## **Keynote Lecture**

## Overview of Onagawa Nuclear Power Station's Response to the Great East Japan Earthquake and Implementation of Safety Improvement Measures.

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Onagawa Nuclear Power Station Unit 2 of Tohoku Electric Power Co. is a BWR plant that has passed Japan's revised regulations and will be the first plant to start up in Japan.

The power plant is located on the Oshika Peninsula near Matsushima, one of the three most scenic spots in Japan. This peninsula, which juts out into the Pacific Ocean, experienced a massive earthquake and a huge tsunami in 2011. The power plant was able to avoid falling into a critical situation by implementing risk-informed measures even before the massive hazard, such as determining the height of the site based on tsunami traces and seismic reinforcement work based on revised base earthquake ground motions.

In this keynote, I would like to introduce the actual examples of risk-informed countermeasures at Onagawa Unit 2, the traces of the huge earthquake and tsunami of 2011, and the safety measures for Onagawa Unit 2 based on the revised Japanese regulations.