SCHÜLE aktuell ...



... SCRAPPED ATOMIC PLANTS OPEN ENERGY GAP IN DAIMLER'S HOMETOWN

»Matthias Schuele's aluminum foundry stands a 30-minute drive from a nuclear reactor that supplied electricity for more than three decades until German Chancellor Angela Merkel switched it off in March.«

His furnaces today are backstopped by power generated in Austria while Merkel's government spars with utilities including EON AG over how to add 20 gigawatts of fossil-fuel plants and offshore wind farms, and 3,600 kilometers (2,237 miles) of high- tension cables fast enough to keep his lights on.

"I can't imagine how they're going to install wind turbines at the pace that's needed here," said Schuele, 44, whose family firm produces engine-cooler parts for MAN SE trucks and casings for the electric motors in Bayerische Motorenwerke AG cars in the southwestern German state of Baden-Wuerttemberg. "I can't see where it will all end."



Schuele's predicament is shared by 470,000 family firms and global corporations led by Daimler AG (DAI), Porsche SE (PAH3) and Robert Bosch GmbH across Baden-Wuerttemberg, whose economic output exceeds Belgium and Luxembourg combined. That puts the German state at the heart of a continent-wide test of energy production and markets as governments seek alternatives to nuclear power in the wake of the accident at Japan's Fukushima reactors in March.

Role Model

"The German energy transformation is a huge challenge that will require investments in renewable and gas combined heat and power generation, new power lines and energy storage systems," said Claudia Kemfert, the senior energy expert at DIW economic institute in Berlin. "If Germany succeeds, this could be a role model to economies all over the world. If it fails, it will be a disaster — for Germany's politicians, society and economy."

So far, the progress has been slow. Since the decision to shutter more than 25 percent of Germany's nuclear capacity, utilities EON, RWE AG (RWE), Vattenfall AB and EnBW Energie Baden– Wuerttemberg AG haven't agreed to build a single coal– or gas– fired plant to replace the 21.5 gigawatts of reactors to be closed by 2022, which provided 23 percent of Germany's electricity last year.

Half the projects to expand the national grid of transmission lines, substations and pylons are delayed, pushing the network to the "edge of its capacity," according to the Bonn-based regulator Bundesnetzagentur.

Three Scenarios

The regulator mapped out three scenarios today, forecasting Germany's energy mix in 2022. These will form the basis for a national grid development plan to be published next year aimed at speeding up power line modernization, Matthias Kurth, the head of the Bundesnetz-agentur, said in an e-mailed statement.

Essen-based RWE fell as much as 1.9 percent in Frankfurt trading, adding to a 7.2 percent decline yesterday when it raised 2.1 billion euros (\$2.8 billion) in a share sale to strengthen its capital base and fund new energy projects. It was down 0.9 percent at 27.89 euros a share at 4:21 p.m.

EnBW, which reported a first-half loss after mothballing two of its four reactors, said yesterday that Chief Executive Hans-Peter Villis won't seek renewal of his contract that ends in September 2012.



Overall, grid operators need to spend a combined 10 billion euros to add power lines and avert shortages against a backdrop of falling power prices as the sovereign-debt crisis erodes demand. Europe's last widespread blackout was in November 2006 when a high-voltage line switched off in northern Germany knocked out power for 15 million people in seven countries from Austria to Portugal.

Network Stability

"We're worried about where all this is leading," Schuele said as he walked by workers hammering sand out of freshly cast aluminum parts. "Network stability is important. When you read that prices could develop in a negative way, this could become a problem."

Franz Untersteller, Baden-Wuerttemberg's environment minister, said retail prices will probably rise "only slightly" to pay for the grid upgrade because wholesale prices are low.

"We're also sure that there will be no blackouts in the next two winters," Untersteller said, citing a decision by the Bundesnetzagentur, which in August identified 2.1 gigawatts of fossil fuel-fired generators in Germany and Austria as back-up to stabilize the power network in Baden-Wuerttemberg and neighboring Bavaria.

Abrupt Change

Two coal-fired power plants under construction in Baden- Wuerttemberg will ease grid bottlenecks, including a 1.2 billion euro station near Mannheim with a capacity of 911 megawatts that is to come online in 2013 or 2014, he said. EnBW started building a 912-megawatt plant in 2008 at a cost of about 1 billion euros.

Merkel's abrupt policy change risks creating shortages in Germany's industrial south, which lost about 5 gigawatts of reactor capacity, because of the lack of cross-country power lines, according to state-owned researcher Dena Energy Agency.

Germany is expected to phase out an additional 21.1 gigawatts of generation capacity by 2020, including older fossil-fired plants and the remaining atomic reactors, from 166 gigawatts last year, according to the Bundesnetzagentur.

To plug any gap in supply, Daimler intends to install combined heat and power generators in its factories, and is reviewing investments into renewable energy projects while reducing overall energy consumption, Martin Steinlehner, a spokesman for the Stuttgart-based automaker, said by e-mail.



Secure Supply

The maker of Mercedes-Benz cars is spending about 38 million euros to equip the power station supplying its facilities in Sindelfingen near Stuttgart, the world's biggest car manufacturing plant, with a gas turbine by 2013. More than 460,000 cars left the factory floor last year at the 3 million square-meter site that employs 27,000 people.

"Security of supply is of key importance to us in the discussion over the energy transition," Steinlehner said.

Sports-car maker Porsche uses solar energy at a new logistics center near its headquarters in Stuttgart. Some 8,500 photovoltaic panels installed on the roof of its year-old component storage facility in Sachsenheim generate about 2 million kilowatt-hours of electricity a year, which is used to power the site, spokesman Dirk Erat said by phone.

Germany needs to expand renewable energy sources, increase building efficiency and speed up grid modernization, according to Bosch Chief Executive Officer Franz Fehrenbach. "At the same time, competitive energy prices and a failure–free supply must remain strategic energy policy targets," he wrote in a Nov. 21 guest commentary in Financial Times Deutschland.

Hardest Hit

EnBW, based in Stuttgart, is proportionally the hardest hit among the four nuclear power providers, losing two of its four reactors in the shutdown. That triggered a 552 million-euro loss in the first nine months of the year after 1.25 billion euros net income in the same period the year earlier.

A total of 17 percent of EnBW's investments in the first nine months were channeled into renewable energy projects, including two planned offshore wind parks in the Baltic Sea. EnBW's total investments were 926 million euros, a 43 percent- drop compared with the year-earlier period.

RWE is raising as much as 11 billion euros to help finance clean-energy projects, while EON, based in Dusseldorf, is cutting up to 11,000 jobs and has filed a complaint against the nuclear exit plan at Germany's top constitutional court in Karlsruhe.

Early Shutdowns

Early shutdowns of EON's reactors and a tax on atomic fuel reduced the utility's earnings by 2.3 billion euros this year, Chief Financial Officer Marcus Schenck said on a Nov. 9 call. RWE saw third-quarter earnings slump 73 percent, after earlier slashing full-year profit targets.



Baden-Wuerttemberg, mimicking a nationwide target, intends to increase the share of renewables to 35 percent of the power mix by the end of this decade, up from about 17 percent now.

The region, which ranks last in wind-power generation among Germany's 16 states, plans to add about 120 turbines each year, up from eight in 2010.

Schuele, whose Metallgiesserei Schuele GmbH factory stands 20 kilometers from EnBW's shuttered Neckarwestheim 1 reactor, says a loss of power would be devastating for the business founded by his father 54 years ago.

He's exploring ways to melt aluminum with wood pellets and is considering insuring against power failures.

A blackout of more than 30 minutes would cause the metal to harden, expand and crack the kilns at his foundry, he says. "We'd easily lose 20,000 euros if that happens."

By Stefan Nicola - Bloomberg

