



NUECES BAY ENERGY CENTER | CORPUS CHRISTI, TX



Rankine Cycle Power Plant



June 2007 – February 2008



\$10,500,000



ARCADIS US



Structural Demolition



Hazardous Material Abatement



Rigging & Equipment
Dismantlement



Brick, Concrete, & Steel Recycling



Zero OSHA Recordables

In preparation to convert Nueces Bay Energy Center’s steam generation plant from a Rankine cycle to a highly-efficient combined-cycle configuration, LVI performed abatement and demolition of two boiler units and their 170-foot concrete stacks, six ancillary buildings, and two underground storage tanks.

Originally built in 1949, the plant covers 67 acres just outside of Corpus Christi, Texas. Topaz Power Group purchased the plant and, upon completion of this project, converted the site into the Nueces Bay Energy Center, a highly-efficient combined-cycle facility that began operations in 2010.

LVI was originally contracted by ARCADIS US to dismantle and demolish two boiler units, their 170-foot structures, and associated fire stacks. Upon successful and timely completion of initial contract work, LVI was awarded several subsequent contracts and task orders including the demolition of six ancillary buildings and two underground tanks.

HIGH ELEVATION STACK DEMOLITION

LVI performed in-place dismantling of two steam-generating Babcock and Wilcox boilers rated at 550 tons per hour and the two 170-foot concrete stacks by using

 **ZERO OSHA RECORDABLES**

many repetitive heavy picks with large cranes and an ultra high reach excavator for the stack demolition. LVI dismantling crews rigged and lowered sections of the boiler stacks, boiler structures, and equipment to the ground level for further processing.

One boiler bay shared structural elements with the turbine building. Dismantling this boiler bay required special structural design reviews to avoid damage to the turbine building, which was to be left standing for the combined cycle repowering.

Crews safely dismantled and removed existing asbestos-containing materials, turbine generators, condensers, boiler structures, stacks, structural concrete foundations and excavated soils with backfill.

SUSTAINABLE DECONSTRUCTION

All materials other than those deemed of a hazardous nature were either reused or recycled for this project. Items recycled or reused included brick, concrete, oil, and steel. A total of 7,000

tons of steel were removed and recycled.

FAST-TRACK SCHEDULE

LVI adhered to a very tight schedule in conducting this work. Timeline constraints were met by pulling resources from three LVI different offices. All work was performed on time and in accordance with applicable regulations.

FOCUS ON SAFETY

Site-specific heavy lifting and demolition plans were approved by our client, ARCADIS US, and the owner, Topaz Energy Group. Thanks in part to significant pre-planning, daily safety meetings, and a Job Safety Analysis (JSA) for each task, the project was completed with zero OSHA recordable incidents.

Project Managed By LVI Environmental Services Inc., a Texas-based subsidiary of LVI Services Inc. | **Client Contact** Trisha Elizondo, ARCADIS US, 1687 Cole Boulevard, Ste 200, Lakewood, CO 80401, (303) 231-9115 x132, Trisha.Elizondo@arcadis-us.com