DOCKETED	
<b>Docket Number:</b>	12-AFC-02C
<b>Project Title:</b>	Huntington Beach Energy Project - Compliance
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### California Energy Commission

#### HBEP - PTA PSA

**Workshop Purposes** 



### PSA/DEIS - Workshop Purposes

#### PSA Workshop Purposes:

On June 24, 2016, the California Energy Commission (Energy Commission) staff published a Preliminary Staff Assessment (PSA).

- The purpose of the workshop is to allow Energy Commission staff, Huntington Beach Energy, LLC (Petitioner), interested agencies, and the public to discuss the Preliminary Staff Assessment (PSA) for the Huntington Beach Energy Project Petition to Amend (HBEP-PTA), to receive comments from individuals and organizations, to identify and resolve areas of disagreement. The PSA contains the California Energy Commission staffs' independent, objective evaluation of the proposed amended HBEP project. The PSA may be found on the project web page at
- https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=12-AFC-02C.
- The PSA is not a decision document for these proceedings, nor does it contain findings of the Energy Commission related to environmental impacts or the project's compliance with local, state, and federal laws, ordinances, regulations, and standards (LORS). The PSA will serve as a precursor to the Final Staff Assessment (FSA).
  - The 30-day public and agency comment period on the PSA ends on July 24, 2016. After the conclusion of the workshop and the 30-day public comment period, staff will then prepare its FSA.

### PSA/DEIS – Workshop Purposes

The Energy Commission encourages public participation in the review of HBEP PTA. If you wish to provide comments on the document, please submit comments by going to the Energy Commission's HBEP- PTA webpage <a href="http://www.energy.ca.gov/sitingcases/huntington\_beach\_energy/">http://www.energy.ca.gov/sitingcases/huntington\_beach\_energy/</a>
and click on the "Submit e-Comment" link. Please provide your full name, any organization name, an e-mail address, a reference to Docket No. 12-AFC-02C in the subject line, and preferably put your comment in an attached document (.doc, .docx, or .pdf format). After entering characters to ensure that responses are generated by a human user and not a computer, click on the "Agree & Submit Your Comment" button to submit the comment to the Energy Commission Dockets Unit. If you wish to mail written comments on the project, please submit them to the Energy Commission Dockets Unit. Please include the docket number (12-AFC-02C) in the subject line or first paragraph of your comments and mail or hand-deliver them to:

California Energy Commission Dockets Unit, MS-4 1516 Ninth Street Sacramento, CA 95814-5512

All written comments and materials filed with the Dockets Unit will become a part of the public record of the proceeding. Additionally, comments will be posted on the HBEP amendment webpage of the Energy Commission's website.



### California Energy Commission

#### HBEP - PTA PSA

**Project Description** 



- On June 27, 2012, AES Southland, LLC submitted an Application for Certification (AFC) for the HBEP. On October 29, 2014, the Energy Commission issued a final decision (Decision) approving a license for the construction and operation of the HBEP facility. On September 4, 2015, AES Southland LLC submitted a Petition to Amend (PTA) the Decision.
- The Amendment to the HBEP Final Decision from the Energy Commission is the result of the selection by Southern California Edison (SCE) of the revised AES project in the 2013 Local Capacity Requirements Request for offers to provide 644 MW of nominal capacity, with different technology than that permitted in the HBEP Final Decision.
- The amended project, located in Huntington Beach, California at 21730 Newland Street, just north of the intersection of the Pacific Coast Highway (Highway 1) and Newland Street, would be constructed within the existing 30 acre footprint of the operating HBGS facility. The amended project would consist of a total of 844 MWs. Construction would commence over a ten year program consisting of construction and demolition activities.

Construction of the amended project will commence in two phases. The first phase consisting of a natural gas-fired, combined-cycle, air-cooled, 644-MW electrical generating facility. After the first phase combined-cycle power block is operational, phase two would begin with adding two 100-MW simple-cycle gas turbines (SCGT). No new offsite linear facilities are proposed as part of this project.



- Based on this selection by SCE, Amended HBEP is a modification to the licensed HBEP with the following equipment:
- One combined-cycle, gas turbine (CCGT), 644-MW power block consisting of two General Electric (GE) Frame 7FA.05s;
- Proposed stack height of 150 feet for the GE Frame 7FA.05 combustion-turbine generator units;
- Two unfired heat-recovery steam generators equipped with two emission control systems to control CO, NOx and VOC emissions;
- One steam turbine generator;
- One air-cooled condenser (ACC) and one closed-loop air-cooled heat exchanger;
- One natural gas-fired auxiliary boiler to support the power block;
- Related ancillary equipment;
- In phase two, two GE simple-cycle LMS-100 PB combustion turbine generators (SCTGs) with a nominal capacity of 200 MWs; and

Proposed stack height of 80 feet for the LMS100 units.



10 Year Construction, Demolition and Power Block Operation Schedule: The planned construction and demolition activities of the Amended HBEP would occur on a schedule that allows continued operation of the existing HBGS generation and synchronous condensers to maintain power delivery and grid reliability.

DEMOLITION / CONSTRUCTION ACTIVITY	TIMELINE
Demolish Unit 5 and fuel tanks	Q1 2016 - Q2 2017 17 months
Construction Power Block 1	Q2 2017 - Q2 2020 36 months
Commercial Operation Power Block 1	Q2 2020
Demolish Units 3, 4 (under separate approved	Q2 2020 - Q4 2021 20 months
License and not part of the current amended	
project)	
Construction Power Block 2	Q1 2022 - Q4 2023 24 months
Commercial Operation Power Block 2	Q1 2024
Demolish Units 1 and 2 to Turbine deck	Q1 2024 - Q4 2025 24 months

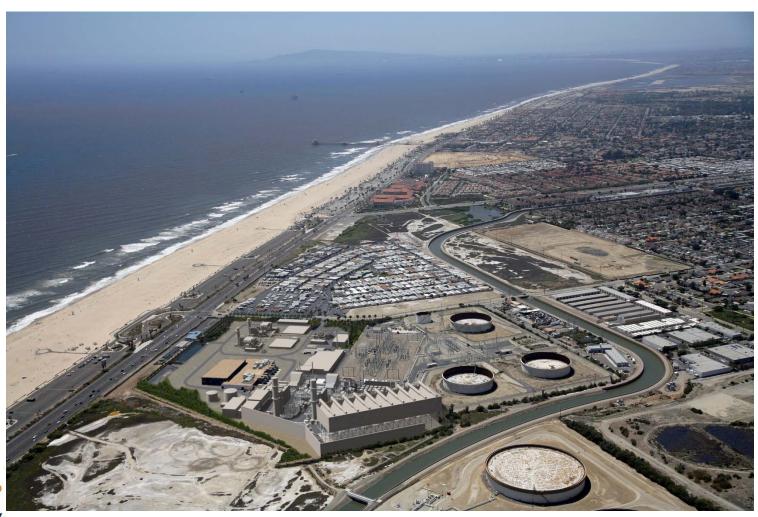


- OTC Deadlines: The current once-through-cooling (OTC) compliance date for operating Huntington Beach Generating Station (HBGS) Units 1 and 2 is December 31, 2020. HBGS Units 3 and 4 are synchronous condenser units and do not using ocean water for cooling. Unit 1 will be retired in the fourth quarter of 2019 to provide interconnection capacity for the new combined cycle units and Unit 2 will be retired either after commercial operation of the HBEP peakers or at the final compliance deadline for once-through-cooling intake structures as determined by the State Water Resources Control Board, after which demolition of HBGS Units 1 and 2 would commence.
- <u>Air Quality</u>: Construction and demolition air impacts were analyzed for a 10 year construction time frame. Operations mitigation would be Regional Clean Air Incentives Market (RECLAIM) Trading Credits (RTCs) and emission reduction credits (ERCs) per District rules. Mitigation measures would reduce potential construction and operational impacts of the proposed project to less than significant.
- Soil and Water: The PSA discussed current and future flood risks considering sea-level rise. Sea-level rise and inundation risk modeling scenario indicated that the Amended HBEP would not be inundated during a 100-year storm. The Amended HBEP would use less potable water than the licensed project; recycled water was not available to the project site.



- Geology: Subsequent to the adoption of licensed HBEP, the California Geological Survey issued mapping showing the Amended HBEP project site is in an area that could be inundated by a tsunami. However, the Amended HBEP is not a critical facility. Staff is adding the recommendation in the PSA for the Amended HBEP that the project owner prepare and implement a Tsunami Hazard Mitigation Plan. The plan would make workers and others on site aware of the tsunami potential, and identify options to shelter in place or evacuate.
- Traffic and Transportation: Although the Amended HBEP would require additional roadway improvements compared to the Licensed HBEP, existing Condition of Certification TRANS-4 would ensure compliance with the city of Huntington Beach requirements for encroachments into public rights-of-way. Staff's modeling for the new project design shows the height at which thermal plumes could be an aviation hazard would increase from 1,740 feet above the ground to 2,200 feet. There are available flight paths to avoid the thermal plumes for the small number of aircraft that may presently fly over the site. Staff has updated existing Condition of Certification TRANS-7 (Pilot Notification and Awareness) to reflect the increased height of the project's thermal plumes.
  - <u>Visual:</u> The Huntington Beach City Council approved the proposed architectural treatment for the Amended HBEP on 5/2/16. One city council member raised concerns during the council meeting regarding glare, the possibility of noise that could be generated by wind moving through the "sphere wall" and supporting cable net structure, and whether the structure would provide perches for raptors that could prey on wildlife. Condition of Certification VIS-1 requires that surface treatments minimize the potential visual effects of glare from project surfaces.







#### PROJECT DESCRIPTION - FIGURE 2

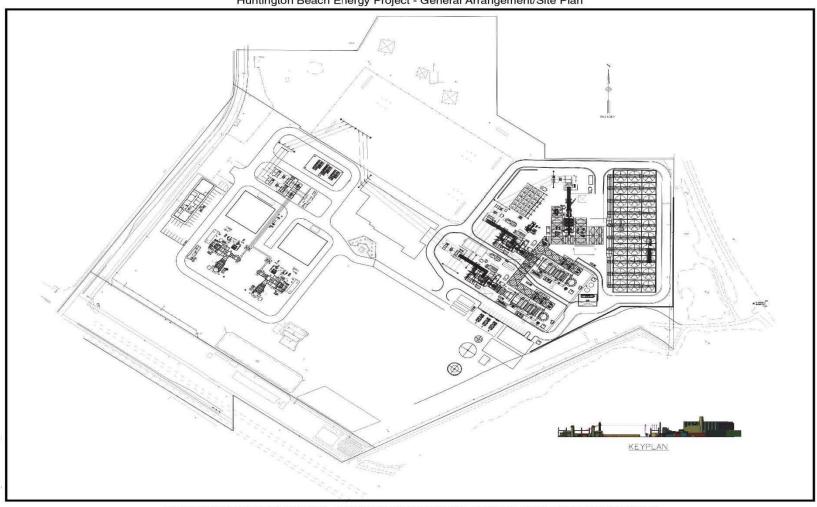
Amended Huntington Beach Energy Project - Construction / Laydown Parking Areas





#### **PROJECT DESCRIPTION - FIGURE 3**

Huntington Beach Energy Project - General Arrangement/Site Plan



#### **VISUAL RESOURCES - FIGURE 4**

Amended Huntington Beach Energy Project - KOP 1 - Revised Architectural Enhancements Being Considered by the City of Huntington Beach



#### **VISUAL RESOURCES - FIGURE 7**

Amended Huntington Beach Energy Project - KOP 4 - Revised Architectural Enhancements Being Considered by the City of Huntington Beach

