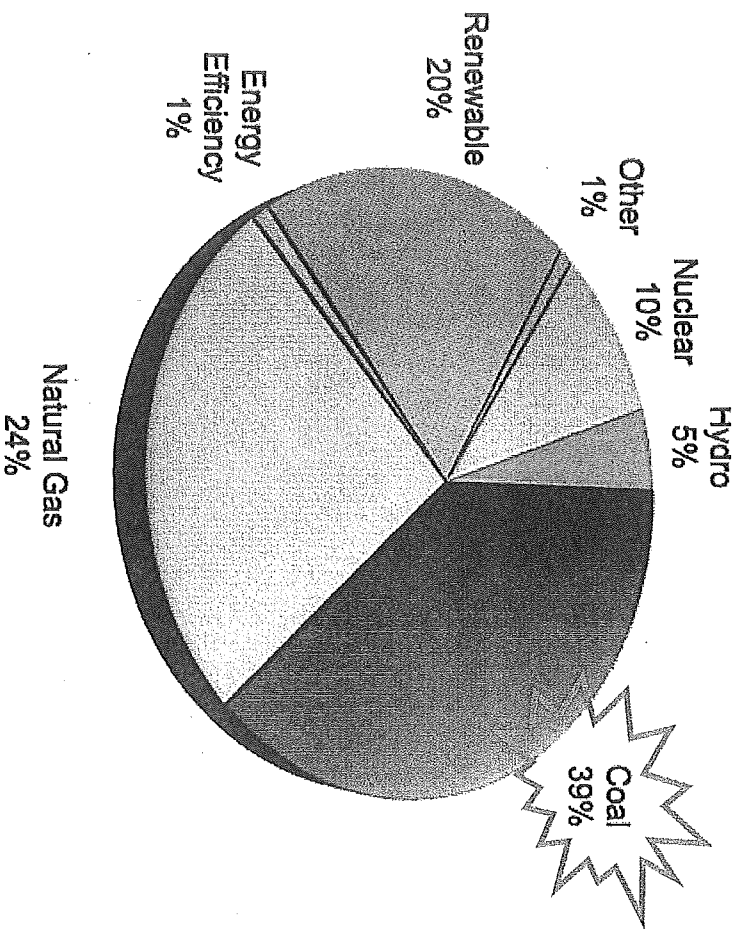
# LADWP is making unprecedented investments in:

**Energy Efficiency**  
**Renewable Energy**  
**Rebuilding Local Power Plants**  
**Power Reliability**

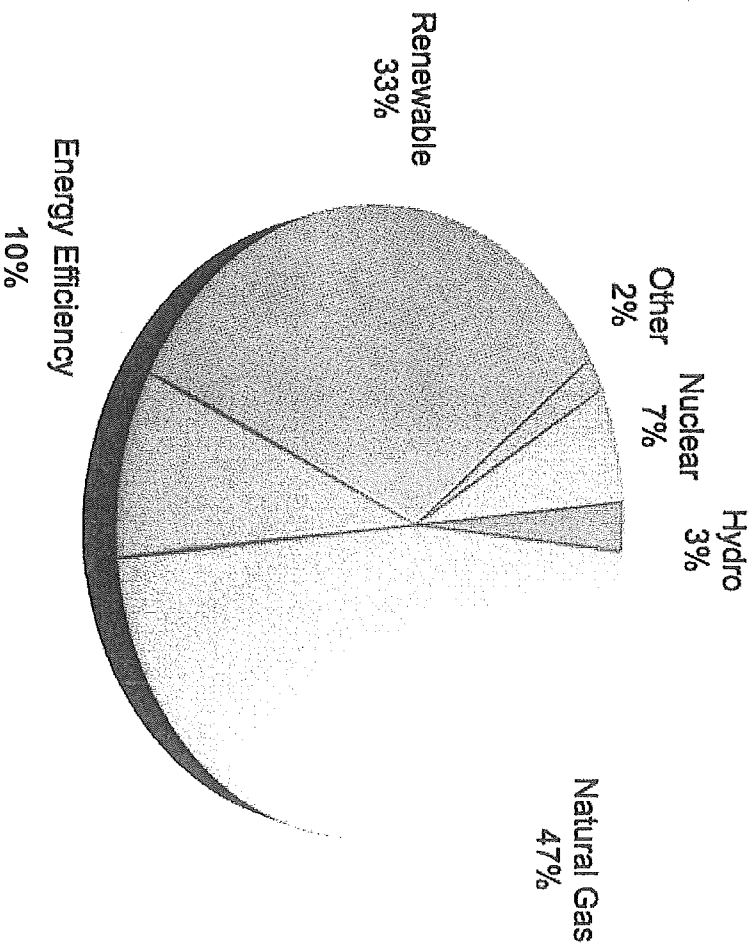
» All are essential parts of eliminating and replacing **coal** power and creating a clean energy future for L.A.

# Our future power supply is coal free

## Present



## Future



# L.A.'s coal power comes from two power plants:

## Navajo Generating Station

Location: Page, AZ

Capacity: 2,250 megawatts

### Owners:

U.S. Bureau of Reclamation – 24%

Salt River Project – 22%

LADWP – 21% (477 MW)

Arizona Public Service – 14%

Nevada Energy – 11%

Tucson Electric – 8%

## Intermountain Power Project

Location: Delta, UT

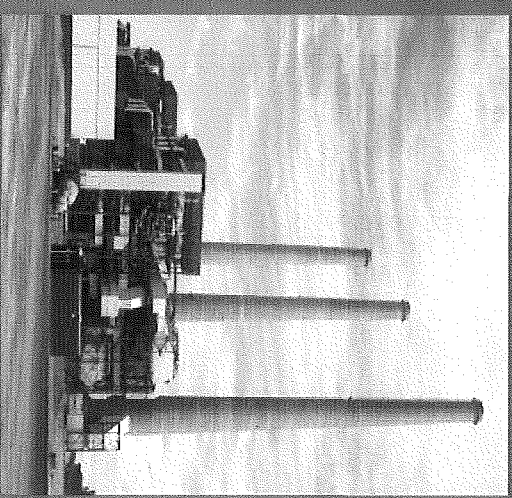
Capacity: 1,800 megawatts

Customers: 6 SoCal and 30 Utah power purchasers

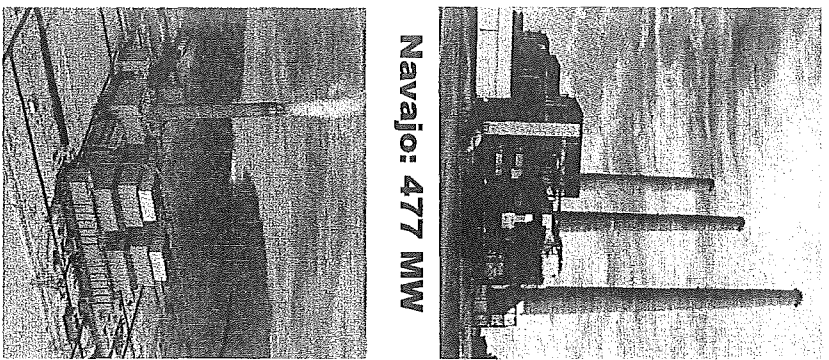
LADWP's share: 48%-66% of output, 875 – 1,200 MW

Owners: 23 Utah municipal utilities

Transmission: 500 miles of lines connecting to SoCal



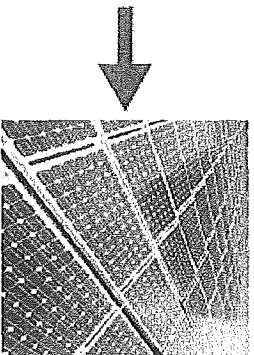
**Right now is 39% of our base load (24/7)  
power supply. How will we replace it?**  
**Integrated Resource Strategy: Increased Energy Efficiency and  
Renewable Energy. Clean and efficient natural gas is used to  
maintain reliability.**



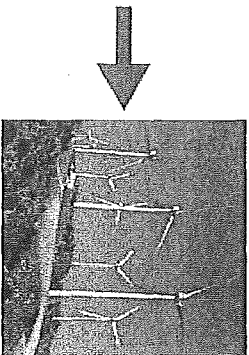
**Navajo: 477 MW**



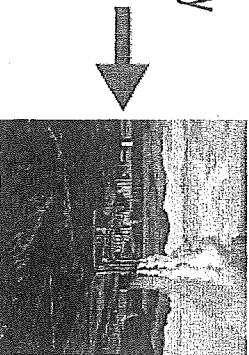
**Energy  
Efficiency**



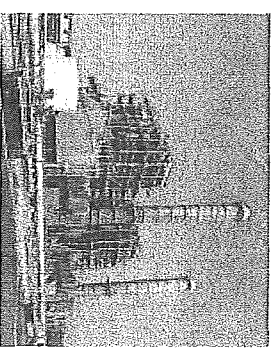
**Solar**



**Wind**



**Geothermal**



**Combined Cycle  
Natural Gas**

**IPP: 875-1200 MW**

# Exiting IPP before contract expiration requires a collaborative effort.

LADWP does not own any part of the plant. We are customers along with 5 other So Cal municipal utilities and 30 Utah power purchasers.

LADWP cannot act unilaterally – any change to the Power Sales Contract requires approval of all SoCal and Utah participants.

➤ All 6 SoCal cities depend on IPP for base load coal power and are contractually obligated to buy it through 2027.



# Why build at IPP?

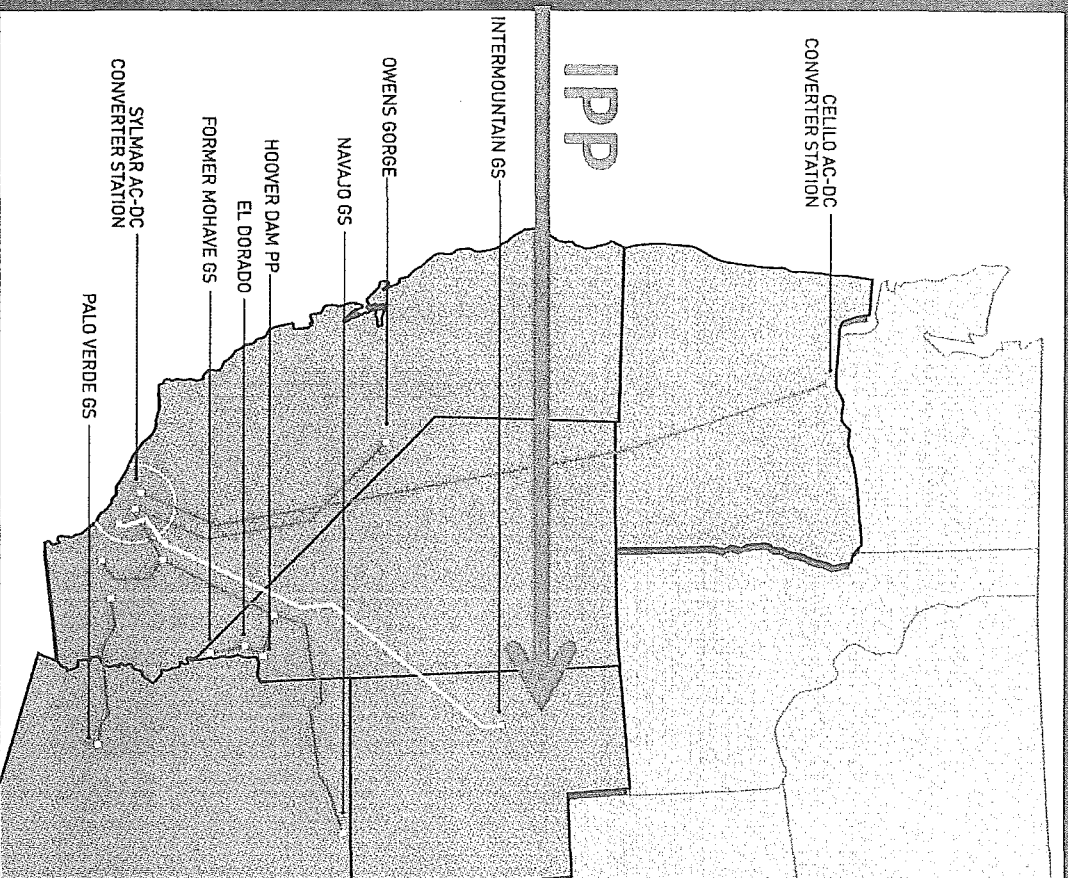
Return on investment: LADWP customers invested billions in transmission and the plant itself.

- 490 miles of transmission (STS)
- Carries 400 MW in renewable energy from Utah to SoCal
- 2,400 megawatt transmission capacity
- \$11.5 billion in today's dollars

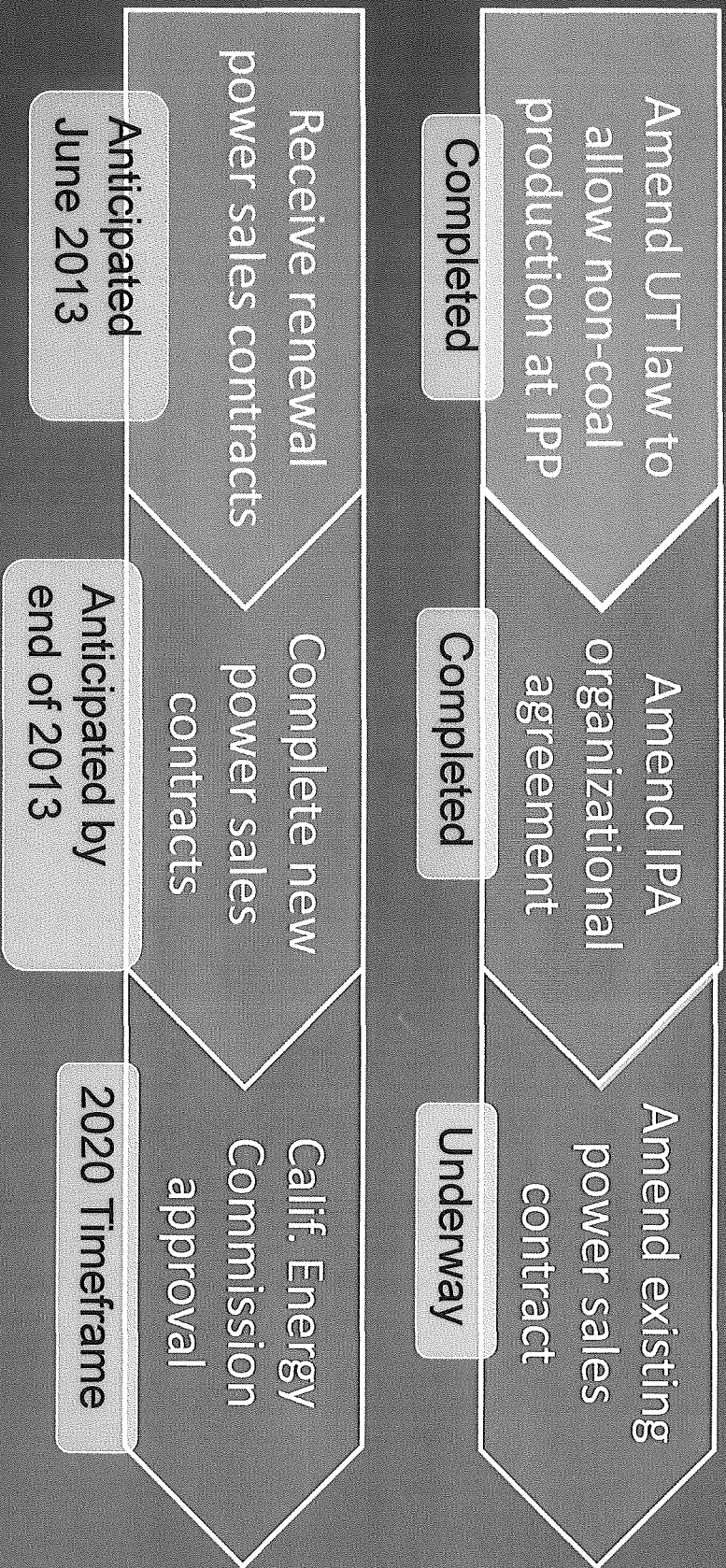
Cost-effective resource sharing with local Utah utilities

Uses existing transmission lines rather than building new and frees up room to develop and bring more renewables to SoCal.

Reduces emissions by over 66%



# Key steps to eliminating coal from IPP.



# IPP Contract Amendment Provides

Fuel will change from Coal to Natural Gas at least by July 1, 2025; timing for earlier conversion determined by participants

Plant size will reduce by at least 1/3; allowing room for new renewable sources to be delivered

Allows size of replacement to be reduced further or altered as long as it complies with CEC regulations

Provides funds for decommissioning coal units

Provides a future renewal contract that gives access to the site and transmission until 2077

# **A Clean Energy & Coal Free LADWP**

## **Navajo Generating Station:**

LADWP will end Coal power from Navajo GS by Dec 2015.

## **Intermountain Power Plant**

Transition will begin by 2020 and be completed no later than 2025.

# Questions?