

STATE UNIVERSITY OF NEW YORK (SUNY) AT OLD WESTBURY

Cogeneration

IMPROVEMENT DETAILS

- Design and installation of 1.78 MWe cogeneration system
- High temperature hot water heat recovery boiler
- Natural gas booster
- 5kV and 15kV switchgear
- Radiators
- Plant auxiliary equipment



GOALS AND CHALLENGES

Operating since 1968, SUNY College Old Westbury is the only public liberal arts college on Long Island. Recognizing the need to reduce annual utility costs and to help the environment, the college reached out to Willdan | Genesys to upgrade the campus heating plant.

which monitors the operation of the plant via a dedicated lease-line from their Hicksville, NY, dispatch center. A new one-of-a-kind sound attenuation chamber which significantly reduces the sound output to the campus and surrounding neighborhood was developed and fabricated by Willdan | Genesys, drawing from Willdan's hands-on experience and "outside the box" thinking.

SOLUTIONS AND OUTCOME

Willdan | Genesys designed and installed a state-of-the-art cogeneration system based on a 1.78 MWe natural gas engine generator GEE-Jenbacher Model JSM-612, which utilizes lean burn technology to meet stringent New York State Department of Environmental Conservation limitations. The engine exhaust heat is now captured in a waste heat boiler (Vapor-Phase Engineering Corporation) that converts the heat into usable high temperature hot water for campus heating purposes. The engine itself was equipped with a synchronous generator and designed to operate in parallel with the Long Island Power Authority,



Willdan provided project management, mechanical engineering, instrumentation and control design in-house, and managed subcontractors who performed electrical utility interconnect, structural, environmental, and acoustic measures.

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