CHELAN COUNTY

Department of Community Development
316 Washington Street, Suite 301, Wenatchee, WA 98801
Telephone: (509) 667-6225

SEPA NOTICE ISSUANCE OF MITIGATED DETERMINATION OF NONSIGNIFICANCE (MDNS)

Project Description: SEPA (PL) 25-139 – an application submitted by Helion Energy, Inc for a comprehensive SEPA review for a fusion energy generation site/project on an 80A portion of a 401A parcel, identified as APN 212205000050 at 1476 Nixon Rapids Ln., Malaga, WA 98828. A SEPA Checklist along with associated Habitat Management and Mitigation Plan (HMMP), Geotechnical engineering and Infiltration Evaluation, Phase I Environmental Assessment, Transportation Technical Memorandum, Drainage Report, Cultural Resources Survey, Threatened and Endangered Species Analysis, Monitoring Schedule, and Decommissioning Estimate, was submitted for a two-phase fusion power generation project to include site grading, 50,000sf parking lot, 1,000' private access road, 6,240sf office building, 26,800sf assembly building, and an approx. 100,000sf fusion generation building along with a 55,000sf on-site substation, both requiring a Conditional Use Permit for a High Impact Utility pursuant to CCC 11.04.020 (District Use Chart), 11.193.180 (Conditional Uses) and 14.98.1915 (Definitions).

File Number: SEPA 25-139

Parcel Number: 21-22-05-000-050

Site Address: 1476 Nixon Rapids Ln, Malaga, WA 98828

Property Owner: Chelan County PUD # 1
203 Olds Station Road
Wenatchee, WA 98801

Applicant: Helion Energy Inc.
1415 75th St. SW
Everett, WA 98203

Lead Agency: Chelan County Department of Community Development

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment that cannot be mitigated. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(c). The decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public upon request.

Findings and Conditions:

a. The applicant submitted an expanded SEPA checklist to include:
- Site Civil Plans
- Phase I Environmental Assessment
- Geotechnical Report
- Trip Generation
- Drainage Report
- Cultural Resources Report with Addendum
- Habitat Management and Mitigation Plan
- Threatened and Endangered Species letter
- Estimated Cost of Decommissioning
- Site Monitoring Schedule

b. The following agencies of jurisdiction were sent the submitted expanded SEPA Checklist and reports/studies identified in (a) above with a request for pre-determination review on May 7, 2025. Agency comments and requested mitigation have been incorporated into this MDNS.
- Chelan County Fire Marshal
- Wenatchee Valley Fire Department
- Chelan Douglas Health District
- Chelan County Public Works
- Chelan County PUD, Real Estate Services
- Washington State Department of Natural Resources
- Washington State Department of Ecology
- Washington State Department of Fish and Wildlife
- Washington State Department of Health
- Malaga Water District
- Wenatchee School District
- City of Wenatchee
- Malaga Community Council
- Washington State Department of Archaeology and Historic Preservation
- Yakama Nation
- Colville Confederated Tribes
- Port of Chelan County
- Bureau of Land Management

c. The SEPA checklist and review included activities not currently approved. The applicant shall apply for a Conditional Use Permit for High Impact Utility to include both the approx. 100,000sf fusion generation building and use, and the approx. 55,000sf onsite substation, pursuant to Chelan County Code, 11.93.180.

d. The applicant shall comply with all recommendations contained within the November 1, 2024 Nelson Geotechnical Associates, Inc, Geotechnical Engineering and Infiltration Evaluation, to include site grading and preparation, subgrade compaction, temporary and permanent erosion control measures (BMPs), temporary and permanent slope stabilization, foundation support, structural fill, slab on grade, pavement/impervious surfaces, and site surface and subsurface drainage. Where monitoring and/or consultation is recommended, the applicant shall provide a certification from a qualified licensed engineer or engineering geologist.

e. If required, the applicant shall provide a transportation impact analysis (TIA) for review and approval by Chelan County Public Works. Recommendations for transportation improvements may become

mandatory if conditioned as part of the Conditional Use Permit for the fusion generation facility.

f. The applicant shall submit for review and approval by Chelan County Public Works, a stormwater and drainage plan which will comply with both the Drainage Report dated January 29, 2025 and the latest edition of the Stormwater Management Manual for Eastern Washington.

g. The applicant is to provide for the perpetual maintenance of all elements of the stormwater system located on-site.

h. A cultural resources report dated March 17, 2025, and an addendum report dated April 14, 2025 were submitted and reviewed by both the Colville Tribe and DAHP. No further archaeological work is recommended. An Inadvertent Discovery Plan has been prepared.

i. The applicant shall comply with all recommendations, mitigation and mitigation sequencing included within the Shrub-Steppe HMMP dated March 26, 2025, prepared by Landau Associates, with the exception of the negotiated change in mitigation ratio of 2:1 for all on-site and off-site shrub-steppe impacts in lieu of the requested spring survey.

j. The applicant shall submit for review and approval:
- Landscaping plan pursuant to Chelan County Code 15.50 (Chelan County Community Development)
- Fire prevention plan for site and structure safety (Chelan County Fire Marshal and Wenatchee Valley Fire Department)
- Parking and lighting plan pursuant to Chelan County Code 11.90 and 11.88.080 (Chelan County Community Development)
- Operations plan identifying both the construction and generation phases, including hours of operation, peak traffic hours, number of employees on site, etc
- Engineered grading and drainage plan (Public Works)
- Monitoring and Reporting plan for emissions, water and stormwater discharge, materials, waste and service water (Chelan County Community Development)

k. The applicant shall apply for, obtain and comply with the following permits:
- Conditional Use Permit for a High Impact Utility (fusion generation & substation)
- Building permits for all 3 proposed structures
- Construction Stormwater General Permit (Ecology)
- Notice of Construction Air Quality (Ecology)
- Industrial Stormwater General Permit (Ecology)
- Large on-site septic system (Chelan Douglas Health District)
- Non-transient Non-community Group A Water System (DoH & Chelan Douglas Health District)
- Industrial Radioactive Materials License (DoH)
- X-Ray Registration (DoH)
- Radioactive Air Emissions License (DoH)
- EPA/State Identification (ID) Number (Ecology)
- Low-level Radioactive Waste Site Use Permit (DoH)
- Decommissioning Plan, if not already required in DoH permitting, to include monitoring.

l. Stated mitigation measures may be updated to include additional environmental protections based on agency and public concerns and comments at the time of Conditional Use Permit review for the fusion generation facility and substation, High Impact Utility

This Mitigated DNS is issued under WAC 197-11-350, Mitigated DNS. Public Notice is given pursuant to WAC 197-11-350 and 13.04.150(1)(c). An agency shall not act upon a proposal for fourteen days after the date of issuance. All public and agency comments must be received at the address listed below, or via email to cd.comment@co.chelan.wa.us, and postmarked by June 14th, 2025.

Appeals of SEPA shall be via the associated permitting actions, BP 250386 (Assembly Building) or the required Conditional Use Permit pursuant to CCC 14.10.040 and CCC 14.12.030, for the fusion generation use/structure and substation, and shall be to the Chelan County Hearing Examiner within 10 working days of the written issuance of the permitting action (BP 250386 and/or Conditional Use Permits).

Responsible Official: Deanna Walter, Director / SEPA Responsible Official

Address: Chelan County Department of Community Development
316 Washington Street, Suite 301
Wenatchee, WA 98801

Phone: (509) 667-6225

Signature Deanna Walter **Date:** 05/30/2025

Deanna Walter, SEPA Responsible Official

SEPA[1] Environmental Checklist

Purpose of checklist

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization, or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. **You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown.** You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to **all parts of your proposal**, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for lead agencies

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B, plus the Supplemental Sheet for Nonproject Actions (Part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in "Part B: Environmental Elements" that do not contribute meaningfully to the analysis of the proposal.

[1] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/Checklist-guidance

A.Background

Find help answering background questions[2]

1. **Name of proposed project, if applicable:**

   Not applicable

2. **Name of applicant:**

   Helion Energy, Inc. and its wholly-owned subsidiary Helion One, LLC **(Helion/we/our)**

3. **Address and phone number of applicant and contact person:**

   Helion Energy, Inc.
   C/o Paul Gentsch, (425) 470-4233
   1415 75th St SW,
   Everett, WA 98203

   Copy to:
   Helion Energy, Inc.
   C/o Ryan Gurule
   1415 75th St SW,
   Everett, WA 98203

   † reviewed as a planned action project through construction of Phase 2, the generation building. CUP required for generation use as high impact utility in R1 zone.

   DW 5/21/25

4. **Date checklist prepared:**

   17 March 2025

5. **Agency requesting checklist:**

   Chelan County Building Department

6. **Proposed timing of schedule (including phasing, if applicable):**

   Phase 1, which will include site grading; the construction of a parking lot; a new Public Utility District No. 1 of Chelan County, Washington, a municipal corporation (**Chelan PUD**) access road; an assembly building; and an office building, is expected to begin in May 2025 and continue through July 2026.

   Phase 2, which will include the construction of the fusion generator building, onsite substation (and any related, limited transmission assets), is expected to begin in July 2026 and be completed in January 2027. See question A.11.

   Following construction, Helion will conduct startup and commissioning activities, and subsequently operate the plant, producing approximately 50 MW of electricity.

7. **Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**

[2] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-A-Background

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Any plans for future additions, expansion, or further activity related to this proposal would be remote and speculative.

8. **List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

This project is directly informed by the following studies, prepared for the proposal:

SEPA Checklist (primary)	**Survey/ Report**	**Extent of Area Addressed in Study/Report**	**Expert**	**Report Status**
General	Phase 1 Environmental Site Assessment **(Phase 1)**	Identify presence, or likely presence, of recognized environmental conditions on site (REC)	Nelson Geotechnical Associates, Inc. **(Nelson Geotech)**	*Complete, attached* ✓
B.1	Geotechnical Engineering and Infiltration Evaluation **(Geotech Report)**	Exploration of surface and subsurface conditions within site and related development recommendations	Nelson Geotech	*Complete, attached* ✓
B.2,.7,.14	**Traffic Study** TIA	Detail anticipated trip generation and impact during construction and during operation	Heffron Transportation Inc.	*Complete, attached* ✓
B.1, .3	**Drainage Reports**	Analyze site soils and conditions and propose required stormwater collection and disposal systems for the project **(Stormwater Drainage Report** and **Construction Stormwater Pollution Prevention Plan).** This study also includes certain analysis regarding civil engineering and construction practices to mitigate any potential environmental impact resulting from the project (such as relating to construction air emissions).	Facet Civil Engineering	*Complete, attached* ✓
B.4-.5	Habitat Assessment;	Conduct site assessment, including in light of shrub-	Landau Associates	*Complete, attached* ✓

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	Habitat Management & Mitigation Plan (**HA** and **HMMP**)	steppe habitat present in area; HMMP prepared addressing elements required under CCC 11.78.060, including in light of shrub steppe habitat.		
B.13	Cultural Resources Survey	Conduct survey and provide risk management strategy related to site.	Willamette Cultural Resources Associates	*Complete, (confidential pursuant to RCW 27.53.080)* ✓
B.5	Threatened and Endangered Species Review (**USFW List**)	Provide list of threatened, endangered, proposed and candidate species and final designated critical habitat within boundaries of proposed project.	**USFW**	*Complete, attached* ✓
B.7	Decommissioning Cost Estimate Study	Provide estimate of decommissioning costs for project.	Energy*Solutions*, LLC	*Complete, attached* ✓

9. **Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**

   None known. CUP required for Phase 2, generation use as high Impact Utility

10. **List any government approvals or permits that will be needed for your proposal, if known.**

- General Land Use Application and Conditional Use Permit – Chelan County Building Department ✓
- Commercial Building Permits (including, mechanical and plumbing permits)– Chelan County Building Department ✓
- Commercial Sign Permit – Chelan County Building Department ✓
- Notice of Construction Air Quality – Washington Department of Ecology **(ECY or Department of Ecology)** ✓
- Drainage report/study for CCPW ✓
- Construction Stormwater General Permit - ECY ✓ SPN
- Industrial Stormwater General Permit – ECY ✓
- New Water Right – ECY ✓
- Large On-Site Septic System Approval – Chelan-Douglas Health District ✓
- Industrial Radioactive Materials Licenses – Washington Department of Health **(DoH or Department of Health)** ✓

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- X-Ray Registrations – DoH ✓
- Radioactive Air Emissions Licenses – DoH ✓
- EPA/State Identification (ID) Number - ECY ✓
- Low-level Radioactive Waste Site Use Permit – DoH ✓
- Fire protection system permit – Chelan County Fire Department & CC Fire Marshal Wenatchee Valley Fire Dept.
- Utility permits for power service, including distribution power service application– Chelan PUD ✓
- Non-Transient Non-Community Permit – DoH ✓
- Public Water System Permit – Chelan County Department of Health Group A or B?

Additionally, we will need to enter into a land lease agreement for a portion of Chelan PUD land that is not yet legally recorded, but that has been identified between the parties and is set forth in the map below in response to Item A.12. We will also enter into an interconnection agreement with the Chelan PUD based on our confidential interconnection feasibility study (see Item A.11). ✓

At this time, we are not aware of any additional material permits during construction or operation; however, it is possible that Helion or potential contractors employed by Helion would require certain temporary permits for on-site generators, or similar. We do not expect any combustion-based generator on-site other than Tier 4 generators, which would only operate for limited periods during construction.

For reference, attached to this checklist are the monitoring activities that Helion will conduct in connection with the above permits and the proposed project.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

Helion Energy proposes to construct, prepare for operation, and operate a fusion power plant site (**site**) and accompanying assembly and administrative facilities. The site will include three permanent structures on an approximately 12-acre site area (occupying 15% of the total parcel that is not yet legally recorded but that has been identified between the parties and is set forth in the map below), each constructed, prepared for operation, and operated in multiple phases. The first phase of the project will include constructing (i) a 26,800-square-foot building, that will be used to assemble sub-systems of Helion's fusion machine(s), and (ii) a 6,240-square-foot building that will serve as the administrative office. The second phase of the project will include (i) constructing a third structure, a 100,000-square-foot fusion generator building, that will house our fusion machine(s), (ii) constructing and assembling the fusion machine(s), and (iii) constructing a 55,000-square-foot onsite substation. Following construction, Helion will conduct startup and commissioning activities, and subsequently operate the site, producing approximately 50 MW of electricity.

12 acre of disturbed w/in 90 acre proposed lease area

Assembly bldg in Phase 1 triggered SEPA

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During the first phase of the project, a 50,000-square-foot parking lot will be developed to accommodate on-site parking. In addition, a new 1,000' access road will be constructed to maintain the Chelan County PUD's exclusive access to the nearby Rock Island Dam facility.

Once operational, the point of interconnection for the proposed site is anticipated to be the Chelan County PUD's Mackenzie switch yard 115 kV south bus. We have a confidential interconnection feasibility study with the Chelan County PUD and are working through the remaining interconnection process with the Chelan County PUD. The proposed interconnection is for a maximum net output of 100 MW AC, facilitating Helion's ability to test "peaker plant" performance capabilities inherent in our technology, in all cases with related environmental impacts set forth in this proposal. Interconnection assets are anticipated to include approximately 1.1 miles of transmission lines, primarily routed on existing transmission poles, and a 55,000-square-foot onsite substation located directly north of the fusion generator building. Chelan PUD manages its interconnection assets, and Helion will contract for these services; however, we will work with Chelan PUD to interconnect the site in a way that mitigates any environmental impact consistent with this proposal and our various site plans referenced here.

12. **Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

The proposed site is located on an approximately 80-acre parcel located at 1476 Nixon Rapids Ln, Malaga, WA 98828. The proposed site is an identified—but not yet legally recorded—portion of property ID 14037 and geographic ID is 212205000050 that will be leased by Helion, as lessee, from Chelan PUD, as lessor. Abbreviated legal description of the property that the leased facility will be contained within is T 21N R 22EWM S 05 G L 2&5 SWNWSW S1/2SE LESS USA 401.0000 ACRES—with separate legal recording to come following entering into a lease with Chelan PUD for the site. PUD may opt to record a Certificate of Exemption to establish 80 acre site as separate parcel, still owned by PUD

The below exhibit shows the overall project site plan, within the context of the broader parcel *(see Map legend, bottom left). The Map does not include* approximately 1.1 miles of transmission lines that are anticipated, based on our work with Chelan PUD in its role as managing its own interconnection assets, to be primarily routed on existing transmission poles.

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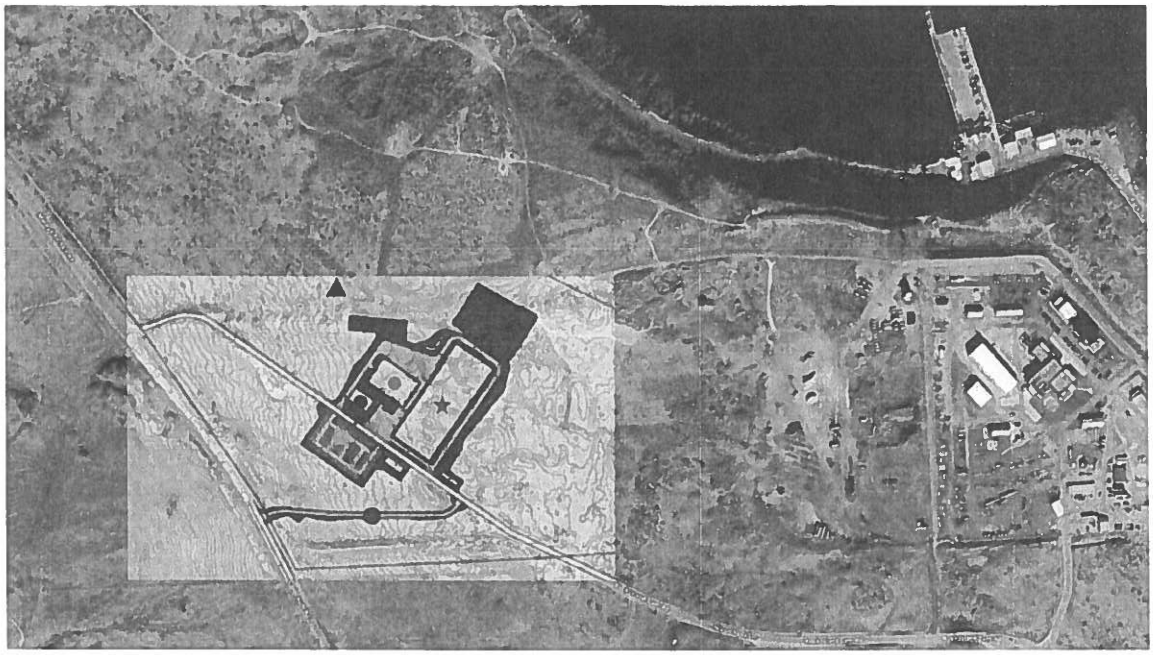

Map legend: Assembly building | Generator building | Administrative office | Parking lot | New PUD access road | Well | Onsite Substation

B.Environmental Elements

1. Earth

Find help answering earth questions[3]

a. General description of the site:

Helion worked with Nelson Geotechnical Associates (see Phase 1, Geotech Report) and Facet Civil Engineering (see Drainage Report) to conduct thorough site analysis, and where applicable, create appropriate plans to ensure that the project is unlikely to have a significant adverse environmental impact, or that any potential such impact will be sufficiently mitigated. The following responses are informed by these reports and plans (attached).

Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other: relatively flat overall

b. What is the steepest slope on the site (approximate percent slope)?

The steepest slope on the undisturbed site is approximately 14 percent.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them, and note any

[3] https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-earth

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agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

On the proposed site, one can find Columbia River flood deposits consisting of brown to grey gravel, boulder-to-cobble gravel with varying amounts of sand, and trace silt. Also, a layer of silt was found at 13 to 18 feet depths. Deposits are in a loose to medium dense condition, as these are unconsolidated alluvial deposits. The on-site soils are moisture sensitive and will be disturbed when wet. We anticipate soil-disturbing activities taking place during periods of extended dry conditions to mitigate any risk associated with on-site soil disturbance.

soil types: Pogue Cashmont gravelly fine sandy loam to fine sandy loam, to sandy loam

There is no existing agricultural land of long-term commercial significance located at the proposed site. No soil is expected to be removed from site.

d. **Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**

While the erosion hazard is considered light to moderate where soil is exposed or disturbed, the relatively flat site precludes the probability of any more slope instability. To mitigate any risks associated with erosion, Helion will implement best management practices, such as erosion control measures, that include diverting surface water away from the stripped or disturbed areas. Silt fences may be erected to prevent muddy water from leaving the site or flowing over the site slopes. Stockpiles may be covered with plastic sheeting during wet weather. Disturbed areas may be planted as soon as practical, and the vegetation should be maintained until it is established. The establishment of vegetation will significantly reduce the erosion on-site.

reference erosion control plan submitted

e. **Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.**

The estimated cut & fill for the entire site (buildings, road, asphalt, parking, substation, etc.) from the top of existing grade to the top of finished grade (including foundations) is 9,513 CY cut and 16,240 CY fill (Net 6,727 CY Fill). Approximately 164,000 square feet of asphalt with a 10" section, accounts for 5,055 CY of the total "fill" listed above. Excluding that, it is a total 1,672 CY of Net fill.

> SEPA threshold

grading & drainage plan will be required

The use of some of the on-site soils as structural fill may be feasible, but this will be dependent on the moisture content of the material at the time construction takes place. Particles over 3.0 inches in diameter will be removed from material intended for use as structural fill. Particles over 3.0 inches will be used in non-structural areas of the site such as landscaping. Our contracted geotechnical engineering firm will be retained to evaluate proposed structural fill material.

Below are the approximate numbers for each portion of the site. These numbers only account for top of existing grade to top of finished grade:

- Fusion generator building: 1,765 CY Cut, 4,778 CY Fill, Net 3,013 CY Fill
- Assembly building: 439 CY Cut, 132 CY Fill, Net 307 CY Cut

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- Office building: 277 CY Cut, 15 CY Fill, 262 CY Cut
- Site (including parking lot): 4,377 CY Cut, 6,987 CY Fill
- New access road: 112 CY Cut, 773 CY Fill, Net 662 CY Fill
- Onsite Substation: 2,543 CY Cut, 3,555 CY Fill, Net 1012 CY Fill

f. Could erosion occur because of clearing, construction, or use? If so, generally describe.

During the construction phase, sediment-laden runoff can enter newly constructed or existing stormwater facilities which can reduce their infiltration and treatment capacity. Controlling erosion and preventing sediment and other pollutants from leaving the project site during the construction phase is achievable through the implementation of temporary and permanent sediment and erosion control (TESC) BMPs. The contractor shall inspect and repair/clean all BMPs after every rainfall event. The proposed TESC BMPs shall remain in place for the duration of construction and until all landscaping has been established and proposed permanent ESC BMPs have been installed and established. The specific TESC plan referenced has been included in the submitted permit documents found. BMPs deployed to stabilize exposed soils include temporary and permanent seeding, mulching, nets and blankets, and plastic covering installation. See Appendix D for the complete Construction Stormwater Pollution Prevention Plan. ✓

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Approximately 15% of the total 80-acre site (that is to be established via lease with the Chelan PUD within the boundaries identified in this checklist) will be covered with impervious surfaces, such as asphalt or buildings.

May lot coverage in RI zoning = 70%

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any.

See section B.1.f above. ✓

2. Air

Find help answering air questions[4]

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Construction

The impacts of construction-related equipment and vehicle operation on air quality are expected to be minor. Helion worked with Nelson Geotechnical Associates and Facet Engineering to understand potential construction air emissions and best practices to manage these emissions (BMPs). Standard vehicle and equipment emissions may increase in a very localized area and therefore temporarily affect local nominal air quality during construction. These emissions are regulated by vehicle and equipment emission standards, which are established on a per-source/vehicle basis.

[4] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-Air

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During site preparation, construction activities will generate dust. Impacts from dust generation are expected to be temporary, minor, and contained within the project site using Facet-identified BMPs.

Operation

Helion's fusion process produces zero-carbon electricity. Helion's fusion process will create five byproducts: a proton (or, hydrogen-1), helium-3, helium-4, tritium (or, hydrogen-3), and a neutron, each of which is effectively captured and/or filtered.

- Kinetic energy from the proton (hydrogen-1), helium-3, helium-4, and tritium (hydrogen-3) is captured as electricity. The atoms then move from the generator to Helion's gas processing system.
- Helium-3 and helium-4 are both considered safe, stable gasses that we can store, reuse--either as fuel (helium-3) or a commercial commodity (helium-4)--or release safely to the air.
- Tritium is a radioactive material that emits weak levels of beta radiation and has a half-life of 12.3 years, decaying at a rate of 5.5% per year. As tritium decays, it turns into helium-3. Both tritium and helium-3 are highly valuable, including as a potential source of fusion fuel, and we design our systems to capture tritium for safety and commercial recovery.
- Neutrons are effectively captured in shielding materials, e.g., the concrete shielding walls surrounding the fusion machine(s). See section 7.a.

To the extent tritium (hydrogen-3) is emitted as a result of normal operations, these emissions are small and planned for (typically the result of normal-course emissions from piping) and will be regulated by the Department of Health under a Radioactive Air Emissions License (RAEL). Helion will secure the RAEL prior to beginning normal operations per RCW 70A.388.010. Thereafter, Helion will operate in accordance with any RAEL, and will not induce any exposure in excess of 10mrem/y to a member of the public due to its normal operations, per WAC-173-480-040. In connection with our operations, site design, and permitting process for our Radioactive Materials License, Helion will further ensure that the maximum credible release of radioactive materials from the site would result in off-site public exposure below 1 rem (which is the Department of Health limit for requiring an offsite emergency plan, per WAC 246-235-077). For a discussion of our emissions capture technology see below at Item B.2.c. offsite? outside of generation bldg or outside of 80A. site?

Helion's electricity generating operations will not require any operating air permit with Washington State Department of Ecology. Other than described above, generating electricity from Helion's site will not produce emissions. See WAC 173-480-070. At this time, the need for any additional air permit for onsite generators or similar in connection with maintenance or other activities would be remote and speculative, and Helion has a team of safety professionals that monitor compliance with these requirements.

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No significant increase in employee vehicle operation or related emissions in the immediate project area are anticipated because of the proposed project.

b. **Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.**

There are no known off-site sources of emissions or odor that may affect our proposal.

c. **Proposed measures to reduce or control emissions or other impacts to air, if any:**

Construction equipment and vehicles will comply with Washington State air quality standards, which includes using properly functioning equipment and vehicles that have passed emissions testing, using clean-burning fuels when possible, minimizing diesel exhaust, and limiting vehicle idling. TESC measures will be incorporated into the project design plans including a stabilized construction entrance and exit and the stabilization of on-site area of frequent construction traffic to mitigate dust emissions.

Helion's fusion process produces zero-carbon electricity. Separate from license conditions, Helion also uses emissions capture technology to reduce air emissions due to its normal operations in connection with the startup, readiness operations, and operation of its site. Helion's emission activities will be regulated by the DoH per RCW 70A.388.010 et seq. Consistent with these rules, emissions capture technologies that Helion employs will include process-specific purification systems that remove tritium from outgoing air streams and are consistent with Best Available Radiation Control Technology (BARCT, e.g., WAC 246-247-120) and As Low as Reasonably Achievable Control Technology (ALARACT, e.g., WAC 246-247-130), as determined via licensing with the Department of Health (see 2.a., WAC 246-246-030; WAC-173-480-040).

3. Water

Find help answering water questions[5]

We worked with Facet Civil Engineering (see Drainage Report) and Aspect Consulting (via Dan Haller) to conduct thorough water-availability analysis. Please see the attached **Drainage Report, which includes a stormwater drainage report and Construction Stormwater Pollution Prevention Plan.** The following responses are informed by this collaboration and these plans.

a. **Surface:**
Find help answering surface water questions[6]

1. **Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

[5] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water
[6] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Surface-water

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No, the proposed project will be approximately 0.25 miles from the Columbia River, outside the 200-foot shoreline buffer of that body of water. There are no other year-round and seasonal streams, saltwater, lakes, ponds, wetlands in the project's vicinity.

2. **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.** Columbia River shoreline designation = urban

   No, the project will be approximately 0.25 miles from the Columbia River, outside the 200-foot shoreline buffer of that body of water.

3. **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

   No earthwork will be performed in the Columbia River or other body of water in general vicinity of the site. more than 200' from OHWM

4. **Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.**

   The proposal will not require surface water withdrawals or diversions.

5. **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

   The proposal does not lie within a 100-year floodplain. ✓

6. **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

   The proposal does not involve any discharges of waste materials to surface waters. Helion will implement Stormwater Pollution Prevention Plan and take other measures discussed below consistent (Item B.3.b.-c.) this statement. ✓

b. **Ground:**
   Find help answering ground water questions[7]

   1. **Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give a general description, purpose, and approximate quantities if known.**

      Yes. Helion is proposing multiple options on supplying reliable groundwater for drinking water purposes, as well as heat exchange, industrial, and other facility uses.

      Two new wells (for source redundancy) are expected to serve the facility's 100-300-gpm demand. The wells would be located in the SW ¼ of Section 5, Township 21 N., Range 22 E.W.M on property leased from Chelan PUD.

[7] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Groundwater

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These wells would be authorized from existing water rights that are part of Chelan PUD's water right portfolio, including water rights acquired by Chelan PUD in 2023 from the Oroville-Tonasket Irrigation District (OTID) water bank, which are currently in trust in the nearby Columbia River. We plan to coordinate with Chelan PUD to file required applications to authorize the wells under Chelan PUD water rights. This will also include well drilling authority to explore available groundwater at the site. Withdrawals at the site will not impair existing groundwater or surface water rights, which will be confirmed through well testing. We are planning for groundwater withdrawals to be fully mitigated by water from the Columbia River through Chelan PUD's OTID assets, and this is intended to be a water budget neutral project. We understand that the Columbia River Rule under WAC 173-563-020 will require consultation with appropriate local, state, and federal agencies and Tribal Nations to confirm the suitability of mitigation.

If sufficient legal or physical supply under the above approach is not available, we would then propose to connect to existing wells, operated by the PUD at its Rock Island facility. The wells are located in the SE ¼ of Section 5, Township 21 N., Range 22 E.W.M on property owned by Chelan PUD. We would then pipe that supply east to the site, approximately 3,000 feet. Those wells are currently authorized under several PUD water rights, including for municipal, domestic, and heat exchange purposes. Additionally, the wells could be added to the rights acquired by the PUD from OTID as additional sources that can supply our project. In either case, Helion will work closely with both Chelan PUD and ECY to secure the necessary authorizations.

Ecology

Helion will use water for three principal purposes on the site, which are tied to specific disposal paths. First, water will be stored for purposes of (1) fire suppression consistent with best practices for any industrial manufacturer and handled in coordination with the Chelan County fire department. Second, water will be used to handle (2) restroom waste and waste from an employee breakroom, and this water will be disposed of as sewage into our on-site sewage disposal septic system, coordinating with the Chelan-Douglas Health District (see below Item B.3.b.2.).

Third, we will have water that may be exposed to radiation as a result of our operations. For example, we will employ a (3) "closed-loop" cooling system for our fusion generator components that will recirculate the same water. Water may also be used to clean fusion generator parts and lab hardware with removable quantities of radiation (e.g., tools used to repair generator parts). Helion will work with the Department of Health in connection with treating and safely disposing of any water that is exposed to radiation as a result of our operations, including (i) water used in our "closed-loop" cooling system in connection with decommissioning the power plant or (ii) water used for relevant cleaning purposes (consistent with current Helion activities that are licensed by WA DOH).

2. **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (domestic sewage; industrial, containing the following chemicals…; agricultural; etc.). Describe the general size of the system, the number of**

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such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Three on-site sewage disposal septic systems are proposed for the project to support peak hours of the site during general operations. Each system is designed to handle restroom waste and waste from an employee breakroom. Systems will be in the northwest portion of the site and will be approved by the Chelan-Douglas Health District. Expected flows for each system are as follows:

- Office building: Anticipate up to and no more than 20 people per shift, 2 shifts per 24-hour period totaling 60 people per day resulting in 1,380 gallons of waste per day.
- Assembly building: Anticipate up to and no more than 35 people per shift, 2 shifts per 24-hour period totaling 100 people per day resulting in 2,300 gallons waste per day.
- Fusion generator building: Anticipate up to and no more than 75 people per shift, 2 shifts per 24-hour period totaling 150 people per day resulting in 3,450 gallons of waste per day.

total new employment = ~310 people

See above (Item B.3.b.1) for a discussion of water use and disposal on-site.

c. **Water Runoff (including stormwater):**

1. **Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

During construction, Helion will follow a Stormwater Pollution Prevention Plan which includes preventative measures such as the installation of construction fencing, covering and maintaining slopes, installing sediment ponds and interceptor swales, stabilizing soils, and covering exposed dirt.

The primary sources of runoff on the proposed site will be from building rooftops. Stormwater runoff from roof areas will be routed directly to one of 14 drywells. The site will have six roof basins, each discharging stormwater runoff to their associated drywell(s). Stormwater runoff from all at-grade hard surfaces will either sheet flow or discharge via tight line storm drain piping into one of seven infiltration swales.

Stormwater runoff from the proposed rural road will sheet flow off the road to the southeast over proposed landscaping and existing vegetation and will percolate into the existing soil. This is not anticipated to have any detrimental impact on the soil or nearby waters. The proposed project will provide the required stormwater collection and disposal as outlined in the 2024 Stormwater Management Manual for Eastern Washington. The proposed stormwater facilities are designed for a 100-year, 24-hour rainfall event.

2. **Could waste materials enter ground or surface waters? If so, generally describe.**

No waste materials are expected to enter ground or surface waters; however, an unintentional release of fuel, lubricants, or hydraulic fluid from construction equipment

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or storage could occur. BMPs will be deployed to minimize the risk of such a release and further reduce the potential for waste materials to enter ground or surface waters. BMPs include but are not limited to storing chemicals in conformance to the appropriate source control BMPs, listed in Vol. IV of the Washington State Department of Ecology Stormwater Manual for Eastern Washington. All chemicals shall have cover containment, and protection provided on-site. Furthermore, all vehicles, equipment, and petroleum product storage/dispensing areas will be inspected in accordance with maintenance procedures to detect any leaks or spills, and to identify maintenance needs to prevent leaks or spills. On-site fueling tanks and petroleum product storage containers shall include secondary containment and spill prevention measures, such as drip pans, will be used when conducting maintenance and repair of vehicles or equipment.

See above (Item B.3.b.1) for a discussion of water use and disposal on-site.

3. **Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

   The proposal does not alter or otherwise affect drainage patterns in the vicinity of the site. Stormwater on-site will be directed to drywells and infiltration swales on-site and we will operate in accordance with our Stormwater Pollution Prevention Plan. ✓

d. **Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:**

   See response to Item B.3.c.

4. Plants

Find help answering plants questions

Helion worked with Landau Associates to, following site assessment and diligence, create a Habitat Assessment (HA) and Habitat Mitigation & Management Plan (HMMP), including shrub-steppe habitat present in the area. Our HMMP is prepared addressing elements required under CCC 11.78.060, including in light of shrub steppe habitat. (attached)

See submitted HMMP

a. **Check the types of vegetation found on the site:**

- ☐ **deciduous tree: alder, maple, aspen, other**
- ☐ **evergreen tree: fir, cedar, pine, other**
- ☒ **shrubs**
- ☒ **grass**
- ☐ **pasture**
- ☐ **crop or grain**
- ☐ **orchards, vineyards, or other permanent crops.**
- ☐ **wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other**
- ☐ **water plants: water lily, eelgrass, milfoil, other**
- ☐ **other types of vegetation**

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TOR

b. What kind and amount of vegetation will be removed or altered?

Vegetation observed on site includes big sagebrush, antelope bitterbrush, rubber rabbitbrush, bluebunch wheatgrass, arrowleaf balsamroot, snowy buckwheat, silky lupine, common yarrow, cheatgrass, tumble mustard, and Russian thistle. ✓

This vegetative community is consistent with Intermountain Basins Big Sagebrush Steppe and typical of habitat adjacent to development where invasive species dominate the herbaceous layer. Presence and quality of shrub-steppe was assessed following survey requirements provided in Appendix 9 of the WDFW Management Recommendations for Washington's Priority Habitats: Managing Shrub-steppe in Developing Landscapes for compliance with Chelan County Code (CCC), Chapter 11.78, Fish and Wildlife Habitat Conversation Areas Overlay District.

Shrub-steppe habitat to be impacted is low-to-moderate quality (overall Ecological Integrity Assessment [EIA] Ranking of C) and will be offset by mitigation plantings. < Mitigation >

c. List threatened and endangered species known to be on or near the site.

No threatened or endangered species are known to be on or near the site. The WNHP Data Explorer does not list any rare plant species in the project vicinity and the USFWS does not identify any threatened or endangered listed plant species in the project vicinity. Field observations performed by professional biologists on December 23, 2024, corroborate the findings of these resources. The project area does include shrub-steppe habitat, which is classified as a WDFW priority habitat.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any.

A planting plan is provided in the attached HMMP and includes native shrubs, forbs, and grasses typical of Intermountain Basins Big Sagebrush Steppe. The plan includes performance standards which when achieved will enhance the diversity and cover of the native plant community.

landscaping plan required for both commercial structures & High Impact Utility CUP

Landscaping of planted medians within the project area will be designed in accordance with Chelan County development standards (CCC, Chapter 15.50).

e. List all noxious weeds and invasive species known to be on or near the site.

Noxious weeds from the 2024 Chelan County noxious weed list were not observed during field investigations, though regulated knapweed (*Centaurea sp.)* species are known to be present in the vicinity. Other common invasive species identified include cheatgrass *(Bromus* Tectorum), tumble mustard *(Sisymbrium altissimum),* Russian thistle (*Salsola tragus),* yellow salsify *(Tragopogon dubius),* and black medick (*Medicago lupulina).*

5. Animals

Find help answering animal questions[8]

[8] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-5-Animals

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Helion worked with Landau Associates to, following site assessment and diligence, create a HA and HMMP, including in light of shrub-steppe habitat present in the area. Our HMMP is prepared addressing elements required under CCC 11.78.060, including in light of shrub-steppe habitat. This work was also done following review of the USFW List and in light of communication with USFW and WDFW. Please see our attached HA and HMMP.

- **List any birds and other animals that have been observed on or near the site or are known to be on or near the site.**

  Examples include:

  •Birds: American crow, northern goshawk, prairie falcon, golden eagle, Brewer's sparrow, sagebrush sparrow, loggerhead shrike, sage thrasher

  •Mammals: Rocky Mountain elk, mule deer, white-tailed deer, bighorn sheep, black-tailed and white-tailed jackrabbit, chipmunk, ground squirrel

  •Reptiles: Western rattlesnake, northern sagebrush lizard, side-blotched lizard, Pygmy short horned lizard

a. **List any threatened and endangered species known to be on or near the site.**

According to the US Fish and Wildlife Service (USFWS) and NOAA Fisheries lists of threatened and endangered species and WDFW State Wildlife Action Plan data the following species may occur in or around the proposed site:

- •Gray Wolf
- •North American Wolverine
- •Yellow-billed Cuckoo
- •Northern Spotted Owl
- •Bull Trout
- •Monarch Butterfly
- •Chinook Salmon
- •Steelhead Trout

WDFW Priority Habitat and Species data does not identify these species in the project area. Field investigations by us and Landau found that none of these species are present in the project area as no aquatic habitats occur in the project area and terrestrial habitat is not suitable for listed species. The Columbia River is approximately 0.25 miles from the project site. ✓

b. **Is the site part of a migration route? If so, explain.**

The site is part of the Pacific Flyway for migratory birds and is within the migratory range of Rocky Mountain elk. The Columbia River, located 0.25 miles from the site, is a migration route for salmon, trout, and sturgeon. The associated riparian corridor is also part of the regional migration route for Monarch butterfly. ✓

c. **Proposed measures to preserve or enhance wildlife, if any.**

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A planting plan is provided in the Habitat Management and Mitigation Plan and includes native shrubs, forbs, and grasses typical of Intermountain Basins Big Sagebrush Steppe. The plan includes performance standards which when achieved will enhance the diversity and cover of the native plan community. Shrub-steppe habitat is critical for elk and mule deer overwintering habitat. Increased cover and diversity will also provide better habitat and forage for bird, small mammal, and reptile species.

d. **List any invasive animal species known to be on or near the site.**

None known.

6. Energy and natural resources

Find help answering energy and natural resource questions[9]

a. **What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**

Each building will require electric service power for heating, manufacturing, and general operations. Electrical power demand prior to machine operation is not expected to exceed 1 MW and will be provided by Chelan County PUD. Typical power usage is expected to service building power, HVAC, lighting, crane operation, and electrical test equipment. General operations are expected to consume less than 1 MW.

Once the site is operational, the peak electric power demand to service the machine is not expected to exceed an additional 4 MW, which will also be provided by Chelan County PUD, bringing peak site-wide electric power consumption from Chelan PUD to 5 MW. Of the additional 4 MW service, typical power usage is expected to service fusion machine water and air handling during power generation activities.

b. **Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**

The project will not affect the potential use of solar energy by adjacent properties.

c. **What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.**

None proposed.

7. Environmental health

Health Find help with answering environmental health questions[10]

a. **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur because of this proposal? If so, describe.**

[9] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-6-Energy-natural-resou
[10] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-7-Environmental-health

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The safety profile of a fusion machine is akin to many other familiar industrial applications (i.e., food irradiators, cyclotrons [used for making medical isotopes], and other particle accelerators) and is, therefore, regulated in the same way. Helion's fusion approach does not produce high-level radioactive waste.

Our generating activities onsite will involve tritium (or, hydrogen-3). As discussed above in Item B.2.a., tritium is a radioactive material that emits weak levels of beta radiation and has a half-life of 12.3 years (compared to 24,000 years for nuclear fission waste), decaying at a rate of 5.5% per year. As tritium decays, it turns into helium-3. Both tritium and helium-3 are highly valuable, including as a potential source of fusion fuel, and we design our systems to capture tritium for safety and commercial recovery. Helion will work closely with the Washington State Department of Health to appropriately permit the quantities of tritium maintained on-site, pursuant to our Radioactive Materials License administered by the Department of Health, per RCW 43-21C.

In addition to tritium, the neutron radiation from fusion does create activated byproduct materials over the operating life of the site, similar to hospitals and other industrial users of particle accelerators and fusion technology. These include components related to the fusion machine(s) and concrete-based shielding, both of which use materials specifically designed to safely absorb and manage any potential Helion fusion byproducts.

Helion's materials will be monitored during operation for structural integrity (e.g., by strain gauges) and will be managed accordingly. Large structures, e.g., concrete-based shielding, will last the entire anticipated lifetime of the site.

Helion will manage any environmental health hazards that could occur as a result of normal operations by working with the Department of Ecology and the Department of Health, including regarding any waste streams, as applicable. Further, in connection with our operations, site design, and permitting process for our Radioactive Materials License, Helion will further ensure that the maximum credible release of radioactive materials from the site would result in off-site public exposure below 1 rem (which is the Department of Health limit for requiring an offsite emergency plan per WAC 246-235-077).

All of Helion's byproduct materials can be either safely stored and repurposed by Helion or disposed of in operating permitted waste facilities, such as those already used by hospital facilities in Washington and across the country. This includes the US Ecology Idaho waste disposal facility in Grandview, Idaho, as well as the mixed waste facility operated by Perma-Fix Northwest Richland, Inc., in Richland, Washington. In connection with any disposal at these facilities, Helion will secure all necessary permits, if any (including a low-level radioactive waste site use permit). As required by the Department of Health, funds will be set aside for decommissioning funding assurance ahead of the start of operations.

For this facility, all of Helion's byproduct materials will have research and development value to Helion and other users of fusion technology throughout the construction, operation, and

Market for bi-product?

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decommissioning of the project. Additional radiation control technology will be employed as discussed below in Item B.7.a.5.

The scope of activated byproduct material expected to be generated during normal operations, subject to Helion research and development, and that may be decommissioned and disposed has been conservatively estimated by third-party experts Energy*Solutions*, LLC, and these results are attached. These results will be monitored in connection with various Department of Health permitting processes and to facilitate coordination between the Department of Health and the Department of Ecology for mixed waste informational purposes. These estimates identify decommissioning and disposal costs based on established markets for these materials.

Finally, we will use standard acids and bases found in chemistry laboratories for cleaning and diagnostic purposes, such as potassium hydroxide alcohols (ethanol, isopropyl, etc.) and hydrochloric acid. We may also use certain alloys, including those identified as dangerous waste constituents by the Department of Ecology, similar to any light-industrial facility that manufactures or uses magnets, semi-conductors and other electric circuitry (such as Helion's capacitors). These alloys include beryllium-containing alloys (which are primarily expected to exist in mixed waste streams, if at all), lithium in hydride form, and zinc oxide. Notably, Helion has taken care to establish supply chains that ensure items like our capacitors are lead-free and PCB-free. All site waste recycling and disposal practices will consider relevant rules and regulations, and—as applicable—will involve permitted hazardous waste service providers. requires compliance w/all state & federal regulations.

Helion will conduct its operations to rigorously manage potential risks, if any, associated with any of these materials. Helion will coordinate with the Department of Health and the Department of Ecology to conduct its operations and waste management, at all times, in accordance with applicable law. Additionally, as applicable, Helion will proceed pursuant to Department of Transportation rules for any transportation of regulated (i.e., radioactive or similar) materials. DOH, DOE, DOT permitting

1. **Describe any known or possible contamination at the site from present or past uses.**

   No known or possible contamination was found at the site from present or past uses. A phase 1 environmental site assessment, conducted by Nelson Geotechnical Associates, found no evidence of recognized environmental conditions in connection with the property.

2. **Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.**

   No known hazardous chemicals were found that will affect project development and design.

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3. **Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.**

   See Item B.7.a ✓

4. **Describe special emergency services that might be required.**

   Helion will coordinate with local emergency services. No special emergency services, outside of what is already available in the surrounding area, would be required.

5. **Proposed measures to reduce or control environmental health hazards, if any:** develop an emergency plan for waste leakage & evacuation. (mitigation)

   See Item B.7.a. In connection with Helion's operation of the fusion machine(s), Helion will employ the Best Available Radiation Control Technology (BARCT, e.g., WAC 246-247-120) and As Low as Reasonably Achievable Control Technology (ALARACT, e.g., WAC 246-247-130) to reduce and control environmental health impacts, if any, as determined via licensing with the Washington State Department of Health. We will also engage in ongoing monitoring and reporting with respect to our various Department of Health and Department of Ecology permits to ensure the ongoing compliance of our measures to reduce or control any environmental health hazards.

   Helion also deploys an inert fire suppression system using nitrogen gas in the fusion generator building to control any fire and related hazard risk. Facilities outside of the fusion generator building would use a typical building water-based sprinkler system.

   For all other operations and potential waste streams, Helion will coordinate with the Department of Health and Department of Ecology, as applicable pursuant to our response in Item B.7.a. The project will comply with all applicable city, state, and federal environmental health requirements.

b. **Noise**

1. **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**

   No known sources of noise exceeding Washington's noise standards and requirements, Chapter 173-60.

2. **What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site)?**

   Temporary construction noise would occur during the construction phase of the project. Construction noise will occur only between the hours from 7 AM to 10 PM, in compliance with Chelan County Code. ✓

   Once operational, mitigation measures will be implemented to ensure the plant conforms with applicable local and state noise regulations and the plant will be designed to address other environmental concerns discussed above (i.e., regarding wildlife).

3. **Proposed measures to reduce or control noise impacts, if any:**

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Construction activities shall comply with the County's noise ordinance. The project will comply with all state and local noise regulations and the plant will be designed to address other environmental concerns discussed above (i.e., regarding wildlife). compliance w/ WAC 173-60

8. Land and shoreline use

Find help answering land and shoreline use questions[11]

a. **What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.**

There is no current use of the proposed site. Proposal will not affect current land uses on nearby or adjacent properties, which principally include Chelan PUD operations. Helion will lease the property from Chelan PUD and does not anticipate this will change any current use of adjacent Chelan PUD property.

b. **Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses because of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?**

Project site has not been used as working farmlands or working forest lands.

1. **Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?**

The proposed project is not expected to affect or be affected by surrounding working farm or forest land during normal business operations.

c. **Describe any structures on the site.**

No current structures are located within Helion's portion of the site to be leased from Chelan PUD. 90A site will be separate as new parcel w/ certificate of exemption

d. **Will any structures be demolished? If so, what?**

No structures on the site.

e. **What is the current zoning classification of the site?**

Rural Industrial. (RI)

f. **What is the current comprehensive plan designation of the site?**

Rural Industrial. (RI)

g. **If applicable, what is the current shoreline master program designation of the site?**

Not applicable. SMP designation is Urban

h. **Has any part of the site been classified as a critical area by the city or county? If so, specify.**

[11] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-8-Land-shoreline-use

5/21/25 DW

No part of the proposed site is classified as a critical area by Chelan County. yes- FEW map required HMP

i. **Approximately how many people would reside or work in the completed project?**

No one will reside in the completed site being proposed. Helion anticipates up to and no more than 30 people per shift, 2 shifts per 24-hour period totaling 60 people working in the completed project. Certain systems will be designed to consider different potential numbers of site users at various stages in the construction and operation lifecycle, including our septic system. See Item B.3.b.2.

j. **Approximately how many people would the completed project displace?**

No people will be displaced by the completed project.

k. **Proposed measures to avoid or reduce displacement impacts, if any.**

None proposed.

l. **Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.**

The proposed project is consistent with the current Zoning and Comprehensive Plan designations as outlined in Helion's Conditional Use Permit. The construction and operation of the project would not affect any existing or projected land uses, would not increase the cost of any farming operations, and would not otherwise interfere with any ongoing uses on the adjacent and surrounding non-project lands, which are principally comprised of Chelan PUD operations. CUP required for operation as High Impact Utility

m. **Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:**

Proposed site optimizes for site layout density to reduce the total amount of land disturbed.

9. Housing

Find help answering housing questions[12]

a. **Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**

No housing units are proposed as part of the project.

b. **Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**

No housing units are proposed to be eliminated as part of the project.

c. **Proposed measures to reduce or control housing impacts, if any:**

No measures are proposed to reduce or control housing impacts as there will be no impact to housing.

[12] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-9-Housing

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10. Aesthetics

Find help answering aesthetics questions[13]

a. **What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**

The tallest structure proposed will be the 100,000 square-foot fusion generator building and will stand no taller than 60' high at its peak. The exterior of the buildings will be sloped sheet metal roofing and metal siding.

Max bldg height in RI = 60'

b. **What views in the immediate vicinity would be altered or obstructed?**

No views would be altered or obstructed by the proposed buildings.

c. **Proposed measures to reduce or control aesthetic impacts, if any:**

The project is to be designed in accordance with the Rural Industrial Zoning district standards of Title 11.26, the Development Standards of Title 15.30 and Landscape Standards of Title 15.50, which entails an average of 10-feet of landscaping screening depth between parking area of building facades adjacent to road frontages or residential districts.

✓ required landscape plan (mitigation)

11. Light and glare

Find help answering light and glare questions[14]

a. **What type of light or glare will the proposal produce? What time of day would it mainly occur?**

Parking lot, security, or any exterior lighting will be shielded to prevent direct light projection over property lines, in accordance with Chelan County Code 11.88.080. As noted above, construction will occur only between the hours from 7 AM to 10 PM, in compliance with Chelan County law.

b. **Could light or glare from the finished project be a safety hazard or interfere with views?**

Light or glare from the project is not expected to cause a safety hazard or interfere with views.

c. **What existing off-site sources of light or glare may affect your proposal?**

No existing off-site sources of light are expected to affect our project.

d. **Proposed measures to reduce or control light and glare impacts, if any:**

No significant light and glare impacts are anticipated from the project.

[13] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-10-Aesthetics
[14] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-11-Light-glare

5/21/25 DW

12. Recreation

Find help answering recreation questions

a. **What designated and informal recreational opportunities are in the immediate vicinity?**

There are no formal recreational opportunities in the immediate vicinity. The project does not abut the river or other recreational opportunities.

b. **Would the proposed project displace any existing recreational uses? If so, describe.**

No, the project would not displace any existing recreational uses.

c. **Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:**

None proposed.

13. Historic and cultural preservation

Find help answering historic and cultural preservation questions[15]

a. **Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.**

One historical period archaeological site (45CH1171) is recorded on the project parcel. No structures over 45 years of age are present on the project parcel. The project is one-half mile from the Rock Island Dam, which is listed in the Washinton Heritage Register. The Rock Island-Valhalla and the Rock Island - McKenzie Transmission Lines, determined Eligible for listing in the NRHP, are one-quarter mile north of the project.

b. **Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.**

Helion contracted with Willamette Cultural Resources Associates, Ltd. (WillametteCRA), a cultural resource management firm, to conduct background research and an archaeological resources survey of the project area. WillametteCRA conducted field studies on February 25 and March 3-5, 2025. Prior to fieldwork, both Helion and WillametteCRA representatives coordinated with the Tribal Historic Preservation Officer (THPO) at Confederated Tribes of the Colville Reservation and the Tribal Archaeologist with the Confederated Tribes of the Yakama Nation and informed them about the project and invited them to participate in fieldwork. Helion also coordinated with the Chelan County PUD Cultural Coordinator prior to conducting the work.

WillametteCRA prepared a report entitled Cultural Resources Survey for the Helion Energy Malaga Property, Chelan County, Washington, dated March 14, 2025. The report is exempt from public disclosure pursuant to RCW 42.56.300 but is being made available to appropriate reviewing parties including the Washington State Department of Archaeology and Historic

[15] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-13-Historic-cultural-p

5/21/25 DN

Preservation (DAHP), Chelan PUD, Chelan County and the affected Tribes. No archaeological resources were identified during the survey work. One previously recorded archaeological site, 45CH1171, was present in the project area. Measures to avoid impacts are described below. The portion of the project area planned for future construction of transmission infrastructure is scheduled to be surveyed and Helion will work with Chelan PUD to construct and operate the transmission infrastructure dedicated to the plant in a manner that does not impact historic and cultural resources.

see DAHP comments

c. **Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.**

Helion Energy intends to avoid disturbing the site; therefore, no formal evaluation is needed. Initial project plans called for building the PUD Access Road along the same alignment as archaeological site 45CH1171. In order to avoid impacts, Helion Energy has redesigned the location of the PUD Access Road. The PUD Access Road will be constructed 100- feet south of the site 45CH1171 boundary, avoiding it entirely. A professional archaeologist will flag the site with a 50-feet buffer during construction ("avoidance area") to ensure site 45CH1171 will be unaffected, and Helion Energy will ensure contractors do not work in the flagged avoidance area. Following construction, a professional archaeologist will remove the flagging around the site.

<Mitigation>

d. **Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.**

Helion Energy has elected to avoid impacts to site 45CH1171. The PUD access road will be constructed 50 feet north of the site 45CH1171 boundary, avoiding it entirely. An archaeologist will mark a 50-foot buffer around the site with construction fencing ("avoidance area") to ensure site 45CH1171 will be unaffected, and Helion Energy will ensure contractors do not work in the avoidance area. Following construction, a professional archaeologist will remove the fencing around the site. Because site 45CH1171 will be avoided, an Archaeological Site Alternation and Excavation Permits will not be required from DAHP

See DAHP comments

The portion of the project prea reserved for future development of transmission infrastructure has not yet been surveyed. Helion Energy has scheduled archaeological survey for any ground disturbing activities in this area and will submit an addendum report to Chelan County, the DAHP, the Chelan County PUD, and the affected Tribes. Helion will work with Chelan PUD to construct and operate the transmission infrastructure dedicated to the plant in a manner that does not impact historic and cultural resources.

<Mitigation>

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14. Transportation

Find help with answering transportation questions[16]

a. **Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.**

Primary access to the project site is provided by the Malaga Alcoa Highway, which Chelan County classifies as a Rural Major Collector. That road becomes Colockum Road, which is classified as a Rural Minor Collector. Local access is provided by Rock Island Dam Road-Nixon Rapids Lane, a local rural access road. The proposed new PUD access road would connect these two roads, just south of the project site.

b. **Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?**

The site is not currently served by public transit. The approximate distance to the nearest transit stop is 5 miles away.

c. **Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).**

The project would construct a new private local access road between Colockum Road and Rock Island Dam Road-Nixon Rapids Lane, about 1,500 feet south of the existing intersection of these two roads.

The project would construct frontage improvements on both the north and south side of Rock Island Dam Road-Nixon Rapids Lane per Chelan County requirements to allow vehicle access to both parcels. ✓

d. **Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

The project would be located about 0.25 miles southwest of the Columbia River. However, water, rail, and air transportation are not proposed as part of the project.

e. **How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?**

Site-generated trips vary depending on the phase of construction or site operations. During the initial phases of site development, building construction, and machine assembly, the contractor and staff are expected to be on-site from 6:00 AM to 6:00 PM seven days a week. Peak staffing is expected during building construction and fusion machine assembly, when 60 to 130 workers could be on-site simultaneously. Once the site is operational, it is expected to have 30 staff on-site 24-hours a day, 7 days a week, using two daily crews working 12-hour shifts. All phases would have peak shift-change times from 5:30 to 6:30 AM and 5:30 to 6:30 PM.

See Hoffman TIA

[16] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-14-Transportation

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Based on the estimated staff and number of contractors required for the project; vehicle trip generation was estimated for the AM and PM peak hours, which correspond to the peak shift times above. The vehicle trips were based on the highest estimated number of workers for each phase, and assuming all employees would drive alone to the site.

In addition, during the construction phases, there would be some truck activity to and from the site during the day to deliver materials. Once the site is fully operational, it is expected that one freight truck and one parcel truck would access the site each day, in addition to standard waste management service estimated at three times a week. Based on this activity, truck trips would represent about 2% of the total daily vehicle trips per day.

The following lists the anticipate peak hour trip generation for each phase:

- Phase 1 – Site Development & Small Building Construction
  - AM (32 in / 3 out = 35 trips); PM (2 in / 30 out = 32 trips)
- Phase 2 – Large Building Construction & Machine Assembly
  - AM (130 in / 20 out = 150 trip); PM (2 in / 125 out = 127 trips)
- Phase 3 – Complete and Fully Operational
  - AM (30 in / 30 out = 60 trips); PM (30 in / 30 out = 60 trips)

f. **Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.**

The proposal will not interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area.

g. **Proposed measures to reduce or control transportation impacts, if any:**

Other than as discussed above, none are proposed. As applicable, we will proceed pursuant to Department of Transportation rules for any transportation of regulated (i.e., radioactive or similar) materials.

15. Public services

Find help answering public service questions[17]

a. **Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.**

The project will require police and fire department protection; however, the presence of on-site private security will reduce the need for public police protection. No special emergency services, outside of what is already available in the surrounding area, would be required.

b. **Proposed measures to reduce or control direct impacts on public services, if any.**

[17] https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-15-public-services

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The proposed project would employ private on-site security to reduce impact to public services. Helion will coordinate with local emergency response. No special emergency services, outside of what is already available in the surrounding area, would be required.

Coordinate w/ WFD for emergency response plan <mitigation>

16. Utilities

Find help answering utilities questions[18]

a. **Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:**

No current utilities available on-site.

b. **Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

Water service is proposed to be provided by the Chelan County PUD via two new production wells or existing wells as discussed in Item B.3.b.1.

Electricity service is to be provided by the Chelan County PUD (see Item B.6.a).

As noted above, Helion will construct its own on-site septic systems (see Item B.3.b.2).

C.Signature

Find help about who should sign[19]

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

X Paul Gentsch

Digitally signed by Paul Gentsch
DN: C=US, E=paul@helionenergy.com, O=Helion Energy, CN=Paul Gentsch
Date: 2025.04.11 00:01:40-07'00'

Type name of signee: Paul Gentsch

Position and agency/organization: Chief of Staff / Helion Energy

Date submitted: April 11, 2025

[18] https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-16-utilities

[19] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-C-Signature

D.Supplemental sheet for nonproject actions

Find help for the nonproject actions worksheet[20]

Do not use this section for project actions.

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. **How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?**

   - **Proposed measures to avoid or reduce such increases are:**

2. **How would the proposal be likely to affect plants, animals, fish, or marine life?**

   - **Proposed measures to protect or conserve plants, animals, fish, or marine life are:**

3. **How would the proposal be likely to deplete energy or natural resources?**

   - **Proposed measures to protect or conserve energy and natural resources are:**

4. **How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?**

   - **Proposed measures to protect such resources or to avoid or reduce impacts are:**

5. **How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

   - **Proposed measures to avoid or reduce shoreline and land use impacts are:**

[20] https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-d-non-project-actions

6. **How would the proposal be likely to increase demands on transportation or public services and utilities?**

   - **Proposed measures to reduce or respond to such demand(s) are:**

7. **Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.**