

MIDLAND COGENERATION VENTURE NOISE CONSULTING AND MONITORING PROGRAM

Midland, MI



PROJECT DESCRIPTION

Midland Cogeneration Venture (MCV) operates America's largest cogeneration facility. The plant includes 12 ABB combustion turbine generator units with heat recovery steam generators to power two steam turbine generator units and to export process steam to a Dow Chemical complex. Upon start-up of the new facility, MCV received noise complaints from several community residents. MCV sought to characterize the overall sound levels produced by the plant, to identify individual noise sources at the plant, and to develop and implement appropriate noise mitigation measures.

Acentech conducted the initial evaluation of the community noise complaints, which included meeting with the community residents and conducting a noise measurement program; the identification and rank-ordering of the plant source contributions to the community sound levels; and the development and specification of noise control treatments. After installation of these retrofit treatments, Acentech evaluated their acoustic performance relative to the design specifications and their effectiveness in reducing the overall plant noise in the community.

We developed and implemented a community noise monitoring system to compare the plant sound levels to the property line noise goal of 50 dBA and to identify plant and non-plant related noise sources. Acentech was responsible for the specification and installation of the overall monitoring system, as well as the design and implementation of custom portions of the system hardware and software.

Acentech

CONSULTING SERVICES

- Noise monitoring
- Noise evaluation
- Noise modeling
- Noise control design

REFERENCE

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