China Quake Batters Energy Industry

The mainland's rapid growth is supported by its power grid, but the May 12 temblor damaged turbine, natural gas, and hydroelectric producers

by Dexter Roberts

The horrendous scale of the human tragedy from China's massive May 12 earthquake continues to mount. On Monday, sirens sounded across the nation as Chinese stopped to observe a three-minute period of mourning in memory of the quake's victims. The death toll may top 70,000, and the government is preparing to provide food to millions of refugees.

Initially economists were hopeful that the disaster would at least not have a major impact on China's economic growth (BusinessWeek.com, 5/13/08) since Sichuan province, site of the temblor, is largely agricultural. However, as the extent of the quake's destruction becomes more apparent, some are starting to worry about damage inflicted on the economy. Today Deputy Industry Minister Xi Guohua said companies had suffered $9.5 billion in damage from the earthquake.

Hardest hit by has been Dongfang Electrical Corp., whose Mianzhu (Sichuan)-based subsidiary Dongfang Turbine, China's largest turbine producer, was virtually wiped out. In a statement released on May 16, the company said Dongfang Turbine has "suffered severe damage" from the quake, causing "a serious impact on the manufacturing and selling of turbines." One-fifth of total revenues of more than $24 billion last year came from the turbine business. Dongfang, which produces 30% of China's locally made turbines, estimates direct losses from the earthquake will reach $1 billion.

Investors have fled: Dongfang's Hong Kong-listed stock has dropped 17% since the earthquake and its Shanghai-listed shares plunged 10% (the daily limit) on Monday, the first day of trading after a four-day suspension. The company "is basically gone. I don't see how they can resume operation in the next couple of months," says K.F. Yan, Beijing-based director at Cambridge Energy Research Associates. "Taking them out will have a major impact [on China's energy industry]. China will have to buy more [turbines] from abroad."

POWER STATIONS SHUTTERED

Other companies in the energy sector are also vulnerable, because Sichuan is a major onshore gas producer and the country's largest hydropower generating region. The quake's destruction has affected natural-gas exploration and production and has hit hydropower operations hard. Sichuan's electricity grid is running at 76% of pre-earthquake levels, with 27 power stations shuttered, China's State Power Grip announced on its Web site on May 19.

China can ill-afford severe disruptions to the gas and hydro industries, which are vital to fueling the country's double-digit GDP growth. Sichuan supplied some 27% of the country's national gas production in 2007. While natural gas still only accounts for 3% of the national energy mix, Beijing plans to raise that proportion to 10% by 2020, with Sichuan's rich reserves playing a key role in that expansion.

Even as rescue efforts continue, the government has ordered a massive inspection of oil and gas operations in the earthquake region. On Sunday, the Water Resources Ministry announced it has sent 25 teams to begin inspecting hundreds of dams and reservoirs in Sichuan that it earlier warned were in "dangerous condition."

HEAVY DAMAGE TO HYDROPOWER

The hydropower sector is likely to suffer the longest-lasting damage. China depends on hydropower to provide more than 20% of the country's total installed energy capacity of 722 gigawatts, with national goals to more than double that by
China has more than half of the world's 40,000 large dams—defined as being more than 15 meters high.) On May 14, the Water Resources Ministry announced that 391 dams were believed badly damaged. "There are major safety issues right now with the reservoirs, hydropower stations, and lakes in the earthquake zone," Minster Chen Lei said in a statement released on the ministry's Web site. "The area has numerous reservoirs and lots of damage, and the extent of the danger is unknown."

Unlisted SinoHydro, China's largest hydro company, has announced that close to 100 of its employees have died, 500 have been injured, and 10,000 made homeless following the quake. Estimated property damage: almost $250 million, with $330 million needed for reconstruction, the company says.

Even more alarming is the possibility of one of China's earthquake-weakened dams or reservoirs bursting, says Andrew Mertha, an assistant professor of political science at Washington University in St. Louis, and author of China's Water Warriors: Citizen Action and Policy Change, a recent book looking at local citizens' resistance to new dam construction in China. Even before the quake, Beijing had admitted there are major flaws in many of the country's 87,000 dams. "Roughly 37,000 dams across the country are in a dangerous state," Water Resources deputy minister Jiao Yong said earlier this year, noting that many had been built decades ago.

RECOVERY EXPECTED

The Zipingpu dam is just one alarming example, says Mertha. It is located just six miles from the quake-devastated city of Dujiangyan. Beijing has admitted the massive dam suffered cracks during the temblor. And although the government has promised the dam is now safe, "When it comes to the actual materials used [in China's dams]—the farther one goes down the food chain, the farther you get from the initial standards that were set," says Mertha. "There is not a whole lot to inspire confidence going forward," he says.

Besides being a center for China's hydropower industry, Sichuan is also an important base for Chinese production of natural gas. The earthquake and its aftermath are also hitting Hong Kong- and New York-listed PetroChina (PTR), which has extensive natural gas operations in Sichuan. Among its 76 natural-gas drilling rigs across Sichuan, 50 have stopped operation. PetroChina has had to cut its daily production from 6 million cubic meters to 4 million cubic meters at one of its biggest natural gas wells in Sichuan.

Still, the hit to the natural gas industry overall longer term is not expected to be too severe, predict analysts. "In the worst case, China's total gas production drops 2.1%," the impact from the loss of the 2 million cubic meters, says Cambridge Energy Research Associates director Yan. "But I don't think they will lose this production for ever," he says, predicting that after a period of reconstruction, China will return to full production.

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