ASSET PERFORMANCE MANAGEMENT

BENTLY NEVADA™ HYDRO TURBINE MONITORING FUNDAMENTALS

The course covers Hydroelectric monitoring applications, including sensor installation, Bently Nevada™ 3500 monitor configuration, and System 1™ configuration and plotting instructions. This is a self-paced, e-learning course that includes a final exam.

Format

Duration: 12 hours **Delivery:** Elearning

Objectives

- To understand hydro turbine generator components and operation.
- To understand hydro turbine generator conditions and failures.
- To discover the sensors and monitoring equipment used in detecting hydro problems.
- To learn the Bently Nevada hydro specific sensors and how to install them.
- To discover the 3500/46M Hydro monitor capabilities and configuration needs.
- To realize the System 1™ Hydro capabilities, configuration requirements, and plotting procedures.

Recommended Prerequisites

Suggested knowledge pre-requisites: Students are expected to have a basic understanding of:

- Systems and Instrumentations
- Machinery vibration
- Plant operation and maintenance
- Configuration and use of:
- System 1™ installed in their own environment
- Bently Nevada™ 3500 Training

Program Outline

Program:

- Three main types of hydro turbine generators and components
- Common problems found with turbines and generators
- Different monitoring methods
- Air Gap sensor installations
- Specific 3500 and System 1™ configuration and plotting instructions