

The Window

No 8 - December 2001

In the United States, wind is being positioned as the fast, clean, competitive energy supply solution. And now, the general public is waking up to the potential of wind. Vestas takes a closer look at the latest developments.

The logo for Vestas, featuring the word "Vestas" in a stylized, italicized font with a registered trademark symbol, set against a dark blue horizontal bar.

Vestas

The Long, Windy Road to Costa Rica

The installation of 30 Vestas 660 kW wind turbines at La Tejona in Costa Rica in late 2001 signals a growing interest in Central America for wind energy.

Even though places like La Tejona in Costa Rica boast some of the highest average wind speeds in the world, Costa Rica and other Central American countries have been generally slow to embrace wind power. That is until now.

The building of the Tejona wind farm in Costa Rica in the fall of 2001 hopefully signals that all this is changing. The planned wind farm will be owned by the local utility ICE (Instituto de Electricidad Costarricense), the largest utility in Costa Rica and Central America. Vestas is supplying the farm's 30 V47-660 kW wind turbines in collaboration with Essent, which is one of the largest utilities in the Netherlands. When completed, the Tejona wind farm will generate an estimated 100 MWh, opening a new chapter in the Central American energy story.

ICE has signed an agreement with the Dutch government to contribute DFL 9.5 million to the project from funds for the Power

Pilot Project - Joint Implementation (PPP-JI) program. The project will act as a pilot project aimed at showing the possibilities of international exchange of CO₂ emission reduction rights (Joint Implementation)—and will contribute to raising local awareness of wind energy.

First steps

Costa Rica took its first steps on the road to wind energy almost 10 years ago—in March 1993—when ICE issued a tender for a 20 MW wind farm in La Tejona. La Tejona is situated in the middle of the country, near Lake Arenal, eight kilometers from the city of Tilarán, in the northern region of Costa Rica—a 3-hour drive from the capital of San José. ICE's Arenal power complex by Lake Arenal is the main supplier of electrical power to Costa Rica. Its output, in three cascaded power stations, is over 400 MW. ICE selected La Tejona as the site for installing the wind farm

because it has some of the highest average wind speeds in the world.

Vestas' involvement in the Tejona Project began when Vestas learned of the ICE tender through Jan Borchgrevink, a commercial advisor and agent for companies wishing to enter the Central American market. Interestingly enough, Borchgrevink has Scandinavian roots and was aware of Denmark's key position in the field of wind energy. So when he learned of the ICE tender, he contacted Vestas and immediately after the ICE tender was announced, Borchgrevink visited Vestas in Denmark. This was the beginning of a longstanding collaboration with Vestas about the Tejona Project.

Obstacles and delays

But there were many obstacles and delays to overcome. In 1994, the Tejona Project, originally covered by a loan agreement with the Inter-American Development Bank (IDB) was put on hold due to macroeconomic restrictions, which among other things placed a debt cap on ICE's investments. Concerned about the potential of very high grid penetration of wind power, ICE imposed a 6% cap on wind power development in Costa Rica. The project seemed stuck.

Several years had to pass before ICE in 1997-1998, searching for an alternative to implement the Tejona Project, settled on a partial BLT-like (Build-Lease-Transfer) arrangement. In April 1999, ICE announced a tender for the Tejona Project and received five bids for the project—one from the Dutch utility Essent. Essent Energie's offer for Supply of Equipment, Operation and Maintenance Services for the Tejona Wind Power Plant had Vestas as designated WTG manufacturer.

On December 7, 1999, ICE's Board of Directors approved the award recommendation report and resolved to award the Tejona Project to Essent and Vestas. But local procedures and legislation further delayed the process until late in 2000, when the final decision to award the Project to Essent/Vestas was made. The contract was for ICE to acquire 5 MW and lease 15 MW from Essent over a 5-year period. Vestas was to be the manufacturer of the wind turbines—and responsible for the maintenance and operation of the project for the first 5 years.

The 30 wind turbines were shipped to Costa Rica in September 2001. Installation is now underway. The total value of the order is approximately mDKK 110.



La Tejona in Costa Rica boasts some of the highest average wind speeds in the world.

The importance of understanding cultural differences

According to Jorge Raul Alvarez, the Vestas Sales Manager who worked with Vestas advisor Borchgrevink putting together the Vestas end of the deal, the key to the project's success—besides much patience and persistence—are good relationships and a good knowledge of the

country's culture. "In order to do business in Central America, it is extremely important to understand the culture of the country and to speak Spanish," says Argentinean-born Alvarez, who has worked on the Tejona Project for the past four years. "It is also very important to be trustworthy and patient. There comes a point in the sales process where the cus-

tomers fully trusts and believes in the sales person. At this point, it is not only important that the customer receives answers to his questions, but also that he is given our full attention and support."

More wind energy in the future

The Tejona wind farm in Costa Rica is Vestas' first larger project in Central

America. But already now Vestas expects the successful outcome of Tejona to open the door to more wind energy projects in the region, so that in the future more of Central and South America's strong winds will be producing energy for the region's fast-growing population.