

The Nine Canyon Wind Project is one of the largest public power wind projects in the nation.

Developed, owned and operated by Energy Northwest, the project's 63 turbines produce up to 95.9 megawatts of clean, renewable energy.

Aligned on the ridge tops of the Nine Canyon area southeast of Kennewick, Washington, the turbines are positioned to take advantage of persistent strong winds along the Columbia River Gorge. The turbines convert those winds into electrical energy. | *continued...*



INFORMATION CONTACT

Public Information
(509) 372-5860
info@energy-northwest.com

TYPE
Wind

GENERATING CAPACITY
95.9 megawatts

LOCATION
Southeast of Kennewick, WA

SITE SIZE
75 acres

PHASE ONE

Construction Started	February 2002
First Electricity Produced	June 2002
Commercial Operation	September 2002

PHASE TWO

Construction Started	May 2003
First Electricity Produced	September 2003
Commercial Operation	December 2003

PHASE THREE

Construction Started	September 2007
First Electricity Produced	December 2007
Commercial Operation	May 2008



Each turbine has its own miniature weather station that monitors wind direction and speed. Motors atop the turbines rotate the turbines into the wind. Sophisticated braking systems ensure the blades turn at the optimal speed to produce electricity.

The Nine Canyon Wind Project demonstrates Energy Northwest's commitment to developing environmentally friendly, powerful solutions.

RELIABLE, AFFORDABLE, ENVIRONMENTALLY RESPONSIBLE POWER

The environmentally friendly Nine Canyon project site is located on an active dry-land wheat farm. Landowners benefit from excellent access roads maintained throughout the site and economically from royalty and lease payments.

Wind energy is typically more expensive than coal, natural gas and nuclear power options, but often less than solar, biomass, and developmental technologies like wave and tidal power.

HOW IT WORKS

Phases I and II of the project include 49 turbines each capable of producing up to 1.3 megawatts of power. Each turbine tower is approximately 200 feet tall with 100-foot long blades. Phase III, completed in 2008, added 14 larger turbines each capable of producing 2.3 megawatts of power. Each of the new turbine towers is approximately 260 feet tall with 148-foot long blades.

The turbines are self-starting and begin generating electricity when wind speed reaches 8 mph. Generation increases as the wind speed increases, with full power achieved at about 35 mph. If winds exceed 55 mph on a sustained basis, the turbines shut down automatically by engaging a large disc brake and restart when the winds fall below 45 mph. The pitch of the blades is automatically adjusted to maximize power generation from the available wind.

PROJECT PARTICIPANTS

The utilities are the Public Utility Districts No. 1 of Benton, Chelan, Cowlitz, Douglas, Franklin, Grays Harbor, Lewis, and Okanogan Counties, Public Utility District No. 2 of Grant County, and Public Utility District No. 3 of Mason County.



ENERGY NORTHWEST

Energy Northwest is a not-for-profit public power, state joint operating agency headquartered in Richland, Washington. The consortium's nuclear, hydro, wind, and solar power projects deliver nearly 1,300 megawatts of reliable, affordable, environmentally responsible electricity to the Northwest power grid. Energy Northwest continually explores and develops new generation opportunities while offering a wide range of energy and business services. Energy Northwest owns and operates Columbia Generating Station, Nine Canyon Wind Project, Packwood Lake Hydroelectric Project, and White Bluffs Solar Station.