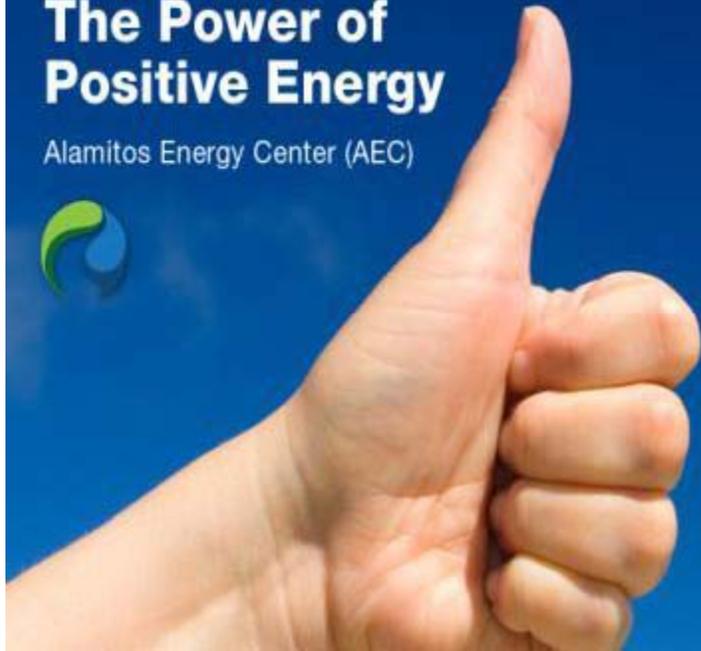


DOCKETED

Docket Number:	13-AFC-01
Project Title:	Alamitos Energy Center
TN #:	210543
Document Title:	Presentation - Alamitos Energy Center 12/17 Application for Certification Status Conference
Description:	N/A
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Submission Date:	2/26/2016 1:50:30 PM
Docketed Date:	2/26/2016

The Power of Positive Energy

Alamitos Energy Center (AEC)



Alamitos Energy Center

California Energy Commission Application for Certification Status Conference

Presented By:

AES Southland Development, LLC

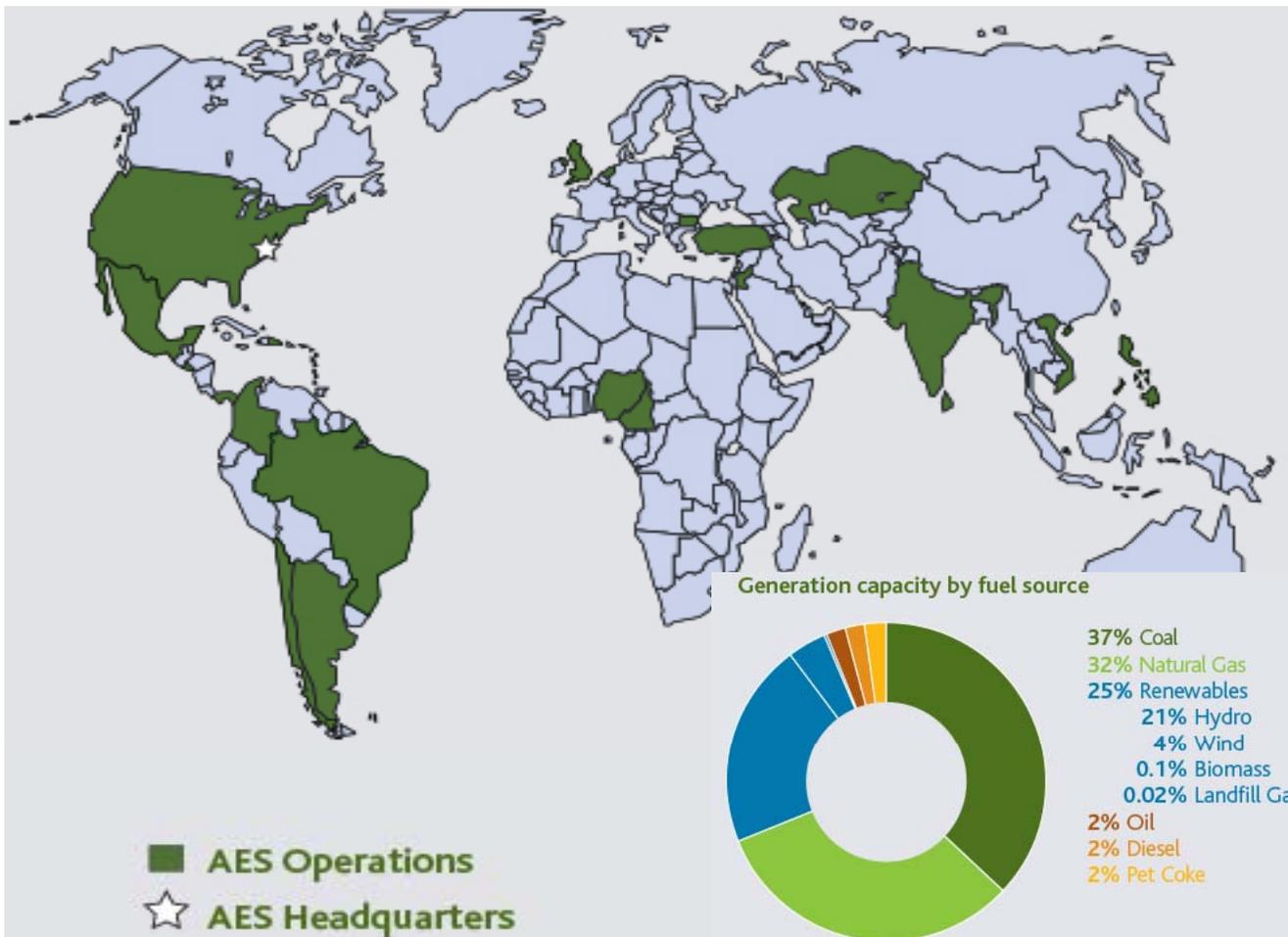
December 17, 2015





The AES Corporation

Improving lives by delivering safe, reliable and sustainable energy in every market we serve.



- Fortune 200 global power company
- Operations in 18 countries on 5 continents
- 8 utilities
- 35 GWs of generation
- Serve 11 million customers
- 18,500 global workforce



AES in California



**Coming to Long Beach by 2021*

- 3 natural gas power plants
 - Long Beach (Alamitos)
 - Huntington Beach
 - Redondo Beach
- Approximately 15% of Southern California Edison's peak demand
- AES Energy is an innovative leader in new energy solutions – helping California meet green energy and clean air goals
- Over 280 MW of renewable energy sources
 - Wind
 - Battery Storage *
 - Solar power developer



Alamitos Energy Center – Recent Developments

- AES submitted an Application for Certification to the California Energy Commission to modernize the 2,000 MW AES Alamitos generating station in December 2013
- AES awarded 20 year Power Purchase Agreements (PPA) with Southern California Edison (SCE) — October 2014
- Separate PPAs for Combined-Cycle Gas Turbines and Battery Energy Storage System
- Significant revision to original plan, smaller, cleaner, world leading technology

- AES proposes to permit and construct 640 MW of combined-cycle gas turbine and 400 MW of advanced technology simple-cycle gas turbine generation
- A separate 300 MW battery energy storage project on the AES Alamitos generating station site application to City of Long Beach currently under review
- Modernization will satisfy Local Area Requirements and meet original project objectives



Why Build a New, Modern Plant?

The need to modernize the AES Alamitos Generating Station to realize California's **clean energy future**, is a **priority**

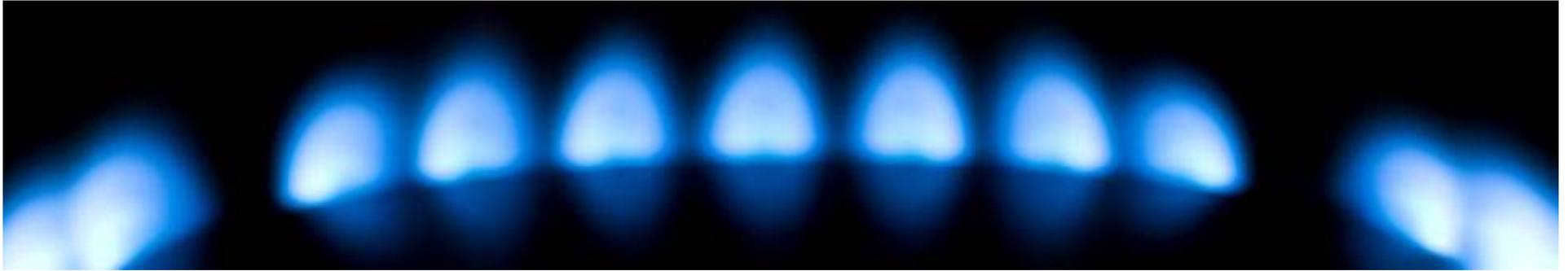
- ❑ Critically located, aging infrastructure necessary to maintain grid reliability
 - Need generation where the demand is, significant population on the coast
 - Alamitos location is 4 times more effective than inland plants to serve coastal demand
 - Loss of generation in south-Western Los Angeles reliability area
- ❑ Modern, efficient technology with flexible operating characteristics is needed for rapidly changing electrical system



Why Build a New, Modern Plant?

California's goals for a cleaner, more environmentally sensitive energy future are fundamentally changing the electrical system.

- Renewable Energy: 33% by 2020 – 50% by 2030
- Greenhouse Gases: 80% reduction by 2050
- Coal: Limits on out-of-state coal contracts
- Water: Limits on once-through-cooling (OTC) for power plants
- Nuclear???
- Electricity: Transportation and goods movement
- System Evolution: Demand side management, smart meters, consumer choice



Key Attributes of the Alamitos Energy Center

- Advanced gas turbine technology replacing old utility steam generators for maximum operating flexibility
 - High efficiency combined-cycle gas turbines
 - Advanced technology aeroderivative gas turbines
- Air cooled, no ocean water
- Reducing fresh water use by over 60%
- Eliminating discharge to San Gabriel river
- AEC project boundaries within existing plant fence line
- Significantly lower profile than existing generating units
- MOU with the City of Long Beach to demolish existing units

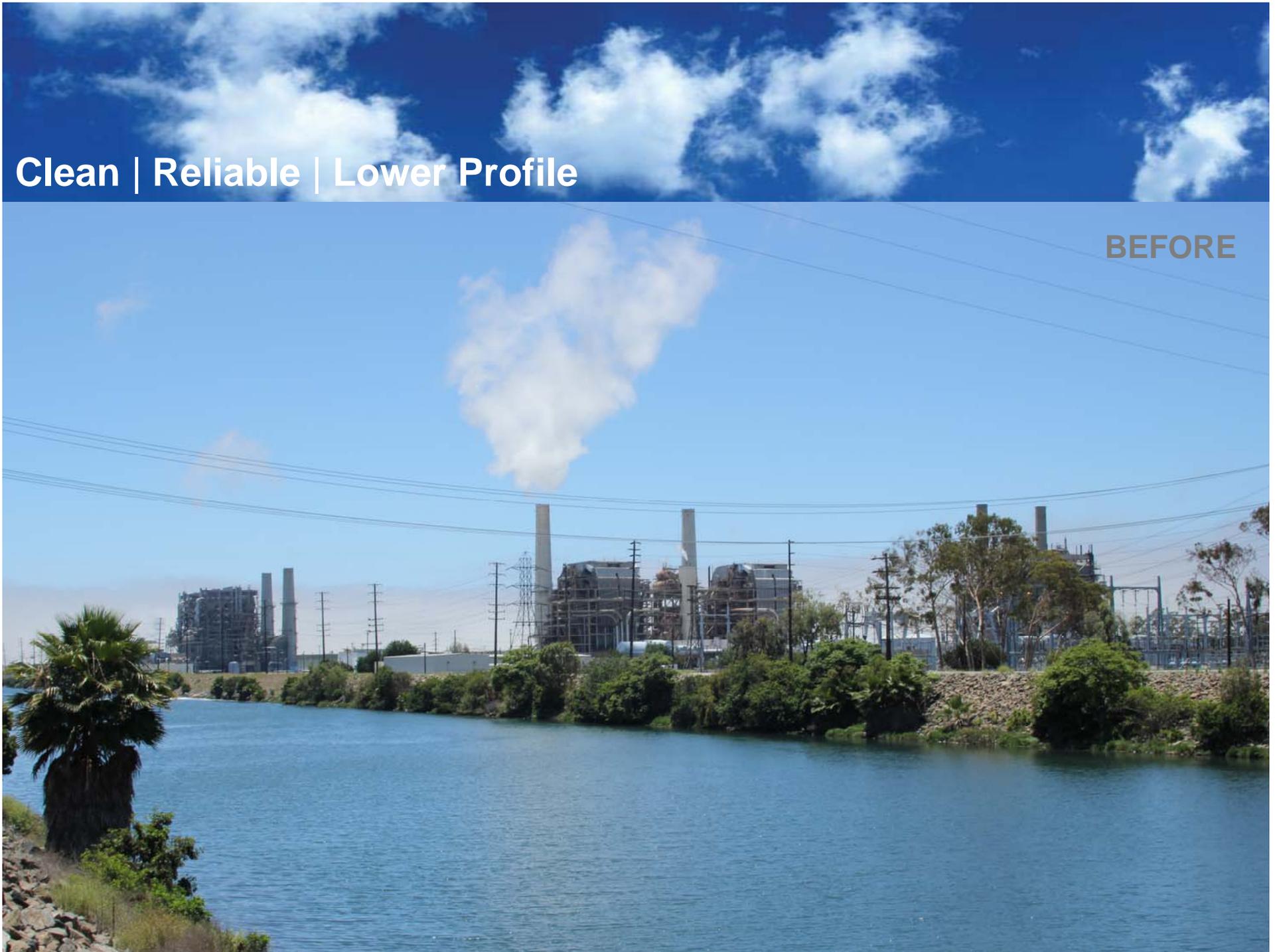






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BEFORE



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Development Schedule and AFC Process

- AES filed detailed revised project description with accompanying environmental analysis
 - Drawings, specifications, schedules, etc.
 - Environmental analysis of changes
 - Submitted responses to staff Data Requests
- In parallel, AES filed an Application for a Conditional Use Permit to City of Long Beach for the Battery Energy Storage System
- Key Project Milestones and CEC Schedule
 - CCGT COD and Energy Delivery Date: Q2 2020
 - CCGT Commissioning and 830 MW of Alamitos Unit retirements: Q4 2019
 - CCGT Construction NTP: June 2017
 - Alamitos site preparation: January 2017
 - Commission approval October 2016



How to Reach Us

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