

## **Resolution for the Washington State Chapter of Sierra Club, August 12, 2014 Advocating Closure of the Columbia Generating Station Nuclear Power Plant**

Whereas, the Washington Public Power Supply System (WPPSS) nuclear generation project in the 1970s was an infamous boondoggle that would eventually waste billions of Washington residents' money and result in, what was at the time, the worst municipal bond default in US history; and,

Whereas, the WPPSS reactor #2, the only one of five reactors that was completed in the WPPSS project, began operating on the Hanford Nuclear Reservation in 1984; and,

Whereas, the WPPSS #2 reactor, now known as the Columbia Generating Station (CGS) was relicensed by the US Nuclear Regulatory Commission (NRC) in May 2012 to continue operation until 2043 - twenty years beyond its designed life; and,

Whereas, the CGS is a General Electric Boiling Water Reactor (BWR) with a Mark II containment that has been identified by the NRC as having the same vulnerability to hydrogen explosions in a loss of power accident as those which experienced three such explosions during the multiple nuclear power plant accident on March 2011 in Fukushima, Japan; and,

Whereas, the NRC has allowed delaying until 2017 the construction of hardened vents in the containment at the CGS that are designed to help prevent a hydrogen explosion in an accident, thus permitting the CGS to operate without a vent for at least six years after the Fukushima accident; and,

Whereas, since the reactor began operation, it has generated approximately 320,000 spent fuel rods containing roughly 274 to 368 million curies of long-lived radioactivity; and,

Whereas, presently, the CGS has generated between 150 to 200 percent as much long-lived radioactivity than is stored in some 177 defense high-level radioactive tanks at the U.S. Department of Energy's Hanford site, approximately 10 miles away from the CGS; and,

Whereas, the fuel rods at the CGS contain 3,235,891 pounds of high-level nuclear waste for which there is no permanent disposal site established by the federal government and no timeline for establishing such a site; and,

Whereas, the CGS also has an elevated spent fuel pool, containing approximately 40% of the CGS' highly-irradiated spent nuclear fuel, which is significantly more vulnerable to earthquake damage and sudden loss of coolant accidents than other nuclear reactor spent fuel pool designs; and,

Whereas, the US Geological Survey has determined, due to increased information about earthquake faulting. that ground motion from earthquakes on the Hanford Nuclear Reservation is potentially twice as strong as was known when the CGS was built; and,

Whereas, the US Department of Energy has upgraded its Waste Treatment Plant and is preparing to empty its Waste Encapsulation and Storage Facility in response to new earthquake information on the Hanford Nuclear Reservation; and,

Whereas, WPPSS, now known as Energy Northwest, has not modified the CGS to reflect new geological information that ground motion at the plant site could be more than twice as high as it was designed to withstand in an earthquake; and,

Whereas, according to a study, partly funded by a Sierra Club grant, by energy economist Robert McCullough, the CGS has been significantly more expensive than the market for the last five years and is likely to cost Northwest ratepayers an additional \$1.7 billion in unnecessary expenses if allowed to continue to operate; and,

Whereas, according to the Washington Department of Commerce, the CGS is providing only 4% of the State of Washington's electric energy needs; and,

Whereas, it is the policy of the Sierra Club to encourage the development of clean energy sources, including wind, solar, geothermal, and energy conservation; and,

Whereas, it has been Sierra Club policy since May 6, 1979 that it "continues to oppose construction of any new commercial nuclear fission power, plants ...[and] supports the systematic reduction of society's dependence on nuclear fission as a source of electric power and recommends a phased closure and decommissioning of operating commercial nuclear fission electric power reactors"; and,

Whereas, in 2011 the Sierra Club reissued and revised its 1982 book entitled "Nukespeak; The Selling of Nuclear Technology from the Manhattan Project to Fukushima," warning readers that "the accidents at Three Mile Island, Chernobyl, and Fukushima remind us again that, in spite of their allegedly redundant *defense-in-depth* design safety features, nuclear power plants can indeed fail, with extremely costly and deadly consequences"; and,

Whereas, Sierra Club Executive Director Michael Brune concludes, "even an imperfect glimpse of the big picture should be enough for us to see that those kinds of risks are just not worth it ... not when we have technologies like wind, solar, and geothermal that can deliver energy without the threat of a cataclysm beyond our ability to comprehend."

Therefore, be it resolved that the Washington State Chapter of the Sierra Club calls upon the publicly owned utilities of the Pacific Northwest, Energy Northwest, and the Bonneville Power Administration to retire the Columbia Generating Station nuclear power plant as rapidly as possible and replace it with energy efficiency and clean renewable energy sources, as well as move spent fuel rods to dry cask storage as soon as possible; and,

Be it further resolved that local groups of the Sierra Club are encouraged to actively engage their utilities to establish policies in favor of the rapid closure and decommissioning of the Columbia Generating Station nuclear power plant.

Approved by the Washington State Chapter Conservation Committee, August 12, 2014