

Yucca Mountain
Nuclear Fuel Locations and Associated Rail Facilities

Palo Verde Nuclear Generating Station, Arizona

IV. PALO VERDE NUCLEAR GENERATING STATION, ARIZONA

Facility Description

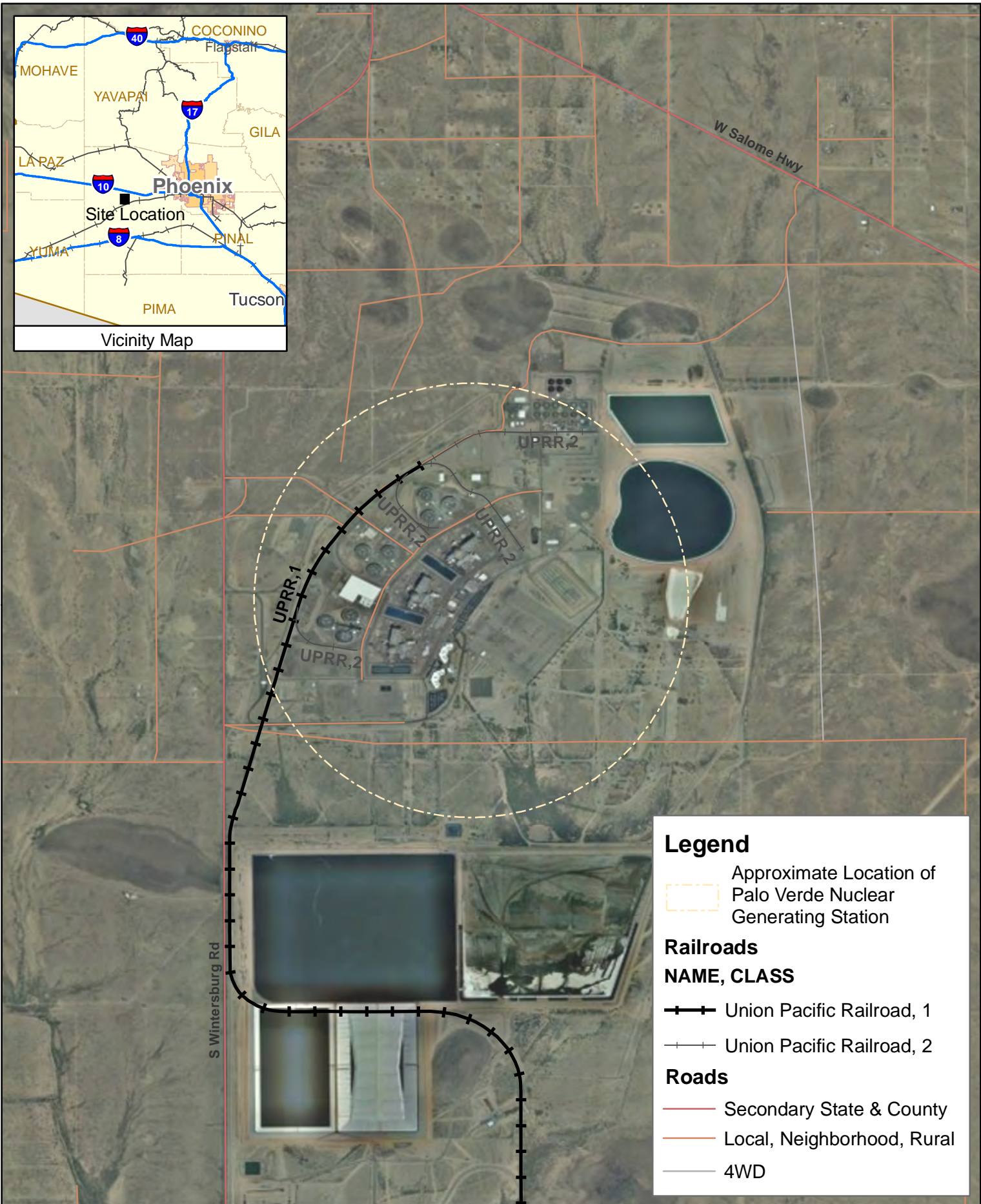
The Palo Verde Nuclear Generating Station, also referred to as the Palo Verde Power Plant, is located in Tonopah, Arizona, about 50 miles west of Phoenix. Owned by Arizona Public Service and six partner agencies, it provides power to approximately four million people in Phoenix and southern California. Annual power generation is approximately 26,700 GW-h. The plant is located on approximately 4,000 acres of land and became fully operational in 1988.

This facility is located at the end of a seven mile spur that begins with a track switch from Union Pacific Railroad's Phoenix Subdivision main line at a location approximately 10 miles west of Palo Verde. Palo Verde is a far western suburb of Phoenix located approximately 30 miles west of Phoenix's central business district. The first of the following maps entitled "**Palo Verde Nuclear Generating Station**" show the Phoenix Subdivision track and the spur track to the nuclear generating station. Population centers, interstate highways, public roads and at-grade road/railroad crossings are noted. More detailed information on the at-grade road/railroad crossings for this and for each of the sites is included in the Appendices to this report. The second of the maps illustrates (at a larger scale) the lead track to the plant ending with four spur tracks at the plant. The Phoenix Subdivision was formerly an east-west through route north of another existing UP main line that passes through Maricopa and Gila. Freight service on the Phoenix Subdivision is actively used for carrying a variety of products serving long established, as well as newly located, industries west of Phoenix. The line is out of service from the Palo Verde Nuclear Generating Station spur track to the west at Wellton. Maximum speed on the in-service segment of the track is 25 miles per hour.

Rail Routes

Palo Verde Nuclear Generating Station to Hazen Map - If rail transport were used for nuclear waste, the UP would pull the loads from the end of the seven mile lead track serving the plant and proceed 40 miles eastward into Phoenix. At Phoenix, the cars would be interchanged to the Arizona & California Railroad, a shortline railroad having trackage rights over the BNSF, from Phoenix northward to Parker, Arizona, near the California border. At Parker, the Arizona & California turns west into the Mojave Desert to Cadiz, California. Interchange would be made to the BNSF at Cadiz and the BNSF would haul the material into its large freight car classification yard at Barstow. At Barstow, the material would be placed into a BNSF train en route to Stockton. The train would depart westward from Barstow to Mojave, traverse Tehachapi Pass into Bakersfield and then run up the San Joaquin Valley through Fresno, Merced, and Modesto to Stockton. At Stockton, the material would be interchanged to the Union Pacific which would continue northward through Sacramento thence eastward over Donner Pass through Reno and into Hazen.

Palo Verde Nuclear Generating Station to Caliente Map – After the loads were brought into Phoenix, the next movement would be via a through train to Tucson. At that point, the loads would travel westward to UP's San Bernardino West Colton Yard. The loads would then travel northwest over Cajon Pass through Barstow and continue northeastward through Yermo to be off loaded at Caliente.



Legend

- Approximate Location of Palo Verde Nuclear Generating Station

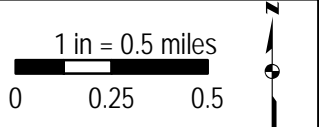
Railroads

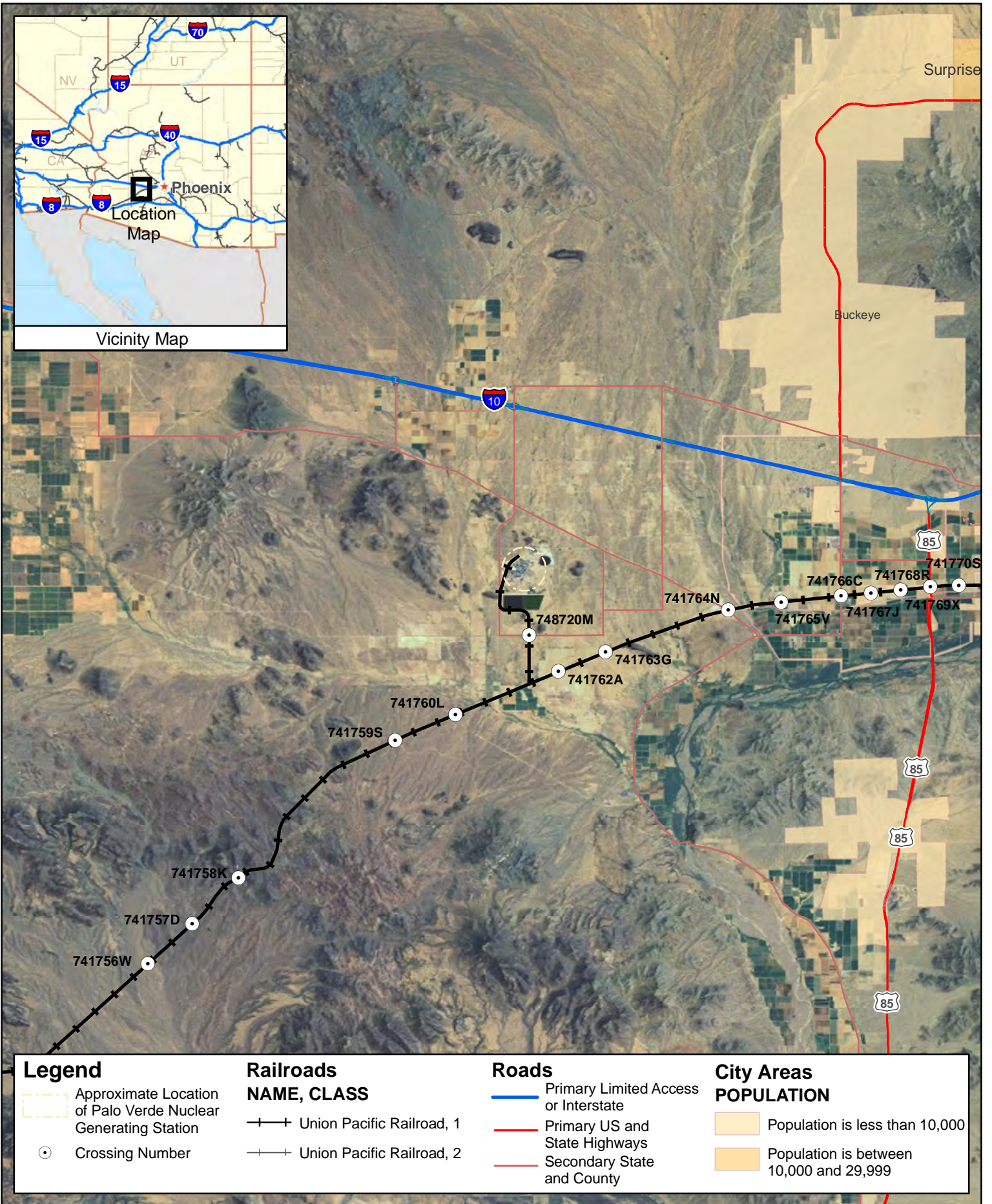
NAME, CLASS

- Union Pacific Railroad, 1
- Union Pacific Railroad, 2

Roads

- Secondary State & County
- Local, Neighborhood, Rural
- 4WD



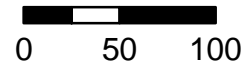


Legend		Railroads		Roads		City Areas	
		NAME, CLASS				POPULATION	
	Approximate Location of Palo Verde Nuclear Generating Station		Union Pacific Railroad, 1		Primary Limited Access or Interstate		Population is less than 10,000
	Crossing Number		Union Pacific Railroad, 2		Primary US and State Highways		Population is between 10,000 and 29,999
					Secondary State and County		



PALO VERDE NUCLEAR GENERATING STATION 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.