DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

HIGH-VOLTAGE TRANSMISSION FACILITIES IN WASHINGTON

Executive Summary

March 2025

This Page Intentionally Left Blank

Table of Contents

EXECUTIVE SUMMARY **ES-1**

ES 1.0 INTRODUCTION **ES-1**

ES 1.1 Action Alternative ES-2

ES 1.2 No Action Alternative ES-2

ES 1.3 Cumulative Impacts ES-2

ES 2.0 BACKGROUND **ES-3**

ES 2.1 Purpose and Need ES-3

ES 2.2 Decisions to Be Made ES-5

ES 2.3 Scope of Analysis ES-6

ES 2.4 Decision Tree ES-7

ES 3.0 RECOMMENDATIONS FROM THIS DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT **ES-11**

ES 4.0 SUMMARY OF IMPACTS **ES-11**

TABLES

Table ES-1: Summary of Impacts for all Elements of the Environment ES-12

FIGURES

Figure ES-1: Study Area ES-7

Figure ES-2: Decision Tree ES-9

This Page Intentionally Left Blank

EXECUTIVE SUMMARY

The Washington Energy Facility Site Evaluation Council (EFSEC) is undertaking a broad evaluation of the potential environmental, cultural, and economic impacts of the construction, operation and maintenance, and upgrade or modification of electrical transmission facilities with a nominal voltage of 230 kilovolts (kV) or greater (transmission facilities) throughout the State of Washington. This analysis is being considered to improve and expand the planning of transmission facilities in response to Senate Bill (SB) 5165, codified in Washington as Revised Code of Washington (RCW) 43.21C.405 and signed by Governor Inslee on May 3, 2023, becoming effective July 23, 2023.

ES 1.0 INTRODUCTION

This Draft Programmatic Environmental Impact Statement (EIS) analyzes transmission facilities at a high level—not individual projects—to identify any common impacts, probable significant adverse environmental impacts, and measures to avoid, minimize, and mitigate probable significant adverse environmental impacts. "Impacts" are the effects or consequences of actions (Washington Administrative Code [WAC] 197-11-752) on the elements of the environment identified.

As directed by the Washington State Legislature in RCW 43.21C.405, this Draft Programmatic EIS analyzes potential direct, indirect, and cumulative impacts of the construction, operation and maintenance, and upgrade or modification of transmission facilities in the State of Washington. The Draft Programmatic EIS includes an analysis of potential impacts on the elements of the natural and built environment specified under WAC 197-11-444. It contains a comprehensive evaluation of impacts and identifies standard mitigation measures for the following topics:

- Earth Resources (including seismic hazards)
- Air Quality (including greenhouse gases)
- Water Resources
- Vegetation
- Habitat, Wildlife, and Fish
- Energy and Natural Resources
- Public Health and Safety
- Land and Shoreline Use (including military, agricultural, and ranching uses)
- Transportation
- Public Services and Utilities
- Visual Quality
- Noise and Vibration
- Recreation
- Historic and Cultural Resources (including Tribal rights, interests, and resources)
- Socioeconomics (including Environmental Justice and Overburdened Communities)[1]

[1] Although not listed among the elements of the environment in WAC 197-11-444, socioeconomics was added to the list of elements analyzed to reflect information on potential socioeconomic impacts provided in response to WAC 463-60-535.

In accordance with the Washington State Environmental Policy Act (SEPA), this Draft Programmatic EIS weighs the likelihood of occurrence of various impacts with the anticipated physical setting, magnitude, and duration of each impact (WAC 197-11-794) and considers several factors when analyzing potential impacts.

This Draft Programmatic EIS presents an analysis of impacts for three assumed project phases—construction, operation and maintenance, and upgrade or modification—and examines the Action Alternative and a No Action Alternative.

ES 1.1 Action Alternative

Under the Action Alternative, this Draft Programmatic EIS analyzes the potential impacts of transmission facilities and contributes to understanding the landscape-scale context of impacts from transmission facility development in Washington. The purpose of the Action Alternative is to identify common impacts and identify, analyze, and adopt, as appropriate, potential mitigation measures to be applied to transmission facilities so that project-specific reviews can focus on project impacts that could not be analyzed in this Programmatic EIS and that require additional analysis and review or coordination with other stakeholders.

This Draft Programmatic EIS would guide the development of project-specific applications for transmission facilities. The Action Alternative creates a phased strategy for the SEPA review process. It provides transmission developers with an opportunity to incorporate the mitigation identified in the Programmatic EIS into their projects during the planning stages and prior to submitting applications to SEPA Lead Agencies for review. Applicants' incorporation of this guidance would maximize the utility of the Programmatic EIS and would reduce the time needed for environmental review by SEPA Lead Agencies, as the Programmatic EIS would serve as the first phase of a phased SEPA review prior to the Lead Agencies' evaluation of individual project proposals.

ES 1.2 No Action Alternative

SEPA requires the analysis of a No Action Alternative. Under the No Action Alternative for this Draft Programmatic EIS, the SEPA Lead Agency for each proposed transmission project would continue the current process of review and management of transmission development under approved land use plans, SEPA, and regulations for transmission.

The impacts associated with the Action Alternative and the No Action Alternative are described quantitatively herein if sufficient data or information is available to do so. In cases where detailed information is not available, and such information is not essential to determining the level of adverse environmental impacts, impacts are described qualitatively. To determine potential impacts, this analysis considers existing laws and regulations, best management practices, and typical design considerations.

ES 1.3 Cumulative Impacts

The analysis of impacts from transmission facilities on the environment and resources may not be significant when considered alone, but when considered in combination with the impacts of reasonably foreseeable, past, and present actions, can result in a significant impact on the environment and resources of concern. SEPA requires that SEPA Lead Agencies address cumulative impacts.

Cumulative impacts are the combined result of incremental direct and indirect impacts on resources of concern from a project and past, present, and reasonably foreseeable actions. Reasonably foreseeable actions generally include actions that are currently underway, formally proposed or planned, or highly likely to occur based on available information. These actions, when combined with the impacts of a specific project, can lead to significant

cumulative effects on the environment and resources of concern. The cumulative effects of past projects and actions are not individually identified but are addressed in the Affected Environment for each resource discussed in Chapter 3.

ES 2.0 BACKGROUND

The Washington State Legislature passed the Clean Energy Transformation Act (CETA) in 2019, which requires Washington's electric utilities to meet 100 percent of their retail electric load using non-emitting and renewable resources by January 1, 2045; eliminate coal-fired resources from their allocation of electricity by December 31, 2025; and make all retail sales of electricity greenhouse gas–neutral by January 1, 2030. The Legislature found that the electric power system serving Washington would require additional high-voltage transmission capacity to achieve the state's objectives and legal requirements. Consistent with Section 25 of CETA, EFSEC convened a Transmission Corridors Work Group.

The TCWG provided a Cover Letter and Final Report to Governor Inslee and the appropriate legislative committees on August 1, 2022 (EFSEC 2022a, 2022b). The Final Report identifies recommendations to guide transmission facility development in the state, while the Cover Letter summarizes the TCWG's work completed to date. The Cover Letter highlights the following key points that emerged from the work of the TCWG:

- Regional and interregional planning
- Staff resources in state agencies
- Enhanced resources for Tribes
- Pre-application planning and coordination

The Legislature anticipated the crucial role of additional transmission capacity in Washington and passed SB 5165 to align the needs of utility providers with CETA and enhance electric transmission planning. SB 5165 was codified into RCW 43.21C.405 and RCW 43.21C.408. EFSEC was also instructed to prepare nonproject environmental reviews, also known as Programmatic EISs, pursuant to RCW 43.21C.030. The purpose of the Programmatic EISs is to assess and disclose any probable significant adverse environmental impacts and identify related mitigation measures for transmission facilities in Washington. This Draft Programmatic EIS provides this requested analysis for two options (e.g., overhead and underground) and multiple phases of transmission facility development (e.g., construction, operation and maintenance, and upgrade or modification). Additional nonproject environmental reviews could be completed for areas identified as outside the scope of this Draft Programmatic EIS, if additional data becomes available.

ES 2.1 Purpose and Need

Washington State needs more transmission infrastructure for several reasons, including population growth, renewable energy integration, grid reliability and resilience, and economic growth. Expanded transmission capacity and modifications that make existing transmission capacity more effective would benefit electricity consumers in the state by making the electric power system more reliable and increasing access to more affordable sources of electricity in the state and across the western United States and Canada.

Existing constraints on transmission capacity within the state already present challenges in ensuring adequate and affordable supplies of clean electricity. Of particular concern is the capability of the transmission system to deliver clean electricity to and within the central Puget Sound area.

Transmission projects typically take at least a decade to develop and permit. This timing presents particular challenges for achieving the state's greenhouse gas emissions reduction mandates, which include ambitious benchmarks starting in 2030. There is a need to accelerate the timeline for transmission development while still protecting other Washington values, including land use, environmental protection, and Tribal rights.

Several factors contribute to the challenge of making timely and cost-effective expansions of high-voltage transmission systems. Transmission planning must reflect not just the requirements to connect individual generating resources to the grid but also the need to transfer electricity across the state and the West as a region. Transmission planning must incorporate state policies and laws in planning objectives.

The following principles recommended by the TCWG were considered in helping to expedite environmental review and permitting without compromising protections. These principles provide foundational, solution-oriented direction throughout transmission system development:

1. *Align and coordinate process, timing, and analysis methodologies within and across National Environmental Policy Act (NEPA) and other federal laws, and State Environmental Policy Act (SEPA) during project planning.*
2. *Use EFSEC for cross-jurisdictional long-range transmission projects.*
3. *Identify opportunities for federal and state programs to establish programmatic permitting agreements for transmission projects.*
4. *Identify specific geographic areas for siting transmission within corridors where additional transmission capacity is needed to meet the goals of CETA, as part of regional planning for grid-critical transmission investments/projects.*
5. *Approach expediting review and permitting with the primary goal of avoiding cultural resource impacts in transmission corridors.*
6. *Invest in proactive and meaningful Tribal consultation.*
7. *Invest in relationship-building between project developers and Tribes.*
8. *Look for a "win" for Tribes and cultural resources.*
9. *Leverage the expertise of the Department of Archaeological and Historic Preservation (DAHP).*
10. *Increase funding to Tribes and DAHP to reduce staffing constraints that impede and slow Tribal cultural resources review and completion of ethnographic studies.* (EFSEC 2022a)

This Draft Programmatic EIS serves several important purposes, including the following:

- **Provide a Broad Environmental Impact Assessment:** It presents a comprehensive evaluation of environmental impacts associated with transmission facility development at a broad level throughout Washington, rather than focusing on specific sites or corridors.
- **Facilitate Streamlined Planning:** It assesses common impacts and mitigation strategies early in the planning stage, which helps to streamline review and approval processes for individual transmission facility projects in the future. Streamlining the process can save time and resources for both developers and regulatory agencies.

- **Support Informed Decision-Making:** It provides information that can help developers understand impacts up front and make initial siting[2] and design[3] choices that could avoid or minimize impacts at earlier phases of project consideration, potentially expediting the permitting timeline for future transmission facility development.
- **Identify Mitigation Strategies:** It identifies effective avoidance, minimization, and mitigation measures[4] to address adverse environmental impacts, which can be applied to future transmission facility projects that fall within the scope of this Draft Programmatic EIS.
- **Initiate Public and Stakeholder Engagement:** It provides an up-front platform for public and stakeholder input, ensuring that community concerns and interests are considered early in the planning process.

Overall, this Draft Programmatic EIS helps facilitate the development and review of transmission infrastructure in an environmentally responsible and efficient manner.

ES 2.2 Decisions to Be Made

This Draft Programmatic EIS, when finalized, is designed to provide a broad environmental review for future project decisions. This Draft Programmatic EIS evaluates the potential environmental impacts of transmission facilities at a high level, rather than focusing on specific projects. Once finalized, a SEPA Lead Agency reviewing a project-specific application for an electrical transmission facility would decide to do one of the following:

- **Adopt** the Programmatic EIS, whereby an agency determines to use the Programmatic EIS unchanged, if the project-specific proposal would not cause probable significant adverse environmental impacts beyond those identified in this Programmatic EIS.
- **Prepare an addendum,** whereby an agency adopts the Programmatic EIS in full but adds minor analyses or information about a project-specific proposal that would not contribute any new or increased probable significant adverse environmental impacts to those identified in the Programmatic EIS.
- **Incorporate** the Programmatic EIS by reference, whereby an agency preparing an environmental document includes all or part of this Programmatic EIS by reference in their SEPA review.
- **Prepare a supplemental EIS,** whereby an agency adopts the Programmatic EIS in full but identifies and assesses substantial impacts or mitigation that have not been addressed in the Programmatic EIS.

SEPA allows for non-project reviews to provide a comprehensive analysis of potential environmental impacts for plans, policies, or programs. The SEPA Lead Agency is still required to conduct a project-specific environmental review even if a non-project environmental review has been conducted. This additional project-specific environmental review would particularly address any impacts or mitigation measures that were not adequately covered in the non-project review. This ensures that all significant environmental impacts are thoroughly evaluated and mitigated, providing a more detailed and focused analysis for individual projects.

[2] Siting involves identifying and evaluating potential routes for transmission facilities.

[3] Design involves the detailed planning of the transmission infrastructure.

[4] WAC 197-11-768 outlines the concept of mitigation in the context of environmental impact. Mitigation includes 1. Avoiding the impact, 2. Minimizing impacts, 3. Rectifying the Impact, 4. Reducing or eliminating the impact, 5. Compensating for the impact, and 6. Monitoring the impact.

ES 2.3 Scope of Analysis

EFSEC has determined that the *Planning Area* of this Draft Programmatic EIS will include the entire State of Washington. The *Study Area,* or geographic scope, includes all lands across Washington except for those covered by the exclusion criteria identified in Table 1.4-1 in Chapter 1, Introduction.

The scope of the Draft Programmatic EIS is limited to the probable, significant adverse environmental impacts in geographic areas suitable for the electrical transmission facilities with a nominal voltage of 230 kV or greater. As directed by the RCW 43.21C.405, the Draft Programmatic EIS is not required to evaluate geographic areas that lack the characteristics necessary to support electrical transmission facilities with a nominal voltage of 230 kV or greater.

The following areas will be excluded from the geographic scope of study for this Draft Programmatic EIS:

- Undersea or oceanic transmission[5]
- Tribal reservation lands[6]

Figure ES-1 shows the geographic scope, or Study Area, for this Draft Programmatic EIS. A full-sized figure representing the Study Area, Figure 1.5-1, is provided in Chapter 1, Introduction.

[5] Programmatic EIS documents address broad, overarching policies, plans, or programs rather than specific projects. Sea cables are considered to be too specific or detailed for the broad focus of this nonproject review. Additionally, sea cables, especially those that cross international water or state boundaries, may fall under different regulatory frameworks or jurisdictions, thus requiring separate, more specific environmental reviews. Lastly, the environmental impacts and technical considerations of sea cables can be significantly different from those of land-based transmission facilities. These differences might necessitate a distinct, focused EIS to adequately address the unique challenges and impacts.

[6] For the purposes of this scoping document, Tribal lands are not included in the Study Area. EFSEC will communicate with each Tribe that has reservation lands in the general scoping area, and if a Tribe chooses to include their lands, those lands will be added to the Study Area for the Final Programmatic EIS. Tribal lands are sovereign territories, and decisions regarding their use typically fall under the jurisdiction of the respective Tribal Government. Tribal lands often have their own regulatory processes and environmental review requirements, which may differ from state or federal processes. Federal agencies are required to engage in government-to-government consultation with Tribes. This process ensures that Tribal concerns and perspectives are adequately addressed.

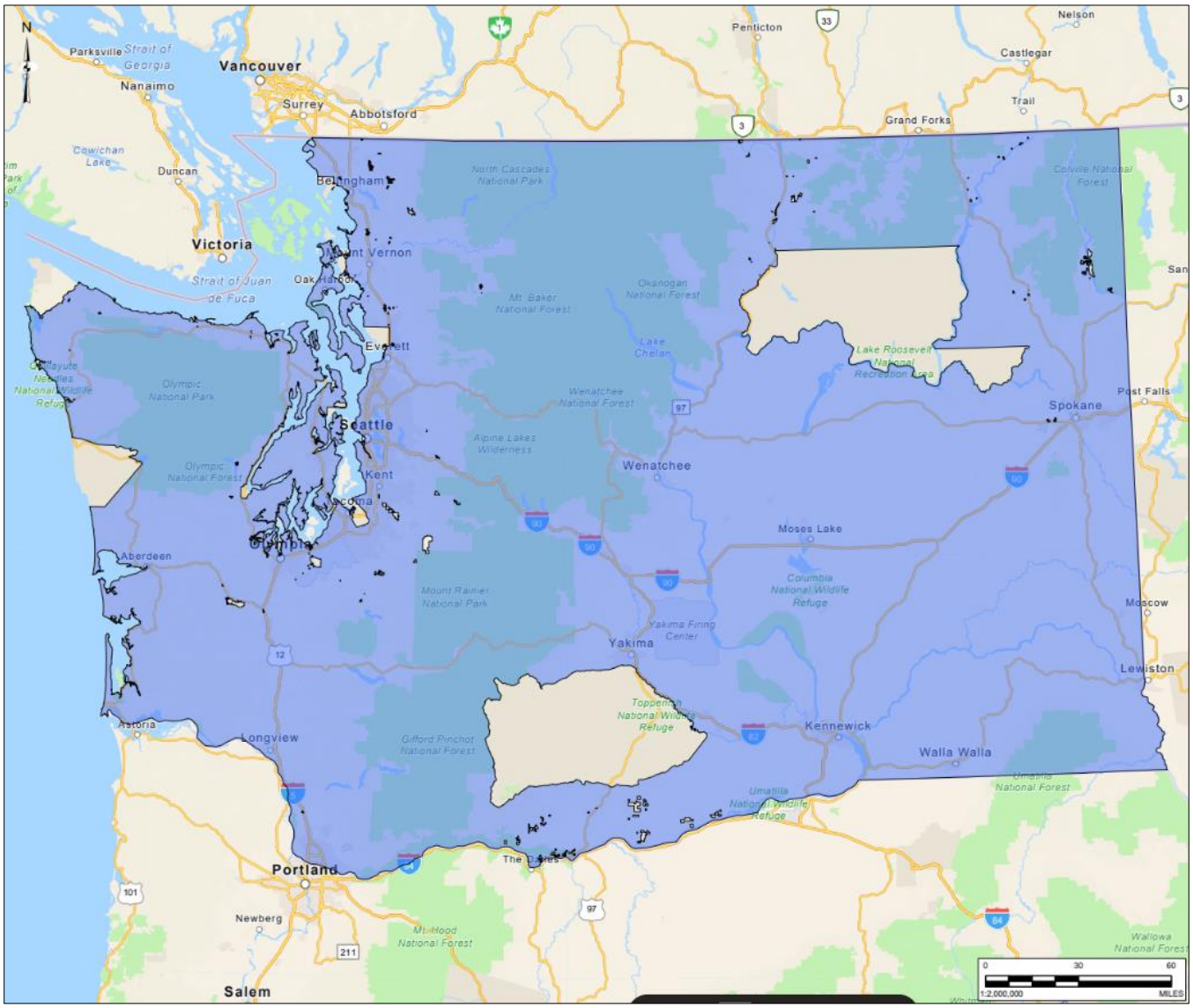


Figure ES-1: Study Area

ES 2.4 Decision Tree

Environmental reviews often involve complex decisions with multiple variables. A decision tree is a visual tool used to guide decision-making processes by outlining a series of questions and corresponding actions or outcomes. It helps users navigate complex regulations, policies, or procedures by breaking them down into manageable steps.

The decision tree is provided in **Figure ES-2** and discussed further in Chapter 1, Introduction. The decision tree breaks down into manageable steps how this Draft Programmatic EIS can be considered in project reviews. Because transmission facilities must connect two or more locations in a safe and reliable manner across the entire length of the project, agency authorizations can be streamlined so that environmental and regulatory considerations can also be simultaneously addressed over the entire length of the project. Within existing laws and regulations, it is possible to simplify the state authorization for transmission facilities.

RCW 43.21C.408 requires that the SEPA Lead Agency conducting a project-level environmental review of an electrical transmission facility with a nominal voltage of 230 kV or greater must consider the nonproject EIS completed pursuant to RCW 43.21C.405. This Draft Programmatic EIS, once finalized, represents the nonproject EIS. It is the intent of this Programmatic EIS to identify the SEPA steps for the SEPA lead agency to expedite the application process for transmission facility projects in Washington. To highlight the opportunities for efficiency gained by applicants, the SEPA review process anticipated by the SEPA Lead Agency has been identified in a decision tree.

In this Draft Programmatic EIS, general conditions and avoidance criteria were identified based on the affected environment and impact analysis. By incorporating these two assumptions into the baseline analysis, this Draft Programmatic EIS provides a framework for understanding and managing probable significant adverse environmental impacts of projects at a broader scale. This approach helps ensure that environmental protection measures are considered from the outset and are integrated into the planning and decision-making process while offering a consistent understanding of what impacts may require project-specific environmental review and mitigation outside the scope of this Draft Programmatic EIS.

Chapter 3 weighs the potential impacts on elements of the environment that would result from transmission facility development after considering the application of laws and regulations; siting and design considerations, including agency guidance and BMPs; general conditions, and avoidance criteria resulting in an impact determination. General conditions and avoidance criteria are designed to reduce the time and resources needed for subsequent project-specific environmental review, allowing developers and planners to better anticipate regulatory requirements. All general conditions, avoidance criteria, and mitigation measures are provided in Appendix 3.1-1.

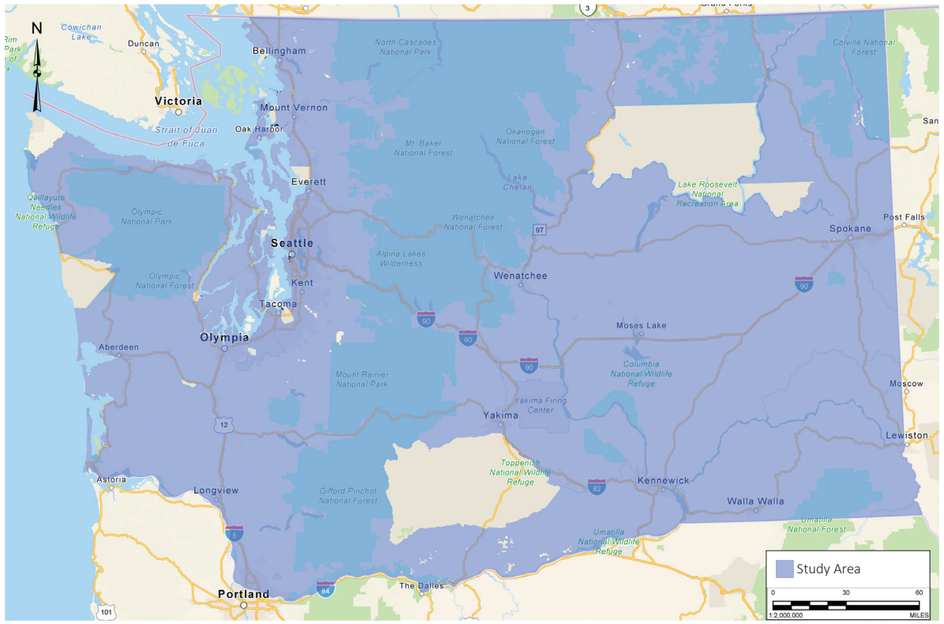
STEP 1

Determine if the project-specific application fits the definition of a **transmission facility**[1] analyzed within the prescribed Study Area[2] of this Programmatic EIS.

NO
Follow applicable SEPA environmental review and permitting processes.

The SEPA Lead Agency would conduct an environmental review in accordance with Chapter 43.21C RCW and Chapter 197-11 WAC for the project-specific application and make a SEPA Threshold Determination.

Regarding this Programmatic EIS, the SEPA Lead Agency could **INCORPORATE BY REFERENCE.**



STEP 2

YES | Would the project-specific application have a federal nexus?

YES
Federal environmental review processes (e.g., NEPA) apply, which would include coordination with EFSEC for environmental review.

Regarding this Programmatic EIS, the SEPA Lead Agency could:

- Adopt the NEPA document as part of their SEPA environmental review process and documentation. **Proceed to Step 3**. *OR*
- Incorporate the NEPA document by reference and complete a separate SEPA analysis. **Proceed to Step 3**.

STEP 3

NO
STEP 3.1
Does the project comply with all state, federal, and local regulations[3]?

NO | This Programmatic EIS did not analyze this scenario.
THE FOLLOWING IS REQUIRED:
- **APP** Identify the regulations that cannot be followed and provide an explanation.
- ***SLA*** Complete additional environmental review and identify mitigation.[3, 7]

Proceed to Step 3.2.

YES
STEP 3.2
Are design considerations and BMPs[3] accounted for in the design of the project-specific application?

NO | This Programmatic EIS did not analyze this scenario.
THE FOLLOWING IS REQUIRED:
- **APP** Identify the design considerations and BMPs[3] that are not proposed as part of the project-specific application and provide an explanation.
- ***SLA*** Complete additional environmental review and identify mitigation.[3, 7]

Proceed to Step 3.3.

YES
STEP 3.3
Would the project comply with the identified **general conditions**[4] within this Programmatic EIS?

NO | This Programmatic EIS did not analyze this scenario.
THE FOLLOWING IS REQUIRED:
- **APP** Identify the general conditions that are not complied with and provide an explanation.
- ***SLA*** Complete additional environmental review and identify mitigation.[3, 7]

Proceed to Step 3.4.

YES
STEP 3.4
Does the project comply with the identified **avoidance criteria**[5] within this Programmatic EIS?

NO | This Programmatic EIS did not analyze this scenario.
THE FOLLOWING IS REQUIRED:
- **APP** Identify avoidance criteria that are not complied with and provide an explanation.
- ***SLA*** Complete additional environmental review and identify mitigation.[3, 7]

Proceed to Step 3.5.

YES
STEP 3.5
Are all probable significant adverse environmental impacts of the project identified and analyzed in this Programmatic EIS?

NO | This Programmatic EIS did not analyze this scenario.
THE FOLLOWING IS REQUIRED:
- ***SLA*** Identify and complete additional environmental review for probable significant adverse environmental impacts not analyzed in this Programmatic EIS and identify mitigation.[3, 7]

Proceed to Step 3.6.

YES
STEP 3.6[6]
Has the applicant committed to the **mitigation**[7] **measures**[3] identified within this Programmatic EIS associated with moderate or high impacts?

NO | This Programmatic EIS did not analyze this scenario.
THE FOLLOWING IS REQUIRED:
- **APP** Identify the mitigation[7] measures[3] that are not proposed as part of the project and provide an explanation.
- ***SLA*** Complete additional environmental review and identify mitigation.[3, 7]

Proceed to Step 4.

YES | **Proceed to Step 4**.

STEP 4[6]

The ***SLA*** has the responsibility to determine the appropriate level and type of environmental review for each project-specific application:

STEP 4.1
ADOPT the Programmatic EIS without the need for an addendum or supplemental analysis. This indicates that there are no additional project-specific details or analyses of impacts that should be recorded in the SEPA documentation.

OR

STEP 4.2
PREPARE A ADDENDUM, in addition to adopting the Programmatic EIS, that adds analyses or information about the project but does not substantially change the analysis of significant impacts and alternatives addressed in this Programmatic EIS.

OR

STEP 4.3
PREPARE A SUPPLEMENTAL EIS, in addition to adopting the Programmatic EIS, that adds new analyses or information related to probable significant adverse environmental impacts of the project that have not been addressed in this Programmatic EIS. This may include project-specific impacts that were not identified in this Programmatic EIS or that were identified in this Programmatic EIS, but are determined by the SEPA Lead Agency through project-specific environmental review to have been insufficiently evaluated.

OR

STEP 4.4
INCORPORATE BY REFERENCE if the intent is for the SEPA Lead Agency to produce a full, distinct project-specific EIS.

REFERENCES

SLA	Responsibility of SEPA Lead Agency
APP	Responsibility of Applicant
BMP	Best Management Practice
EIS	Environmental Impact Statement
kV	Kilovolt
NEPA	National Environmental Policy Act
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
WAC	Washington Administrative Code

1 The construction, operation and maintenance, and upgrade or modification of electrical transmission facilities with a nominal voltage of 230kV or greater.

2 For the purposes of this Draft Programmatic EIS, Tribal lands and undersea cables are not included in the Study Area.

3 As applicable to project-specific applications.

4 As used in this Draft Programmatic EIS, a measure that provides a consistent baseline for evaluating the potential impacts of project-specific applications for transmission facility development.

5 Criteria that, when implemented, would narrow the scope of the project-specific environmental review. These broad mitigation measures would be anticipated to avoid otherwise significant impacts for project-specific applications.

6 If all environmental mitigation strategies from this Programmatic EIS have been implemented then mitigation would be deemed sufficient for all probable significant adverse environmental impacts addressed in this Programmatic EIS.

7 A specific step or action taken to address impacts of project development or action.

This Page Intentionally Left Blank

ES 3.0 RECOMMENDATIONS FROM THIS DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Following the preparation of this Draft Programmatic EIS, the following key recommendations were identified to help streamline the process of siting, permitting, and addressing potential challenges for transmission facilities:

1) **Expand Use of the Programmatic EIS:** Agencies could increase the use of this Programmatic EIS for transmission facilities on federal and state land if a memorandum of agreement for coordinating and adopting documents between federal agencies and state agencies was considered and completed.

2) **Enhance Coordination:** Identify and complete the tools necessary to improve coordination between applicants, stakeholders, and agencies.

3) **Stakeholder and Partner Engagement:** Hold additional workshops with stakeholders and partners to increase engagement throughout the process to address concerns and gather input in an effort to help mitigate opposition and delays.

4) **Data and Evidence-Based Decisions:** Identify a mechanism and funding to utilize extensive data compilation and evidence-based recommendations to inform decision-making and overcome barriers to transmission facilities.

5) **Capacity Building:** Ensure that agencies have sufficient capacity and resources to handle the increasing number of projects proposed within the scope of this Programmatic EIS

6) **Environmental and Community Protection:** Balance the need for rapid deployment with the protection of environmental integrity and community interests.

7) **Update Guidance Information, as Appropriate:** As new data or scientific findings become available, the information in the appendices may need to be updated to reflect the most current information. Updates in environmental laws, regulations, or policies may also necessitate changes in guidance to ensure compliance. Feedback from public consultations or stakeholder engagements might highlight areas that require additional information or clarification.

8) **Formally Update the Programmatic EIS:** Periodically update the Programmatic EIS (Supplemental or Addendum) with new information and analyses that has been collected, including review of avoidance criteria to identify possible additional analysis.

9) **Prepare a Subsequent Programmatic EIS:** Prepare a Programmatic PEIS using multiple least-conflict corridors identified by other sources for future transmission development and examining corridor-specific impacts and mitigation.

ES 4.0 SUMMARY OF IMPACTS

This Draft Programmatic EIS comprehensively evaluates the potential environmental, social, and economic impacts of transmission facilities. By identifying adverse impacts, this Draft Programmatic EIS aims to inform decision-makers and stakeholders, ensuring that the implementation aligns with sustainable development goals and regulatory requirements. This analysis underscores the importance of avoidance criteria and mitigation measures to minimize negative consequences while maximizing positive outcomes for the environment and society. **Table ES-1** provides a summary, organized by element of the environment, of the impacts identified and analyzed.

Table ES-1: Summary of Impacts for all Elements of the Environment

Element of the Environment	Potential Impact Analyzed
Earth Resources (Section 3.2)	▪ Alteration of topography and drainage patterns ▪ Increased soil erosion and/or accretion ▪ Compaction of soil ▪ Damage from a geological event or geohazard
Air Quality (Section 3.3)	▪ Increased fugitive dust emissions ▪ Increased emissions from fuel-burning equipment ▪ Increased SF_6 emissions
Water Resources (Section 3.4)	▪ Impacts on water quality, including: – Changes in sedimentation – Changes in water chemistry ▪ Impacts on water quantity, including: – Increased water usage – Altered hydrology – Temporary water diversions – Groundwater extraction ▪ Damage to infrastructure
Vegetation (Section 3.5)	▪ Direct impacts and mortality, including: – Loss of habitat – Loss of species or populations – Loss of ecosystem functionality ▪ Indirect impacts, including: – Introduction or spread of invasive plants or noxious weeds – Surface runoff – Deposition of dust – Introduction of hazardous substances ▪ Fragmentation
Habitat, Wildlife, and Fish (Section 3.6)	▪ Direct habitat loss ▪ Indirect habitat loss ▪ Mortality of species ▪ Barriers to movement ▪ Fragmentation
Energy and Natural Resources (Section 3.7)	▪ Consumption of non-renewable resources ▪ Consumption of renewable resources ▪ Consumption of energy
Public Health and Safety (Section 3.8)	▪ Increase in accidents and injuries ▪ Exposure to hazardous materials ▪ Increased risk of wildfire ▪ Exposure to EMF ▪ Excess heat generation ▪ Inundation of vaults in floodplains

Element of the Environment	Potential Impact Analyzed
Land and Shoreline Use (Section 3.9)	▪ Incompatible land use ▪ Conflict with relevant goals and policies ▪ Loss of function and value of shorelines ▪ Loss of function and value of agricultural lands and rangelands ▪ Conflicts with military utilized airspace and civilian airfield operations
Transportation (Section 3.10)	▪ Impacts on vehicular transportation and infrastructure, including: – Closures and diversions – Increased traffic and increased collision risk – Impacts from access road construction – Impacts on road authority ▪ Impacts on waterborne vessels and infrastructure, including: – Closures and diversions – Increased collision risk – Impacts from infrastructure modification ▪ Impacts on rail transportation and infrastructure, including: – Closures and diversions – Increased collision risk – Impacts on rail stability – Impacts from infrastructure modification ▪ Impacts on air transportation and infrastructure[7], including: – Impacts from airspace restrictions – Increased collision risk – Decreased visibility
Public Services and Utilities (Section 3.11)	▪ Conflicts with existing utility infrastructure ▪ Increased solid waste production ▪ Increased water demand ▪ Increased demand for fire protection services, law enforcement, and emergency responders ▪ Increased emergency response times ▪ Increased risk of power outages at public service facilities
Visual Quality (Section 3.12)	▪ Degradation of scenic natural resources ▪ Degradation of aesthetics ▪ Degradation of night sky
Noise and Vibration (Section 3.13)	▪ Increased noise at sensitive receptors ▪ Increased ground-borne vibration at off-site structures ▪ Hearing loss
Recreation (Section 3.14)	▪ Temporary closure or restricted access ▪ Permanent closure ▪ Increase in use ▪ Change in integrity ▪ Increased risk of wildfire

[7] Section 3.09, Land and Shoreline Use, analyzes impacts on military utilized airspace and civilian airfield operations

Element of the Environment	Potential Impact Analyzed
Cultural and Historic Resources (Section 3.15)	■ Physical impacts on historic and cultural resources ■ Visual impacts on historic and cultural resources ■ Physical impacts on TCPs and Tribal resources ■ Visual impacts on TCPs and Tribal resources
Socioeconomics and Environmental Justice (Section 3.16)	■ Degradation of the natural and built environment, including: – Noise and vibration – Air quality – Visual quality – Land and shoreline use, and recreation ■ Changes in housing availability ■ Changes in home values ■ Changes in fiscal conditions and employment

References

EFSEC (Washington Energy Facility Site Evaluation Council). 2022a. Transmission Corridors Work Group Cover Letter. October 31, 2022. Accessed November 8, 2024. https://www.efsec.wa.gov/sites/default/files/181034/20221031_TCWG%20Cover%20Letter%20from%20EFSEC%20Chair_GovInslee.pdf

EFSEC (Washington Energy Facility Site Evaluation Council). 2022b. Transmission Corridors Work Group Final Report. Accessed November 8, 2024. https://www.efsec.wa.gov/sites/default/files/181034/Final_TCWG_Report%20_2022_0801.pdf