

Yucca Mountain
Nuclear Fuel Locations and Associated Rail Facilities

Trojan Nuclear Power Plant, Oregon

X. TROJAN NUCLEAR POWER PLANT, OREGON

Facility Description

Oregon's only commercial nuclear power plant is the Trojan plant located in Ranier, Oregon. It was built in 1970 and started commercial operation in 1976. It is owned by Portland General Electric. In 1978, the plant was closed for nine months while modifications were made to improve its earthquake resistance. Subsequently, significant construction errors were discovered and within four years, premature cracking in the steam tubes was noted. Throughout the 1980s and early 1990s, a series of ballot measures threatened to close the plant, and in 1993, Portland General Electric announced the plant would be closed. After being in service 16 years, operation was stopped. This was almost 20 years prior to the end of its design service life and prior to its license expiration date of 2011. During its operations, the plant provided about 12 percent of the power generating capacity for the state of Oregon. Decommissioning and demolition of the plant was started in 1993 and completed in 2006. In 2005, the reactor vessel and other radioactive equipment were removed from the Trojan plant and transported via barge along the Columbia River to the Hanford Nuclear Reservation in Washington. At Hanford, the material was buried in a 45 foot deep pit and covered with gravel making it the first commercially used reactor to be buried whole. The spent fuel is stored onsite in 34 dry casks and was planned to be transported to Yucca Mountain. The spent fuel ponds containing the spent fuel rods are currently stored at the Trojan site.

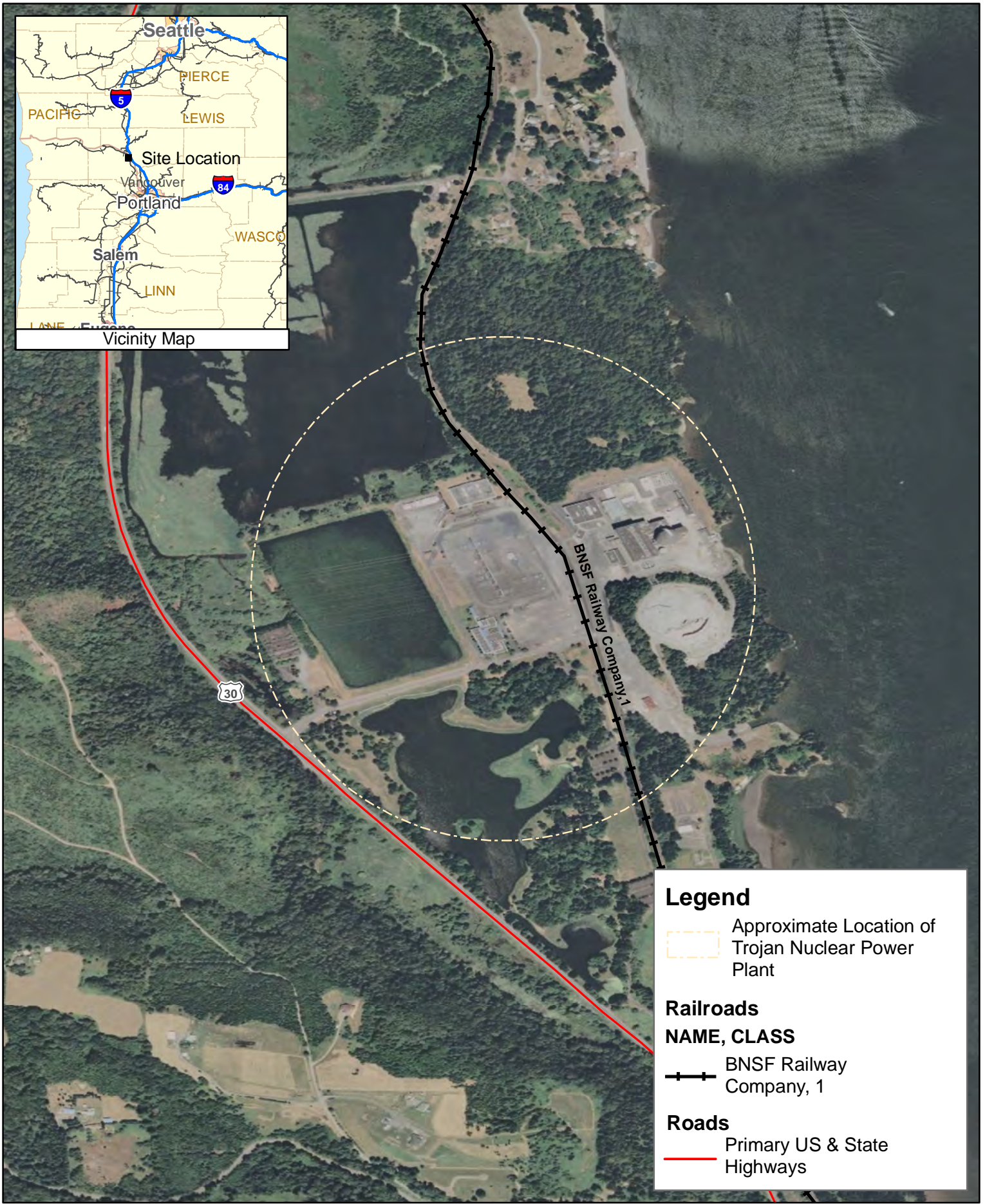
The first of the following maps entitled "**Trojan Nuclear Power Plant**" show the local road network and at-grade road/railroad crossings. The second of the two maps illustrates the plant and surrounding features at a larger scale.

This facility is located on the Portland & Western Railroad on the west side of the Columbia River approximately ten miles south of Kelso, Oregon. There is a spur into the facility. The Portland & Western Railroad is a 520 mile regional railroad owned and operated by short line conglomerate Genesee & Wyoming. There are four to six freight trains per day on the line passing by the nuclear facility. The track speed is 25 miles per hour. Products carried include paper, steel, grain, forest products, chemicals, aggregates, fertilizers, and consumer goods.

Rail Routes

Trojan Nuclear Power Plant to Hazen Map - If materials from the site were to be transported by rail, the Portland & Western Railroad has a spur track into the Trojan Nuclear Power Plant. This rail line would haul the waste material approximately 50 miles south to Portland where it would be interchanged with the Union Pacific. The UP would take over the movement turning southward through Eugene and Klamath Falls, Oregon and into Roseville, California. The loads would be placed into an eastward train for transport over Donner Pass through Reno and into Hazen.

Trojan Nuclear Power Plant to Caliente Map - UP would move this traffic as described above to Roseville. At that point, the loads would be handled eastward over Donner Pass and through Reno to Ogden thence southward to Salt Lake City and onward southwestward to Caliente.



Legend

- Approximate Location of Trojan Nuclear Power Plant

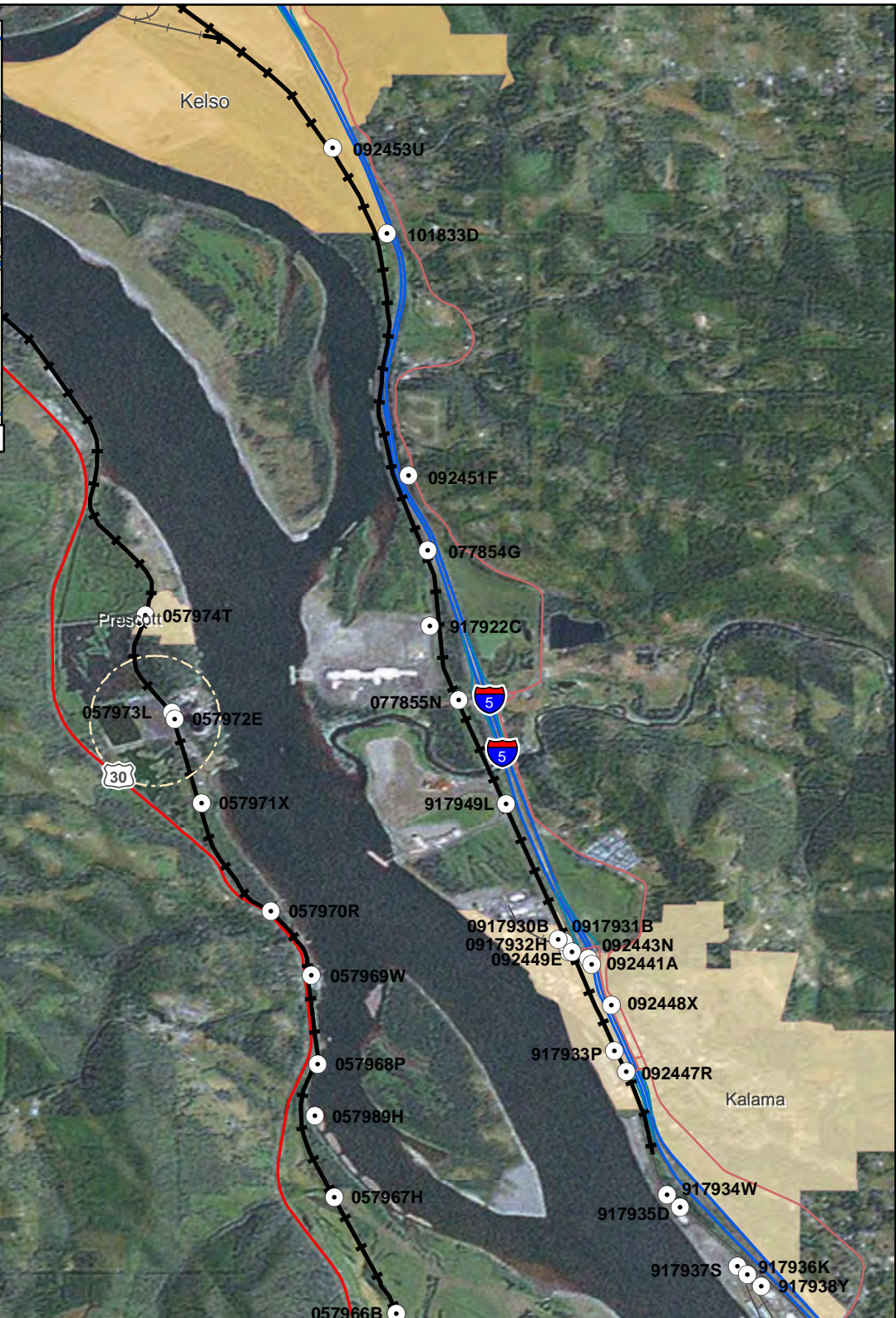
Railroads

NAME, CLASS

- BNSF Railway Company, 1

Roads

- Primary US & State Highways

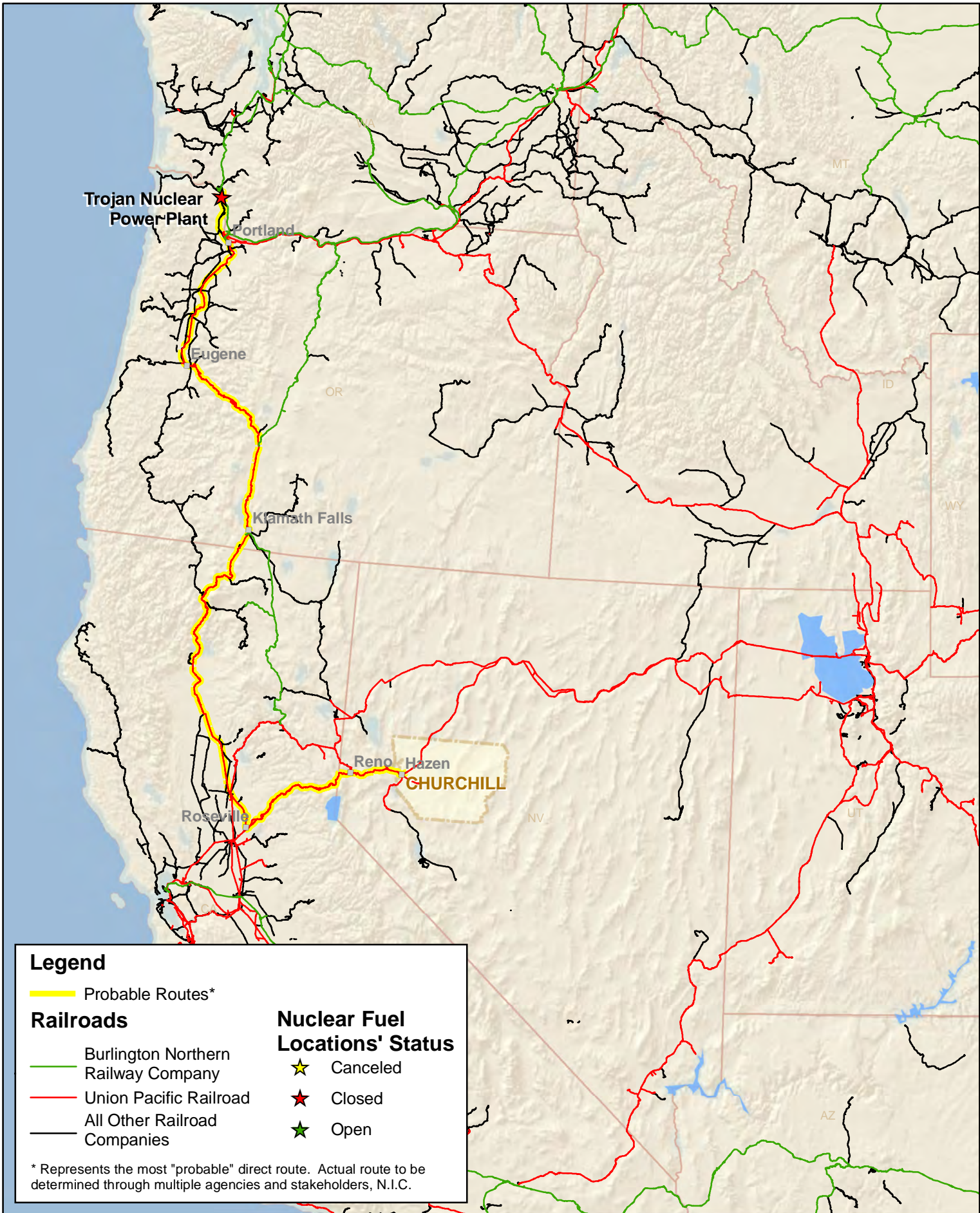


Legend	Railroads	Roads	City Areas
Approximate Location of Trojan Nuclear Power Plant Crossing Number	NAME, CLASS BNSF Railway Company, 1	Primary Limited Access or Interstate Primary US and State Highways Secondary State and County Freeway Ramp	POPULATION Population is less than 10,000 Population is between 10,000 and 29,999

TROJAN NUCLEAR POWER PLANT, OR

1 in = 1 miles

0 0.5 1



Legend

Probable Routes*

Railroads

- Burlington Northern Railway Company
- Union Pacific Railroad
- All Other Railroad Companies

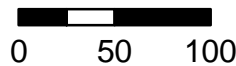
Nuclear Fuel Locations' Status

- Canceled
- Closed
- Open

* Represents the most "probable" direct route. Actual route to be determined through multiple agencies and stakeholders, N.I.C.

TROJAN NUCLEAR POWER PLANT TO HAZEN

1 in = 100 miles





Legend

— Probable Routes*

Railroads

- Burlington Northern Railway Company
- Union Pacific Railroad
- All Other Railroad Companies

Nuclear Fuel Locations' Status

- ★ Canceled
- ★ Closed
- ★ Open

* Represents the most "probable" direct route. Actual route to be determined through multiple agencies and stakeholders, N.I.C.