

Uncertainty triggers fears of big job losses

The US wind sector may be enjoying a building boom but, with a possible expiration of the production tax credit looming, things are looking bleak for next year, as up to half of all wind jobs are forecast to go. [Mark Anderson](#) examines how supply-chain companies are preparing



Chain reaction Like all supply-chain firms, Nordex fears job losses at its Arkansas turbine factory if the PTC expires

The likely-to-lapse US production tax credit (PTC) has created an avalanche that is hurtling towards the American wind industry — already beginning to curtail development, destroy manufacturing, gut supply chain and kill jobs in its wake.

Without the federal government's incentive, worth \$0.022/kWh for the first ten years of a wind project, US turbine installations are projected to nosedive from roughly 7GW on average over the past five years to less than 3GW in 2013 and beyond. Any chance of extending the subsidy past 2012 is in the hands of Congress — and until Democratic President Barack Obama's future is decided by the November election Republicans appear poised to block renewable-energy measures.

New figures from the American Wind Energy Association (AWEA) count 470 manufacturing facilities now producing wind components in 42 states. But a report issued by AWEA in December suggests that 78,000 current wind-related US jobs could almost halve next year without a PTC extension.

"It's really a tragic situation," says Mike Garland, CEO of California-based developer Pattern Energy. "To think

that we have an industry that actually has grown and flourished in the United States — and we're willing to give that up."

Garland cites anecdotal numbers that suggest US equipment manufacturers have increased domestic content from 20% five or six years ago to more than 60% today. "Pattern spends \$100 million a year in the US on average in development, which means white-collar service jobs," Garland says. "That all gets blown away when you have no idea whether there's going to be a market going forward."

Pattern, expecting to complete nearly 1.3GW of Canadian development by 2014, is one of a growing list of companies forced to look outside the US to survive the boom-and-bust cycle induced more than once by the PTC.

Nordex is another example. The German manufacturer opened its Arkansas factory in October 2010, producing about 85 units annually of 2.4MW and 2.5MW turbines. "We've managed to increase our domestic content to a level of around 75-78% as we had planned," says Ralf Sigrist, chief executive of Nordex USA. "We would like to do more, but that would only be

(CONTINUED)



possible if the main gearboxes and generators become available from US suppliers.”

Sigrist offers Bosch Rexroth as an example. In 2009, the German gearbox maker finished a billion-euro plant in Nuremberg, then evaluated both the US and China for its next factory. The company chose China. “The main reason was the unstable US outlook. There would certainly be even greater potential for the US to build more domestic supply chain if it was not for unstable policy,” Sigrist says.

Although Nordex plans to sell its US-made equipment in Latin America, those markets cannot fully compensate for business lost as a result of the PTC expiring, and Sigrist fears for his workers. “We would certainly have to reduce our staff quite considerably,” he says.

Effect on construction sector

Mortenson Construction, a leading North American wind-project builder, is better situated than most. The Minnesota-based company plans to install nearly 20% of the 10GW expected in this year’s rush to beat the potential expiration of the PTC. Wind typically accounts

Missed opportunity
Gearbox maker Bosch Rexroth chose China over the US for its new plant

for 20-30% of Mortenson’s broad-based construction business and its wind unit employs about 300 white-collar staff plus 150 to 200 travelling labourers. Those employees are likely to survive by moving to the company’s other business units, but around 500 local labourers Mortenson typically hires may struggle to find work on wind farms next year without an extended PTC.

Many construction companies, however, depend on wind for survival. “Let’s be candid,” says Jerry Grundtner, vice-president of project development at Mortenson. “There’ll be jobs lost in 2013 without an extension of the PTC. It’ll be a big number, whatever it is.”

Tom Lieurance, lead renewable-energy instructor at Oregon’s Columbia Gorge Community College, has overseen one- and two-year training programmes since 2007. Around 350 students have graduated from the college since 2007 and so far has seen no decrease in applications for these programmes.

But Lieurance knows a steep decline in wind installations would correspond to a huge drop in job openings for new workers. “If they stop putting turbines up, then we’re down to maintaining them,” he says. “The only job openings will be through attrition.”

Many experts claim that supply-chain operations typically need 12 to 18 months for ramping up to full production — meaning layoffs, which are already happening, could be protracted. That notion leads some to wonder whether the industry would be better off in the long run if it knew the PTC would never return.

“The industry would find some sort of growth pattern that wouldn’t be nearly what it might look like with the PTC — but it wouldn’t be zero, either,” says Ryan Wiser, a staff scientist at the Lawrence Berkeley National Laboratory. “The uncertainty of the PTC gives people a wait-and-see attitude, and that kills a significant subset of the jobs.” ■■W

SCARY PREDICTION OR SCAREMONGERING? AWEA NAVIGANT REPORT WARNS OF 37,000 JOB LOSSES

A much-quoted figure stating that 37,000 wind-supported jobs will be lost in the US next year without an extension of the production tax credit (PTC) comes from a report commissioned by the American Wind Energy Association (AWEA) published in December.

The research, conducted by Navigant Consulting, compared two models — one with no PTC, the other with a four-year extension. It then combined public records, various forecasting methods and interviews with 24 leading US wind developers and manufacturers.

Navigant concluded that, with no PTC extension, wind-sector jobs will drop by nearly half, from

78,000 in 2012 to 41,000 in 2013. “We’re trying to wrap our heads around the magnitude of these job losses,” says Elizabeth Salerno, AWEA’s director of industry data and analysis. “We as a country have to compete with other countries and you do that through policy. You don’t win by sitting back.”

Among other findings in the 43-page report is a two-thirds decline in US wind investment, from \$15.6 billion in 2012 to \$5.5 billion in 2013, without an extension. A four-year extension, however, would boost investment to \$16.3 billion and bring 17,000 additional jobs by 2016.

Critics of the report say the job-loss figure is misleading

because workers are likely to migrate to other energy sectors. Solar, for instance, maintains its PTC until 2016 — meaning significant job growth can be expected. Some believe such surveys are inherently flawed.

Guesswork

“A survey is just that — it’s at best an estimate,” says Peter Beadle, founder and CEO of greenjobs.com, a California-based recruitment service established in 2004. “It’s only a guess and really depends on how good the statistics are that went into the report.”

Beadle has yet to see a marked decline in wind-related job listings but foresees trouble ahead. “I’ve

noted a few wind companies having real problems,” he says. “That tells you there’s a lot of pressure on the industry.”

Meanwhile, although many experts agree that related industries may indeed absorb a significant proportion of workers shed from the wind industry, this prospect offers cold comfort.

“You want to be careful about net job impacts, because those that need income will find jobs,” says Ryan Wiser, staff scientist at Lawrence Berkeley National Laboratory. “Most people in the wind sector are well-enough educated to find a job somewhere out there. It might not be the job of their dreams, but it’s going to be a job.”