Bloomberg

Japan Quakes Force Evacuation Near Reactor; Oil Refinery Burns

By Tsuyoshi Inajima and Yuji Okada - Mar 11, 2011

Residents near a Tokyo Electric Power Co. nuclear reactor were ordered to evacuate because of a possible radiation leak as Japan's strongest earthquake in a century shut power plants and oil refineries.

About 1,800 residents living within 2 kilometers (1.2 miles) of the Fukushima Dai-Ichi No. 1 reactor were ordered to evacuate, said Ryohei Shiomi, spokesman at the Emergency Information Center of the Nuclear and Industrial Safety Agency. Residents within 10 kilometers were told to stay indoors.

Firefighters continued to battle a blaze at Cosmo Oil Co.'s refinery, 40 kilometers east of Tokyo, said Seiichi Aso, a spokesman at the local fire department. The blaze started at the 220,000 barrela-day plant's storage tanks, Cosmo Oil spokesman Yusuke Kaneda said. JX Nippon Oil & Energy Corp. said it shut its refineries in Sendai, Kashima, and Negishi.

Millions of homes were without electricity as utilities shut 11 nuclear power reactors. The shutdowns amount to about 20 percent of Japan's 4.6 million barrels a day refining capacity and about 20 percent, or 12 gigawatts, of Japan's total installed nuclear capacity, Sanford C. Bernstein analysts including Neil Beveridge said in a note today.

Reactors operated by Tokyo Electric Power Co., <u>Asia</u>'s biggest utility, Tohoku Electric Power Co. and Japan Atomic Power Co. were shut, the trade ministry said in an e-mailed statement. A fire broke out at a turbine building at Tohoku Electric's Onagawa reactor, company spokesman Kazuya Sugawara said, adding that there's no risk of a radiation leak.

Tsunami Kills 26

The 8.9-magnitude quake struck at 2:46 p.m. local time and unleashed a tsunami as high as 10 meters, engulfing towns along the northern coast and killing at least 26 people. The temblor hit 130 kilometers off the coast of Sendai, north of Tokyo, at a depth of 24 kilometers, the <u>U.S.</u> <u>Geological Survey</u> said. A 7.1- magnitude aftershock followed at 4:25 p.m., it said.

The <u>Philippines</u>, <u>Indonesia</u> and <u>Papua New Guinea</u> were among more than 20 countries bracing for a possible tsunami, the Pacific Tsunami Warning Center said.

Tokyo Electric shut seven reactors at its Fukushima Daiichi and Daini atomic plants while three reactors at Tohoku Electric's Onagawa station were halted, the trade ministry's Nuclear and Industrial Safety Agency said in the e-mailed statement. Japan Atomic Power shut the No. 2 reactor at its Tokai plant, the agency said.

Tokyo Electric

More than 3.4 million homes serviced by Tokyo Electric were without power following the quake, Daisuke Hirose, a spokesman for the utility, said today by phone.

Electric Power Development Co. shut its 600-megawatt No. 2 unit of Isogo coal-fired plant in Yokohama, spokesman Hiroshi Nakatani said by telephone.

Tokyo Electric's Kashiwazaki Kariwa, Chubu Electric Power Co.'s Hamaoka and Hokkaido Electric Power Co.'s Tomari nuclear plants are operating, the agency said.

Showa Shell Sekiyu KK said it halted shipments at refineries in Keihin and Yokkaichi. Liquefied natural gas import facilities at Sodegaura, Ohgishima and Negishi weren't affected by the earthquake, Atsuhiko Ashikawa, a spokesman for Tokyo Gas Co. said today.

Officials at ports and energy companies in <u>China</u>, Taiwan, <u>South Korea</u> and Russia said the quake and tsunami aren't expected to affect operations.

Reach China

The tsunami due to reach China's southern Guangdong and Fujian provinces today isn't expected to have a significant impact, the official Xinhua News Agency reported, citing the National Marine Environmental Forecasting Center. There's no need to shut the country's ports, Chen Jianmin, director of the China Earthquake Administration, said in Beijing.

Gao Ting, a media official at China National Offshore Oil Corp.'s liquefied natural gas terminal in Fujian, said she isn't aware of any emergency measures being drawn up because of the tsunami. Spokesmen at PetroChina Co. and China Petroleum & Chemical Corp. said they haven't received reports that their companies' offshore operations have been affected.

<u>Taiwan</u> shut schools and business in its eastern and northeastern counties after the Central Weather Bureau issued a tsunami alert. Taiwan Power Co., the island's biggest electricity producer, expects its two operating nuclear plants on the northern coast to remain safe. They were designed

to withstand waves as high as 12 meters (39 feet), said Huang Huei- yu, a company public relations officer.

Sakhalin Island

Operations at the Exxon Mobil-led Sakhalin-1 oil production project on the island off the Pacific coast of Russia are unaffected, Olga Shishkina, a spokeswoman for Exxon said today. She declined to comment on whether the events caused any tanker cargos to be diverted to different destinations.

<u>Russia</u>'s Sakhalin-2 venture, which includes an LNG plant with an annual capacity of 9.6 million tons, hasn't been affected because the tsunami warning hasn't been issued for Sakhalin Island, a spokesman said.

Russia has issued a tsunami warning for the Kuril Islands, also known as the Northern Territories in Japan.

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