

Resolution No. 138

WHEREAS, The Skagit Nuclear Power Project Site Certification Agreement Condition III.D.1 requires the Puget Sound Power and Light Company (Puget) to develop soil erosion control requirements in consultation with the Council, and

WHEREAS, On January 20, 1978 Puget did submit to the Council a proposal for said requirements entitled "General Erosion Control Requirements," and

WHEREAS, On March 14, 1978 representatives of the Council and Puget did consult and perfect said proposal, and

WHEREAS, On March 27, 1978 Puget did submit a revised proposal properly incorporating the modifications developed in consultation with the Council,

NOW, THEREFORE, BE IT RESOLVED That Puget's "General Erosion Control Requirements (Revision 1)" appended hereto constitutes compliance with the consultation requirements of Condition III.D.1 of the Skagit Nuclear Power Project Site Certification Agreement.

Dated this 27th day of March 1978.

WASHINGTON STATE ENERGY FACILITY
SITE EVALUATION COUNCIL

BY Nicholas D. Lewis
Nicholas D. Lewis
Chairman

ATTEST:

BY William L. Fitch
William L. Fitch
Executive Secretary

APPROVED AS TO FORM:

BY Thomas F. Carr
Thomas F. Carr
Assistant Attorney General

PUGET SOUND POWER & LIGHT COMPANY

SKAGIT NUCLEAR POWER PROJECT

GENERAL EROSION CONTROL REQUIREMENTS

March 1978
(Revision 1)

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1.0 PURPOSE

This document describes the General Erosion Control Requirements that will be implemented during the construction phase of the Skagit Nuclear Power Project and is designed to provide control measures that are consistent with relevant requirements established by referenced documents. The requirements shall be applicable to all construction, both on-site and off-site.

2.0 SCOPE

This document describes the general control measures, and reporting and surveillance requirements that will be utilized for erosion control for the Skagit Project.

3.0 REFERENCES

- (1) U. S. Soil Conservation Service, 1975. Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas. College Park, Maryland.
- (2) U. S. Environmental Protection Agency, 1972. Guidelines for Erosion and Sediment Control Planning and Implementation. EPA-R2-72-015. Washington, D.C.
- (3) U. S. Environmental Protection Agency, 1973. Processes, Procedures, and Methods to Control Pollution Resulting From All Construction Activity. EPA 430/9-73-007. Washington, D.C.
- (4) U. S. Environmental Protection Agency, 1975. Logging Roads and Protection of Water Quality. EPA 910/9-75-007. Region X, Seattle.
- (5) State of Washington, 1977. Skagit Nuclear Power Project Washington State Site Certification Agreement. Olympia, Washington.
- (6) Puget Sound Power & Light Company, 1974. Skagit Nuclear Power Project Environmental Report. Bellevue, Washington.
- (7) Puget Sound Power & Light Company, 1974. Application for Washington State Site Certification; 74-1. Bellevue, Washington.
- (8) State of Washington, 1977. Standard Specifications for Road and Bridge Construction. Olympia, Washington.

4.0 CONTROL MEASURES

4.1 Clearing, Grubbing, and Stripping

- (1) To minimize construction impacts, equipment use and access shall be limited to the construction area. The contractors shall inform all personnel of the limits of his construction areas and provide means to control access outside of the areas.

- (2) Careful control and discretion shall be exercised to preserve all vegetation not specified for removal, such as in buffer zones, in transmission corridors, and along streams and roadways. Specifically, the limits of clearing should be clearly marked.
- (3) Clearing shall not be performed within 200 feet of Wiseman, Tank, and Black Creeks except where specifically required for construction of facilities, designated crossing locations, or modification of the drainage. |1
- (4) Small trees, brush, and other debris shall be shredded for use as mulch, placed in the designated disposal areas, burned, or disposed of off-site at authorized dumping locations. |1
On-site slash burning is prohibited during air pollution episodes and shall be limited to four clean and high stacks at any time. |1
- (5) Stripping shall be confined to limited areas and scheduled with cutting and filling activities so that stripped areas can be promptly graded to increase on-site retention of precipitation. |1
- (6) Temporary interceptor ditches, small dikes placed to create small water retention ponds, hydroseeding, burlap, terracing, and mulching of exposed soil, shall be used as appropriate to minimize erosion and to control runoff.
- (7) Temporary culverts or bridge structures shall be installed at locations of frequent crossings. Crossings of drainages containing surface-water runoff shall be limited to designated locations. Only minimal fording by equipment necessary for construction of culverts and bridges shall be permitted. Construction of these structures shall be accomplished during the period of May 31 and September 15. |1

4.2 Excavation

- (1) Ditches shall be constructed at the top and at the base of slopes as necessary to intercept and control runoff from the slopes. |1
- (2) Temporary erodible slopes that will be exposed for significant time periods (such as two weeks or more when rainfall is expected) shall be covered with straw, mulch, fabric, plastic, or other suitable material to minimize the erosive effects. Additional measures, if required, may include benching, track-walking, and contour furrowing. |1
- (3) Straw bales or other means shall be used as necessary, as check dams in long trench sections, to reduce runoff water velocity. |1
- (4) Water that has accumulated in excavations shall be drained to the nearest sediment retention facility or similar control facility. |1

(5) Haul roads and exposed soil excavations shall be sprayed with water routinely during dry conditions for dust control. | 1

(6) Ditches shall be lined, riprapped, or revegetated as necessary. | 1

4.3 Fill Placement

(1) Small temporary ditches shall be constructed around the tops of filled areas and interceptor ditches shall be constructed at the bottom of fill slopes to control surface water runoff. | 1

(2) Temporary ditches shall be used to drain fill areas where necessary.

(3) Temporary erodible slopes, draining to sediment retention facilities, that will be exposed for significant time periods (such as two weeks or more when rainfall is expected) shall be covered with mulch, straw, plastic sheets, fabric, or other suitable material to minimize erosive effects. | 1

(4) Final fill slopes shall be graded to specified inclinations, contour furrowed, track-walked, or terraced, and riprapped, mulched, reseeded, or revegetated as promptly after completion as possible. | 1

(5) Trench backfill surfaces and adjacent areas shall be mulched and revegetated as soon after completion of backfilling as practicable. | 1

(6) Fill materials shall be properly compacted and sprinkled with water to control dust. | 1

(7) Rock or other suitable material shall be placed, as required, as riprap in diversion channels, at the toe of slopes, and in other locations exposed to running water or wave erosion. Care shall be exercised during preparation of the ground surface and placement of riprap material to minimize erosion and siltation. | 1

(8) Straw bales or other means shall be used as necessary, as check dams in long trench sections to reduce runoff water velocity. | 1

(9) All temporary erodible slopes not draining to sediment retention facilities shall be compacted by track-walking or equivalent after each lift, not to exceed twelve (12) inches. | 1

(10) Temporary erodible slopes that do not drain to sediment retention facilities that will be exposed for significant time periods (such as 72 hours or more when rainfall is expected) shall be covered with mulch, straw, plastic sheets, fabric, or other suitable material to minimize erosive effects. | 1

4.4 Stream Diversions and Drainage Crossings

(1) Diversion channels shall be excavated and diversion of water into new channels should be accomplished in accordance with Corps of Engineers permits, where applicable. | 1

- (2) Construction of diversions and temporary and permanent crossing structures, and fording of creeks, shall be scheduled (within the time frame of May 31 and September 15) to minimize adverse effects on fish production. | 1
- (3) Equipment shall use only designated crossings for drainages containing water.
- (4) Temporary culverts or bridge structures shall be installed at locations of frequent stream or water-filled drainage crossings.
- (5) Culverts installed at creek crossings will be installed with minimum disturbance of adjacent areas. Upon completion, means will be used to prevent siltation and erosion.
- (6) Culverts shall be of sufficient length to prevent erosion of fill near the entrance and discharge of the culverts. | 1
- (7) Intake and outlet structures, riprapping, baffling, and/or channel lining shall be provided to prevent scour of the drainage channel. | 1
- (8) Temporary culverts and bridges shall be removed when frequent crossings are no longer needed. Access roads which will have infrequent future use, such as those for transmission corridors, should be improved at drainage crossings by grading and gravel placement to provide stable fording. | 1
- (9) Abandoned drainage crossings shall be regraded to as close to natural conditions as practicable and exposed ground revegetated. | 1

4.5 Final Grading

- (1) The top of fill areas and cuts shall be sloped or bermed so that surface water is directed to drainage ditches or storm drains and not permitted to run down unprotected side slopes. | 1
- (2) Soil slopes shall be terraced or contour furrowed to retain as much water on the slopes as possible. | 1
- (3) Final grading and topsoil placement shall be accomplished as soon as practicable after excavation and fill placement are completed. | 1

4.6 Final Revegetation

- (1) Seeding, mulching, and planting shall be performed as soon as practicable after completion of site regrading in each area. | 1
- (2) Disturbed areas shall be covered with topsoil, seeded, and landscaped to be compatible with terrain and nearby natural features. | 1
- (3) Revegetated areas shall be monitored by Puget to determine success or need for additional treatment.

4.7 Access Routes

- (1) Care should be exercised in constructing fill side slopes where access road and rail line embankments cross Wiseman Creek and other creeks. Slopes shall be protected with suitable materials. | 1
- (2) Drainage ditches shall be constructed to intercept and control runoff. | 1
- (3) Temporary haul and access roads shall be surfaced with gravel or sprinkled with water to reduce erosion, control dust, and improve trafficability. | 1
- (4) Temporary haul and access roads no longer required shall be regraded and revegetated to be consistent with surrounding topography.

4.8 Water Supply and Discharge

- (1) Clearing, grubbing, and grading of Ranney Collector sites shall be performed in a manner that prevents sediment-laden water from reaching the Skagit River. | 1
- (2) Diversion and retention systems shall be provided as necessary to prohibit excess water draining from material excavated at Ranney Collector sites from flowing directly into the Skagit River. | 1
- (3) Stockpiles of excavated material shall be placed or protected so that runoff does not drain directly into streams. | 1
- (4) Silt laden ground water accumulations removed from pipeline trenches or Ranney Well excavations during construction shall be directed away from stream channels.
- (5) After pipe installation and trench backfill, creek channels shall be restored as nearly as possible to their original configuration. Reconstructed channels should be lined with light riprap or gravel as necessary to protect against erosion. | 1
- (6) Excess material excavated during installation of the discharge system shall be disposed of at an approved landfill site.

5.0 REPORTING

In accordance with Article III.D.3 of reference 5, Puget will notify the Executive Secretary, EFSEC, and others, as deemed appropriate, of the occurrence or likely occurrence of any previously unforeseen water erosion problem and of the corrective actions taken or to be taken.

6.0 SURVEILLANCE

Puget will maintain environmental surveillance during construction activities via the Conservation and Environmental Affairs Department's Environmental Control and Surveillance Team. The Environmental Control and Surveillance Team shall prepare and maintain periodic inspection reports, noting any discrepancies from established environmental control measures.