95°F as established by the applicable water quality criteria. The use of the condenser discharge RTD's provides the circulating water discharge temperature prior to mixing with the Dardanelle Reservoir water.

No credit was taken in the analyses and models of the circulating water system for heat exchange within the discharge embayment even though it is expected that the water temperature will be reduced in the embayment. Thus, the average temperature should be ≤ 105°F even when the temperature at the condenser discharge is greater.

2.1.3 Maximum BTU/hr

Not applicable.

2.1.4 Rate of Change of Discharge Temperature

Objective

To avoid thermal stress to the aquatic ecosystem due to sudden changes in water temperature.

Specification

In the event of a planned shutdown during the period November through April, the reactor power level shall be reduced to 0% at a rate such that the decrease in the condenser circulating water discharge temperature shall be ≤ 5°F/hr in order to avoid any adverse thermal impact on the aquatic environment in the discharge embayment. As the reduction in power level is made, the number of operating circulating water pumps will be reduced so as to limit the rate of decrease of the water temperature in the discharge embayment.

This limitation may be exceeded for brief periods as necessary to protect plant equipment and for certain safeguard operations which cannot be limited or negated by plant operation. These safeguard operations include automatic plant trips and compliance with safety-related technical specifications.

Monitoring Requirement

Condenser discharge water temperature will be monitored every hour during the power reduction utilizing the average of the computer output of the condenser discharge RTD readings. The RTD's have a 0-150°F range and an accuracy of ±0.5%.

If the plant computer is inoperable, the condenser discharge water temperature shall be monitored at least once per hour during the power reduction utilizing the condenser temperature recorder which has a 0-150°F range and a ±0.5% accuracy.

Bases

There has been no incidence of adverse environmental impact associated with any operating AP&L power plant. Based on data collected at the plant over a six year period, a rate of change of ≤ 5°F/hr is specified. Also, the actual rate of change of the discharge embayment will be slower than the rate of change of the circulating water system. A reduction in circulating water flow will further decrease the rate of change of temperature in the discharge embayment.

2.1.5 Heat Treatment of Circulating Water System

Not applicable.

2.1.6 Deicing Operations

Not applicable.