



The Worldwatch Institute's Climate and Energy Blog

A (Transmission) Line in the Sand for Renewable Energy

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The most important renewable energy project in the United States this year could be a transmission line.



The Unsung Hero of Renewables Growth in Nevada

The One Nevada Transmission Line (ON Line), which the U.S. Department of Energy (DoE) announced February 15 that it would support with a \$343 million loan guarantee, is supposed to be just the initial piece of the 570-mile Southwest Intertie Project (SWIP) that will connect Wyoming, Idaho, and Nevada to the large consumption centers of Southern California and the Southwest. The project is expected to cost roughly \$500 million. The 500 kilovolt, 235-mile line will have the capacity to carry 600MW, while SWIP as currently planned could eventually carry over 2,000MW.

The groundbreaking ceremony for the ON Line was actually held last October, and the line is expected to become operational by the end of 2012. ON Line is a joint venture of NV Energy and Great Basin Transmission LLC, the company behind SWIP. The groundbreaking was a well-attended affair, with the likes of Senator Harry Reid and U.S. Interior Secretary Ken Salazar present. U.S. Energy Secretary Steven Chu personally announced DoE's decision to award the loan guarantee, the first ever from the Department for a transmission project.

Nevada is home to significant and varied renewable energy resources. It has the largest potential for solar production of any state in the U.S., heavily concentrated in the deserts in the middle of the state; it has many areas of superior wind resource in the north; and it is second only to California in geothermal power produced, with plenty of untapped potential throughout the north and west part of the state.

The lack of transmission capacity, and connection to major markets, is perhaps the biggest barrier facing developers looking to begin projects here. Las Vegas and the southern part of Nevada—and with it, Los Angeles, Phoenix, and other population hubs of the Southwest—are not currently connected to the majority of the state. The expanse of desert in the middle of the state has proven a difficult barrier to overcome. Renewable energy projects adding up to 6,500MW of capacity have been proposed in Nevada, but without less glamorous projects like ON Line, they aren't feasible.

ON Line demonstrates the importance of government involvement in promoting renewable energy through filling gaps that the private sector alone cannot. By ensuring that ON Line receives financing the Obama Administration has leveraged stimulus money in a way that will hopefully lead to renewable energy projects of a value far greater than the amount the government invested. Public-private partnerships of this nature are often critical to the development of large infrastructure systems like the electric grid. ON Line should be celebrated both for the direct effect it will have on the Western grid system and the potential for renewable energy projects in the region, as well as for the precedent it sets for future investments in the US power sector. It could be very important line in the sand.