

**FINDING OF NO SIGNIFICANT IMPACT
FOR THE
BREA POWER II, LLC'S OLINDA COMBINED CYCLE
ELECTRIC GENERATING PLANT FUELED BY WASTE LANDFILL GAS,
BREA, CALIFORNIA**

RESPONSIBLE AGENCY: U.S. Department of Energy (DOE)

ACTION: Finding of No Significant Impact (FONSI)

SUMMARY: DOE completed the Final Environmental Assessment for the Brea Power II, LLC's Olinda Combined Cycle Electric Generating Plant Fueled by Waste Landfill Gas, Brea, California. Based on the analyses in the Environmental Assessment (EA), DOE determined that its proposed action – awarding a grant to Brea Power II, LLC (Brea Power, formerly Ridgewood Renewable Power, LLC) to facilitate modification and expansion of an existing landfill gas collection system and construction and operation of a combined cycle power facility at the Olinda Alpha Landfill in Brea, California – would result in no significant adverse impacts. DOE further determined that the proposed project would have potential beneficial impacts to the nation's energy efficiency and local air quality. Additionally, beneficial local socioeconomic impacts could occur as a result of increased employment opportunities and spending in the project area.

BACKGROUND: As part of the *American Recovery and Reinvestment Act of 2009* (Recovery Act; Pub. L. 111-5, 123 Stat. 115), DOE's National Energy Technology Laboratory (NETL), on behalf of the Office of Energy Efficiency and Renewable Energy's Industrial Technologies Program, is providing up to \$156 million in federal funding under competitively awarded agreements to facilitate the deployment of district energy systems, combined heat and power systems, waste energy recovery systems, and energy-efficient industrial equipment and processes.

DOE's proposal to provide funding for these Industrial Technologies Program projects requires compliance with the *National Environmental Policy Act of 1969* (NEPA) (42 U.S.C. 4321 *et seq.*), the Council on Environmental Quality regulations (40 CFR Parts 1500 to 1508) and DOE's NEPA implementing procedures (10 CFR Part 1021). DOE prepared an EA to evaluate the potential environmental consequences of providing a grant to this project under the Industrial Technologies Program.

PURPOSE AND NEED: The overall purpose and need for DOE action pursuant to the Industrial Technologies Program and the Recovery Act is to assist U.S. industry with energy efficiency and productivity. The program leads the nation's effort to reduce industrial energy intensity and carbon emissions, and strives to transform the way industry uses energy by supporting cost-shared research and development that address the energy challenges facing industry. Additionally, the program fosters adoption of advanced technologies and best energy management practices to reduce industrial energy intensity.

The Industrial Technologies Program pursues these objectives by:

- Sponsoring research, development, and demonstration of industry-specific and crosscutting technologies to reduce energy and carbon intensity;
- Conducting technology delivery activities to help plants access today's technology and management practices; and
- Promoting a corporate culture of energy efficiency and carbon management within industry.

The strategy also calls for an 18-percent reduction in U.S. carbon intensity by 2012. DOE seeks to identify projects and technologies that it can fund to meet this goal. Brea Power's proposed project would also contribute to the nation's economic recovery by creating or helping to retain manufacturing jobs in the United States in accordance with the objectives of the Recovery Act.

DESCRIPTION OF THE PROPOSED ACTION: DOE's proposed action is to provide a grant to partially fund Brea Power's proposed project – modification and expansion of an existing landfill gas collection system and construction and operation of a combined cycle power facility at the Olinda Alpha Landfill. The project includes construction of new buildings; water, sewer and electrical infrastructure; and storage tanks and pipelines, and the installation of power-generating equipment. The project also includes three off-site construction components: a 6,300 ft. electrical transmission line, a 7,900 ft. fiber optic cable, and a 2,800 ft. sewer connection. DOE would provide a \$10 million grant in a cost-sharing arrangement to facilitate construction and operation of the project. The cost of the project is estimated at \$84 million.

ALTERNATIVES CONSIDERED: In addition to the proposed action, DOE considered the No-Action Alternative as required under NEPA. Under the No-Action Alternative, DOE would not provide funds for the proposed project. For the purposes of the EA, DOE assumed that the project would not proceed without DOE funding. This assumption established a baseline against which the potential environmental impacts of the proposed project were compared.

ENVIRONMENTAL CONSEQUENCES: DOE evaluated the potential environmental consequences of the proposed project and the No-Action Alternative. DOE considered 14 environmental resource areas in the EA. However, not all areas were evaluated at the same level of detail. For four of the resource areas, DOE determined there would be no impacts or the resource area was not applicable to the proposed project, and therefore did not carry these areas forward for additional analysis. DOE focused its more detailed analyses on those areas that could require new or amended permits, have the potential for significant impacts or controversy, or may interest the public. These resource areas included: air quality; noise; aesthetics and visual resources; biological resources; cultural resources; socioeconomics; energy, utilities, and materials; and transportation.

During construction, vehicular exhaust would be a source of pollutants, but they would have a negligible impact on air quality. Landfill gas consists largely of methane, which is a very potent greenhouse gas. By using nearly 50,000 tons per year of methane from the landfill, the project would generate carbon dioxide equivalent reductions of greater than 1 million tons annually. Additionally, the project would provide an indirect benefit by avoiding more than 120,000 tons of carbon dioxide per year by not using other fuels to generate this electricity.

Minor, short-term adverse impacts from noise generated during the construction of the proposed utility alignments would occur. The necessary activities would occur during normal daylight working hours and would be required to comply with all local noise ordinances. Short-term impacts to traffic during utility construction could occur.

The proposed project would result in the removal of approximately 0.28 acre of coastal sage scrub, which is not only a sensitive ecosystem but also critical habitat for the coastal California gnatcatcher, a federal listed threatened species. A California Environmental Quality Act Mitigated Negative Declaration was approved by Orange County Waste and Recycling, the lead reviewing agency, that requires an off-site restoration project to mitigate the habitat loss. Under this agreement, Brea Power would pay the Puente Hills Landfill Native Habitat Preservation Authority (Habitat Authority) to restore coastal sage scrub within the Puente-Chino Hills preservation lands. The Habitat Authority would restore 0.28 to 0.5 acres of coastal sage scrub habitat within its existing preservation area to mitigate the loss of habitat due to the proposed project. The Habitat Authority would be responsible for implementing and monitoring this effort. This compensatory mitigation measure would ensure that impacts to coastal sage scrub habitat and the gnatcatcher would not be significant.

DOE consulted with the California Department of Parks and Recreation's Office of Historic Preservation and provided additional information to the office. DOE also completed a cultural resources literature search of the project area as requested by the Office of Historic Preservation. DOE determined that no historic properties would be affected by the project. The Office of Historic Preservation concurred with this determination.

Short-term beneficial socioeconomic impacts would occur from increased employment opportunities and spending in the local economy. Long-term beneficial impacts include the generation of approximately 280,320 MWh of electricity annually and a savings of an estimated 2,216 trillion Btu annually from landfill gas that would otherwise be flared. The power generated from the proposed project would be distributed to the local power grid via a new transmission line installed by the local utility company.

Under the No-Action Alternative, DOE would not provide funding to Brea Power and it is assumed that the proposed facility would not be built. No impacts to the existing environment would occur. In addition, the potential beneficial impacts discussed above would not be realized.

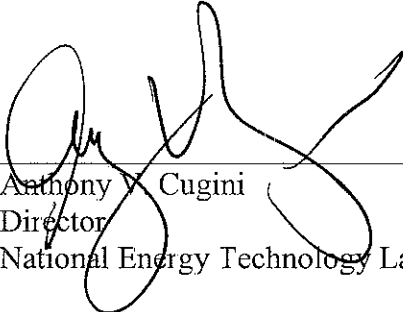
PUBLIC AVAILABILITY: DOE issued the draft EA on May 29, 2010, and advertised its availability in *The Orange County Register* on May 29, 30, and 31. In addition, DOE sent a copy

of the draft EA for public review to the Orange County Public Library in Brea, California. DOE established a 15-day public comment period that ended June 14, 2010, and announced it would accept comments by mail, email, and facsimile.

The draft EA was distributed to various federal, state, and local agencies with jurisdiction or special expertise. DOE conducted formal consultations by mail with the responsible U.S. Fish and Wildlife Service (USFWS) field office, the California Office of Historic Preservation, and the American Indian tribes on the contact list provided by the Native American Heritage Commission. The USFWS concluded that, with the mitigation measure, the project might affect, but is not likely to adversely affect, critical habitat of the coastal California gnatcatcher. The California Office of Historic Preservation concurred with DOE's determination that no historic properties would be affected. No other comments or correspondence were received.

DETERMINATION: On the basis of the evaluations in the final EA, DOE determined that its proposed action – to provide a \$10 million Recovery Act grant – and Brea Power's proposed project – modification and expansion of an existing landfill gas collection system and construction and operation of a combined cycle power facility – would have no significant impact on the human environment. Although the proposed project would eliminate 0.28 acre of critical habitat for the threatened coastal California gnatcatcher, a mandatory mitigation measure would restore 0.28 to 0.5 acres of such habitat, providing adequate replacement value and minimizing any adverse effects. Therefore, preparation of an environmental impact statement is not required and DOE is issuing this FONSI.

Issued in Pittsburgh, Pennsylvania, this 22nd day of October 2010.



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