

APPENDIX B

TO FACILITY OPERATING LICENSE NO. DPR-34
FORT ST. VRAIN NUCLEAR STATION

PUBLIC SERVICE COMPANY OF COLORADO
DOCKET NO. 50-267

ENVIRONMENTAL PROTECTION PLAN
(NON-RADIOLOGICAL)

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1.0 Objectives of the Environmental Protection Plan

The Environmental Protection Plan (EPP) is to provide for protection of environmental values during operation and additional construction of the nuclear facility. The principal objectives of the EPP are as follows:

1. Verify that the plant is operated in an environmentally acceptable manner, as established by the FES and other NRC environmental impact assessments.
2. Coordinate NRC requirements and maintain consistency with other Federal, State and local requirements for environmental protection.
3. Keep NRC informed of the environmental effects of facility operation and additional construction and of actions taken to control those effects.

Environmental concerns identified in the FES which relate to water quality matters are regulated by way of the licensee's NPDES permit.

2.0 Environmental Protection Issues

In the FES-OL, the staff considered the environmental impacts associated with the operation of the Fort St. Vrain Station. Certain environmental issues were identified which required study or license conditions to resolve environmental concerns and to assure adequate protection of the environment. The Appendix B Environmental Technical Specifications issued with the licenses included discharge restrictions and monitoring programs to resolve the issues. Prior to issuance of this EPP, the requirements remaining in the ETS were:

1. Protection of the aquatic environment by limiting thermal stress to aquatic organisms.
2. Protection of aquatic life by limiting the release of chemicals from plant operation.
3. The need for aquatic monitoring programs to confirm that effects of phytoplankton, periphyton, plankton, benthos, and fish due to plant operation are no greater than anticipated.
4. The need for studies to document levels of intake entrainment and impingement in relation to the densities of important species in the plant vicinity.

Aquatic issues are now addressed by the effluent limitations and monitoring requirements contained in the effective NPDES Permit issued by the State of Colorado. The NRC will rely on this agency for regulation of matters involving water quality and aquatic biota.

2.1 Terrestrial Issues

The ETS also contained the following programs related to protection of the terrestrial environment:

1. Surveillance programs to determine vegetation composition, bird and small mammal populations, amphibian and reptile distribution, and distribution of terrestrial invertebrates.
2. Special programs were undertaken to: (a) examine vegetation tissue changes related to cooling tower drift, and (b) examine heavy metal uptake by a common resident mammal and amphibian species.

The NRC requirements for issue 1 and 2(b) have been completed and are terminated by the appraisal prepared in conjunction with preparation of this EPP. The requirements with regard to issue 2(a) are specified in Subsection 4.2.1 of this EPP.

3.0 Consistency Requirements

3.1 Plant Design and Operation

The licensee may make changes in station design or operation or perform tests or experiments affecting the environment provided such changes, tests or experiments do not involve an unreviewed environmental question. Changes in plant design or operation or performance of tests or experiments which do not affect the environment are not subject to this requirement.

Before engaging in unauthorized construction or operational activities which may affect the environment, the licensee shall perform an environmental evaluation of such activity.* When the evaluation indicates that such activity involves an unreviewed environmental question, the licensee shall provide a written evaluation of such activities and obtain prior approval from the NRC.

A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns (1) a matter which may result in a significant increase in any adverse environmental impact previously evaluated in the final environmental statement (FES) as modified by staff's testimony to the Atomic Safety and Licensing Board, supplements to the FES, environmental impact appraisals, or in any decisions of the Atomic Safety and

*Activities are excluded from this requirement if all measurable nonradiological effects are confined to the on-site areas previously disturbed during site preparation, plant construction and previous plant operation.

Licensing Board; or (2) a significant change in effluents or power level (in accordance with 10 CFR Part 51.5(b)(2)); or (3) a matter not previously reviewed and evaluated in the documents specified in (1) of this Subsection, which may have a significant adverse environmental impact.

The licensee shall maintain records of changes in facility design or operation and of tests and experiments carried out pursuant to this Subsection. These records shall include a written evaluation which provides bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question.

Activities governed by Section 3.3 of this EPP are not subject to the requirements of this section.

3.2 Reporting Related to the NPDES Permit and State Certification
(pursuant to Section 401 of the Clean Water Act)

1. Violations of the NPDES Permit or the State 401 Certification Conditions shall be reported to the NRC by submittal of copies of the reports required by the NPDES Permit or State 401 Certification.
2. The licensee shall provide the NRC with a copy of any 316(a) or (b) studies and/or related documentation at the same time it is submitted to the permitting agency.
3. Changes and additions to the NPDES Permit or the State 401 Certification shall be reported to the NRC within 30 days following the date the

change is approved. If a permit or certification, in part or in its entirety, is appealed and stayed, the NRC shall be notified within 30 days following the date the stay is granted.

4. The NRC shall be notified of changes to the effective NPDES Permit proposed by the licensee by providing NRC with a copy of the proposed change at the same time it is submitted to the permitting agency. The licensee shall provide the NRC a copy of the application for renewal of the NPDES Permit at the same time the application is submitted to the permitting agency.

3.3 Changes Required for Compliance with Other Environmental Regulations

Changes in plant design or operation and performance of tests or experiments which are required to achieve compliance with other Federal, State, or local environmental regulations are not subject to the requirements of Section 3.1.

4.0 Environmental Conditions

4.1 Significant Environmental Events

Any occurrence of a significant event that indicates or could result in significant environmental impact causally related to station operation shall be recorded and promptly reported to the NRC within 24 hours followed by a written report within 30 days. No routine monitoring programs are required to implement this condition.

The written report shall (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact and plant operating characteristics, (b) describe the probable cause of the event, (c) indicate the action taken to correct the reported event, (d) indicate the corrective action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems, and (3) indicate the agencies notified and their preliminary responses.

Events reportable under this subsection which also require reports to other Federal, State or local agencies shall be reported in accordance with those reporting requirements in lieu of the requirements of this subsection. The NRC shall be provided a copy of such report at the same time it is submitted to the other agency.

The following are examples of significant environmental events: excessive bird impaction events; onsite plant or animal disease outbreaks; mortality or

unusual occurrence of any species protected by the Endangered Species Act of 1973; unusual fish kills; and increase in nuisance organisms or conditions.

4.2 Aerial Remote Sensing

Vegetative communities of the site and vicinity within 2 kilometers of the cooling towers in all directions shall be aerially photographed to detect and assess the significance of damage, or lack thereof, as related to cooling tower drift dispersions. Photography shall be done by aerial overflight during July or August. Monitoring shall include a program of low altitude color infrared photography. The scale for full coverage shall be adequate to enable identification of vegetative damage over relatively small areas of terrain. Some circumstances may warrant inspection of photographs discerning individual trees. Such scale should be adequate to resolve impacted features. Photographs shall be compared with baseline to ascertain changes in vegetation. Photographic interpretations shall be verified by ground inspection surveys to confirm areas of stress and non-stress. This program shall require aerial photographic monitoring during the first July-August period after the station has been at greater than 50% operation for one year and the program shall be repeated once the following year and alternate years for three (3) additional periods. A report shall be submitted within 90 days following each aerial photographic monitoring period. The report shall contain a description of the program results, and interpretative analyses of environmental impacts. Results reported shall contain information encompassing but not limited to the following: sampling data; time of day; film types; and one (1) set of resultant color transparencies encompassing an area within approximately a two kilometer (2 km) radius of the cooling towers.