

## Nuclear power plants in northern Taiwan operated safely when Typhoon Talim pounded the island

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The typhoon Talim with a speed of 21 kilometer per hour and packing sustained winds of 184 kilometer per hour hit Taiwan late Wednesday night and early morning of September 1. At least 3 persons died and 59 people were injured and electricity supplies for over 1.45 million households were disrupted when torrential rains and gusting wind brought by typhoon with a radius covering the northern and central parts of island.

The maximum sustained wind in northern tip of Taiwan, where the two Nuclear Power Plants (NPPs) namely Chinshan and Kuosheng are located, exceeded the limit of 25 meters per second specified in the special operating procedures under typhoon condition at 8:17pm Wednesday night. As a result, both NPPs were required to reduce from full power to between 20 and 30 % capacity. As typhoon center left Taiwan and warning was lifted in midday, Unit 2 of both Chinshan and Kuosheng were gradually returned to full power after inspection of outdoor equipment for possible damage. Unit 1 of Chinshan was shutdown at midnight to start the scheduled refueling outage after 538 days record-breaking continuous operation. Unit 1 of Kuosheng was disconnected from grid to replace a broken leader (or wire) of lightning arrestor in main transformer damaged by typhoon. It was reconnected to grid at 8:00pm on September 1. There are a total of three NPPs in operation in Taiwan, each with two units. The total installed capacity is 5,144 MWe. The first nuclear unit-Chinshan Unit 1, a BWR/4 rated at 636 MWe, started commercial operation in 1978. Unit 1 of Kuosheng, the first operating BWR/6 rated at 985MWe, started commercial operation in 1981. Unit 1 of the third NPP-Maanshan, a 3-loop PWR rated at 951MWe, started commercial operation in 1984.