



# ***Public Site Visit & Informational Hearing***

## ***Willow Pass Generating Station***

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**California Energy Commission  
December 18, 2008**

# Mirant Corp. Overview



- **Independent Power Producer**

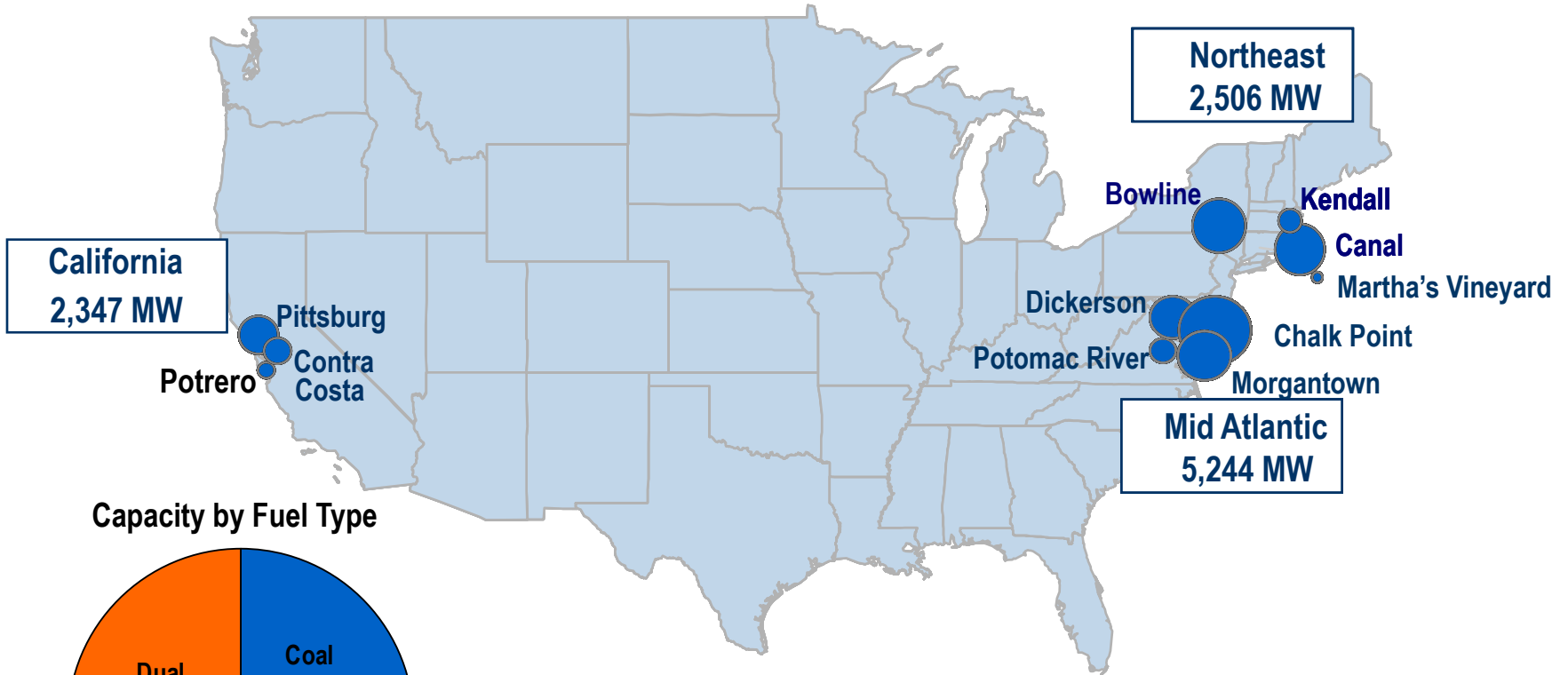
- ▶ Owns 13 power plants in Mid-Atlantic, New York, Boston, and California
- ▶ Total generating capacity in excess of 10,000 MW

- **Three power plants in California (2,347 MW)**

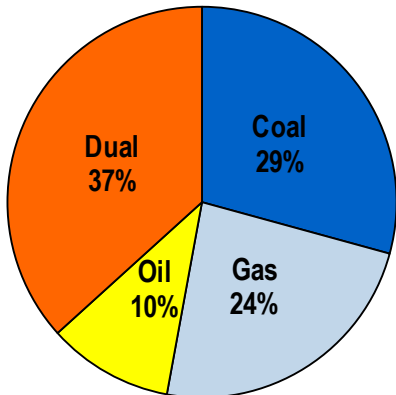
- ▶ Pittsburg Power Plant (Pittsburg, CA)
- ▶ Contra Costa Power Plant (Antioch, CA)
- ▶ Potrero Power Plant (San Francisco, CA)

# Mirant Operations

10,097MW



Capacity by Fuel Type



● Power plants sized by capacity



# Why New Generation?

- **Why Now?**

- ▶ California needs new efficient electric generating capacity
- ▶ Increased use of intermittent renewable resources will require new power plants that can start quickly, and then rapidly increase and decrease output as needed

- **Why Here?**

- ▶ State policy encourages the construction of new units at existing plant sites (brownfield development, utilize existing infrastructure)
- ▶ Need new capacity to meet local electric reliability needs

# Project Location



# WPGS Simulations Before & After



**Existing Facility**

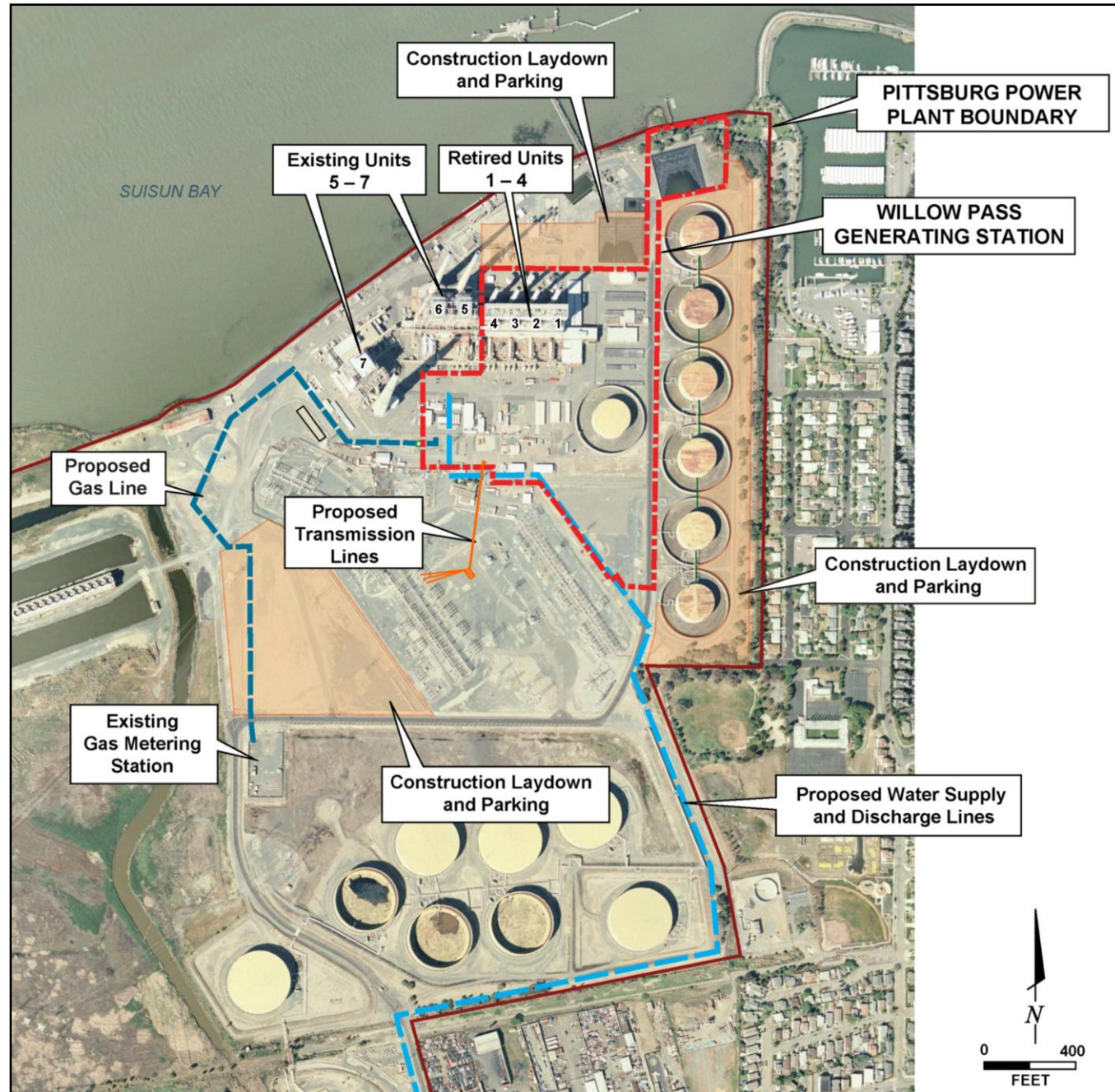
**Visual Simulation**



# Video



# Site Plan





# Project Benefits



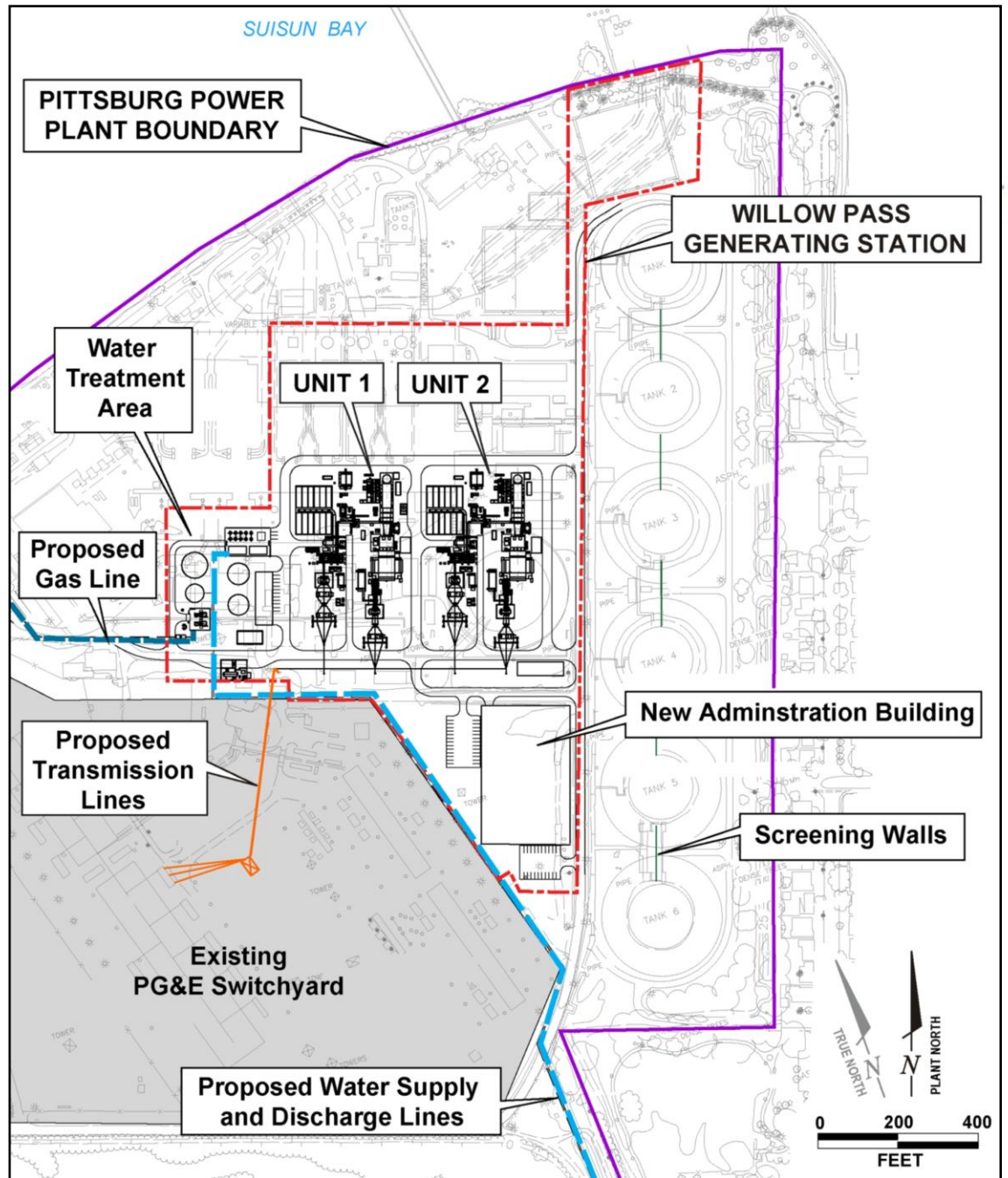
Feature	Benefits
<b>Stand-alone facility located on 26 acres within the 1,000-acre Pittsburg Power Plant site</b>	<ul style="list-style-type: none"><li>• <b>Brownfield development</b></li><li>• <b>Existing Power Plant site</b></li><li>• <b>Located on previously disturbed areas</b></li><li>• <b>In Local Reliability Area</b></li></ul>
<b>Demolition of existing Units 1-4, administration building, and one fuel oil tank</b>	<ul style="list-style-type: none"><li>• <b>Replaces four 211-foot tall stacks with two 150-foot tall stacks, improving visual profile</b></li><li>• <b>Locates plant within existing plant footprint</b></li><li>• <b>Recycle demolition materials, where feasible</b></li></ul>
<b>Adjacent to existing infrastructure</b>	<ul style="list-style-type: none"><li>• <b>Connects to adjacent PG&amp;E substation</b></li><li>• <b>No new offsite transmission or gas lines, minimizing offsite impacts</b></li></ul>

# Project Benefits (cont'd)



<b>Feature</b>	<b>Benefits</b>
<b>New Administration Building</b>	<ul style="list-style-type: none"><li>• Pursuing LEED® certification</li></ul>
<b>Start construction in late 2009, with commercial operation by mid-2012</b>	<ul style="list-style-type: none"><li>• Up to 390 union construction jobs</li><li>• Estimated \$1.9 million in construction sales tax revenue</li></ul>
<b>Construction laydown and parking areas all located within Pittsburg Power Plant site</b>	<ul style="list-style-type: none"><li>• No offsite construction laydown or parking areas, minimizing offsite impacts</li><li>• Use previously disturbed areas</li></ul>

# WPGS Site Layout



# Facility Benefits



Feature	Benefits
Two 1x1 Siemens FP10 combined cycle units	<ul style="list-style-type: none"> <li>• State-of-the-art units</li> <li>• Highly efficient, ultra low emissions</li> <li>• Fast start, low startup emissions</li> <li>• Provides operation flexibility to follow load and respond to changes in renewable output</li> <li>• All permitted emissions will be offset by local emission reduction credits</li> </ul>
Best Available Control Technology (BACT)	<ul style="list-style-type: none"> <li>• Control air emissions to lowest feasible level</li> <li>• Meet all BAAQMD air emission requirements</li> <li>• Continuous emissions monitoring system</li> </ul>
Utilize pipeline-quality natural gas	<ul style="list-style-type: none"> <li>• Clean and abundant domestic fuel source</li> <li>• Limits combustion emissions</li> </ul>
Air Cooled Heat Exchangers (ACHE)	<ul style="list-style-type: none"> <li>• Eliminates need to use water for cooling</li> <li>• Compact design creates less visual impact than typical air cooled condensers</li> </ul>
Total Net Output = 550 MW	<ul style="list-style-type: none"> <li>• Equivalent to supplying more than 450,000 homes</li> </ul>

# Recycled Water Supply Plan



# Recycled Water Supply Benefits



Feature	Benefits
Dry Cooled	<ul style="list-style-type: none"><li>• No water will be used for plant cooling purposes</li><li>• Plant uses far less water than conventional wet-cooled plant</li><li>• No visual plume</li><li>• Fully satisfies CEC policies regarding use of water for cooling</li></ul>
Use Recycled Water for Process Needs	<ul style="list-style-type: none"><li>• Plant uses a small amount of recycled water</li><li>• Uses a resource that would otherwise be discharged by DDSD</li><li>• Conserves potable freshwater resources</li><li>• Recycled water supply and discharge connected to Delta Diablo Sanitation District</li><li>• More than 60% of recycled water delivered to site will be consumed, with remainder returned to DDSD</li></ul>

# Community Economic Benefits



## Revenues

- **Construction sales tax revenue: Estimated \$1.9 million (one-time)**
- **Sales tax revenue due to operation: Estimated \$25,000 (permanent, annual)**
- **Property tax revenue: Up to \$6.6 million (permanent, annual)**

## Jobs

- **Construction jobs: 390 at peak**
- **20 full-time permanent employees = Estimated \$3.5 million annual payroll**

# Summary



- Provides needed efficient electric generating capacity to Northern California and local area
- Brownfield development at an existing power plant site in an industrial area
- Connects to adjacent PG&E switchyard (no offsite transmission linears required)
- Provides tax revenues and job opportunities to the local community
- No significant environmental impacts



# For More Information:



- **Contact Mirant**

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- **Visit the Website**

**[www.mirantwillowpass.com](http://www.mirantwillowpass.com)**