

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

F A C T     S H E E T  
(pursuant to NAC 445A.236)

**Permittee Name:** Sierra Pacific Power Company  
6226 West Sahara Avenue, MS #30  
Las Vegas, Nevada 89146

**Permit Number:** NEV95001 - Fort Churchill Power Generating Station

**Description of Discharge**

**Location:** Sierra Pacific Power Company Fort Churchill Power Generating Station is located at 1000 Sierra Way, approximately two miles east southeast of Wabuska, in northern Mason Valley, Lyon County, Nevada. Latitude: 39E 07' 30"N.; Longitude: 119E 07' 30"W. Section 25,36 T. 15N., R. 25E., MDB&M

**Characteristics:** Non-contact cooling water supplemented with groundwater pumped from supply wells make up the cooling water stored in four ponds. The cooling water flows by gravity into a 58 acre site dedicated to three wetland cells located adjacent, and to the south and west of the cooling ponds, via pipeline to North Pond in the Mason Valley Wildlife Management Area administered by the Nevada Division of Wildlife, and for dust control and firefighting uses. The cooling pond water quality is good, as it supports a catfish and largemouth bass fishery in the cooling ponds, and is used for the North Pond fishery in the Mason Valley Wildlife Management area. The quality of the ponds remains similar to the source groundwater with minor variations.

**Flow:** Discharges/flows from the cooling ponds are variable and flow by gravity through a gate valve to the wetland cells. Flows primarily occur from the Spring to Fall. Water passes through the wetland cells by means of interconnecting pipes in quantities necessary to maintain healthy wetlands habitat. Flows to North Pond are by gravity pipeline and are controlled by valves.

**Limitations:** Outfall 001 is into the three wetland cells.  
Outfall 002 is to the evaporation pond.  
Outfall 003 is to North Pond wetlands area.  
Outfall 004 is for dust control and firefighting uses.

<b><u>Flow:</u></b>	Outfall 001, 003	4.40 MGD 30-day average	5.50 MGD
		Daily Maximum, (total)	
	Outfall 002	0.86 MGD Daily Maximum	
	Outfall 004	Monitor & Report Monthly total flow	

The following parameters shall be monitored each quarterly reporting period from the cooling pond to **Outfalls 001 and 003 and at a representative location within the wetlands**; the pounds per year discharged will be calculated yearly and reported the fourth quarter: Arsenic, Fluoride, Iron, Sodium, TDS, Boron, zinc, Molybdenum, and Mercury.

Fecal Coliform: Monitored and reported quarterly.

Freeboard 001: A minimum 3' of freeboard shall be maintained at all times. Visual inspection quarterly.

Leak Detection: Visual inspection quarterly.

#### **Outfall 002**

The following parameters shall be monitored quarterly: TDS, pH, Sulfate, and, 4th quarter only: oil and grease, TPH, and 13 Priority Pollutant Metals scan.

Freeboard 002: A minimum 3' of freeboard shall be maintained at all times. Visual inspection quarterly.

Leak Detection: Visual inspection quarterly.

**General:** Sierra Pacific Power Company operates the Fort Churchill Power Generating Station at 1000 Sierra Way, Yerington, Nevada. The plant consists of two 110 Megawatt natural gas and oil fired steam driven generation units. The cooling pond supplies water to each of the unit's steam condensers (a closed heat exchanger). Non-contact cooling water is stored in four cooling ponds, where it is supplemented with pumped groundwater to freshen the ponds. This additional water benefits both the cooling pond fishery (catfish and bass) and the water quality of the discharges to the series of three wetland cells and North Pond wetlands area.

**Receiving Water Characteristics:** The depth to groundwater averages ten feet. Adverse effects to the groundwater are not expected. Groundwater in the area is generally potable, however fluoride and arsenic exceed State Standards at times; the source of the fluoride and arsenic is probably the geothermal waters naturally occurring in the northern end of the valley. The wetlands are expected to continue to provide quality habitat that will aid in wildlife diversity and numbers. Water quality in the cooling ponds benefits from the addition of supplemental groundwater. Facility wastestream waters are directed to the HDPE double lined evaporation pond (zero discharge). Quarterly groundwater monitoring is required.

**Procedures for Public Comment:** The Notice of the Division's intent to reissue a discharge permit to the facility, subject to the conditions contained within the permit, is being sent to the **Mason Valley News** and the **Reno Gazette-Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing or by FAX for a period of 30 days following the date of newspaper publication of the public notice, by October 24, 2008. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

#### **Proposed Determination**

The Division has made the tentative determination to reissue the proposed permit for a period of five (5) years.

#### **Proposed Effluent Limitations, Schedule of Compliance and Special Conditions**

See Permit.

Any revisions to the Operations and Maintenance Manual shall be submitted by December 30, 2008. There are no special conditions.

#### **Rationale for Permit Requirements**

Extensive monitoring is being required to ensure that the waters of the State are not degraded.

Prepared by: Icycl C. Mulligan, ES MS  
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