Nature of Action

On August 18, 2020, the Washington Energy Facility Site Evaluation Council (EFSEC) received a written request from the certificate holder, Grays Harbor Energy LLC (GHE), to amend the current Grays Harbor Energy Center Site Certification Agreement (SCA). The amendment request consists of two distinct revisions to the SCA.

The first of the two proposed SCA revisions would authorize the installation of General Electric’s Advanced Gas Path (AGP) package in the operational combustion turbines in Units 1 and 2.

The second proposed revision is a request for EFSEC to extend the start of construction deadline in for Units 3 and 4, which obtained site certification under SCA Amendment No. 5, but have not yet been constructed.

GHE’s SCA amendment request would change the following in the Grays Harbor Energy Center SCA:

- Increase combustion turbine output to 181.2 MW from the current 175 MW for operating units 1 and 2.
- Extend the start of construction date for Units 3 and 4 to be no later than February 18, 2028. This would extend by seven years the February 18, 2021, deadline to begin construction for units 3 and 4, which is 10 years from the date of execution of SCA Amendment 5.

Background

The Grays Harbor Energy Center is located on a 22-acre site within the 1,600-acre Satsop Development Park. In 1976, the initial SCA authorized construction of Nuclear Projects No. 3 and No. 5, which were never completed. In 1996, the SCA was amended to authorize construction of a natural gas-fired combined cycle generating facility, and in 1999, the terms relating to the nuclear projects were removed.

In the decade that followed, EFSEC amended the SCA several times to reflect changes in the project ownership, from Energy Northwest to Duke Energy and then to GHE, and to reflect changes in the equipment proposed for Units 1 and 2. Units 1 and 2 were eventually constructed and put into operation in April 2008.

In 2011, the SCA was amended to authorize an expansion of the facility. This SCA amendment authorized a doubling of the facility’s output, with the construction of two additional combustion turbine
units, heat recovery steam generators and a steam turbine generator. The SCA refers to this expansion as Units 3 and 4. Construction on Units 3 and 4 has not yet begun.

Procedural Status

EFSEC’s SCA amendment procedure is governed by chapter 80.50 RCW and chapter 463-66 WAC.

GHE and EFSEC have complied with procedural requirements of Chapter 463-66 WAC as follows:

- Pursuant to WAC 463-66-030, the request for amendment of the SCA was submitted in writing on August 17, 2020.
- At its monthly meeting on September 15, 2020 the Council determined a schedule for action on the amendment request as follows: EFSEC conducted a public informational hearing on the GHE amendment request on October 6, 2020. Due to COVID-19 public health and safety concerns EFSEC held the public informational hearing virtually. Though not required by its rules EFSEC invited public comment via US mail or online submittal from September 24, 2020 through midnight October 6, 2020.
- Pursuant to WAC 463-66-030, notice of a public hearing was distributed to the GHE project distribution list. The public notice issued by EFSEC advised that GHE had requested an amendment to the SCA, and that a public informational hearing to consider the matter would be conducted on October 6, 2020. The public notice for the EFSEC virtual public informational hearing stated that public comments would be heard at the public hearing and could also be submitted online or via US mail to EFSEC from September 24, 2020 through midnight October 6, 2020.
- EFSEC conducted a virtual public informational hearing session in which the public was provided an opportunity to comment on this matter on October 6, 2020.
- No public comments were received.
- At the Council’s November 17th, 2020, monthly meeting EFSEC Manager Sonia Bumpus discussed the status of EFSEC’s SEPA review and staff’s recommendation with regard to the GHE SCA amendment request:
  - Sonia Bumpus proposed that the Council bifurcate the GHE SCA Amendment request Council decision. Separate draft SEPA Addendums were presented and discussed by EFSEC staff at the meeting. Copies of the SEPA Addendum for GHE Units 1 and 2 and GHE Units 3 and 4 were provided in Council member packets and made available on EFSEC’s website.
  - EFSEC Siting Specialist Kyle Overton discussed the content of two supporting SEPA staff memos to the EFSEC SEPA Addendum documents. Copies of the SEPA staff memo for GHE Units 1 and 2 and for Units 3 and 4 were included in EFSEC Council member packets and made available on EFSEC’s website.
  - At the meeting the Council resolved to bifurcate its decision for the GHE SCA Amendment request. The Council directed EFSEC staff to draft a resolution for Council review consistent with the staff recommendation.
- The Council considered information in GHE’s SCA amendment request, the proposed amendments to the Amended GHE SCA, the SEPA Addendums and supporting SEPA Staff Memos, and a draft of this Resolution No. 348 at the December 15, 2020 Council meeting.
Discussion

WAC 463-66-040 outlines the relevant factors that the Council shall consider prior to a decision to amend a SCA. In reviewing any proposed amendment, the council shall consider whether the proposal is consistent with:

1. The intention of the original SCA;
2. Applicable laws and rules; and
3. The public health, safety, and welfare; and
4. The provisions of chapter 463-72 WAC.

At its November 17, 2020, meeting, the Council resolved to review the equipment upgrade and the extension request separately.

As noted above, GHE has requested two unrelated changes to its SCA. The first requested change would authorize equipment and software changes to existing Units 1 and 2. The second change would extend by seven years the existing ten year expiration date of SCA Amendment 5, which authorized the construction of two new generating units (Units 3 and 4) by February 18, 2021.

Under these circumstances, the Council concludes it is reasonable to bifurcate and give separate consideration to GHE’s request for an extension of the ten year construction authorization expiration date set out in SCA Amendment 5, apart from the equipment upgrade request.

1. Advanced Gas Path Package/Increase in Authorized Generating Capacity

The Council first reviews just those proposed changes to the SCA that are necessary to authorize installation of the Advanced Gas Path Package in the existing combustion turbines, Units 1 and 2, under the criteria in WAC 463-66-040.

a. Consistency with intention of the original SCA

Under WAC 463-66-040(1), the Council must consider whether the proposed amendment is consistent with the intention of the original SCA. In general, the intention of every SCA is to grant State authorization to a certificate holder to construct and operate an energy facility that has been determined to be in the interest of the State of Washington because the facility will produce a net benefit after balancing need for the facility against impacts on the broad public interest, including human welfare and environmental stewardship. An SCA provides a “license” and GHE as the certificate holder, in-turn, commits itself to comply with the terms and conditions of the SCA.

The intent of the SCA authorizes “electrical generation facilities at the Satssop site, first the nuclear facility, then a natural gas-fired 2x1 combined-cycle combustion turbine facility, and then a second 2x1 combined-cycle combustion turbine addition to the facility (which has not been built).” (Grays Harbor Energy Center Request to Amend the Site Certification Agreement, letter dated August 17, 2020) The Advanced Gas Path Package is an equipment and software improvement to combustion turbine units 1 and 2, which is expected to increase operation efficiency and output. Currently each turbine is nominally rated at 175 megawatts and the upgrade is expected to increase the output of each turbine to approximately 181 MW. While some minor impacts to air and water are anticipated, they are addressed within the existing SCA and/or air and water permit requirements. An application for a minor modification to the Prevention of Significant Deterioration (PSD) permit will address the technical changes to operation without requiring an increase to existing PSD permits limits. The Council finds that installation of the Advanced Gas Path Package for efficient gas-fired electrical generation is consistent with the intent of the SCA.
b. **Consistency with applicable laws and rules**

Under WAC 463-66-040(2), the Council must consider applicable laws and rules, including chapter 80.50 RCW, chapter 43.21C RCW and chapter 197-11 WAC (the State Environmental Policy Act and EPA rules), WAC 463-66-070 through -080, and the construction and operation standards for energy facilities in WAC 463-62.

i. **Consistency with SEPA (chapter 43.21C RCW and chapter 197-11 WAC)**

The Council is charged with the responsibility to review proposed projects under SEPA, RCW 43.21C and chapter 197-11 WAC. That law provides for the consideration of probable adverse environmental impacts and possible mitigation measures. Pursuant to WAC 463-47-140, EFSEC is the lead agency for environmental review of projects under the jurisdiction of RCW 80.50; the Council Manager is the SEPA responsible official, per WAC 463-47-051.

GHE submitted an amendment request and SEPA Checklist which EFSEC staff reviewed along with the other materials submitted to EFSEC. EFSEC reviewed the SEPA Determination of Significance/Adoption for the Satsop Combustion Turbine Project; adoption of the NEPA Bonneville Power Administration’s 11/1995 EIS document; which is the SEPA document being addended for this proposal. An Addendum under SEPA, Per WAC 197-11-600(3), for DNSs and EISs, preparation of a new threshold determination or supplemental EIS is required if there are:

(i) Substantial changes to a proposal so that the proposal is likely to have significant adverse environmental impacts (or lack of significant adverse impacts, if a Determination of Significance (DS) is being withdrawn); or

(ii) New information indicating a proposal’s probable significant adverse environmental impacts (this includes discovery of misrepresentation or lack of material disclosure). A new threshold determination or Supplemental EIS (SEIS) is not required if probably significant adverse environmental impacts are covered by the range of alternatives and impacts analysis in the existing environmental documents.

If it is determined that new information and analysis does not substantially change the analysis of significant impacts and alternatives in the existing environmental document (WAC 197-11-600 (4)(c) then an addendum is appropriate for documenting this review under SEPA.

As no substantial changes to the proposal or new information indicating probable significant adverse impacts were identified, EFSEC’s SEPA responsible official determined that an Addendum to the SEPA EIS prepared by the Washington State Thermal Power Plant Site Evaluation Council is appropriate. EFSEC’s SEPA responsible official considered all of the information in the above referenced documents for the installation of the Advanced Gas Path Package in turbine units 1 and 2. The SEPA Addendum for Units 1 and 2 identified resource impacts but no new or significant unavoidable impacts were identified. The SEPA staff memo dated November 17, 2020, and the Final SEPA Addendum for Units 1 and 2 discusses impacts and mitigation which are consistent with existing mitigation and permit requirements in the SCA.

EFSEC invited public comment on the GHE SCA Amendment request at a virtual public hearing session held on October 6, 2020. EFSEC also invited public comment via US mail or through online submittal from Thursday, September 24, 2020 through midnight on October 6, 2020. No substantive comments were submitted for the SCA amendment request. The Council finds that installation of the Advanced Gas
Path Package for efficient gas-fired electrical generation is consistent and in compliance with SEPA laws and rules in chapter 43.21 C RCW and chapter 197-11 WAC.

ii. **Consistency with WAC 463-66-070: Approval by Council Action and -080: Approval by governor**

WAC 463-66-070 and -080 discuss the two options available to the Council for approval of a request for amendment to an EFSEC site certification agreement.

WAC 463-66-080 provides:

An [SCA] amendment which substantially alters the substance of any provision of the SCA or which is determined to have a significant detrimental effect upon the environment shall be effective upon the signed approval of the governor.

On the other hand, WAC 463-66-070 provides:

An amendment request which does not substantially alter the substance of any provisions of the SCA, or which is determined not to have a significant detrimental effect upon the environment, shall be effective upon approval by the council. Such approval may be in the form of a council resolution.

The Council considered whether the SCA Amendment request related to the Advance Gas Path Package would result in, “significant detrimental effects” on the environment. EFSEC relied upon its SEPA review to identify potential significant adverse impacts. If potential significant unavoidable adverse impacts were identified, these would be categorically characterized as “significant detrimental effects.” No new significant adverse impacts from the installation of the Advance Gas Path Package on GHE Units 1 and 2 were identified in EFSEC’s SEPA review.

The Council therefore concludes that this amendment may be approved by Council resolution pursuant to WAC 463-66-070.

iii. **Consistency with WAC 463-62 Construction and Operation Standards for Energy Facilities**

Chapter 463-62 WAC implements EFSEC’s policy and intent outlined in RCW 80.50.010. Performance standards and mitigation requirements that address seismicity, noise limits, fish and wildlife, wetlands, water quality, and air quality are identified in the rule.

Within the existing terms of the SCA, the proposed SCA amendments pertaining to installation of the Advanced Gas Path Package demonstrate compliance with the construction and operation conditions outlined in WAC 463-62.

Seismicity:
No new seismicity issues are anticipated for installation of the Advanced Gas Path Package.

Noise:
Installation of the Advanced Gas Path would occur during the annual maintenance outage which will be 45 days in 2021. Noise levels are expected to remain within existing operating limits established in the SCA and permits; no new concerns related to noise were identified.
Fish and wildlife habitat and function:
No issues related to wildlife and function were identified.

Wetland impacts and mitigation:
No issues related to wetland and mitigation impacts were identified.

Water quality:
Due to higher firing temperatures from the Advanced Gas Path, the facility’s water consumption drawn from the Chehalis River could increase, but by no more than 3%. There are several variables that determine the actual amount of water consumption at the facility, which results in a range of water consumption over time. The current SCA includes a water withdrawal authorization that does not require any change as part of this amendment request (2010 SCA Attachment III). Additionally, EFSEC consulted Ecology regarding the potential increase in water withdrawal from the Chehalis River. Ecology confirmed that the GHE amendment request does not change the amount of water GHE is already approved to withdraw for Units 1 and 2 (Ecology email 10/20/2020). No new concerns related to environmental impacts to water or from withdrawal from the Chehalis River are identified. GHE’s current NPDES permit is expected to adequately address water quality.

Air quality:
Following installation of the Advanced Gas Path Package, the turbines “will continue to meet all hourly and annual emission limits. Combustion turbines may have greater emissions with the Advanced Gas Path Package.” (GHE Amendment Request II.C.1.). “There will be an increase of NOx and CO but will still comply with the BACT limits already set.” (GHE SEPA Checklist B.2.). EFSEC received a PSD minor permit modification application which will be processed. Proposed updates to the PSD permit are expected to address any potential air quality impacts from the addition of the Advanced Gas Path package and no increase in PSD permit limits are anticipated. No new concerns related to environmental impacts to air quality were identified.

Based on the results of the SEPA environmental review conducted by EFSEC, and within the terms of the SCA as proposed for amendment to authorize installation of the Advance Gas Path Package on Units 1 and 2, the Council hereby concludes that the standards for construction and operation in chapter 463-62 WAC are satisfied. Therefore, the Council determines that the SCA Amendment pertaining to installation of the Advance Gas Path Package is consistent with WAC 463-62.

c. Consistency with public health, safety, and welfare

Under WAC 463-66-040(3) and -050, the Council must consider whether the SCA Amendment request would be consistent with public health, safety, and welfare. In considering whether a proposed amendment is consistent with the public health, safety and welfare, WAC 463-66-050 requires the Council to consider the long-term environmental impacts of the proposal, and further requires a consideration of “reasonable alternative means by which the purpose of the proposal might be achieved” along with the “availability of funding to implement the proposal.”

Installation of the Advanced Gas Path package will occur during the annual maintenance outage which will be for 45 days in 2021. This equipment upgrade will occur within the existing and approved facility footprint with no change to the site boundary. Increased turbine generation output to approximately 181 MW at 100% load is expected. A minor PSD permit modification will address any potential air quality impacts from the addition of the Advanced Gas Path package, within existing PSD permit limits. Increased water consumption is anticipated with this upgrade and the GHE SCA already includes a water withdrawal authorization that does not require any change as part of this amendment request (2010 SCA Attachment III).
Attachment III). EFSEC coordinated with Ecology during its SEPA review of the SCA amendment request regarding the potential increase in water withdrawal from the Chehalis River, and Ecology confirmed that the Advanced Gas Path Package upgrade will not change the amount of water GHE is already authorized to withdraw for Units 1 and 2 (Ecology email 10/20/2020).

The proposed equipment upgrade will involve the use of more de minimis amounts of toxic or hazardous chemicals already addressed in GHE’s existing site Spill Prevention, Control, and Countermeasure Plan and Dangerous Waste Management Procedures.

As with the previous environmental resources discussed above, greenhouse gas emissions were evaluated in previous SEPA documents that EFSEC reviewed. The GHE facility has an approved Greenhouse Gas Mitigation Plan which generally requires the certificate holder to mitigate potential carbon dioxide emissions from the facility that exceed a rate of 0.675 lb/kWh. Potential greenhouse gas emissions resulting from the equipment upgrade will be addressed by updating the greenhouse gas emissions mitigation payment calculations at startup post construction (EFSEC SEPA Addendum GHE Units 1 and 2).

GHE will continue to implement the purpose of the original project, though with slightly increased generating capacity. The Advanced Gas Path Package installation will not result in potential significant adverse impacts on public health and safety. Consequently, as supported by the documentation in the SEPA Addendum for GHE Units 1 and 2, and the Amended SCA, this equipment upgrade is consistent with the public health, safety and welfare.

d. Consistency with WAC 463-72

WAC 463-72-020 provides that site restoration or preservation plans shall be prepared in sufficient detail to identify, evaluate, and resolve all major environmental and public health and safety issues, to include provisions for funding or bonding and monitoring.

The Council has already approved a site restoration plan for the Grays Harbor Energy Center. The requested amendment does not propose any change to that approved plan or to the SCA’s site restoration conditions.

The Council concludes that this amendment is consistent pursuant to WAC 463-72.

Conclusion regarding Advanced Gas Path Package

The Council concludes as follows with regard to the proposed SCA revisions to authorize installation of the Advanced Gas Path Package. That portion of the proposed amendment that is necessary to authorize installation of the Advance Gas Path Package on Units 1 and 2 is consistent with: (1) the intent of the Original Project SCA; (2) the public health, safety, and welfare; (3) all applicable laws (including SEPA); and (4) the provisions of WAC 463-72.

The Council hereby determines that it is appropriate to approve Amendment 6 to the Grays Harbor Energy Center SCA, as necessary to reflect the proposed Advance Gas Path Package upgrade to Units 1 and 2.

2. Units 3 and 4 Construction Start Deadline Extension

The Council turns now to review GHE’s request to extend, to February 18, 2028, the SCA’s requirement to begin construction of Units 3 and 4 by February 18, 2021.
As discussed above, the first criterion for the Council’s review of a request to amend an SCA is whether the proposed amendment is consistent with “the intention of the original SCA.” WAC 463-66-040(1). A key consideration under this criterion is whether the SCA term the certificate holder proposes to change was fundamental to the Council and the Governor’s approval of the original SCA. If the term was fundamental to approval of the original SCA, but the reasons the certificate holder provides for the requested change are not compelling or do not adequately address the fundamental issue that led to the inclusion of that term in the original SCA, then the Council may deny the request.

For purposes of the Council’s review of the extension request, Amendment 5 (Feb. 18, 2011) to GHE’s SCA is the “original SCA.” The Council reviewed GHE’s October 2009 application for certification of Units 3 and 4 using the same procedural steps that are required for a new application for site certification. The Council issued a mitigated determination of non-significance under SEPA, determined the project would be consistent and in compliance with land use plans and zoning ordinances, and granted expedited processing. The Council ultimately prepared a recommendation to the Governor to approve certification of Units 3 and 4, subject to conditions to mitigate the adverse environmental effects of the project.

Amendment 5, Art. II.B.2, pp. 4-5, includes the following requirements concerning start of construction:

This Site Certification Agreement authorizes the Certificate Holders to begin construction of Units 3 and 4 within ten (10) years of the execution of Amendment No. 5. If construction of Units 3 and 4’s major components has not been commenced within ten (10) years of the execution of Amendment No. 5, all rights under this Site Certification Agreement to construction and operation of Units 3 and 4 will cease.

If the Certificate Holders do not begin construction of Units 3 and 4 within five (5) years of the execution of Amendment No. 5, the Certificate Holders will report to the Council their intention to continue and will certify that the representations in the application, environmental conditions, pertinent technology and regulatory conditions remain current and applicable, or identify any changes and propose appropriate revisions in the Site Certification Agreement to address changes. Construction may begin only upon prior Council authorization, upon the Council’s finding that no changes to the Site Certification Agreement are necessary or appropriate, or upon the effective date of any necessary or appropriate changes to the Site Certification Agreement.

Further, if the Certificate Holders do not begin construction of Units 3 and 4 within five (5) years of the execution of Amendment No. 5 and the Council has adopted by rule changes to the standards governing "construction and operation for energy facilities" specified in WAC chapter 463-62, the construction and operation of Units 3 and 4 will be governed by the regulations in effect at the time the Council authorizes construction to proceed.

( Italics added.) When explaining this provision in its recommendation to the Governor, the Council stated that although “there is a benefit to the public to have permitted facilities ready to be constructed whenever it becomes known that more generation capacity is needed,” the Council nonetheless recognized “that an unlimited ‘build window’ for a proposed project is not appropriate as, over time, technology or mitigation measures presented in an application may no longer be protective of environmental standards and conditions at the time the facility is constructed.” Council Order No. 860, p. 13.

The Council’s recommendation that the Governor approve certification of Units 3 and 4 was based on its weighing of the need for the project against the project’s environmental impacts at the proposed location.
The Council stated that, in reviewing a request for site certification, it “must consider whether an energy facility at a particular site will produce a net benefit after balancing the legislative directive to provide for abundant energy at a reasonable cost with the impact to the environment and the broad interests of the public.” *Id.* at p. 15. The Council did not merely assume a need for the project, but instead specifically found that:

> [T]he evidence in the record supports the conclusion that the region needs to continue to add electrical generation capacity. The Project will contribute to the diversification and reliability of the state’s electrical generation capacity, and will therefore support the legislative intent to provide abundant energy at a reasonable cost.

Based on the Council’s recommendation, the Governor approved the request.

The Council’s evaluation of the evidence of need for Units 3 and 4 followed the approach the Council had taken in its 1996 order regarding authorization of Units 1 and 2 at Satsop. Council Order No. 694 (Modified April 15, 1996). In that order, the Council declined the applicant’s request to exclude the issue of project need, reasoning that it is impossible to balance need and the public interest without evaluating the urgency of the need for a particular facility at a particular location.

GHE is now requesting that the Council amend the SCA to extend the deadline for commencing construction of Units 3 and 4 by seven years, from February 2020 to February 2028. GHE’s request states that “[a]lthough market conditions do not currently support construction of Units 3 and 4, GHE believes that they may by 2028, given the planned [coal plant] baseload retirements.”

GHE admits that market demand currently is not sufficient to support construction. In addition, GHE does not explain how its prediction of possible future need squares with recent changes in state law regarding transition away from fossil fuel by Washington utilities, which could have a bearing on the Council’s analysis of need for the facility. Under the 2019 Clean Energy Transformation Act (Laws of 2019. ch. 288; RCW 19.405), utilities must eliminate coal-fired electricity from their state portfolios by 2025 (RCW 19.405.030), and by 2030 a greenhouse neutral standard will apply, which means utilities have flexibility to use limited amounts of electricity from natural gas if it is offset by other actions (RCW 19.405.040). By 2045, utilities must supply Washington customers with electricity that is 100% renewable or non-emitting, with no provision for offsets (Id.).

In summary, in recommending certification of Units 3 and 4, the Council stated it did not believe an “unlimited build window” would be appropriate. The Council also considered the applicant’s evidence of need for the project to be a necessary part of its recommendation of approval. As such, GHE’s extension request is not only inconsistent with the intention of the original SCA, it also fails to provide a compelling demonstration of need to justify changing the ten year expiration of Amendment 5 to the SCA.

The Council concludes that the proposed SCA Amendment is inconsistent with the intent of SCA Amendment No. 5. Consequently, it is unnecessary to review GHE’s extension request under the other three criteria.

**Conclusion regarding Units 3 and 4 Construction Extension**

Because it is inconsistent with the intent of the original SCA, and GHE has not put forth a compelling reason for the proposed extension of the construction start deadline for Units 3 and 4, GHE’s proposed amendment to SCA Amendment 5 should be denied. Denial of this request should be without prejudice to GHE’s ability to submit a new application for certification of additional generating units in the future, should need arise.
RESOLUTIONS

For the foregoing reasons, the Council:

Grants Grays Harbor Energy’s request to amend its SCA to allow GHE to install the Advanced Gas Package. The Council's approval is memorialized in the attached SCA Amendment.

Denies Grays Harbor Energy’s request to amend SCA Amendment 5 to extend the construction start deadline for Units 3 and 4.

Assuming that GHE has not commenced construction, Amendment 5 will expire by its own terms on February 18, 2021. This expiration will be without prejudice to GHE’s ability to submit an application to build new generating units in the future. If market conditions eventually change to support construction of new generating units, GHE may submit a new application to be reviewed in the same manner as its 2009 request.

The approved SCA changes are shown in the Amended SCA.

The supporting SEPA review documentation is set out in attachment 1 to this resolution.

Appeals:

A request for judicial review of the SCA amendment is subject to the requirements of the Administrative Procedures Act, Chapter 34.05 RCW.

DATED at Lacey, Washington and effective on December 15, 2020

WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

Kathleen Drew, EFSEC Chair

Sonia E. Bumpus, EFSEC Manager