



CARLSBAD ENERGY CENTER: FACT OR FICTION

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At the beginning of the decade the City of Carlsbad established its redevelopment plan surrounding the existing 95-acre Encina Power Plant and stretching south, to relocate the plant to a smaller and more efficient location.

FACT

In 2000, the City of Carlsbad created a redevelopment plan for the area surrounding the Encina Power Plant and stretching south, with the objective "to work towards the complete demolition of the existing power plant at its current location on the existing site and provide for construction of a new physically smaller plant at the rear of the existing site." A primary objective of the City of Carlsbad's South Carlsbad Coastal Redevelopment Plan is: "Facilitate the redevelopment of the Encina Power Generating Facility to a physically smaller, more efficient power generating plant."

The City of Carlsbad's and Redevelopment Agency's "top preference is to have the new Power Plant constructed within the area between the railroad tracks and Interstate 5, which is east of the existing Plant site. With demolition of the existing Power Plant and construction of a new Plant to the rear of the existing site, excess development property will be created which is located in a prime coastal location. It is staff's opinion that this excess property could be used for both private and public land uses."¹

Following the City of Carlsbad's vision, NRG has proposed a new site for a more environmentally friendly and efficient project. In keeping with the City's vision, the new plant would be located east of the railroad tracks and west of the freeway on the Encina Power Station property, where several unused fuel oil tanks sit today. Known as the Carlsbad Energy Center Project (CECP), this proposed project will use a recessed location of the current facility, which is approximately 30 feet below grade, and established landscaping to substantially eliminate the visual impacts often associated with power plants. Visual simulations are available at www.carlsbadenergycenter.com

¹ City of Carlsbad staff report attached to City of Carlsbad Resolution adopting the Plan, February 2002.

FACT OR FICTION

NRG West, owners of the Encina Power Plant, submitted an application to the State of California to build a modern replacement power plant on the site designated in the City's Redevelopment Plan. The permitting authority rests with the State of California.

FACT

As witnessed by the recent wild fires, local energy reliability is essential. Consequently, NRG submitted an application to the California Energy Commission (CEC) to upgrade and ultimately replace the existing Encina Power Plant. The upgraded project is known as the Carlsbad Energy Center Project (CECP).

San Diego's recent energy crisis demonstrated to the community, and all of southern California, that available electrical resources in California and San Diego County are insufficient to handle current and expected growth in the region. With its first true energy crisis earlier in this decade, San Diego experienced a series of damaging blackouts.

With population expanding to the eastern parts of San Diego County where summers are hotter and air conditioning is essential to health and safety, the region has set multiple records for energy consumption over the past few summers. Regional resources have not kept pace with this growth, which heightens the need for new facilities such as the CECP. The new CECP will employ state-of-the-art technology and enhance local air quality by implementing best available emissions control equipment and using natural gas fuel. The new units would replace the older, less efficient, existing units 1, 2, and 3 at Encina. Existing units 4 and 5 will continue to operate at Encina and which already employ best available emission control devices.



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The California Energy Commission (CEC) has jurisdiction over all proposed power plants in the state exceeding 50 megawatts in size via its Application for Certification process. This is a comprehensive evaluation process that (1) closely examines proposed projects like CECP, (2) determines along with community input, if any adverse impacts may be caused, and (3) mandates adverse impacts be mitigated prior to approval of a project. This process was initiated in early September 2007 and is expected to be completed in early 2009.

It is important to note that the CECP does not affect the construction and operation of the Carlsbad Seawater Desalination Project that is expected to be constructed at the Encina Power Station west of the railroad tracks on land leased from NRG.

FACT OR FICTION

The State of California has a policy to accomplish and accelerate the repowering of California's aging power plants.

FACT

The California Energy Commission, the California Public Utilities Commission (CPUC), the California Independent System Operator, (the entity operating the majority of California's high-voltage wholesale power grid), and California's Governor and Legislature have all stressed the need to repower California's aging power generating facilities in multiple reports and actions. Specifically, the CPUC has a stated preference for "brownfield" power projects pursuant to Decision No. 04-12-048; meaning reducing environmental and community impacts by adaptive reuse of existing infrastructure. Repowering at existing sites makes the most sense, as it is the most cost effective path to securing new power generation capacity necessary to provide electric power reliability for all consumers.

FACT OR FICTION

The citizens of Carlsbad are involved in the permitting process.

FACT

NRG and the CEC encourage community involvement—which is a fundamental part of the permitting process overseen by the CEC. The majority of CEC meetings and hearings are held locally. In addition, NRG has and will continue to host community forums, providing residents with the opportunity to ask questions about the project and ensure their voices are heard.

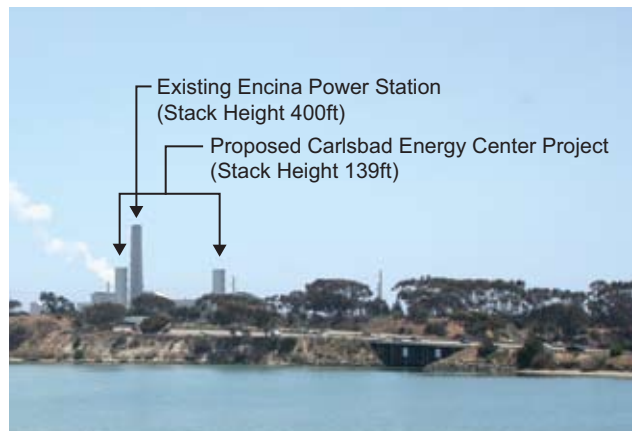
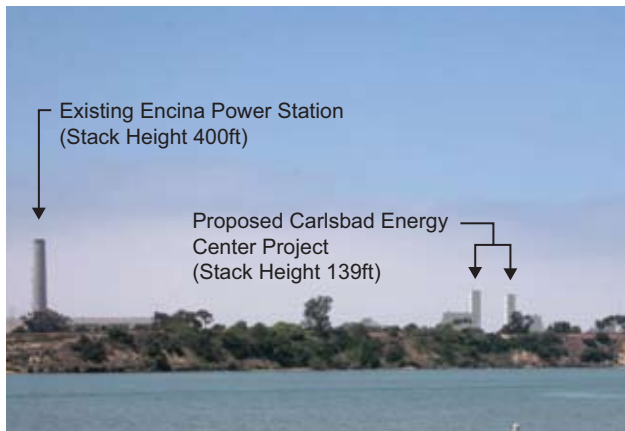
In an effort to make participation as easy as possible, NRG maintains a project website—www.carlsbadenergycenter.com—and invites you to visit the site to learn more about the CECP. Additionally, a complete record of the CEC's review of this project can be found at: www.energy.ca.gov/sitingcases/carlsbad/index.html.

FACT OR FICTION

The proposed site will be smaller than the existing site.

FACT

The proposed project is substantially smaller than the existing plant, utilizing 23 acres of the existing 95-acre facility—land that currently houses fuel oil storage tanks in a recessed containment basin. The existing Encina power block building is approximately 158 feet high and the boiler stack is approximately 400 feet high. The two proposed project stacks will be approximately 139 feet high and the main generating equipment will be approximately 90 feet high. However, by starting at 30 feet below grade in the recessed area, the effective stack heights will only be 109 feet above grade. (see below)



FACT OR FICTION

The small industrial ocean-water purification system being proposed by the Carlsbad Energy Center Project as an alternative means of providing plant services water does not increase the plant's carbon footprint or violate the Coastal Act.

FACT

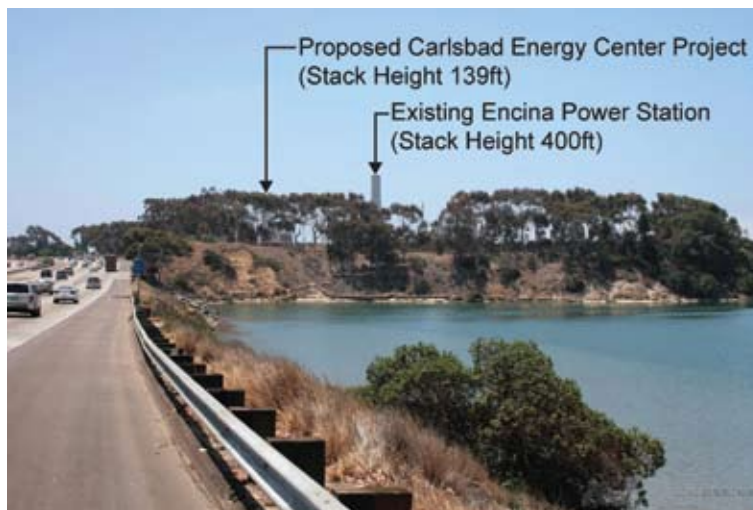
CECP's ocean-water purification proposal is a small industrial water purification unit, proposed solely as an alternative to a preferred reclaimed water supply and because the City of Carlsbad is unwilling to provide reclaimed water to the project. The CECP's industrial ocean-water purification system has an inconsequential effect on the project's environmental footprint; it will use close to the same level of energy to purify water for power plant use as would similar treatment of reclaimed water, as was originally proposed. Coastal Act conformance is a key part of the CEC's review of the project and the project cannot be certified without demonstrating conformance to all applicable laws, ordinances, regulations and statutes, including the Coastal Act. Further, the CECP's proposed alternative ocean-water purification system is designed in similar fashion to the City of Carlsbad-supported Carlsbad Seawater Desalination Project, which was recently approved by the California Coastal Commission, thereby substantiating that such a system conforms to the Coastal Act.

FACT OR FICTION

The proposed Carlsbad Energy Center Project will not negatively effect visual resources even after the Caltrans' proposed widening of the I-5 freeway.

FACT

Caltrans' plans for widening the I-5 freeway are in the preliminary stages of development. While alignment options may move lanes toward the Carlsbad Energy Center Project, there is enough room for both. NRG will continue to work with Caltrans to determine viable solutions to maintain appropriate barriers, including trees and berms, between the project and I-5 for safety and visual screening. (see below)



This is an example of the landscaping that will be used to screen the proposed project from the I-5.

FACT OR FICTION

If the proposed Carlsbad Energy Center Project is built, future redevelopment of the Encina Power Station site for public and private uses will still be possible.

FACT

For nearly a decade, NRG has been working with the City of Carlsbad on a vision to replace the existing Encina Power Station with a smaller, more efficient power generating station. The Carlsbad Energy Center Project is the first phase in implementing that plan and vision, with a future phase to accomplish the complete shutdown of the older plant when that plant is no longer needed for electrical system reliability. Once the entire older plant is retired, almost 65 prime coastal acres will be available for redevelopment. The Carlsbad Energy Center Project only uses 23 acres of the property furthest away from the coast and within the industrial corridor area between the railroad tracks and the 1-5 freeway.

NRG and the City both recognize that the Encina plant sits on valuable coastal property. In fact, the City's own planning documents in 2002 state, "With demolition of the existing Power Plant and construction of a new Plant to the rear of the existing site, excess development property will be created which is located in a prime coastal location. It is staff's opinion that this excess property could be used for both private and public land uses."² It is clear that this project facilitates achievement of this vision by cost-effective and feasible replacement of the older plant that allows for its retirement.

² City of Carlsbad staff's work plan attached to City of Carlsbad Resolution adopting the Plan, February 2002.



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After careful evaluation, environmental and energy experts determined that building the Carlsbad Energy Center Project on an alternative site in Carlsbad is not feasible and would cause considerable and unreasonable delays in meeting the region's power needs.

FACT

Environmental and Energy experts have conducted a comprehensive analysis of alternative sites in Carlsbad. They concluded that the alternative industrial sites proposed by the City of Carlsbad are not feasible due to significant adverse environmental, airport and community impacts and because there is insufficient critical infrastructure in the area, like electrical transmission, making the sites technically infeasible. Additionally, the alternative sites would cause substantial and unacceptable delays in meeting the region's power needs within the 2010-2012 timeframe, as determined by the state's energy agencies.

FACT OR FICTION

Even though the existing Encina Power Station units are older and less efficient, they are still critical to electrical grid reliability in the San Diego region. The only way to shut down these units is to first provide replacement generation that is on-line and reliable.

FACT

It is important to note that the CEC provides such seamless replacement, thereby allowing for permanent retirement of three of the five existing units at Encina. It is clear that demolition of the existing power plant structure cannot occur until all five of the older units are fully replaced and retired. Therefore, CEC provides the necessary replacement for three of the five existing units and brings us closer to being able to eliminate the older plant. When the entire plant can be replaced and removed is dependent on many factors, including the growth rate of San Diego's demand for electrical resources, when new replacement resources become available, and when the California Independent System Operator determines the remaining older units are no longer needed for system reliability.

FACT OR FICTION

Relocating the switchyard to the southeastern portion of the property will produce minimal visual impacts.

FACT

The recent amendments to the project include relocating one of the two existing electrical switchyards from the 65-acre coastal property to SDG&E-owned property in the industrial corridor between the railroad tracks and the I-5 freeway. This relocation further facilitates the vision of removing industrial equipment from the 65 coastal acres in a cost-effective manner. The visual aspects of the electrical equipment are described in the recent amendment evaluation report, which concludes that the switchyard is a relatively low profile structure that will not be particularly noticeable from the CEC's key observation points around the project and will not result in a significant visual impact. This report can be obtained from NRG's project website at www.carlsbadenergycenter.com.