POTENTIAL ACTION ITEM

Washington State
Energy Facility Site Evaluation Council

AGENDA

MONTHLY MEETING
Wednesday July 17, 2024
1:30 PM

HYBRID MEETING
Click here to join the meeting
Conference number: 564-999-2000 ID: 699286814#

1. Call to Order ……Kathleen Drew, EFSEC Chair
2. Roll Call ……Andrea Grantham, EFSEC Staff
3. Proposed Agenda ……Kathleen Drew, EFSEC Chair
4. Minutes
Meeting Minutes……Kathleen Drew, EFSEC Chair
- June 20, 2024 Monthly Council Meeting Minutes

5. Projects

a. Kittitas Valley Wind Project
- Operational Updates……Jarred Caseday, EDP Renewables

b. Wild Horse Wind Power Project
- Operational Updates……Jennifer Galbraith, Puget Sound Energy

c. Chehalis Generation Facility
- Operational Updates……Jeremy Smith, Chehalis Generation

d. Grays Harbor Energy Center
- Operational Updates……Chris Sherin, Grays Harbor Energy
- Title V Air Operating Permit……Sara Randolph, EFSEC Staff

The Council may consider and take FINAL ACTION on issuing the Title V AOP for the Grays Harbor project.

e. Columbia Solar
- Operational Updates……Thomas Cushing, Greenbacker Capital

f. Columbia Generating Station
- Operational Updates……Denis Mehinagic, Energy Northwest

g. WNP – 1/4
- Non-Operational Updates……Denis Mehinagic, Energy Northwest

h. Goose Prairie Solar
- Project Updates……Jacob Crist, Brookfield Renewable

i. High Top & Ostrea
- Project Updates……Sara Randolph, EFSEC Staff

j. Badger Mountain
- Project Updates……Joanne Snarski, EFSEC Staff

k. Wautoma Solar
- Project Updates……Lance Caputo, EFSEC Staff

l. Hop Hill Solar
- Project Updates……John Barnes, EFSEC Staff

m. Carriger Solar
- Project Updates……Joanne Snarski, EFSEC Staff

n. Wallula Gap
- Project Updates……John Barnes, EFSEC Staff

o. Whistling Ridge
- Draft Order 893 Discussion……Lance Caputo, EFSEC Staff

The Council may consider and take FINAL ACTION on Order 893 for the Whistling Ridge project.

p. Horse Heaven Wind Farm
- Project Updates……Amy Moon, EFSEC Staff

q. Goldeneye BESS
- Application Introduction……Zia Ahmed, EFSEC Staff

6. Other
- Cost Allocation……Sonia Bumpus, EFSEC Staff

7. Adjourn……Kathleen Drew, EFSEC Chair

Note: "FINAL ACTION" means a collective positive or negative decision, or an actual vote by a majority of the members of a governing body when sitting as a body or entity, upon a motion, proposal, resolution, order, or ordinance. RCW 42.30.020

WASHINGTON STATE

ENERGY FACILITY SITE EVALUATION COUNCIL

MONTHLY MEETING

June 20, 2024

Lacey, Washington

Reporter: John M.S. Botelho, CCR, RPR

APPEARANCES

STATE AGENCY MEMBERS:

Kathleen Drew, Chair

Elizabeth Osborne, Department of Commerce

Eli Levitt, Department of Ecology

Mike Livingston, Dept. of Fish and Wildlife

Lenny Young, Department of Natural Resources

Stacey Brewster,
Utilities & Transportation Commission

LOCAL GOVERNMENT AND OPTIONAL STATE AGENCIES:

Horse Heaven:
Ed Brost, Benton County

Badger Mountain:
Jordyn Guilio, Douglas County (*)

Wautoma Solar:
Dave Sharp, Benton County (*)
Paul Gonseth, Washington State Dept. of Transportation (*)

Wallula Gap:

Adam Fyall, Benton County (*)

APPEARANCES (Continuing)

ASSISTANT ATTORNEYS GENERAL:

Jon Thompson

Jenna Slocum (*)

Zack Packer (*)

ADMINISTRATIVE LAW JUDGES:

Adam Torem (*)

Laura Bradley (*)

Dan Gerard (*)

COUNCIL STAFF:

Sonia Bumpus
Ami Hafkemeyer
Stew Henderson
Joan Owens
Andrea Grantham
Sonja Skavland
Sara Randolph (*)
Sean Greene
Lance Caputo
John Barnes
Joanne Snarski
Alex Shiley
Ali Smith
Karl Holappa
Audra Allen
Maria Belkina
Lisa McLean
Adrienne Barker
Catherine Taliaferro
Alondra Zalewski
Sairy Reyes
Martin McMurray
Trevin Taylor

APPEARANCES (Continuing)

OPERATIONAL UPDATES:

Jarred Caseday (*)
Kittitas Valley Wind, EDP Renewables
Jennifer Galbraith (*)
Wild Horse Wind Power Project, Puget Sound Energy

Sara Randolph, EFSEC staff (*)
Grays Harbor Energy Center, Grays Harbor Energy
Jeremy Smith (*)
Chehalis Generation Facility, PacifiCorp

Denis Mehinagic (*)
Columbia Generating Station & WNP-1/4, Energy Northwest

Thomas Cushing (*)
Columbia Solar, Tuusso Energy
Jacob Crist (*)
Goose Prairie Solar, Brookfield Renewable

COUNSEL FOR THE ENVIRONMENT:

Sarah Reyneveld (*)

Yuriy Korol (*)

(*) indicates remote attendee

Note: All attendees listed above have been verified as being present despite some having been omitted from the oral roll call.

MEETING INDEX

MEETING INDEX (Continuing)

BE IT REMEMBERED that on Thursday, June 20, 2024, at 621 Woodland Square Loop Southeast, Lacey, Washington, at 12:30 p.m., the following Monthly Meeting of the Washington State Energy Facility Site Evaluation Council was held, to wit:

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CHAIR DREW: Good afternoon. This is Kathleen Drew, Chair of the EFSEC Council, calling to order our monthly meeting for June.

Ms. Grantham, will you call the roll of the general EFSEC Council.

MS. GRANTHAM: Certainly, Chair Drew.

Department of Commerce.

MS. OSBORNE: Elizabeth Osborne, present.

MS. GRANTHAM: Department of Ecology.

MR. LEVITT: Eli Levitt, present.

MS. GRANTHAM: Department of Fish and Wildlife.

MR. LIVINGSTON: Mike Livingston, present.

MS. GRANTHAM: Department of Natural Resources.

MR. YOUNG: Lenny Young, present.

MS. GRANTHAM: Utilities & Transportation Commission.

MS. BREWSTER: Stacey Brewster, present.

MS. GRANTHAM: Chair, there is a quorum of the regular Council.

CHAIR DREW: Thank you.

At this time, I'm going to call an executive session. The purpose of the session is listed under RCW 42.30.110, Sub 1. And the purpose -- the subject is the Whistling Ridge energy project site certification agreement, and the purpose is discussing with legal counsel representing the agency matters relating to potential litigation or legal risks of the proposed actions to approve transfer and to extend the Whistling Ridge energy project site certification agreement.

We plan to return by 1:30. Thank you.

(Pause in proceedings from 12:31 p.m. to 1:30 p.m.)

CHAIR DREW: Good afternoon. This

is Kathleen Drew, Chair of the EFSEC Energy Facility Site Evaluation Council, bringing our monthly meeting back to order now that our executive session has closed.

Ms. Grantham, will you please call the roll.

MS. GRANTHAM: Certainly. And, Chair Drew, really quick, would you like me to recall the roll of the regular Council or just start from the local government and optional State agency council?

CHAIR DREW: Go ahead and start with the local government.

MS. GRANTHAM: Perfect.

Okay. So for local government and optional State agencies: For the Horse Heaven council, for Benton County, Ed Brost.

For the Badger Mountain, for Douglas County, Jordyn Guilio.

MS. GUILIO: Jordyn Guilio.

MS. GRANTHAM: For Wautoma Solar, for Benton County, Dave Sharp.

MR. SHARP: Dave Sharp, present.

MS. GRANTHAM: Washington State Department of Transportation, Paul Gonseth.

MR. GONSETH: Paul Gonseth, present.

MS. GRANTHAM: Hop Hill Solar, for

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Benton County, Paul Krupin.
For Carriger Solar, for Klickitat County, Matt Chiles.
And for Wallula Gap, for Benton County, Adam Fyall.
MR. FYALL: Adam Fyall is here.
MS. GRANTHAM: For assistant attorney generals: Jon Thompson.
MR. THOMPSON: Present.
MS. GRANTHAM: Jenna Slocum.
MS. SLOCUM: Present.
MS. GRANTHAM: Zack Packer.
MR. PACKER: Present.
MS. GRANTHAM: And do we have any administrative law judges on the line?
ALJ GERARD: Dan Gerard.
MS. GRANTHAM: I have Mr. Gerard. And was there someone else present?
ALJ TOREM: Yeah. Judge Torem.
MS. GRANTHAM: Thank you.
For EFSEC staff -- oh.
ALJ BRADLEY: Also Judge Bradley.
MS. GRANTHAM: Thank you, Judge Bradley.
And I will go over to EFSEC staff. I will be

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calling those anticipated to possibly speak today.
For EFSEC staff, Sonia Bumpus.
MS. BUMPUS: Present.
MS. GRANTHAM: Ami Hafkemeyer.
MS. HAFKEMEYER: Present.
MS. GRANTHAM: Sara Randolph.
MS. RANDOLPH: Present.
MS. GRANTHAM: Sean Greene.
MR. GREENE: Present.
MS. GRANTHAM: Lance Caputo.
MR. CAPUTO: Present.
MS. GRANTHAM: John Barnes.
MR. BARNES: Present.
MS. GRANTHAM: Joanne Snarski.
MS. SNARSKI: Present.
MS. GRANTHAM: Mar- -- excuse me. Martin McMurray.
MR. McMURRAY: Present.
MS. GRANTHAM: And Trevin Taylor.
MR. TAYLOR: Present.
MS. GRANTHAM: And for operational updates: Kittitas Valley Wind Project.
MR. CASEDAY: Jarred Caseday, present.
MS. GRANTHAM: Wild Horse Wind Power

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Project.
MS. GALBRAITH: Jennifer Galbraith, present.
MS. GRANTHAM: Grays Harbor Energy Center.
Chehalis Generation Facility.
MR. SMITH: Jeremy Smith, present.
MS. GRANTHAM: Columbia Generating Station.
MR. MEHINAGIC: Denis Mehinagic, present.
MS. GRANTHAM: Columbia Solar.
MR. CUSHING: Thomas Cushing, present.
MS. GRANTHAM: Goose Prairie Solar.
MR. CRIST: Jacob Crist, present.
MS. GRANTHAM: And do we have anyone present for the counsel for the environment?
MS. REYNEVELD: Yes. Sarah Reyneveld and Yuriy Korol are present.
MS. GRANTHAM: Thank you.
Chair, there is a quorum for all councils.
CHAIR DREW: Thank you.
Moving on to our proposed agenda. Council members, you see that in front of you.

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Is there a motion to adopt the proposed amended -- excuse me -- a proposed agenda?
MR. YOUNG: Lenny Young. So moved.
MR. LIVINGSTON: Mike Livingston. Second.
CHAIR DREW: Thanks.
Any discussion?
All in favor, please say "aye."
MULTIPLE SPEAKERS: Aye.
CHAIR DREW: Opposed?
The agenda is adopted.
Moving on to the meeting minutes.
First, the May 15, 2024, monthly Council minutes. I did not find any -- first of all, let's have a motion to approve the monthly Council minutes.
MR. LIVINGSTON: Move to approve the Council minutes from May.
CHAIR DREW: Second?
MR. LEVITT: Second. Eli Levitt.
CHAIR DREW: I did not find any corrections or changes. Did anyone find anything in that set of minutes?
Okay. All those in favor of approving those monthly Council minutes, please say "aye."
MULTIPLE SPEAKERS: Aye.

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CHAIR DREW: All those opposed?
Minutes are approved.
Move on to -- we have the May 16th Whistling Ridge transfer and extension request meeting minutes, and they're two sets of minutes. So we can take them as one, but I do have corrections on both.
So let's go ahead and move to approve the May 16th, 2024, Whistling Ridge transfer and extension request meeting minutes. Motion?
MS. BREWSTER: Stacey Brewster. So moved.
CHAIR DREW: Second?
MS. OSBORNE: Elizabeth Osborne. Second.
CHAIR DREW: Okay. So the changes that I have are, for the transfer request, Page 21, Line 1, in the sentence, quote, "No secret addendum is required," it should say "SEPA," S-E-P-A.
Then moving on to the extension request.
Are there any other corrections from that set of minutes from anybody? Okay.
Then moving on to the extension request. I have a few. On Page 15, Li- -- excuse me. Page 17, Line 15, the word "city" should be "EFSEC," E-F-S-E-C.
Page 22, Line 22, the word "fourth," should be

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"forest."
On Page 53, Line 6, I believe "2013" should be "2023."
And on Page 54, Line 2, "EPA" should be "BPA," the letter "B" as in "boy."
Okay. Any other corrections or edits?
All those in favor, please say "aye," of the minutes as amended.
MULTIPLE SPEAKERS: Aye.
CHAIR DREW: Opposed?
The minutes are approved.
Moving on now to our operational updates. Kittitas Valley wind project. Mr. Caseday.
MR. CASEDAY: Good afternoon, Chair Drew, EFSEC Council, and staff. This is Jarred Caseday with EDP Renewables for the Kittitas Valley wind power project.
We have nothing nonroutine to report for the period.
CHAIR DREW: Thank you.
Wild Horse --
MR. CASEDAY: Thank you.
CHAIR DREW: -- wind power project. Ms. Galbraith.
MS. GALBRAITH: Yes. Thank you,

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Chair Drew, Council members, and EFSEC staff. For the record, this is Jennifer Galbraith from Puget Sound Energy representing the Wild Horse wind facility.
And for the month of May, we had no nonroutine updates.
CHAIR DREW: Thank you.
Chehalis Generation Facility. Mr. Smith.
MR. SMITH: Good afternoon, Chair Drew, Council members, and staff. This is Jeremy Smith, the operations manager, representing the Chehalis Generation Facility.
I have nothing nonroutine to report for the month of May.
CHAIR DREW: Thank you.
Grays Harbor Energy Center. Mr. Sherin or Ms. Randolph.
MS. RANDOLPH: That would be me today. Thank you, Chair Drew and Council members. For the record, this is Sara Randolph, site specialist, for Grays Harbor.
The public comment period began May 20th and ends today. There have not been any public comments at this time. Following the public comment period, the draft permit documents as well as responses to any substantive comments will go to the EPA for a 45-day

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review. The acid rain permit application is under review. There are no other updates to report at this time.
CHAIR DREW: Are there any questions for Ms. Randolph? Thank you.
Columbia Solar. Mr. Cushing.
MR. CUSHING: Good afternoon, Chair Drew, Council members, EFSEC staff. This is Thomas Cushing speaking on behalf of Columbia Solar.
There are no nonroutine updates to report.
CHAIR DREW: Thank you.
Columbia Generating Station and WNP 1 and 4. Mr. Mehinagic.
MR. MEHINAGIC: Good afternoon, Chair Drew and Council members. This is Denis Mehinagic on behalf of Columbia Generating Station and Washington Nuclear Projects 1 and 4.
I do have one small update under environmental compliance. An evaluation of the halogenation/dehalogenation system was completed by Energy Northwest and the system vendor following the total residual halogen maximum daily discharge limit exceedance in March 2024. The system experienced a malfunction due to incorrect data inputs after firewall maintenance. To prevent recurrence, any future

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firewall maintenance that could affect the halogenation/dehalogenation system will require approval by the chemistry department prior to implementation.

Additionally, the vendor has implemented an extra layer of surveillance for the system in case of network feed lockup. If data inputs become frozen, an automatic notification will be sent to the chemistry department for verification.

That is all I had.

CHAIR DREW: Are there any questions from Council members? Thank you.

Goose -- Goose Prairie Solar project update. Mr. Crist.

MR. CRIST: Yeah. Thank you, and good afternoon, Chair Drew, EFSEC Council, and staff. This is Jacob Crist, senior project manager, on behalf of Brookfield Renewable North America, so providing the Goose Prairie Solar project update.

So the project remains on schedule, actually ahead of schedule. Some upcoming milestones have shifted for commissioning activities due to some independent engineer review that we're working through. The start of our energization for test purposes will now be July 1st. It was originally expected to be June 18th.

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We currently sit at -- I guess Brookfield considers the site mechanically complete at this time, pending that IE mechanical completion certificate. And then on or around September 30th, we're looking to have a utility sign-off and consider the project COD.

All major scope items are complete: Module, racking, trackers, and substation. Cleanup items and punch list items are underway, such as road repairs and improvements to project roads and neighboring roads. Back feed of the substation is complete up to the inverters, where we have load break disconnects locked and tagged so we cannot flow power out. And we -- again, punch list items, hot commissioning, and remaining BPA testing is -- is basically the remaining scope for our site at this point.

O&M site certificate deliverables are in draft with Brookfield O&M team and Tetra Tech.

There was no discharge on the site reported for the month of May. We do continue to receive frequent inspections weekly from WSP, and the latest that included Ecology and WSP occurred on Tuesday, June 18th, so Tuesday of this week, to inspect B&Ps and vegetation growth. And, you know, what you're seeing on the screen, I did submit a couple photos for -- for all the folks to see. If there's any questions on the

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updates, please let me know.

CHAIR DREW: Thank you. And congratulations. And we are seeing on our screen here the photos from the site. And those are major accomplishments. And we look forward to perhaps having a time around September 30th to perhaps have some sort of official congratulations on the completion of the project.

MR. CRIST: Thank you.

CHAIR DREW: Any other? Thank you.

High Top and Ostrea project updates. Ms. Randolph.

MS. RANDOLPH: Thank you, Chair Drew and Council members. For the record, this is Sara Randolph, site specialist, for High Top and Ostrea.

EFSEC staff are continuing to work with the developer on preconstruction requirements and plans. We are reviewing the initial site restoration plan, or the ISRP, and anticipate providing it to the Council for your review ahead of the July Council meeting.

We have no other updates at this time.

CHAIR DREW: Thank you.

Badger Mountain project update. Ms. Snarski.

MS. SNARSKI: Thank you, Chair Drew. And good afternoon, Council members. For the record,

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this is Joanne Snarski, the siting specialist for Badger Mountain Solar.

Between May 28th and June 7th, supplemental fieldwork was initiated on wetland characterization and cultural resources. The consult- -- however, the consultants were not able to access certain portions of the site.

On June 3rd, Chair Drew and EFSEC staff participated in government-to-government consultation with the Colville Confederated Tribe Business Council and Culture Committee.

That's it. May I answer any questions?

CHAIR DREW: Thank you.

And that is true. We -- we had a session with the Colville Cultural Committee and appreciate their comments, and we'll continue to work with them going forward. And thank you very much.

Wautoma Solar project update. Mr. Caputo.

MR. CAPUTO: Thank you, Chair Drew and Council members.

On May 20th of this year, EFSEC issued a mitigated determination of nonsignificance on this project. The MDNS identified probable impacts to the natural and manmade environments and listed measures to mitigate these impacts to a level of nonsignificance. The MDNS

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was published in the State SEPA register followed by a 14-day public comment period. The comment period ended June 4. EFSEC received five responses.

On Friday, June 16th of this year, EFSEC issued a revised MDNS and published it in the State SEPA register. The revised MDNS does not require a public comment period. The revised MDNS contained language clarifying mitigation measures.

Before you today is a request from the applicant for an extension of its application for site certification. The present expiration date is June 28th. The applicant is requesting the processing time of the Wautoma Solar application be extended to December 31st, 2024. Staff recommends the Council approve the request.

On Tuesday, June 18th, EFSEC provided a draft order commencing the process adjudicating the issue of land use on the project. A copy of this order is contained in your packets. Staff received one edit on the draft language, which we'll see on Page 5 of the document, to delete the word "undersigned."

Thank you. May I answer any questions?

CHAIR DREW: Thank you, Mr. Caputo.

So we have a few items before us on this. Are there any questions about the MDNS or the revised MDNS

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that I think you received for our SEPA officials?

Okay. Then moving on to the extension request. Did we have this posted, Mr. Caputo?

MR. CAPUTO: Yes.

CHAIR DREW: And do we receive any comments on the extension request?

MR. CAPUTO: Negative.

CHAIR DREW: Thank you.

So in front of us is the extension request.

Is there a motion to approve the extension request to be extended to December 31st, 2024, for the Wautoma Solar application?

MR. YOUNG: Lenny Young. So moved.

CHAIR DREW: Thank you.

Second?

MR. LEVITT: Eli Levitt. Second.

CHAIR DREW: Any discussion?

I think it's reasonable, given the project course in front of us with the limited adjudication.

All those in favor, please say "aye."

MULTIPLE SPEAKERS: Aye.

CHAIR DREW: Opposed?

Motion carries. The extension is approved.

The next item we have is the order commencing adjudication. What I would bring Council members'

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attention to is the issues on Page 3 for adjudication. In that, RCW 80.50.090(4)(b) provides that if the environmental impact of the proposed facility in an application for certification is not significant or will be mitigated to a nonsignificant level under RCW 43.21C.031, the Council may limit the topic of the public hearing conducted as an adjudicative proceeding under the section to whether any land-use plans or zoning ordinances with -- excuse me -- with which the proposed site is determined to be inconsistent should be preempted.

And as you see and we discussed, that MDNS has been issued. And so the Council in this adjudicative order will limit the topic of the adjudicative proceeding to whether the Council should recommend to the governor that the State preempt the land-use plan, zoning ordinances, or other development regulations for the site for the alternative energy resource proposed by the applicant and what conditions -- if that preemption is approved, what conditions the Council should include in any -- in a draft certification agreement to consider state or local governmental or community interests affected by the construction or the operation of the project.

Are there any questions from the Wautoma council

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members?

MR. SHARP: No.

Could you hear me? This is Dave Sharp.

CHAIR DREW: I could. Thank you, Mr. Sharp, and for identifying yourself. Appreciated.

All those in favor of -- can we have a motion to approve this adjudicative order?

MR. YOUNG: Lenny Young. So moved.

CHAIR DREW: Second?

MS. OSBORNE: Elizabeth Osborne. Second.

CHAIR DREW: Any discussion?

All those in favor of approving the adjudicative order, please say "aye."

MULTIPLE SPEAKERS: Aye.

CHAIR DREW: Opposed? Thank you.

And that concludes our items for the Wautoma Solar project today.

Moving on to Hop Hill Solar Project update. Mr. Barnes.

MR. BARNES: Thank you, Chair Drew and Council members. For the record, this is John Barnes, EFSEC staff, for the Hop Hill application.

The applicant continues to complete studies and reports needed to make a SEPA determination. We

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continue to coordinate and review the application with our contractor, contracted agencies, and tribal governments.

Are there any questions?

CHAIR DREW: Carriger Solar project update. Ms. Snarski.

MS. SNARSKI: Thank you, Chair Drew. For the record, again, this is Joanne Snarski, the siting specialist for Carriger Solar.

EFSEC staff will soon be making the final assessments regarding the revised visual impacts assessment provided to us by the applicant. Staff will meet next week to address the applicant's mitigation proposal to reduce significant impacts to visual aesthetics.

Additionally, EFSEC received a revised cultural resource survey from the applicant on May 22nd. The revision has been sent to the Department of Archaeology and Historic Preservation and the Yakama Tribe. We anticipate a response in the coming weeks.

And that's it. May I answer any questions?

CHAIR DREW: Are there any questions for Ms. Snarski on Carriger Solar project?

Thank you.

Wallula Gap application update. Mr. Barnes.

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MR. BARNES: For the record, this is John Barnes, staff for the Wallula Gap application.

EFSEC received application review comments from Washington State Department of Fish and Wildlife on June 10, 2024. These comments were forwarded to OneEnergy on June 11th, 2024. Staff are preparing a data request, which we anticipate being sent to OneEnergy in the coming week. Staff are continuing to manage review of the application with our contractor, contracted agencies, and tribal governments.

Are there any questions?

CHAIR DREW: Any questions?

Thank you.

Whistling Ridge transfer and extension requests. Mr. Caputo.

MR. CAPUTO: Thank you, Chair Drew and Council.

The applicant, Twin Creek Timber, submitted two petitions to the Council in March 2022: The first petition requesting approval of a transfer of controlling interest of the site certification agreement from SDS Lumber to Twin Creek Timber. The second request is to amend the SCA, site certification agreement, by extending the expiration date of their agreement until November 2026.

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On May 16, 2024, the Council convened separate public hearings on these requests. 24 comments were submitted online, through e-mail, and/or at the public hearings. 21 comments were opposed to the petitions. Objections referenced range from legal and environmental issues to public notice and viewshed concerns. We also received comments in favor of the petitions. Staff request the Council consider these requests and direct us to prepare any documentation reflecting the Council's position.

Thank you. May I answer any questions?

CHAIR DREW: Any questions for Mr. Caputo?

At this point, I'd like to perhaps take up the transfer request and have discussion on that and any questions or comments from Council members.

I would like to perhaps start us off with a question for our counsel, Mr. Thompson.

And in looking at the requirements for a transfer, can you briefly summarize for us what the applicable criteria are for a transfer?

MR. THOMPSON: Certainly.

So the particular agency rule that's -- applies to transfers of site certification agreements is WAC 463-66-100. And the criteria for the Council to

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apply in one of these requests is -- I want to focus in on one part that I think's probably most germane -- is Subpart 4(b), where it says that the applicant -- that the Council may approve the transfer if the applicant agrees to abide by all of the terms and conditions of the site certification agreement to be transferred and has demonstrated it has the organizational, financial, managerial, and technical capability and is willing and able to comply with the terms and conditions of the certification agreement being transferred.

That's really the -- that's really the core of it.

CHAIR DREW: Council members, you've heard the criteria. Is there a conversation or discussion about that?

Ms. Brewster.

MS. BREWSTER: Yeah. It -- it seems clear the -- that the project, as approved initially, would not be the same project that they would be able to put together, and so therefore it seems we're not discussing the same project, and I don't see how that applies.

CHAIR DREW: I think too that the key for me is whether or not the applicant certificate holder -- I mean, if it's transferred -- has not demonstrated that they have currently the

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organizational and technical capability. There have some -- have mentioned that there are partners out there, but they are not under agreement at this point in time in order to have the capacity to finish the project even as it was put forward more than a decade ago.

Is there a motion from the Council or any other discussion regarding this transfer request?

MR. LIVINGSTON: Chair Drew.

CHAIR DREW: Mr. Livingston.

MR. LIVINGSTON: Yeah. Coming through. Yeah, I just wanted to add on some of the concerns that I would have with just a direct transfer right now is the -- related to the fact that it's been ten years since we've done all of the -- the background work, the SCA was created, approved by the governor, and the landscape has changed; the population's changed; the technology's changed. There's a -- there's just a variety of different components to this that we would need to consider in a new project essentially. Possibly taller turbines we're understanding need to be added in. And for these reasons, I would make a motion that we deny the request for the transfer.

CHAIR DREW: Second?

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MS. BREWSTER: Stacey Brewster. Second.

CHAIR DREW: All those in favor, signify by saying "aye."

MULTIPLE SPEAKERS: Aye.

CHAIR DREW: Opposed?

Motion carries.

Moving on to the extension request, which at this point in time would be moot without the transfer request. But are there also comments about -- and I think we heard some of them in terms of the change in the landscape, in the rules, in the process that has been significantly changed since this project was originally approved.

If there is a desire on behalf of an applicant to have a project as Mr. Livingston stated, it would have to be significantly changed. And therefore, because the SEPA work would have to be done again, because all of the other work is required, would be similar to a new application, I myself think that it would be much more appropriate for the owners of the property now to submit a new application.

Other comments?

All those -- is there a motion to deny the extension request?

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MR. THOMPSON: Chair Drew, if I could make just a procedural point. In the -- I noticed in the prior motion and then this one, you phrased it in terms of a motion to deny. I wonder if it might make more sense to make it a motion to direct staff --

CHAIR DREW: Oh.

MR. THOMPSON: -- to prepare decision documents --

CHAIR DREW: Thank you.

MR. THOMPSON: -- consistent with that -- with that tentative decision, yeah.

CHAIR DREW: Okay. Let's take a step back.

If we could ask the staff to draw up documents to deny both the request for transfer and the request for extension.

Is there a second?

MR. YOUNG: Lenny Young. Second.

CHAIR DREW: Discussion?

All those in favor to direct the staff to draw up the necessary documents, please say "aye."

MULTIPLE SPEAKERS: Aye.

CHAIR DREW: Opposed?

Motion is approved. Thank you.

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Moving on to the Horse Heaven Wind Farm Project update. Ms. Hafkemeyer.

MS. HAFKEMEYER: Thank you. Good afternoon, Chair Drew and Council members. For the record, this is Ami Hafkemeyer for the Horse Heaven Wind Project.

EFSEC staff submitted the Horse Heaven recommendation report to the governor on April 29th as directed by the Council at the April 17th Council meeting. On May 20th, the applicant, Scout Clean Energy, submitted a petition for reconsideration to EFSEC for reconsideration of the Council's recommendation. This filing met the 20-day filing requirement for petitions for reconsideration as defined in Washington Administrative Code 463-30-335, Section 1.

Benton County, Yakama Nation, and Tri-City C.A.R.E.S. submitted responses to the applicant's petition on June 3rd, meeting the 14-day reconsideration due date as defined in WAC 463-30-335, Section 3. The Council issued its notice of intent to defer decision on Tuesday, June 18th.

On May 23rd, the governor responded to the Council recommendation with comments for Council reconsideration. The governor requested that the

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Council reconsider the conditions in mitigation in the draft site certification agreement and provide a response to his office within 90 days, by August 21st. Staff have reviewed the response letter and have prepared a presentation on mitigation measures within the final EIS that we think are most directly related to the request in the governor's letter.

Are there any questions before we move to the presentation?

Mr. Greene.

MR. GREENE: Okay. Thank you. Hello, Chair Drew and Council. For the record, I am Sean Greene, EFSEC staff, and I'll be giving a presentation just summarizing some of the content of the governor's letter and identifying the mitigation measures that we believe are most directly related to his requests.

So as Ms. Hafkemeyer said, we received the letter on May 23rd, 2024. The governor requested in the letter that the Council complete its reconsideration within 90 days, which would be August 21st, 2024. By statute, Council reconsiderations are -- must be conducted expeditiously according to RCW 80.50.100. There is no statutory requirement on a number of days through which the Council must complete its

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reconsideration.

But in the governor's letter, the request that the Council is directed to reconsider is the mitigation that were included within the draft SCA. The governor has indicated a preference for an approach that would be, quote, more narrowly tailored to the specific impacts identified, end quote, and is, quote, consistent with achieving the full or near-full clean energy generation capacity of the proposed project, end quote.

In addition, the governor has requested that the Council develop new measures that adhere to the -- adhere to the, quote, existing robust record and design mitigation requirements, reduce the impacts wherever reasonably feasible, and do not substantially reduce the generation capacity of the proposed project, end quote.

Staff have reviewed the mitigation measures included within the draft site certification agreement and identified three measures that we believe, if implemented, would reduce the generation capacity of the proposed project. Their inclusion here is not to be understood as a recommendation from staff for the retention, alteration, or removal of these mitigation measures. We are just presenting them as the most

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relevant for the Council's deliberations.

The first measure is Vegetation 10, which is the prohibition of siting solar arrays on rabbitbrush shrubland or WDFW-designated priority habitat types, the only one of which that is within the project lease boundary is shrubsteppe. This measure was intended to address impact -- project impacts to wildlife habitat.

And a summary of the affected project components are -- first I should say, the difference between proposed solar siting area and proposed solar footprint: The solar siting area is the micro-siting area upon which all solar panels will be placed. The solar footprint is the current proposed placement of solar arrays. So the solar siting area is not subject to change. The solar footprint could change throughout the micro-siting process of the project.

But as currently proposed, approximately 10 percent of the proposed solar siting area would be excluded from production as part of this mitigation measure and about one and a half percent of the current proposed solar footprint.

Are there any questions on this measure?

Yes.

MR. BROST: Just a question.

MR. GREENE: Yes.

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MR. BROST: Can you repeat that last part that you were talking about?

MR. GREENE: Sure. The difference between the two solar? Okay.

So the solar siting area is the -- the -- the total area -- the area in which all solar panels will be placed as part of the -- the draft SCA. The current solar footprint is the current layout proposed by the applicant. So the current layout may change during the micro-siting process, but the final disposition of all solar arrays will be somewhere within the -- the solar siting area that was proposed.

MR. BROST: Okay. Okay.

MR. GREENE: Any other questions?

CHAIR DREW: So in terms of the -- you have the acres.

MR. GREENE: Yes.

CHAIR DREW: So the first is of the proposed solar siting area --

MR. GREENE: Correct.

CHAIR DREW: -- is one -- basically 1,100 of 10,700 acres. In the siting area, that's across the project or in the one -- I guess it's -- does it just affect the one particular area?

MR. GREENE: So that's inclusive

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of -- there are three solar siting areas.
CHAIR DREW: Yes.
MR. GREENE: There are three proposed solar arrays throughout the lease boundary, and this is a combination of all of those into this -- this acreage total.
CHAIR DREW: Okay.
MR. GREENE: The only -- so the eastern solar array, as currently proposed, has a majority of the targeted wildlife habitat. There is a tiny bit in the -- in one of the two western solar siting areas, but the majority is within one of the three.
CHAIR DREW: And then, again, and then 75 of the current proposed solar footprint, so that's where currently the solar arrays are now designed?
MR. GREENE: As currently proposed.
CHAIR DREW: Okay.
MR. GREENE: Yes. And 70 -- it's about 75 -- it's just over 75. 75 of them, of the acres, are in the eastern solar array, and I think .4 acres are in one of the -- the two western solar arrays.
CHAIR DREW: Okay. Thank you.

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MR. GREENE: Any further questions?
Okay. The next measure is Habitat 1, which is the prohibition of siting primary project components defined as solar arrays, wind turbines, and battery -- BESSes, battery substations or battery stations, in medium or higher linkage wildlife movement corridors and the siting of secondary components, which is defined as all other project components, primarily transmission lines and roads, in high or -- or above linkage wildlife movement corridors unless sited alongside existing infrastructure.
This measure was intended to address impacts from the project to wildlife movement corridors, and the effective project components that would be excluded from construction as a result of this measure is approximately 13 percent of the turbines either for Option 1 or Option 2, about 6 percent of the proposed solar siting area, 0 percent of the current proposed solar footprint, and 3.4 miles of the optional 230-kilovolt 19.4-mile intertie transmission line, so about 17 percent of that line.
And I should say, these acreages and percentages, there may be some overlap between or among these three mitigation measures.
Are there any questions regarding Habitat 1?

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MS. HAFKEMEYER: Just a quick question, Mr. Greene. Are these the mitigation measures as presented in the draft SCA that went to the governor's office, or are these the mitigation measures as they are presented in the final EIS?
MR. GREENE: These are the measures that were incorporated into the draft SCA that was submitted to the governor.
CHAIR DREW: So do we have information on the differences between the measure as it was in the SCA versus the recommendation in the FEIS?
MR. GREENE: Yes, I can address -- for the first one, Vegetation 10, that was created as part of the Council deliberations after the FEIS, so there is no FEIS version of that, the final environmental impact statement.
For Habitat 1, the version included in the final environmental impact statement did not include hard exclusion areas. It -- it required that the applicant make an effort not to locate project components within these linkage -- these medium and higher linkage wildlife movement corridors but did not include exclusion areas. And also it required additional mitigation in the form of a wildlife corridor -- or a

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wildlife movement management plan or mitigation plan. I forget the terminology.
CHAIR DREW: Other questions on this slide for Mr. Greene?
Go ahead.
MR. LIVINGSTON: I was going to follow up, Chair, and just ask if this is helpful.
MR. GREENE: Sure.
MR. LIVINGSTON: This is very helpful. If we could see that with the EIS too, the side-by-side, it'd be very "information." Thanks.
MR. GREENE: Sure. Are there any further questions on Habit 1?
CHAIR DREW: So essentially, I mean, if we were to do the comparison, there was no requirement of any turbine -- any exclusion based on the FEIS.
MR. GREENE: Yes. The FEIS version would not result in a reduction in production potential for -- energy production potential for the project, because it would just require additional mitigation for any components that were sited within these movement corridors.
MS. BREWSTER: You mentioned that there is some overlap with the, I'm assuming the

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Species 5.
MR. GREENE: Yes.
MS. BREWSTER: So if 30 out of the 222 turbines, some of those are also covered in Species 5 reductions as well?
MR. GREENE: I believe the majority are, if -- if not all. It's possibly all of them are also covered by Species 5.
Any further questions? Okay.
And the last of the three measures that would result in a -- a reduction of energy production potential for the project is Species 5, which is the prohibition of siting wind turbines within two miles of a documented ferruginous hawk nest and the siting of solar arrays or BESSes within half a mile of a documented nest and additionally requires mitigation for all components sited within two miles of a nest.
This measure was intended to address project impacts to the ferruginous hawk, other avian wildlife, wildlife habitat, traditional cultural properties, visual aesthetics, safety for recreation, and aerial firefighting as a part of public health and safety.
And the project components that would potentially be excluded if this measure were to be implemented would be approximately 48 percent of the wind turbines

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either for Option 1 or Option 2, approximately 30 percent of the proposed solar siting area, approximately 12 percent of the proposed solar footprint, and one of the three proposed BESS sites, though it should be noted that a maximum of two BESSes would be constructed with the final project as part of the draft SCA.
Are there any questions for Species 5?
CHAIR DREW: I'm sure there will be.
MR. GREENE: Okay. Yes.
CHAIR DREW: Mr. Brost, go ahead.
MR. GREENE: Yeah.
MR. BROST: Just one I have: Solar versus the wind turbines. Is the impacts the same? Or if you reduce wind turbines, you'll have more of an impact than you would with a solar panel? That make sense?
MR. GREENE: Yes, I understand the question. The issue is they're different types of impact. The primary impact that solar has on the ferruginous hawk is the denial of access to potential foraging habitat, whereas the primary impact that wind turbines have is direct mortality through bird strikes as they try to access that foraging habitat.
I will say, the -- in the discussions we've had

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with WDFW staff, they have indicated a greater concern with the impacts associated with wind turbines. Although that may be a result of the -- the specific proposed outlay of this -- or proposed layout of this project.
MR. BROST: Thank you.
MS. BUMPUS: Chair Drew, if I may.
CHAIR DREW: Yes.
MS. BUMPUS: We have some slides that have the FEIS measures. We could share some of those. I think Species 5 might be one to go over as that one relates to probably the -- the greatest impact in terms of reduction of the output capacity of the project.
CHAIR DREW: That would be great. Do we also have them in printed copies for us so we can actually see them?
MS. BUMPUS: We can get those.
CHAIR DREW: Thanks.
Do we need to pause our meeting in order to get those?
MS. HAFKEMEYER: That would be great.
MS. BUMPUS: Couple of minutes.
CHAIR DREW: So let's take a very

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short break. Thank you.
(Pause in proceedings from 2:20 p.m. to 2:32 p.m.)

CHAIR DREW: Okay. Please bring this Council meeting back to order. Will all people please sit down.
Thank you. The meeting is now back to order, and we will take up the -- concluding the slide show by Mr. Greene on the options, the greater explanation of what was in the FEIS and the SCA of the options of -- that limit the energy production of the site. Thank you.
MR. GREENE: Thank you, Chair Drew and Council.
Going through the three options again: For Vegetation 10, there was no FEIS version. There is other mitigation within the SCA and the FEIS that target vegetation generally and wildlife habitat, which would be inclusive of shrubsteppe and rabbitbrush shrubland, but there are no other mitigation measures that are exclusive to those two habitat types.
Questions here?
Okay. For Habit 1, you have the full text there available to you, but the -- the summation of the

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differences is the FEIS version requires that the applicant locate project components outside of medium and higher linkage areas to the extent feasible and that they must provide a rationale and additional mitigation, including a corridor mitigation plan for any components sited within those medium and above linkage corridors, whereas the SCA version prohibits the siting of primary components of medium and above or secondary and high and above.

CHAIR DREW: Questions?

Let's talk about Species 5.

MR. GREENE: Thank you.

So apologies. I think Species 5 is -- okay, it's on two slides -- is a very long mitigation measure. But, again, summation: The FEIS version requires that the applicant, EFSEC, and the representatives of the PTAG, the pretechnical -- or the Pre-Operational Technical Advisory Group, go through a process where they identify the availability of nesting sites for historically identified ferruginous hawk nests and the viability of foraging habitat within the two-mile buffer home range of those nests. And if a determination is made that the nesting site is available and the habitat is viable, then there would be a two-mile exclusion buffer placed on that nest for

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wind turbines specifically.

For the two-mile buffer surrounding nests, historic nests where one or both of those criteria were not reached, alternative mitigation was proposed in the FEIS, which would include things like monitoring wind turbine curtailment during periods of high activity and adaptive management based on the results of monitoring, including mortality events, whereas the version that was included in the SCA has placed a two-mile exclusion buffer on all historically documented ferruginous hawk nests and a half mile for -- two-mile buffer for wind turbines and a half-mile buffer for solar arrays and batteries and still requires that -- that same additional mitigation process for all components sited within half a mile to two miles, which by the nature of the SCA version would only include non-turbine project components.

CHAIR DREW: So if we go to the FEIS.

MR. GREENE: Okay.

CHAIR DREW: So we say "available" in the FEIS.

MR. GREENE: Correct. For the nesting site. And that's meant to indicate, like, the thee in which a historic nest was located or the rock

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outcropping where that historic nest was located. If that site, itself, is still present and available for re-nesting, then it would -- it would meet that criteria.

CHAIR DREW: Because then you have nonviable, but up here, this is -- okay.

MR. GREENE: Yes. Viability is in relation to foraging habitat within the home range of --

CHAIR DREW: Okay.

MR. GREENE: -- the historic nest.

MS. HAFKEMEYER: Chair Drew, if I could just -- because it may not be clear to the Council or potentially to people phoning in: Where the slide says current as of 12/2023, that was an error on my part, and it should indicate that that is the language that's within the SCA. It should not say --

CHAIR DREW: Oh.

MS. HAFKEMEYER: -- as of 2023.

CHAIR DREW: Thank you. Okay. So up on the subtitle, or on the title up at the top of the page, this is current as of the SCA as submitted.

MS. HAFKEMEYER: Correct. Correct.

CHAIR DREW: Okay. Thank you. Okay. Are there questions from Council members?

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Do we know -- one, the FEIS develops a process to determine what's available to the species, and that's in the actual nesting location and viable as in the habitat. Do I have that right?

MR. GREENE: Correct.

CHAIR DREW: Okay.

MR. GREENE: Yes.

CHAIR DREW: Whereas the SCA -- SCA said no turbines within the two miles of an historic nest.

MR. GREENE: Correct.

CHAIR DREW: Is that correct?

So we don't really know what the difference in -- or do you have some information to provide to us about what's the difference in terms of the number of turbines --

MR. GREENE: Yeah.

CHAIR DREW: -- that would be eliminated?

MR. GREENE: You are correct. The -- the process through which EFSEC, the applicant, and the PTAG would identify available nesting sites and viable habitat has not begun, and it would go on prior to construction. So at this point, there's no way to really know how many turbines would still be excluded

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based on the FEIS version of the mitigation other than it would maximi- -- it would -- the maximum amount would be the same as it -- it was in the SCA, which is about 48 percent. The minimum, unlikely, but technically could be 0 percent of the turbines. So it's somewhere within that range of 0 to 48 percent.

CHAIR DREW: Are there other questions?

And if we do, as we go into discussion, have questions, we can bring Mr. Greene into our conversation, Ms. Hafkemeyer, if that makes sense to Council members.

So if we're ready to now move into the discussion. We have the governor's request for reconsideration. And as I look at it -- and I'll ask for comments from everybody -- I guess what I'm struck with is asking us to look to our own record to see if there are ways to narrowly tailor, more narrowly tailor the specific impacts identified and not to really compound the multiple impacts into a general -- into a general prohibition. That's how I read it.

I know other people have other comments they'd like to make on the general letter overall. And, Mr. Brost, if you're ready, I think you wanted to talk a little bit about that.

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MR. BROST: Just on this sheet that we're looking at, clarification. The first --

CHAIR DREW: Your microphone needs to be on.

MR. BROST: Sorry. What you said.

CHAIR DREW: There you go. You're on.

MR. BROST: So the first question I have is on that second bullet point on the governor's direction for reconsideration. First bullet: It's more narrowly tailored project to the specific impacts identified. The second bullet: Consistent with achieving full or near-clean energy generation.

It seems like those two could be direct opposites. Am I reading that right? Or is that a question we should talk about when we...?

CHAIR DREW: Thank you. Just trying to get the right page in front of me.

And your question is are they contradictory?

MR. BROST: Like, the two -- two bullets are direct opposites, I think. And can we have both? It's kind of like one or the other, to a large extent, isn't it?

CHAIR DREW: I think the point, again, that the governor was making, as I read it, is

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that when we made the recommendation to exclude turbines within a certain area, it was a compounding of issues, not specifically tailored to each issue, such as just the ferruginous hawk, just the visual, just the cultural resources. And so the way I read the governor's request to us is asking us to tailor our mitigation to specific impacts.

MR. BROST: Thank you.

CHAIR DREW: And his goal, as he states it, is to achieve the full or near-full clean energy generation capacity of the proposed project.

But now would be the time for discussion, and I think, Mr. Brost, you had some comments you wanted to make overall in terms of some of the other issues such as need.

MR. BROST: So I'm going to share just -- just to give you this. I don't have anything written down here. Okay?

CHAIR DREW: Okay.

MR. BROST: But -- but my thoughts come from my role as a project manager for Bonneville Power Administration involved in the building in operation oversight. Okay? We weren't doing the actual work. But Energy Northwest, various different entities, were doing the actual work, with Bonneville

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was funding all of the activity.

But what I was going to say is that -- now I forgot what I was going to say.

But the location of the project in this particular sense, without substantial reductions, is not going to solve the problem of any of the species. The project, itself, wind power, we keep talking -- not we, but in the letter, the size of the project is 1500 megawatts. Pick a number. That number doesn't mean anything when it comes to the operation of the system. And these renewable projects, whether it's solar or wind, have a drastic impact on the reliability of the system, especially in different areas.

Like, we have probably one of the worst areas for wind -- probably one of the best areas, but it's still not very good -- over in that area of Washington. And whether you have a turbine that produces ten megawatts, but the wind needs to be blowing to get that ten megawatts. And that's what I don't see in any of this, is that we're talking about the size of a project, and there's a lot of good numbers.

When it comes down to the actual generation, you've got different parts of the system -- nuclear plants, coal, hydro projects that now are kind of getting an endangered species themselves, I think, it

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sounds like. But in any event, all of those pieces come together to keep this system operating.

And just two weeks ago -- I'm part of our Kiwanis back in the Tri-Cities. We always have a guest speaker come in. And I didn't have anything to do with the speaker. I didn't know it was coming. But the -- the manager for Benton PUD was our speaker that day. And he had some several slides that he was sharing with -- with the group. And one of the slides he had was the reliability of the system and what impacts are.

And I think before we decide, I would recommend, if it's possible for the Council to do it -- this is my first shot at this, so I don't know. But I think it would be real wise and real important for this Council -- again, I don't know exactly what our charter is or how we can do this. But it seems to me that is a major issue that we should deal with before we say "yes" or "no" to this project: What is the system implications of a project like this versus the system that we have? And does it make se- -- is it -- economically, is it smart for us?

I don't want my power going out middle of January, which I've been there. But in any event, all of this stuff, how this system is put together, taking out what I call firm resources versus these not-so-firm

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resources. You know, when the wind blows, when the sun shines, you never know. And you turn on a nuclear plant or a coal plant or a dam, for most part, it's -- it's when you turn it on, it's there for you.

So anyway, I have a system perspective of this stuff, and -- and that's why I have reservations about this project, if that makes sense.

CHAIR DREW: Thank you. And thanks for your comments.

It's not truly within our purview to look at it vis-à-vis the system. We're looking at the project and the specific impacts to it.

So, Ms. Bumpus, would you like to...?

MS. BUMPUS: Well, I was just going to -- to say that, you know, I think that staff's approach to this has been, based off the -- the letter from the governor, that the record's complete. The information's there. All the information needed to re-tailor, if you will, some of the conditions that would allow greater output capacity, all of that is there. All the information's there in the record.

And so staff have looked to that to see if there are measures that can be revised, implemented, that would allow greater build-out but still provide protection to the resource. And so that's -- that's

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been our approach to this, and so we're -- we're -- I don't know if that's helpful, but we're looking at it very, you know, narrowly.

The Council's made a recommendation on this project to recommend approval with conditions, and I think now before us is just looking at this again to see are there still protections we can put in place but that allow for greater output.

CHAIR DREW: Thank you.

Are there additional comments from Council members in terms of looking at this review process and what we -- I agree certainly I think we should look within our new -- our existing record, so not to bring anything new or any additional subject matters into it. What are the Council's views? And, if so, what are the parts of the record that we would like to look at more closely? Any comments?

MR. YOUNG: I have perhaps.

CHAIR DREW: We've got Mike Livingston and then you.

MR. YOUNG: Okay.

MR. LIVINGSTON: Thank you.

Well, just generally, first, it seems the difference here is where we landed with the recommendation to the governor was there was some

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substantial avoidance measures put in place that were covering these various issues that were in the presentation. It wasn't just -- even though it's labeled "Species 5," we were talking about the substantial comments we got from Yakama Nation on cultural resources and then also the visual impacts that we heard from the community loud and clearly.

So the balance that I feel we struck with the recommendation to the governor was there's a project here that's permitable, and it balances it with the impacts that we heard both at the social as well as the biological concerns that we heard very clearly through the deliberative process.

The -- some of the measures that were in the final EIS that I had concerns with that were specific to the biological was I -- I couldn't tell you what the project looked like in the end, because I didn't know what we were voting on. Because if -- if we -- if the PTAG had that process it set up, the -- the number of turbines that would get built out would be determined later.

And so how large was the project going to be? We were voting on it with an impression of one size, and it felt like it could potentially come back significantly different than what we were asked to be

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voting on. So I had some real reservations with that PTAG measure that was in there with the assessment of the viability of those -- those nest sites.

So I see the governor's recommendation is narrowing that down. I don't know exactly how we do that when we -- we have these multiple issues and values that we're trying to balance with the renewable energy goals that we have in this state.

And so where we landed, I was in favor of it. I voted for it. Where we're headed, I don't know what it's going to look like, and I don't know how I'll feel about that. But I just wanted to put out some more general observations about the whole lengthy, very -- you know, staff did a wonderful job, a ton of work. A lot of back-and-forth with agency staff. And I was -- you know, I felt that it was the -- it was the right thing that we -- we proposed.

But the governor has his -- his say, and that's where we are today. And so I -- I do have concerns if we're going to significantly reduce the avoidance measures that we came up with and end up in a place where it's much more like the FEIS. So just some general statements, Chair.

CHAIR DREW: Mr. Young.

MR. YOUNG: I'm in a different

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position than the majority of the Council. Obviously I voted to not move ahead with the project as it was originally composed and in the SCA. And I'm concerned about a lot of the language in what the governor provided in terms of becoming more focal and also with some of the information that Mr. Greene presented to us about how the project could potentially be reconfigured to restore more of the original number of turbines, more of the original energy production that was envisioned.

Because, to me, if -- I didn't feel that the first proposal to the governor sufficiently reduced impacts to Yakama Nation traditional cultural properties. And anything that puts more turbines back on the land, increases the infrastructure footprint, is going to make a revised recommendation to the governor even worse when it comes to Yakama Nation traditional cultural properties. So that's -- that's a big thing that I'm thinking about right -- right now.

CHAIR DREW: Comments?

Okay. Thank you.

MS. OSBORNE: There's a reason I let Mike do the mike. Thank you.

I also have concerns, I think, about what we're being asked to reconsider. I am certainly willing to

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reconsider the measures the governor has requested that we take a look at, but I don't want to come across as pre-approving, so to speak, the full or near-full clean energy generation capacity of the proposed project. I think we'd have to do a lot of -- I don't know that we have in the record enough to support that, going that far.

MR. LEVITT: This is Eli Levitt, Department of Ecology. I guess, you know, maybe in response to Mr. Brost's comments earlier, I come from a different system of thinking, which is more around climate policy and energy policy historically, not -- not an engineer's perspective perhaps. And, you know, this is a hard part of what we're doing, is we're balancing tradeoffs. And we only get to make a decision on -- on this particular project, right?

So, I guess, from my perspective, I think I owe it to current populations but also future generations to look closely at the world we live in and the emissions that come from our actions. And regardless of whether from a -- from an engineering perspective this is really reliable, we need dramatically more renewable energy in the system in this state and the system globally to have a sustainable future.

You know, my children, my grandchildren, all of

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our children, it's -- it's difficult for me to think that we're at the pace we need to be at to have a more sustainable future even just if you break it down to a state or region. I guess for those reasons, I'm als- -- I'm wondering if maybe most of us could live with some of these mitigation measures and even potentially introduce a few more that might be a compromise.

For example, we all heard that the visual impacts were considerable and significant for -- for the people that provided public comment and the people living in the area. Could we -- and the scope and the scale is so large. Could we consider asking the staff to tell us how many turbines are within half a mile to a mile of any residence or any business, and we could consider a slightly larger buffer, like a mile or more, for example.

Another option perhaps would be to ask staff are there specific traditional cultural properties, cultural resources where we could ask the applicant to consider pushing back a little bit farther? I don't think it would have -- I don't know the numbers. I'm not an expert like Mr. Greene or Ms. Hafkemeyer. But I don't think it would have a dramatic impact on energy generation, but it would indicate that we're taking

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this feedback and trying to consider the footprint of the overall project.

So there are a few tribal cultural properties in my mind or traditional cultural properties where you could, you know, look at how -- how many turbines are proposed within a half a mile and potentially move that more out to a mile perhaps. So I guess these are things I'm thinking about, but I don't have a much more firm proposal than that.

MS. BREWSTER: This is Stacey Brewster. I want to echo a bit of what Mike said. I appreciate the balance we struck, and I think that was important to us. And, for instance, say the Species 5 mitigations did indeed cover other compounding aspects we needed to consider. So I think, you know, we discussed some of the FEIS mitigations for those three things, but I think we'll have to do considerable more consideration for visual aspects, firefighting, and protection of traditional cultural properties.

So if we're going to break them down specifically, that might lead to more available build-out. I don't know that it will, so -- but I would think we would have to approach those individually. And I think we've got some work to do if we're going to follow through.

CHAIR DREW: Yes.

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MS. OSBORNE: I should have identified myself last time. This is Elizabeth Osborne from Commerce.

I share Council Member Levitt's concerns about the amount of clean energy that we're going to need. I'm not convinced that the size of this particular project will be the only way to achieve it. And so I keep going back to the, you know, the very difficult balance that we struck in -- in our recommendation to the governor. And that's where my hesitance comes, you know, why I said what I said about not wanting to -- to in any way preemptively or pre-approvingly indicate that we'd like to see this project be a certain size.

I think we have -- we have in front of us a set of impacts that are real, and they're there. And so if -- if they're there, I don't think we actually have the ability to approve things that would worsen those impacts. So I -- I think I'm -- I just wanted to respond that I also am concerned about growing the amount of clean energy that we need to serve Washington customers, but I'm not sure that that needs to come at the cost of some of the impacts that we saw in the record. Thank you.

CHAIR DREW: In terms of my perspective, I do think it's -- I think it makes sense

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to look more specifically at impacts and not combine them together in the compounding that we did. I think a lot of it, even though we did talk about it in compounding, it did rest on specifically the Species 5 and the recommendation for the two-mile buffer for nests.

Myself, when this came up, I went back, and I -- I reviewed the adjudication, because I thought that that's really where the Council formed a very strong view of the concern about the ferruginous hawk specifically. And I reviewed specifically Don McIvor's testimony.

And what I realized as I listened to that is that when we're -- and I'm not a specialist in biology or wildlife management in any way, shape, or form. But specifically in that instance in an endangered hawk, the probability of a strike, because of the few numbers is low, but the impact of a strike is high, so where on the dial do we, you know, look at that particular impact, and how is it best for us, not knowing the future, to really try and identify -- avoidance is one, but it is -- it's the risk.

I mean, part of that risk is also there won't be any. So I think we look at the avoidance side of it. And it's a real struggle. No question about it. But

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on the other hand, the impact of that to the project overall was substantial.

So I do have questions about looking at perhaps the curtailment that was talked about, the fact that it's going to be at least a couple of years before we have the project, if it were approved, actually goes to construction. So we have years where I think it would be advisable, for example, for EFSEC to have a consultant that reports to our staff. I don't think we would want to just ask the applicant to do that, for example, and provide that information. And I am sensitive to the back-and-forth that you were talking about -- and you have before, Mike -- about -- Mr. Livingston -- about the Fish and Wildlife staff. So that's why I think it's important perhaps for that to be centered on someone that EFSEC would hire to -- to lead that type of effort.

But we really don't know what the next few years will bring us in information about the hawk usage of that site either or in the region. And I think those uncertainties caused us very much to reduce the project footprint. And I think there are ways we could look at, specifically again talking about that, ways that we can see what our ongoing review of the site by somebody that is brought on by EFSEC will provide information to

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the staff to identify where those really viable areas are on the site. And that does leave an open question.

But it's both, in my mind, protective -- and yet if -- if then we could even, for example, limit the construction to periods of time outside of the times when the hawk would be there. So I think there are possibilities to put together -- maybe perhaps what Mr. Levitt was talking about -- to more specifically tailor impacts that would increase the potential for power generation at the site. So that's -- that's where I am.

I guess I would ask if there's a motion to request the staff to develop from the record some specific mitigations for us to consider for the next meeting.

Is that a motion anyone wishes to put forward?

MR. LEVITT: This is Eli Levitt. I'll put forth this motion.

CHAIR DREW: Second?

MS. BREWSTER: Stacey Brewster. Second.

CHAIR DREW: Discussion?

MR. LIVINGSTON: Yeah, Mike Livingston. What are we asking them specifically to do? Are we asking, if we're going to get a request for a motion next month or August to vote on some measures

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that staff have come up with, are we going to get more information and understanding of what the impacts potentially -- I heard a lot of questions, including my own, about what is this -- if we were to reduce the avoidance measures, what does this look like, and how does that impact all of those values that we're trying to protect?

MS. BUMPUS: Thank you, Council Member Livingston, for the question. By the way, this is Sonia Bumpus, for the record.

I think staff would continue to look at what we can glean from our mitigation measures in the FEIS, what they offer in terms of mitigating impacts. We already know that the original recommendation included avoidance measures essentially. And so what we would be presenting to you at the next meeting would be probably a combination of things that were in the FEIS, perhaps some of the things that Chair Drew mentioned, perhaps additional monitoring, data collection at the outset for the site prior to operation.

But it would probably be a tailoring of measures that you could look at that would not offer avoidance necessarily but still protection. We are happy to bring the information in, you know, from the FEIS and talk about that as well. We can go over those measures

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in more detail and look at what they offer. But based off what I'm hearing, it sounds like we're -- we're still wanting to -- to look at avoidance to some degree. There's -- there's concern about, for just as an example, relying on curtailment, for instance, solely. You know, I'm not getting the sense that that's something that the Council's comfortable with. So I think we would be looking at the FEIS measures and -- and then perhaps adding a few more things that would help to answer some of those questions.

CHAIR DREW: Comments?

So I would -- there's a motion on the floor. I would ask all those in favor to say "aye."

MULTIPLE SPEAKERS: Aye.

CHAIR DREW: Opposed?

MR. YOUNG: Opposed.

MR. BROST: Aye.

CHAIR DREW: Thank you. Motion carries.

Thank you. And I encourage all of the Council members to contact staff if you'd like to talk further, and we will try to then have more specific options developed for the July meeting. Okay? Thank you.

We now move into the "Other" -- yes, there's a back to the agenda -- to staff introductions.

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Ms. Bumpus.

MS. BUMPUS: Thank you, Chair Drew and Council members. For the record, this is Sonia Bumpus.

I just wanted to let everyone know that we are welcoming a new employee to the EFSEC staff, Martin McMurray here. He joined EFSEC on June 10th and is our director of administration. He has over 22 years' experience with the State. He's also worked private sector, on budgets, financial advisements. He has a vast array of experience, and we are really excited that he's chosen to join the EFSEC team. So please join me in welcoming Martin to our team.

(Applause.)

MR. McMURRAY: Thank you, Director Bumpus, for that warm introduction.

Chair Drew, Council members, it's a pleasure and an honor to be here with EFSEC. Like Director Bumpus mentioned, 22-year State career in State government. My most recent post was actually at the Department of Commerce, where I was a budget director, CFO, and the chief operating officer. So, happy to bring those skills and help the team out, and everyone's been very gracious in Day 7 for me. So, again, thank you.

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CHAIR DREW: Welcome.
Ms. Hafkemeyer.
MS. HAFKEMEYER: Okay. Thank you, Chair Drew, Council. I would also like to introduce another new staff member. Trevin Taylor is our new SEPA specialist. So he will be joining Sean in tackling the SEPA review for the projects in front of us. Trevin's first day was Monday, so we thought we could just pop him in the deep end.
CHAIR DREW: No detailed questions yet?
MS. HAFKEMEYER: Maybe, like, a couple more days, I think, would probably be a good idea.
But Travin has a great background in both SEPA and NEPA experience, working at both the State and the County level. So...
MR. TAYLOR: Yeah, thank you for having me and for this opportunity. Yeah, I have about 25, 26 years of experience in environmental compliance and also biological support. Trained as a habitat biologist specialist for the most part and then have been processing NEPA, SEPA, pretty much any permit that's been out there for -- as part of that process for many years. So, once again, thank you for having

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me, and looking forward to the opportunity.
CHAIR DREW: Welcome.
(Applause.)
CHAIR DREW: And with that, our meeting is adjourned. Thank you, all. And it's good to see you-all in person.
(Meeting adjourned at 3:15 p.m.)

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STATE OF WASHINGTON)
) ss
County of Pierce)

I, John M.S. Botelho, CCR, RPR, a certified court reporter in the State of Washington, do hereby certify:

That the foregoing Monthly Meeting of the Washington State Energy Facility Site Evaluation Council was conducted in my presence and adjourned on June 20, 2024, and thereafter was transcribed under my direction; that the transcript is a full, true and complete transcript of the said meeting, transcribed to the best of my ability;

That I am not a relative, employee, attorney or counsel of any party to this matter or relative or employee of any such attorney or counsel and that I am not financially interested in the said matter or the outcome thereof;

IN WITNESS WHEREOF, I have hereunto set my hand this 8th day of July, 2024.

/s/John M.S. Botelho, CCR, RPR
Certified Court Reporter No. 2976
(Certification expires 5/26/2025.)

EFSEC Monthly Council Meeting – Facility Update Format

Facility Name: Kittitas Valley Wind Power Project
Operator: EDP Renewables
Report Date: July 9, 2024
Reporting Period: June 2024
Site Contact: Jarred Caseday, Operations Manager
Facility SCA Status: Operational

Operations & Maintenance (only applicable for operating facilities)

- Power generated: 33,847.79 MWH.
- Wind speed: 8.60m/s
- Capacity Factor: 46.58%

Environmental Compliance

- No incidents

Safety Compliance

- Nothing to report

Current or Upcoming Projects

- Nothing to report

Other

- No sound complaints
- No shadow flicker complaints

EFSEC Monthly Council Meeting – Facility Update

Facility Name: Wild Horse Wind Facility
Operator: Puget Sound Energy
Report Date: July 9, 2024
Report Period: June 2024
Site Contact: Jennifer Galbraith
SCA Status: Operational

Operations & Maintenance

June generation totaled 67,391 MWh for an average capacity factor of 34.34%.

Environmental Compliance

Nothing to report.

Safety Compliance

Nothing to report.

Current or Upcoming Projects

Nothing to report.

Other

Nothing to report.

Chehalis Generation Facility
1813 Bishop Road
Chehalis, Washington 98532
Phone: 360-748-1300

EFSEC Monthly Council Meeting – Facility Update

Facility Name: Chehalis Generation Facility
Operator: PacifiCorp
Report Date: July 2, 2024
Reporting Period: June 2024
Site Contact: Jeremy Smith, Operations Manager
Facility SCA Status: Operational

Operations & Maintenance
-Relevant energy generation information, such as wind speed, number of windy or sunny days, gas line supply updates, etc.

- 99,233 net MW-hrs. generated in the reporting period for a capacity factor of 28.64%

The following information must be reported to the Council if applicable to the facility:

Environmental Compliance
-Monthly Water Usage: zero (0) gallons

- Both of the City of Chehalis water meters are out of commission. Chehalis utility district has replacements on order.

-Monthly Wastewater Returned: 728,193 gallons
-Permit status if any changes.

- No changes.

-Update on progress or completion of any mitigation measures identified.

- Nothing to report

-Any EFSEC-related inspections that occurred.

- Nothing to report.

-Any EFSEC-related complaints or violations that occurred.

- Nothing to report

-Brief list of reports submitted to EFSEC during the monthly reporting period.

- Nothing to report

Safety Compliance
-Safety training or improvements that relate to SCA conditions.

- Zero injuries this reporting period for a total of 3,257 days without a Lost Time Accident.

Current or Upcoming Projects

-Planned site improvements.

- No planned changes.

-Upcoming permit renewals.

- Nothing to report.

-Additional mitigation improvements or milestones.

- Nothing to report.

Other

-Current events of note (e.g., Covid response updates, seasonal concerns due to inclement weather, etc.).

- Nothing to report.

-Personnel changes as they may relate to EFSEC facility contacts (e.g., introducing a new staff member who may provide facility updates to the Council).

- Nothing to report.

-Public outreach of interest (e.g., schools, public, facility outreach).

- Nothing to report.

Respectfully,

Jeremy Smith
Gas Plant Operations Manager
Chehalis Generation Facility

EFSEC Monthly Council Meeting – Facility Update

Facility Name: Grays Harbor Energy Center
Operator: Grays Harbor Energy LLC
Report Date: Jun 17, 2024
Reporting Period: May 2024
Site Contact: Chris Sherin
Facility SCA Status: Operational

Operations & Maintenance
-GHEC generated 178,785MWh during the month and 1,163,126MWh YTD.
--Annual (Maintenance) Outage ended June 5th.

The following information must be reported to the Council if applicable to the facility:

Environmental Compliance
-There was no outfall, or storm water deviations, during the month.
-Routine monthly, quarterly, and annual reporting to EFSEC Staff.
- Monthly Outfall Discharge Monitor Report (DMR).
- Quarterly Stormwater Discharge Monitor Report (DMR).

-Rata Test Plant was submitted to EFSEC Staff.
-Submitted notice of GT1 & GT2 Startup Emissions excess CO deviations to EFSEC Staff.

Safety Compliance
- None.

Current or Upcoming Projects
- Submitted the Acid Rain Permit Application for permit renewal in accordance with Permit Requirements 1(i) of Acid Rain Permit No. EFSEC/10-01-AR.
-Application for a Modification to the Air Operating Permit submitted to EFSEC in April 2022. GHEC is currently authorized to operate under PSD Permit EFSEC/2001-01, Amendment 5 and Federal Operating Permit EFSEC/94-1 AOP Initial.
-NPDES permit renewal application submitted to EFSEC in December 2023 in accordance with Section S6.A of NPDES Permit No. WA0024961.

Other
-None.

STATE OF WASHINGTON

ENERGY FACILITY SITE EVALUATION COUNCIL (EFSEC)

TITLE V AIR OPERATING PERMIT (AOP)

Issued To

Grays Harbor Energy, LLC
For The
Grays Harbor Energy Center

PERMIT #:	**EFSEC/94-1 AOP- 1st Modification**
ISSUED:	**June 17, 2020**
EXPIRATION:	**June 17, 2025**

ENERGY FACILITY SITE EVALUATION COUNCIL
621 Woodland Square Loop
Lacey, WA 98503-3172
Telephone: (360) 664-1345

AIR OPERATING PERMIT #: **EFSEC/94-1 AOP 1st Modification**

ISSUED TO: **Grays Harbor Energy LLC**
401 Keys Road
Elma, WA 98541-9149

PLANT SITE:
Grays Harbor Energy Center
401 Keys Road
Elma, WA 98541-9149

ISSUED BY: **Energy Facility Site Evaluation Council**
621 Woodland Square Loop SE - PO Box 43172 Lacey,
WA 98503-3172

NATURE OF BUSINESS:	Electrical Generating Facility
SIC / NAICS:	4911 / 221112
ICIS NUMBER:	WAORC0005302701186
EFFECTIVE DATE:	<enter>
EXPIRATION DATE:	June 17, 2025
RENEWAL APPLICATION DUE:	December 17, 2024

PERMIT ENGINEER:

Aaron Manley P.E. – ORCAA — <enter> Date

REVIEWED BY:

Sonia E. Bumpus – EFSEC Executive Director — <enter> Date

APPROVED BY:

Kathleen Drew - EFSEC Chair — <enter> Date

ISSUED IN ACCORDANCE WITH:
40 CFR Part 70, Chapters 70A.15 and 80.50 RCW, and Chapters 463-78 and 173-401 WAC

TABLE OF CONTENTS

I. REGULATORY BASIS

This Air Operating Permit (AOP), issued to Grays Harbor Energy LLC, for the Grays harbor Energy Center, is authorized under the procedures established in Chapter 173-401 WAC as adopted by EFSEC in Chapter 463-78 WAC, and Title V of the 1990 Federal Clean Air Act Amendments. The terms and conditions of this AOP describe the emissions limitations, operating requirements, monitoring requirements, recordkeeping requirements, and reporting requirements applying to the permitted facility.

AOP terms and conditions are divided into the following categories: Permit Administration Conditions (P#), General Terms and Conditions (G#), Applicable Requirements (AR#), Monitoring and Recordkeeping (M#), Reporting (R#), and Permit Shield (S#) Conditions. As used in this permit, there is no distinction between "terms" and "conditions." As such, "condition" means the same as "terms and conditions" as referred to in Title V of the 1990 Federal Clean Air Act Amendments.

All terms and conditions of this AOP, including any provisions designed to limit potential to emit, are enforceable under the Federal Clean Air Act (FCAA) unless specifically identified as "state" or "EFSEC" only in the "regulatory basis" description that follows each condition. Conditions identified as "EFSEC only" are enforceable only by the Energy Facility Site Environmental Council (EFSEC). Conditions identified as "state/EFSEC only" are enforceable only by EFSEC and the State of Washington.

The conditions in this AOP contain abbreviated and, in some cases, paraphrased versions of the language of the applicable requirements from the underlying laws, regulations and regulatory orders. Any difference between the description of an applicable requirement in this AOP compared to the corresponding law, regulation or order is provided for purposes of clarifying the underlying requirement. The legal requirement remains the underlying applicable requirement cited in the "Applicable Requirement" column of the tables and the citations contained in brackets at the end of each requirement. Any perceived conflicts between this AOP and an underlying applicable requirement will be resolved by referring to the cited applicable requirement.

Definitions of key terms used in this AOP are provided in Attachment 2 and should be consistent with definitions provided from corresponding referenced regulations. If not defined in this AOP, the referenced regulation, Chapter 70A.15 RCW, WAC 173-401-200 or WAC 173-400-030, terms shall be defined consistent with the Merriam-Webster's Collegiate Dictionary, Eleventh Edition copyright © 2003 by Merriam-Webster Inc.

The conditions required under this AOP were determined necessary to assure and provide for certification of compliance with applicable EFSEC, state, and federal air pollution regulations and standards. These requirements were determined applicable based on the equipment specifications and regulatory history of each emissions unit as described in the Technical Support Document for this AOP.

Conditions in this AOP originate from state, federal, and EFSEC regulations and standards and

are generally referred to as "applicable requirements." AOP conditions reflect the versions of each applicable requirement in effect at the time the AOP modification application was submitted to EFSEC. Certain applicable requirements may have had multiple versions in effect at the time the AOP modification application was submitted due to either:

1. An amendment to the associated regulation/rule/standard that occurred after EFSEC adopted the regulation by reference; or,
2. An older version of the rule/regulation/or standard adopted by EFSEC in their State Implementation Plan (SIP).

In these instances, both versions of the applicable requirement apply and are reflected in the AOP condition.

The following tables clarify the "landmark" dates that establish the effective versions for each applicable requirement contained in this AOP. However, any disputes regarding the exact language of an applicable requirement covered in this AOP should be settled by consulting versions of the associated rules/regulations/standards based on the "landmark dates" shown in the following tables.

Table 1: Landmark Dates for Federal Regulation

Federal Regulations	Date Federal Regulation Adopted by EFSEC[a]	EFSEC Delegation Date[b]
40 CFR 60, Subpart A (§ 60.1 to § 60.19)	11/11/2019	Not Delegated
40 CFR 51, Subpart K	11/11/2019	Not Delegated
40 CFR 52, Subpart A	11/11/2019	Not Delegated
40 CFR 60, Subpart IIII	11/11/2019	Not Delegated
40 CFR 60, Subpart KKKK	11/11/2019	Not Delegated
40 CFR 60, Appendices	11/11/2019	Not Delegated
40 CFR 61, Subpart A	11/11/2019	Not Delegated
40 CFR 61, Subpart M	11/11/2019	Not Delegated
40 CFR 63, Subpart A	11/11/2019	Not Delegated
40 CFR 63, Subpart ZZZZ	11/11/2019	Not Delegated
40 CFR 63, Appendices	11/11/2019	Not Delegated
40 CFR 72	11/11/2019	Not Delegated
40 CFR 75	11/11/2019	Not Delegated
40 CFR 75, Appendices	11/11/2019	Not Delegated
40 CFR 82, Subpart B	11/11/2019	Not Delegated
40 CFR 82 Subpart F	11/11/2019	Not Delegated

a. The "Date Federal regulation Adopted by EFSEC" is set by the date established in WAC 463-78-005(1), which is the effective date of EFSECs adoption by reference for all federal and state regulations adopted by EFSEC. At the time the Permittee submitted their AOP modification application, WAC 463-78-005(1) stated November 11, 2019, as the effected date for adoption by reference. Therefore, the versions of federal regulations cited in this permit are those that existed on 11/11/2019.

b. The "EFSEC Delegation Date" is the date EFSEC was granted delegation to enforce the specific federal regulation. EFSEC has not yet received federal rule delegation from EPA.

Table 2: Landmark Dates for State Regulations

State Regulations	SIP Regulation Version Effective Date[a]	Date State Regulation Adopted by EFSEC[b, c]
WAC 173-400-036	12/29/2012	11/11/2019

WAC l 73-400-040(2)(a & b) - Visible Emissions	4/1/2011	11/11/2019
WAC 173-400-040(3) – Fallout	Not in SIP	11/11/2019
WAC 173-400-040(4)- Fugitive Emissions	9/16/2018	11/11/2019
WAC 173-400-040(5) - Odors	Not in SIP	11/11/2019
WAC 173-400-040(6) - Detrimental Emissions	9/16/2018	11/11/2019
WAC 173-400-040(7) - SO2 Emissions	9/16/2018	11/11/2019
WAC 173-400-040(8) - Concealment and Masking	9/16/2018	11/11/2019
WAC 173-400-040(9) - Fugitive Dust	9/16/2018	11/11/2019
WAC 173-400-050 (Except: 173–400–050(2), (4), (5), and(6).	9/16/2018	11/11/2019
WAC 173-400-060	9/16/2018	11/11/2019
WAC 173-400-105	11/25/2018	11/11/2019
WAC 173-400-107	9/23/1993	11/11/2019
WAC 173-400-108	Not in SIP	Not Adopted Effective version of rule is 4/12/2022
WAC 173-400-109	Not in SIP	Not Adopted
WAC 173-400-110	12/29/2012	11/11/2019
WAC 173-400-114	Not in SIP	11/11/2019
WAC 173-400-230	Not in SIP	4/12/2022
WAC 173-400-700	4/1/2011	11/11/2019
WAC 173-401	Not in SIP	11/11/2019
WAC 173-406	Not in SIP	11/11/2019
WAC 173-425	10/18/1990	11/11/2019
WAC 173-441	Not in SIP	Not Adopted Effective version of rule is 4/12/2022
WAC 173-460	Not in SIP	Not Adopted Effective version of rule is 4/12/2022
WAC 463-78-105 (Fees)	Not in SIP	8/27/2015
WAC 463-78-115	Not in SIP	11/11/2019
WAC 463-78-120 (Testing)	11/11/2004	11/11/2004

a. The "SIP Regulation Version Effective Date" is the effective date of the specific regulation listed in EFSEC's State Implementation Plan.
b. The "State Regulation Version Adoption Date" is set by the date established in WAC 463-78-005(1), which is the effective date of EFSECs adoption by reference for all federal and state regulations adopted by EFSECs. At the time the Permittee submitted their AOP modification application, WAC 463-78-005(1) stated November 11, 2019, as the effected date for adoption by reference. Therefore, the versions of federal regulations cited in this permit are those that existed on 11/11/2019.
c. For those State regulations not adopted by EFSEC, the date the AOP modification application was submitted sets the date of the effective version of the regulation.

Table 3: Effective Dates for PSD and NSR Permits

Regulatory Orders/Permits	Effective Dates
Acid Rain Permit No. EFSEC/10-01-AR	6/17/2020
PSD No. EFSEC/2001-01, AMENDMENT 5	1/28/2021
No. EFSEC NOC 17-01 (Cooling Tower Replacement)	4/18/2017

[END OF SECTION]

II. EMISSION UNIT (EU) IDENTIFICATION

The following table contains emission unit identifications. More detailed descriptions of each emission unit are included in the Technical Support Document (TSD) for this Air Operating Permit (AOP).

TABLE 4: Emissions Units Covered Under AOP

EU #	Generating Equipment/Activity	Emission Control
EU-1	**Combined Cycle Gas Turbine 1 (CGT-1)**: • Combustion Turbine 1 (CT-1) – General Electric 7FA natural gas turbine with a nominal design heat rate of 1,823 mmBtu/hr and an output of 234 MVA. • Duct Burner 1 (DB-1) – 505 mmBtu/hr natural gas duct burner	• CT-1 equipped with Dry-Low NO_x Combustors • DB1 equipped with Low NO_x Burners. • Exhaust from both CT-1 and DB-1 pass through Selective Catalytic Reduction (SCR) and CO catalyst systems
EU-2	**Combined Cycle Gas Turbine 2 (CGT-2):** • Combustion turbine – General Electric 7FA natural gas turbine with a nominal design heat rate of 1,823 mmBtu/hr and an output of 234 MVA. • Duct Burner – 505 mmBtu/hr natural gas duct burner	• CT-2 equipped with Dry-Low NO_x Combustors • DB-2 equipped with Low NO_x Burners. • Exhaust from both CT-2 and DB-2 pass through Selective Catalytic Reduction (SCR) and CO catalyst systems
EU-3	**Auxiliary Boiler:** 29.3 mmBtu/hr natural gas fired boiler used to assist with start-ups.	• Low NO_x burners • Flue Gas Recirculation (FGR)
EU-4	**Cooling Tower:** Nine cell, 175,000 gal/min forced draft cooling tower	• Equipped with drift eliminators
EU-5	**Emergency Generator:** 400 kW (536 hp) emergency generator used to help power down equipment and maintain operation of lubricating oil pumps in the event of power outages.	None
EU-6	**Emergency Fire Water Pump:** 205 kW (275 hp) diesel-fired water pump to provide for fire suppression during electrical power outages.	None

Table Notes:

1. The information in Table 4 is for purposes of description only and is not intended as a limitation.

[END OF SECTION]

III. PERMIT ADMINISTRATION (P)

Conditions in this section govern administration of this Air Operating Permit (AOP) and include AOP administrative and other requirements that have no ongoing compliance monitoring requirements. The Permittee must comply with all of AOP requirements including AOP administrative requirements and must certify compliance with all requirements annually.

P1. Permit Duration. This Air Operating Permit (AOP) is issued for a fixed term of 5 years from date of issuance.

[Origin: WAC 173-401-610]
[Authority: WAC 173-401-600(1)(b)]

P2. Federally Enforceable Requirements.

a) All terms and conditions in this AOP, including any provision designed to limit potential to emit, are enforceable by the U.S. EPA Administrator (EPA) and citizens under the Federal Clean Air Act (FCAA), except as indicated in b) below.

b) Notwithstanding subsection (a) of this condition, any terms and conditions included in this AOP that are not required under the FCAA or under any of its applicable requirements are specifically designated as "state," "EFSEC," or "state/EFSEC" only and are not federally enforceable under the FCAA. Terms and conditions so designated are not subject to review by EPA and affected states per the requirements of WAC 173-401-810 and 820.

[Origin WAC 173-401-625]
[Authority: WAC 173-401-600(1)(b)]

P3. Compliance Maintenance. The Permittee must maintain compliance with all applicable requirements with which the source was in compliance as of the date of permit issuance. The Permittee must meet on a timely basis any applicable requirements that become effective during the permit term.

[Origin: WAC 173-401-630(3); WAC 173-401-510(2)(h)(iii)]
[Authority: WAC 173-401-600(1)(b)]

P4. Standard Conditions:

a) **Duty to comply.** The Permittee must comply with all conditions of this AOP. Any permit noncompliance constitutes a violation of Chapter 70.94 RCW, Chapter 80.50 RCW, the Site Certification Agreement, and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for AOP termination, revocation and re-issuance, or modification; or for denial of an AOP renewal application. [Origin: WAC 173-401-620(2)(a)]

b) **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this AOP. [Origin: WAC 173-401-620(2)(b)]

c) **Permit Actions.** This AOP may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [Origin: WAC 173-401-620(2)(c)]

d) **Property Rights.** This AOP does not convey property rights of any sort, or any exclusive privilege. [Origin: WAC 173-401-620(2)(d)]

e) **Duty to Provide Information.** The Permittee must furnish to EFSEC, within a reasonable time, any information that EFSEC may request in writing to determine whether cause exists for modifying, revoking, and reissuing, or terminating the AOP, or to determine compliance with the AOP. Upon request, the Permittee must also furnish to EFSEC copies of records that the Permittee is required to keep by this AOP, or for information claimed to be confidential, the Permittee may furnish such records directly to EFSEC along with a claim of confidentiality per condition P16. Permitting authorities must maintain confidentiality of such information in accordance with RCW 70.94.205. [Origin: WAC 173-401-620(2)(e)]

f) **Fees.** The Permittee must pay costs as a condition of this AOP in accordance with EFSEC's fee schedule as provided under WAC 463-78-105. Failure to pay fees in a timely fashion may subject the Permittee to civil and criminal penalties as prescribed in Chapter 70.94 RCW. [Origin: WAC 173-401-620(2)(f) and WAC 463-78- 105]

g) **Emission Trading.** No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the AOP. [Origin: WAC 173-401-620(2)(g)]

h) **Severability.** If any provision of this AOP is to be held invalid, all unaffected provisions of the AOP shall remain in effect and enforceable. [Origin: WAC 173-401-620(2)(h)]

i) **Permit Appeals.** This AOP or any conditions in it may be appealed in accordance with the provisions of WAC 463-78-140(3). This provision for appeal in this section is separate from and additional to any federal rights to petition and review under §505(b) of the FCAA. [Origin: WAC 173-401-620(2)(i)]

j) **Permit continuation.** This AOP and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. An application shield granted pursuant to WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied if a timely and complete application has been submitted. This protection shall cease to apply if, subsequent to a completeness determination, the applicant fails to submit by the deadline specified in writing by EFSEC any additional information identified as being needed to process the application. [Origin: WAC 173-401-620(2)(j)]

[Origins: as indicated by sub condition]
[Authority: WAC 173-401-620(2)]

P5. Duty to Supplement or Correct Application. The Permittee, upon becoming aware that any relevant facts were omitted, or incorrect information was submitted in the permit application, must promptly submit such supplementary facts or corrected information. In addition, the Permittee must provide additional information as necessary to address any

requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft AOP.

[Origin: WAC 173-401-500(6)]
[Authority: WAC 173-401-600(1)(b)]

P6. Misrepresentation and Tampering:

a) The Permittee must not make any false material statement, representation or certification in any form, notice, or report.

b) The Permittee must not render inaccurate any monitoring device or method required under Chapter 70.94 RCW, or any ordinance, resolution, regulation, permit, or order in force pursuant thereto.

[Origin: WAC 173-400-105(6)&(8) (State Only)]
[Authority: WAC 173-401-600(1)(b)]

P7. Permit Renewal Application. The Permittee must submit a complete renewal application to EFSEC at least six months, but no more than 18 months, prior to the expiration date of this AOP.

[Origin: WAC 173-401-710(1)]
[Authority: WAC 173-401-600(1)(b)]

P8. Transfer of Ownership or Operational Control. A change in Permittee due to transfer of ownership or operational control of an affected source requires a request for administrative permit amendment as governed by WAC 173-401-720.

[Origin: WAC 173-401-720(1)(d)]
[Authority: WAC 173-401-600(1)(b)]

P9. Permit Expiration – Application Shield. AOP expiration terminates the Permittee's right to operate unless a timely and complete renewal application has been submitted consistent with condition P7. All terms and conditions of the AOP shall remain in effect after the AOP itself expires if a timely and complete permit application has been submitted. Operation under the terms and conditions of the expired AOP will be allowed until EFSEC takes final action on the renewal application.

[Origin: WAC 173-401-705(2) and WAC 173-401-710(3)]
[Authority: WAC 173-401-600(1)(b)]

P10. Permit Revocation. EFSEC may revoke an AOP only upon the request of the Permittee or for cause. EFSEC shall provide at least thirty days written notice to the Permittee prior to revocation of the AOP or denial of a permit renewal application. Such notice shall include an explanation of the basis for the proposed action and afford the Permittee/applicant an opportunity to meet with EFSEC prior to the authority's Preliminary Draft decision. A revocation issued under this section may be issued conditionally with a future effective date and may specify that the revocation will not take effect if the Permittee satisfies the specified conditions before the

effective date.

[Origin: WAC 173-401-710(4)]
[Authority: WAC 173-401-600(1)(b)]

P11. Reopening for Cause. The AOP must be reopened and revised under any of the following circumstances:

- **a)** Additional requirements become applicable to the source with a remaining permit term of three or more years. Such a reopening must be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the AOP is due to expire, unless the original AOP or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j);
- **b)** Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the AOP;
- **c)** EFSEC or the Administrator determines that the AOP contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the AOP; or
- **d)** EFSEC or the Administrator determines that the AOP must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and issue this AOP shall follow the same procedures as apply to initial AOP issuance and shall affect only those parts of the AOP for which cause to reopen exists. Reopening under this section shall not be initiated before a notice of such intent is provided to the Permittee by EFSEC. Such notice shall be made at least 30 days in advance of the date that the AOP is to be reopened, except that EFSEC may provide a shorter time period in the case of an emergency.

[Origin: WAC 173-401-730]
[Authority: WAC 173-401-600(1)(b)]

P12. Changes not Requiring Permit Revision/Off Permit Changes. The Permittee may make the changes described in WAC 173-401-722 and WAC 173-401-724 without revising this AOP, provided that the changes satisfy the criteria set forth in those sections, including the requirements to notify EFSEC and EPA.

[Origin: WAC 173-401-722; and, WAC 173-401-724]
[Authority: WAC 173-401-600(1)(b)]

P13. Administrative Permit Amendments. The Permittee may request an "administrative permit amendment" for the following types of permit revisions:

- **a)** Correction of typographical errors;
- **b)** Change the name, address, or phone number of any person identified in the AOP, or provide a similar minor administrative change at the source;
- **c)** Require more frequent monitoring or reporting by the Permittee;
- **d)** Allow for a change in ownership or operational control of a source where EFSEC determines that no other change in the AOP is necessary, provided that a written

agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittee has been submitted to EFSEC; and,

e) Incorporate into the chapter 401 permit the terms, conditions, and provisions from orders approving NOC applications processed under an EPA-approved program.

Application and approval of administrative permit amendment applications shall conform to the procedures in WAC 173-401-720.

[Origin: WAC 173-401-720]
[Authority: WAC 173-401-600(1)(b)]

P14. Permit Modifications. AOP permit revisions that cannot be accomplished using the provisions for administrative permit amendments shall be applied for and approved as a permit modification according to WAC 173-401-725.

[Origin: WAC 173-401-725]
[Authority: WAC 173-401-600(1)(b)]

P15. Greenhouse Gas Reporting Fee. The Permittee must pay a greenhouse gas (GHG) reporting fee for each year they submit a GHG report to Ecology. Fees will be paid according to Ecology's fee schedule. Fees must be paid within sixty days of receipt of Ecology's billing statement.

[Origin: WAC 173-441-110 (State Only)]
[Authority: WAC 173-401-600(1)(b)]

P16. Confidential Information. The Permittee is responsible for certifying and clearly identifying any information considered proprietary and confidential. In the case where a Permittee has submitted information to EFSEC under a claim of confidentiality, EFSEC may also require the Permittee to submit a copy of such information directly to the administrator. The Permittee is responsible for clearly identifying information that is considered proprietary and confidential prior to submittal to EFSEC. In addition, all confidential information must be submitted according to EFSEC's Public Records and Confidentiality Procedures.

[Origin: WAC 173-401-500(5) and, WAC 173-401-620(2)(e)]
[Authority: WAC 173-401-600(1)(b)]

P17. Credible Evidence. For purposes of certifying compliance or establishing whether or not the Permittee has violated or is in violation of this AOP, nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with the requirements if the appropriate performance or compliance test or procedure had been performed.

[Origin: 40 CFR 51.212; 40 CFR 52.12; 40 CFR 52.33; 40 CFR 60.11, and, 40 CFR 61.12]
[Authority: WAC 173-401-600(1)(a)]

P18. Unavoidable Excess Emissions (Current SIP). The unavoidable excess emissions provisions in this condition are per WAC 173-400-107 and apply only to requirements that are

identified as either "state-only," "EFSEC-only," or state/EFSEC-only" requirements. The following conditions apply until the effective date of EPA's removal of the September 20, 1993, version of WAC 173-400-107 from the Washington State Implementation Plan after which they become inapplicable:

a) Excess emissions determined to be unavoidable under the procedures and criteria in this condition shall be excused and not subject to penalty.

b) The Permittee shall have the burden of proving to EFSEC in an enforcement action that excess emissions were unavoidable. This demonstration shall be a condition to obtaining relief (from penalty).

c) **Reporting.** Excess emissions may be considered unavoidable provided the Permittee reports as required in either condition R6 or R7. Excess emissions that represent a potential threat to human health or safety or which the Permittee believes to be unavoidable shall be reported to EFSEC as soon as possible. Other excess emissions must be reported within thirty days after the end of the month during which the event occurred or as part of the routine emission monitoring reports. Upon request by EFSEC, Permittee must submit a full written report including the known causes, the corrective actions taken, and the preventive measures to be taken to minimize or eliminate the chance of recurrence.

d) Excess emissions due to startup or shutdown conditions may be considered unavoidable provided the Permittee reports as required under subsection (c) of this condition and adequately demonstrates that the excess emissions could not have been prevented through careful planning and design and, if a bypass of control equipment occurs, that such bypass was necessary to prevent loss of life, personal injury, or severe property damage.

e) Excess emissions due to scheduled maintenance may be considered unavoidable if the Permittee reports as required under subsection (c) of this section and adequately demonstrates that the excess emissions could not have been avoided through reasonable design, better scheduling for maintenance or through better operation and maintenance practices.

f) Excess emissions due to a malfunction or upset may be considered unavoidable provided the Permittee reports as required under subsection (c) of this section and adequately demonstrates that:

- **i)** The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;
- **ii)** The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance; and
- **iii)** The Permittee took immediate and appropriate corrective action in a manner consistent with good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action, including slowing or shutting down the emission unit as necessary to minimize emissions, when the Permittee knew or should have known that an emission standard or permit condition was being exceeded.

[Origin: WAC 173-400-107]
[Authority: WAC 173-401-600(1)(b)]

P19. Unavoidable Excess Emissions. The following conditions apply starting the effective date of EPA's removal of the September 20, 1993, version of WAC 173-400-107 from the

Washington State Implementation Plan:

- **a)** Excess emissions determined to be unavoidable under the procedures and criteria in this section are violations of the applicable statute, rule, permit, or regulatory order.
- **b)** EFSEC determines whether excess emissions are unavoidable based on the information supplied by the Permittee and the criteria in subsection (g) of this condition.
- **c)** Excess emissions determined by EFSEC to be unavoidable are:
  - **i)** A violation subject to WAC 173-400-230 (3), (4), and (6); but
  - **ii)** Not subject to civil penalty under WAC 173-400-230(2).
- **d)** The Permittee shall have the burden of proving to EFSEC in an enforcement action that excess emissions were unavoidable. This demonstration shall be a condition to obtaining relief under subsection (g) of this section.
- **e)** This condition (P19) does not apply to an exceedance of an emission standard in 40 C.F.R. Parts 60, 61, 62, 63, or 72, or EFSEC's adoption by reference of these federal standards.
- **f)** Excess emissions that occur due to an upset or malfunction during a startup or shutdown event are treated as an upset or malfunction under subsection (g) of this section.
- **g)** Excess emissions due to an upset or malfunction will be considered unavoidable provided the Permittee reports as required in either condition R6 or R7, as applicable, and adequately demonstrates to EFSEC that:
  - **i)** The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;
  - **ii)** The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance;
  - **iii)** The Permittee took immediate and appropriate corrective action in a manner consistent with safety and good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action, when the Permittee knew or should have known that an emission standard or other permit condition was being exceeded (Actions taken could include slowing or shutting down the emission unit as necessary to minimize emissions);
  - **iv)** If the emitting equipment could not be shut down during the malfunction or upset to prevent the loss of life, prevent personal injury or severe property damage, or to minimize overall emissions, repairs were made in an expeditious fashion;
  - **v)** All emission monitoring systems and pollution control systems were kept operating to the extent possible unless their shutdown was necessary to prevent loss of life, personal injury, or severe property damage;
  - **vi)** The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent possible; and
  - **vii)** All practicable steps were taken to minimize the impact of the excess emissions on ambient air quality.

[Origin: WAC 173-400-109]
[Authority: WAC 173-401-600(1)(b)]

P20. Certification. All documents required to be submitted by this AOP must contain certification by a responsible official of truth, accuracy, and completeness. Documents include any application form, report, or compliance certification including but not limited to test plans and results, monitoring plans and results, applications, emissions inventory submittals,

equipment malfunction reports or annual compliance certification. Such certification must state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Provided, however, where a report is sent more frequently than once every six months, the responsible official's certification need only be submitted once every six months, covering all required reporting since the date of the last certification.

[Origin: WAC 173-401-520; WAC 173-401-615(3)(a); and, WAC 173-401-630(1)]
[Authority: WAC 173-401-600(1)(b)]

IV. GENERAL TERMS AND CONDITIONS (G)

G1. Inspection and Entry. Upon presentation of appropriate credentials, the Permittee must allow a representative from EFSEC or an authorized representative to perform the following:

- **a)** Enter upon the premises where a Chapter 173-401 WAC source is located or emissions related activity is conducted, or where records must be kept under the conditions of this AOP;
- **b)** Have access to and copy at reasonable times any records that must be kept under the conditions of this AOP;
- **c)** Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this AOP; and
- **d)** Sample or monitor, at reasonable times, substances, or parameters for the purpose of assuring compliance with the AOP or other applicable requirements.
- **e)** Nothing in this condition or AOP shall limit the ability of EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

[Origin: WAC 173-401-630(2) and WAC 173-400-105(3) &(4);
PSD No. EFSEC/2001-01, AMENDMENT 5, condition 27]
[Authority: WAC 173-401-600(1)(b)]

G2. Insignificant Emission Units. The following applies to emissions units determined insignificant based on actual emissions in accordance with WAC 173-401-530(1)(a):

- **a)** Any emission unit or activity that qualifies as insignificant solely on the basis of provisions in WAC 173-401-530(1)(a) must not exceed the emission thresholds specified in WAC 173-401-530(4) until this AOP is modified.
- **b)** Upon request from EFSEC, the Permittee must provide sufficient documentation to enable EFSEC to determine that the emission unit or activity has been appropriately listed as insignificant.
- **c)** Upon request from EFSEC, at any time during the term of the AOP, the Permittee must demonstrate to EFSEC that the actual emissions of any unit or activity claimed insignificant on the basis of actual emissions are below the emission thresholds listed in WAC 173-401-530(4).

[Origin: WAC 173-401-530]

[Authority: WAC 173-401-600(1)(b)]

G3. New Source Review. The Permittee must not construct or modify a source which is required to be reviewed under Chapters 173-400 or 173-460 WAC without first receiving an approval or permit. Portable sources may be exempt from the requirement to obtain a site-specific permit if they fulfill the criteria described in G5 - Temporary Sources. Replacing, relocating, or reconstructing a source is considered constructing a source.
[Origin: WAC 173-400-110; WAC 173-400-700; and, WAC 173-460-040 (State Only)]
[Authority: WAC 173-401-600(1)(b)]

G4. Replacement or Substantial Alteration of Emission Control Technology. A notice of construction application must be filed with EFSEC prior to replacing or substantially altering the emission control technology installed on an existing stationary source or emission unit. Replacement or substantial alteration of control technology does not include routine maintenance, repair, or similar parts replacement.

[Origin: WAC 173-400-114]
[Authority: WAC 173-401-600(1)(b)]

G5. Temporary Sources. A portable source with an order of approval from another Washington permitting authority may be authorized to operate at the facility without obtaining a site-specific permit from EFSEC if EFSEC approves the proposal on a case-by-case basis and all of the conditions of WAC 173-400-036(2) through (4) are met. Operation at any location under this provision is limited to one year or less.

[Origin: WAC 173-400-036 (State Only) and WAC 173-400-110(6)]
[Authority: WAC 173-401-600(1)(b)]

G6. Asbestos, Demolition and Renovation Projects. The Permittee must notify EPA Region 10 and EFSEC prior to commencing any renovation or demolition activities at the facility as defined in 40 CFR 61.141. The Permittee must conduct all renovation, demolition, and asbestos projects in accordance with applicable asbestos control standards and requirements in Subpart M of 40 CFR Part 61.

[Origin: 40 CFR Part 61, Subpart M]
[Authority: WAC 173-401-600(1)(a)]

G7. Chemical Accident Prevention. The Permittee must comply with the requirements of the Chemical Accident Prevention provisions of 40 CFR Part 68 no later than the following dates:

- **a)** Three years after the date on which a regulated substance, present above the threshold quantity, is first listed under 40 CFR 68.130; or,
- **b)** The date on which a regulated substance is first present above a threshold quantity in a process.

[Origin: 40 CFR Part 68]
[Authority: WAC 173-401-600(1)(a)]

G8. Protection of Stratospheric Ozone. The Permittee shall comply with the standards for recycling and emissions reduction as provided in 40 CFR Part 82, Subpart F.

[Origin: 40 CFR Part 82, Subpart F]
[Authority: WAC 173-401-600(1)(a)]

G9. Outdoor Burning. The Permittee is prohibited from conducting outdoor burning except as allowed by Chapter 173-425 WAC.

[Origin: WAC 173-425]
[Authority: WAC 173-401-600(1)(b)]

G10. Concealment and Masking Prohibited: No person shall cause or allow the installation or use of any device or use of any means, which conceals or masks an emission of an air contaminant, which would otherwise violate any provisions of chapter 173-400 WAC.

[Origin: WAC 173-400-040(8) (State Only)]
[Authority: WAC 173-401-600(1)(b)]

G11. Circumvention. The Permittee must not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[Origin: 40 CFR 60.12]
[Authority: WAC 173-401-600(1)(a)]

G12. General Emissions Testing Requirement. In addition to the testing requirements contained in this AOP, EFSEC or an authorized representative of EFSEC may require the Permittee to conduct stack and/or ambient air monitoring and report the results to EFSEC.

[Origin: WAC 463-78-120]
[Authority: WAC 173-401-600(1)(b)]

G13. Acid Rain Program - Duty to reapply. The designated representative must submit a complete acid rain permit application for each source with an affected unit along with the Title V permit renewal application required by condition P7. The original and three copies of all permit applications must be submitted to EFSEC.

[Origin: WAC 173-406-301(3)]
[Authority: WAC 173-401-600(1)(b)]

G14. Acid Rain Program – Designated Representative. Designated representative under the Acid Rain Program means a responsible natural person authorized by the owners and operators of an affected source and of all affected units at the source or by the owners and operators of a combustion source or process source, as evidenced by a certificate of representation (see Acid

Rain Permit under Attachment 1), to represent and legally bind each owner and operator, as a matter of Federal law, in matters pertaining to the Acid Rain Program. Whenever the term "responsible official" is used in this permit, it shall be deemed to refer to the "designated representative" with regard to all matters under the Acid Rain Program.

[Origin: WAC 173-406-101(40)]
[Authority: WAC 173-401-600(1)(b)]

G15. Prevention of Significant Deterioration (PSD). A PSD permit application must be filed by the Permittee and a PSD permit issued by EFSEC prior to beginning actual construction of any major stationary source or major modification as these terms are defined in WAC 173-400-720.

[Origin: WAC 173-400-720]
[Authority: WAC 173-401-600(1)(b)]

G16. Requirements for PSD Applicability Determinations. The Permittee must comply with the specific pre and post project monitoring, recordkeeping, and reporting requirements in WAC 173-400-720(4)(b)(iii), as applicable, to projects triggering a PSD applicability determination.

[Origin: WAC 173-400-720(4)(b)(iii)]
[Authority: WAC 173-401-600(1)(b)]

[END OF SECTION]

V. APPLICABLE REQUIREMENTS (AR)

TABLE 5: Applicable Requirements.

AR#	Requirements	Subject Units	Additional Monitoring & Records Requirements
	General Plant-wide Emission Standards		
AR 1.1	**General Duty Requirements:** At all times, including periods of startup, shutdown, and malfunction, the Permittee must maintain and operate all emissions units and their associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. [Origin: 40 CFR 60.11(d); 40 CFR 60 Subpart KKKK, §60.4333; PSD No. EFSEC/2001-01, AMENDMENT 5, condition 26] [Authority: WAC 173-401-600(1)(a), and (b)]	Plant-wide	None
AR 1.2	**General Standards for Maximum Visual Emissions.** The Permittee must not cause or allow any emission of an air contaminant from any emissions unit which at the emission point, or within a reasonable distance of the emission point, exceeds twenty percent opacity for more than three minutes, in any one hour, as determined by Ecology method 9A. **Reference Test Method:** When stack testing is conducted for purposes of demonstrating compliance, Ecology Method 9A must be used. [Origin: WAC 173-400-040(2) (state/EFSEC only)] [Authority: WAC 173-401-600(1)(b); and, WAC 173-401-605(1)]	Plant-wide	M5 M6 M7
AR 1.3	**Fallout Prohibition.** The Permittee must not cause or allow the emission of particulate matter from any source to be deposited beyond the property under their direct control in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited. [Origin: WAC 173-400-040(3)(state/EFSEC only)] [Authority: WAC 173-401-600(1)(b)]	Plant-wide	None
AR 1.4	**Fugitive Emissions Control.** The owner or operator of any emission unit engaging in materials handling, construction, demolition, or any other operation which is a source of fugitive emissions must take reasonable precautions to prevent release of air contaminants from the operation. [Origin: WAC 173-400-040(4)(a) (state/EFSEC only)] [Authority: WAC 173-401-600(1)(b)]	Plant-wide	M4
AR 1.5	**Odor Control.** The Permittee must use recognized good practice and procedures to reduce odors to a reasonable minimum. [Origin: WAC 173-400-040(5) (state/EFSEC only)]	Plant-wide	M4

	[Authority: WAC 173-401-600(1)(b)]		
AR 1.6	**Emissions detrimental to persons or property.** The Permittee must not cause or allow the emission of any air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business. [Origin: WAC 173-400-040(6) (state/EFSEC only)] [Authority: WAC 173-401-600(1)(b)]	Plant-wide	M4
AR 1.7	**Sulfur Dioxide (SO_2).** The Permittee must not cause or allow the emission of a gas containing sulfur dioxide from any emissions unit in excess of one thousand ppm of sulfur dioxide on a dry basis, corrected to seven percent oxygen for combustion sources, and based on the average of any period of sixty consecutive minutes. **Compliance Demonstration Methods:** 1. For diesel fuel, records documenting a sulfur content of 15 ppm or 0.0015% sulfur by weight or less must be used. A fuel certification from the fuel supplier documenting the sulfur content of the diesel may be used to demonstrate compliance with this requirement. 2. SO2 emissions from combustion of natural gas are presumed to be in compliance with this limit. **Reference Test Method** – When stack testing is conducted for purposes of demonstrating compliance, EPA Method 6c from 40 CFR Part 60 Appendix A must be used, or an equivalent method agreed to in advance by EFSEC. [Origin: WAC 173-400-040(7) (state/EFSEC only)] [Authority: WAC 173-401-600(1)(b); and, WAC 173-401-605(1)]	Plant-wide	M1 M8
AR 1.8	**Fugitive Dust Control.** The Permittee must take reasonable precautions to prevent fugitive dust from becoming airborne and must maintain and operate the source to minimize emissions. [Origin: WAC 173-400-040(9)(a) (state/EFSEC only)] [Authority: WAC 173-401-600(1)(b)]	Plant-wide	M4

AR 1.9	**General Particulate Standards for Combustion Units.** The Permittee must not cause or allow emissions of particulate matter in excess of 0.23 gram per dry cubic meter at standard conditions (0.1 grain/dscf). **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, emissions must be measured using EPA Method 5 in Appendix A to 40 CFR Part 60 (in effect on February 14, 2005), or approved procedures in Source Test Manual – Procedures for Compliance Testing, state of Washington, Department of Ecology, as of September 20, 2004, on file at Ecology. Measured concentrations must be adjusted for volumes corrected to 7% oxygen, except when EFSEC determines that an alternate oxygen correction factor is more representative of normal operations such as the correction factor included in an applicable NSPS or NESHAP, actual operating conditions, or the manufacturer's specifications for the emission unit. [Origin: WAC 173-400-050(1)] [Authority: WAC 173-401-600(1)(b); and, WAC 173-401-605(1)]	Plant-wide	M5 M6 M7
AR 1.10	**General Emission Standards for Process Units**. The Permittee must not cause or allow emissions of particulate matter from any general process unit (excluding combustion) in excess of 0.23 grams per dry cubic meter at standard conditions (0.1 grain/dscf) of exhaust gas. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, test methods (in effect on the date in WAC 173-400-025) from 40 CFR Parts 51, 60, 61, and 63 and any other approved test procedures in Ecology's "Source Test Manual - Procedures For Compliance Testing" as of September 20, 2004, must be used to determine compliance. [Origin: WAC 173-400-060] [Authority: WAC 173-401-600(1)(b); and, WAC 173-401-605(1)]	Plant-wide	None
AR 1.11	**Acid Rain.** The Permittee must hold SO_2 allowances not less than the total annual emissions of SO_2 for the previous calendar year (see Attachment 1 of this AOP - Acid Rain Permit). [Origin: Acid Rain Permit No. EFSEC/10-01-AR] [Authority: WAC 173-401-600(1)(b); and, WAC 173-401-605(1)]	CGT1 & CGT2	M1
AR 1.12	**Operating and Maintenance Manuals.** The Permittee must have on-site, and must follow, an Operating and Maintenance manual (O&M Manual) and Start-up, Shutdown, and Malfunction Procedures manual (SSM Manual). Both manuals must describe accepted operating procedures for minimizing emissions for all equipment that have the potential to affect emissions to the atmosphere. The following requirements apply: 1. Copies of both manuals must be available to EFSEC at the facility. 2. The manuals must be reviewed annually and updated as needed. 3. EFSEC must be notified whenever either manual is updated. 4. The O&M Manual should contain equipment-specific operating parameter and maintenance information.	Plant-wide	M1

	5. The O&M Manual should specify acceptable ranges for: a. Fuel heat (MMBtu/dscf) and sulfur content (percent); b. Expected range of fuel rates for each unit (MMBtu/hr for turbines, duct burner and aux boiler) and mode of operation (startup, shutdown, operational); c. Expected range of power production (MW) for each turbine; d. Expected range of total power production (MW); e. CGT exhaust temperature and percent oxygen for each mode of operation; f. Ammonia flow for each mode of operation; g. SCR and CatOx catalyst temperatures for each mode of operation h. Mode 6 criteria 6. The SSM manual must contain information on the proper procedures, and sequencing of actions for plant operations staff to follow in order to safely, efficiently start and stop the various equipment at the station under all reasonably ascertainable normal and abnormal start-up and shut-down situations. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 17.1, 17.2 and 23] [Authority: WAC 173-401-600(1)(c)]		
	NSPS Requirements for CGT1 and CGT2 (including duct burners)		
AR 2.1	**CGT NSPS NO_x Limit.** Nitrogen oxide (NO_x) emissions from each CGT exhaust stack after duct burners – CGT1 and CGT2 – must not exceed the following limits: 1. 15 parts per million at 15 percent oxygen and on a dry basis when the turbine is operating. 2. 54 parts per million at 15 percent O2 when the duct burners are operating independent of the turbine, if applicable. **Monitoring:** The Permittee must install, certify, maintain, operate, and quality-assure a NOx-diluent continuous emission monitoring system (NOx-diluent CEMS) consisting of NO_X and O_2 analyzers, an automated data acquisition and handling system (DAHS), and natural gas monitoring system for recording and reporting NOx emissions data according to conditions M5 and M8. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, test methods and procedures from 40 CFR 60, Subpart KKKK and EPA Method 20 must be used, except that the instrument span must be set between zero and 25 ppm. Performance testing must be conducted at any load condition within plus or minus 25 percent of 100 percent of peak load. Testing may be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. Three separate test runs for each performance test must be conducted and the minimum time per run is 20 minutes. [Origin: 40 CFR 60 Subpart KKKK: §60.4320(a); §60.43.40; and §60.4345; and, §60.4350]	CGT1 CGT2	M5 M8 M9 M12 M13

	[Authority: WAC 173-401-600(1)(b)]		
AR 2.2	**CGT NSPS SO_2 Limit.** The CGTs (turbines and duct burners) must not burn any fuel containing total potential sulfur emissions in excess of 0.060 lb SO2 /MMBtu heat input. **Compliance Demonstration Required:** A demonstration of compliance with the NSPS SO2 standard must be conducted annually (no more than 14 calendar months between tests) using one or more of the following methods: 1. Calculate the potential sulfur emissions in units of lb SO2 /MMBtu heat input using a current, valid purchase contract, tariff sheet, or transportation contract for the fuel specifying the maximum total sulfur content of the natural gas combusted in the CGTs; 2. Stack testing according to the SO2 Reference Test Method below; or, 3. Calculate the potential sulfur emissions in units of lb SO2 /MMBtu heat input using natural gas composition data from required monthly monitoring as described below. **Monitoring:** On a monthly basis**,** the Permittee must monitor the natural gas burned in the CGTs by sampling and analyzing the natural gas delivered to the GHE facility according to condition M8 to determine: 1. The Gross Calorific Value (GCV) in terms of MMBtu/scf; 2. Sulfur concentration in terms of grains/hscf; and, 3. Potential sulfur emissions in terms of lb SO_2/MMBtu input. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Methods 6, 6C, 8, or 20 in appendix A of 40 CFR Part 60 must be used. The American Society of Mechanical Engineers (ASME) standard, ASME PTC 19-10-1981-Part 10, "Flue and Exhaust Gas Analyses," manual methods for sulfur dioxide can be used instead of EPA Methods 6 or 20. Concurrently measure the natural gas heat input to each CGT using a fuel flowmeter (or flowmeters). Use EPA Method 19 in appendix A of 40 CFR 60 to calculate the SO2 emission rate in lb/MMBtu. [Origin: 40 CFR 60 Subpart KKKK: §60.4330(a)(2)] [Authority: WAC 173-401-600(1)(b)]	CGT1 CGT2	M8 M9 M12
PSD Permit Requirements for CGT1 and CGT2			
AR 2.3	**CGT Fuel Limit:** The CGTs (each consisting of a GE 7FA combustion turbine and its associated duct burner and HRSG) and auxiliary boiler are limited to the use of natural gas. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 2] [Authority: WAC 173-401-600(1)(c)]	CGTs	M8
AR 2.4	**CGT NO_x Limits:** Emissions from each CGT exhaust stack – CGT1 and CGT2 – must not exceed the following, except during start-up and shutdown (and CGT over-speed protection testing) when they must meet the requirements in conditions AR2.13 and AR2.14: a) 21.7 pounds/hour (lb/hr), 1-hour (1-hr) average. b) 17.4 lb/hr, 24-hr rolling average.	CGTs	M5 M8 M9 M12 M13

	c) 2.5 parts per million by volume, dry (ppm), 1-hr average, corrected to 15 percent oxygen (O_2). d) 2.0 ppm, 24-hr rolling average, corrected to 15 percent O_2. **Monitoring:** Ongoing compliance must be monitored by a NOx-diluent CEMS. The NOx-diluent CEMS and flow measurement to determine NOx mass rates must meet the requirements of conditions M5 and M8 respectively. Emissions calculations must meet the requirements of condition M9. **Added Clarification:** For purposes of determining compliance with the 24-hr rolling average NO_x limit, start-up, and shut-down emissions must not be included in the averaging and a full averaging period should be used in determining compliance. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Method 20 from 40 CFR Part 60 Appendix A must be used and testing must meet the requirements in §60.4405 of 40 CFR Part 60 Subpart KKKK, except that the instrument span must be set between zero and 25 ppm. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.1] [Authority: WAC 173-401-600(1)(c)]		
AR 2.5	**CGT CO Limits:** Carbon monoxide (CO) emissions from each CGT exhaust stack – CGT1 and CGT2 – must not exceed the following limits, except during startup and shutdown (and CGT over-speed protection testing) when they must meet the requirements in conditions AR2.13 and AR2.14: a) 2.0 ppm, corrected to 15 percent O_2, 1-hr average. b) 10.6 lb/hr, 1-hr average. **Monitoring:** Ongoing compliance must be monitored by a CO CEMS. The CO CEMS and flow measurement to determine CO mass rates must meet the requirements of conditions M5 and M8 respectively. Emissions calculations must meet the requirements of condition M9. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Method 10 from 40 CFR Part 60 Appendix A must be used, or an equivalent method agreed to in advance by EFSEC. The span and linearity calibration gas concentrations in Method 10 are to be modified as appropriate to the CO concentration limits specified in this condition. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.2] [Authority: WAC 173-401-600(1)(c)]	CGTs	M5 M8 M9 M12 M13

AR 2.6	**CGT SO_2 Limits:** Sulfur dioxide (SO_2) emissions from each CGT exhaust stack – CGT1 and CGT2 – must not exceed the following, except during startup and shutdown (and CGT over-speed protection testing) when they must meet the requirements in conditions AR2.13 and AR2.14: a) 19.8 lb/hr, 1-hr average. b) 3.3 lb/hr, rolling annual-average of emissions determined monthly when the CGTs operate. **Stack Testing:** Compliance with the 1-hr average limit must be determined for each CGT at 5-year intervals through stack testing according to the Reference Test Method. **Monitoring:** Ongoing compliance with both limits must be determined monthly according to condition M9 by calculating hourly average SO_2 emission rates from each CGT in pounds per hour for all hours of operation during the previous month and the average emission rate in lb/hr over the previous 12-consecutive month period. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Method 6c from 40 CFR Part 60 Appendix A must be used, or an equivalent method agreed to in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.3] [Authority: WAC 173-401-600(1)(c)]	CGTs	M8 M9 M12
AR 2.7	**CGT H_2SO_4 Limits:** Sulfuric acid mist (H_2SO_4) emissions from each CGT exhaust stack – CGT1 and CGT2 – must not exceed 2.17 lb H_2SO_4/hr, rolling annual average calculated monthly, except during startup and shutdown (and CGT over-speed protection testing) when they must meet the requirements in conditions AR2.13 and AR2.14: **Stack Testing:** Hourly H2SO4 rates and the unit-specific ratios of H2SO4 to SO2 shall be determined for each CGT based on stack testing using EPA Reference Method 8, or an equivalent method approved by EFSEC. Stack testing shall be performed at each exhaust stack at 5-year intervals. Testing shall be performed between the months of November – March (unless otherwise approved by EFSEC) at representative maximum heat input rate. **Monitoring:** Ongoing compliance must be determined monthly according to condition M9 by calculating the average hourly H_2SO_4 emission rates from each CGT in pounds per hour for all hours of operation during the previous month and 12-consecutive month periods. The unit-specific ratio of H_2SO_4 to SO_2 determined through stack testing must be used to convert the calculated potential SO_2 emissions into sulfuric acid mist emissions and SO_2 emissions. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Method 8 from 40 CFR	CGTs	M8 M9 M12

	Part 60 Appendix A or EPA Conditional Test Method 013(CTM-013) for SO2/sulfuric acid mist determination must be used, or an equivalent method agreed to in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.4] [Authority: WAC 173-401-600(1)(c)]		
AR 2.8	**CGT VOC Limits:** Volatile organic compound (VOC) emissions from each CGT exhaust stack – CGT1 and CGT2 – must not exceed the following, except during startup and shutdown (and CGT over-speed protection testing) when they must meet the requirements in conditions AR2.13 and AR2.14: a) 7.7 lb/hr, 1-hr average, reported as propane. b) 0.93 ppm, 1-hr average, reported as propane at 15 percent O_2. **Stack Testing:** Each CGT stack must be tested at 5-year intervals. Testing must be performed between the months of November – March (unless otherwise approved by EFSEC) at representative maximum heat input rates and according to the Reference Test Methods. **Monitoring:** Ongoing compliance with the hourly rate limit of this condition must be monitored separately for each CGT by calculating hourly VOC emissions rates according to condition M9 using: a) The hours of operation; b) Fuel flow to each CGT according to condition M8; c) An emissions factor in lbs/MMBtu derived from the most recent reference method testing of the CGT; and, d) Emission calculations according to condition M9. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Methods 19 and 25A, 25B or 18 from 40 CFR Part 60 Appendix A, or South Coast Air Quality Management District Method 25.3, must be used, or equivalent methods agreed to in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.5] [Authority: WAC 173-401-600(1)(c)]	CGTs	M8 M9 M12
AR 2.9	**CGT Particulate Limits:** Particulate matter and particulate matter less than or equal to 10 micrometers (aerodynamic diameter)(PM_{10}) emissions from each CGT exhaust stack – CGT1 and CGT2 – must not exceed 22.6 lb/hr of filterable plus condensable PM_{10} except during startup and shutdown (and CGT over-speed protection testing) when they must meet the requirements in conditions AR2.13 and AR2.14. **Stack Testing:** Each CGT stack must be tested at 5-year intervals. Testing will be performed between the months of November – March (unless otherwise approved by EFSEC) while operating at representative maximum heat input rate. **Monitoring:** Maintaining compliance with the opacity limit in condition 2.11 will serve as a means to determine when CGT maintenance actions,	CGTs	None

	investigations or additional testing are needed to verify or assure compliance with the limit in this condition. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Method 19 and EPA Methods 5, 201, or 201A, plus EPA Reference Method 202 from 40 CFR Part 60 Appendix A must be used, or equivalent methods agreed to in advance by EFSEC. Use of EPA Reference Method 5 assumes all filterable particulate is PM_{10}. Use of EPA Reference Method 201 or 201A assumes that the mass of filterable PM is equal to the mass of filterable PM_{10}. If EPA Method 201 or 201A is used, the mass of particulate retained in the cyclone must be determined and reported. Test runs must be a minimum of 3 hour each unless otherwise approved in advance by EFSEC. The results of the filterable and condensable particulate analyses must be reported as total particulate, filterable particulate, and condensable particulate. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.6] [Authority: WAC 173-401-600(1)(c)]		
AR 2.10	**CGT Ammonia Limits**: Ammonia (free NH_3 and combined measured as NH_3) emissions from each CGT exhaust stack – CGT1 and CGT2 – must not exceed the following, except during start up and shutdown (and CGT over-speed protection testing): a) 5.0 ppm, 24-hr average corrected to 15 percent O_2. b) 16.1 lb/hr, 24-hr average. **Monitoring:** Ongoing compliance must be monitored by an Ammonia CEMS. The Ammonia CEMS and flow calculations to determine Ammonia mass rates must meet the requirements of conditions M5 and M8 respectively. Emissions calculations must meet the requirements of condition M9. **Added Clarification:** For purposes of determining compliance with the 24-hr average Ammonia limit, start-up and shut-down emissions should not be included in the averaging and a full averaging period should be used in determining compliance. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, Bay Area Air Quality Management District Source Test Procedure ST-1B, "Ammonia, Integrated Sampling" or EPA Conditional Test Method 027 must be used, or an equivalent method approved in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.7] [Authority: WAC 173-401-600(1)(c)]	CGTs	M5 M8 M9 M12 M13
AR 2.11	**CGT Opacity Limits**: Opacity at each CGT exhaust stack must not exceed a 6-minute average opacity of five percent, except during start-up and shutdown (and CGT over-speed protection testing) when they must meet the requirements in conditions AR2.13 and AR2.14: **Monitoring:**	CGTs	M5d

	a) A certified opacity reader must read and record the opacity of each operating CGT daily during daylight hours; or, b) Opacity must be monitored using a Continuous Opacity Monitoring System (COMS) on each CGT as an alternative to EPA Reference Method 9 readings. c) Any COMS must be installed and operated according to condition M5. d) If readings from daily monitoring are less than the opacity limit for the last calendar month, the manual opacity monitoring frequency is reduced to weekly. e) Any readings above the opacity limit will require daily manual opacity readings for at least 30 days. **Reference Test Method:** When stack testing is conducted for purposes of demonstrating compliance, EPA Reference Method 9 from 40 CFR Part 60 Appendix A must be used, or an equivalent method agreed to in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.8] [Authority: WAC 173-401-600(1)(c)]		
AR 2.12	**CGT Formaldehyde Limits:** Formaldehyde emissions from each CGT exhaust stack – CGT1 and CGT2 – during normal operation must not exceed 91 ppb, one-hr average corrected to 15 percent O_2. **Stack Testing:** a) The initial compliance test must be performed between the months of November – March, and then biennially (unless otherwise approved by EFSEC) after the initial test. b) The CT unit at a minimum (excluding duct burner) must be tested while operating at representative maximum heat input rate. c) If GHE demonstrated that the unit is not relying on CO catalyst to meet the Formaldehyde emission limit by testing at the inlet to the CO catalyst, GHE may perform compliance testing every 5 years instead of every 2 years. **Monitoring:** If compliance with the CGT formaldehyde limits relies on formaldehyde reduction by the CO catalyst, maintaining performance of the CO catalyst will serve as the indirect means for assuring compliance with the limits between testing events. Otherwise, ongoing compliance assurance with these limits does not require any additional monitoring beyond the required stack testing. **Reference Test Method:** When stack testing is conducted for purposes of demonstrating compliance, EPA Test Method 320 from 40 CFR part 63, appendix A must be used, or an equivalent method approved in advance by EFSEC. As an alternative, ASTM D6348-12e1 may be used, provided that the test plan preparation and implementation provisions of Annexes A1 through A8 are followed and the %R as determined in Annex A5 is equal or greater than 70% and less than or equal to 130%.	CGTs	None

	[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.9] [Authority: WAC 173-401-600(1)(c)]		
AR 2.13	**CGT Start-up/Shut-down Operational Limits.** The following definitions and limits apply during start-ups and shut-downs: a) **Start-up Defined:** A start-up begins when fuel is first fired in the combustion turbine, and ends when the earlier of one of these events occurs: i) The operating temperatures of the oxidation and SCR catalysts serving an operating CGT reach 500°F and 525°F, respectively and when the associated combustion turbine achieves operational Mode 6; or, ii) One of the following time limits has been reached, as applicable: 1) Three hundred minutes have elapsed since fuel was first introduced to the applicable turbine on a cold start-up. A cold start-up is any start-up occurring after the applicable turbine has not operated in Operational Mode 6 for 48 hours or more. 2) One hundred eighty minutes have elapsed since fuel was first introduced to the applicable turbine on a warm start-up. A warm start-up is any start-up occurring after the applicable turbine has not operated in Operational Mode 6 between 8 and 48 hours. 3) One hundred twenty minutes have elapsed since fuel was first introduced to the applicable turbine on a hot start-up. A hot start-up is any start-up occurring after the applicable turbine has not operated in Operational Mode 6 for 8 hours or less. b) **Shut-down Defined:** Shutdown is defined as the period beginning when the combustion turbine leaves operational Mode 6 and ends when fuel is no longer being introduced to any burner. c) **Operational Mode 6 Defined:** The turbine manufacturer defines operational Mode 6 as the low emission mode during which all six of the burner nozzles are burning a lean premixed gas at steady-state operation. d) **Water Wash Operations:** At least twice per year it is estimated each CGT will need to undergo an off-line water wash to remove combustion product buildup from the turbines to improve operational efficiency. The process requires CGT fired operation at Full Speed No Load (FSNL) for 5 minutes without attaining Operational Mode 6. e) **Over-speed Protection Testing:** Once per year it is estimated that each CGT will need to be tested to confirm that the over-speed protection is functioning properly (less than 90 minutes). Each test will account for one start-up. f) **Start-up/Shut-down Operational Limits:** i) Each CGT is limited to two start-ups per calendar day. ii) Duration of a planned shutdown period must not exceed 30 minutes per occurrence. iii) During start-up, ammonia injection must begin no later than when the SCR reaches an operating temperature of 525°F.	CGTs	M1

	[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 11.1 – 11.3] [Authority: WAC 173-401-600(1)(c)]		
AR 2.14	**CGT Start-up/Shut-down Emissions Limits**. During a start-up and associated shutdown (SU/SD) of a CGT, as defined in condition AR2.14, the combined emissions must not exceed the following limits in terms of pounds per turbine per SU/SD (lbs): a) 900 lbs NO_x b) 500 lbs CO c) 730 lbs VOC **Monitoring:** Ongoing compliance with the CGT SU/SD limits of this condition must be monitored by calculating the pounds of NOx, CO, and VOC for each SU/SD event according to condition M9. **Reference Test Methods:** Not applicable. Compliance determined through emissions calculations using monitoring data. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 11.5] [Authority: WAC 173-401-600(1)(c)]	CGTs	M1 M8 M9 M11
AR 2.15	**CGT Annual Limits.** Annual emissions from each CGT, calculated as rolling 12-month averages in terms of tons, must not exceed the following limits, which apply to total emissions over each 12 consecutive month period and include emissions during start-up, shutdown and periods of malfunction: a) 121.7 NO_x b) 71.6 CO c) 14.5 SO_2 d) 9.5 H_2S0_4 e) 99.0 PM/PM_{10} (PM and PM_{10} assumed to be equal) f) 45.8 VOC g) 70.5 NH_3 The annual limits for NOx, CO and VOC include emissions from the Diesel Generator and emergency fire pump engine. **Monitoring:** Annual 12-month total emissions from each CGT must be calculated and compared to the limits in this condition as follows: a) Emissions total must be calculated monthly according to condition M9. b) Total annual emissions must be based on the total monthly emissions summed for the preceding 12 months. c) CGT start-up emissions may be equally apportioned between the two turbines. d) For NOx, CO and VOC, annual 12-month total emissions must include emissions from the Diesel Generator and emergency fire pump engine. To accomplish this, emissions from the Diesel Generator and emergency fire pump engine may be equally apportioned between the two CGTs.	CGTs	M5 M8 M9 M12 M13

	Reference Methods: Not applicable. Compliance determined through emissions calculations using fuel consumption and monitoring data. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 10] [Authority: WAC 173-401-600(1)(c)]		
AR 2.16	**SCR Catalyst Maintenance:** The SCR catalyst system treating the exhaust from one CGT must be repaired, replaced, or have additional catalyst bed installed at the next scheduled outage, following a calendar month when the average ammonia slip cannot be maintained at or below 4.5 ppm, corrected to 15% oxygen, based on the actual operating hours of the CGT. No month with less than 200 hours of actual operation (excluding start-up and shutdown hours) shall be used for this evaluation. The outage to repair, replace, or install additional catalyst to the SCR system must be no later than 12 months after the month the ammonia slip exceeds the 4.5 ppm criteria given above in this condition. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.7.5] [Authority: WAC 173-401-600(1)(c)]	CGTs	M1
AR 2.17	**CGT Sampling Port Requirements:** a) Sampling ports and platforms must be provided on each CGT stack, after the final pollution control device. [PSD condition 15] b) The ports must meet the requirements of 40 CFR, Part 60, Appendix A, Method 20. [PSD condition 15] c) Adequate permanent and safe access to the test ports must be provided. Other arrangements may be acceptable if approved by EFSEC prior to installation. [PSD condition 16] [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, as indicated] [Authority: WAC 173-401-600(1)(c)]	CGTs	None
PSD Permit Requirements for the Auxiliary Boiler			
AR 3.1	**Aux. Boiler NO_x Limit**: NO_x emissions from the Auxiliary boiler exhaust stack are not to exceed the following: a) 1.03 lb/hr, 1-hr average. b) 30 ppm at three percent O_2, 1-hr average. **Stack Testing:** Compliance with these limits must be determined at 5-year intervals through stack testing according to the Reference Test Methods. **Monitoring:** No ongoing monitoring beyond the required stack testing is required for assuring compliance with the limits of this condition. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Methods 7E and 19 from 40 CFR Part 60 Appendix A must be used. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 6.1] [Authority: WAC 173-401-600(1)(c)]	Aux. Boiler	None
AR	**Aux. Boiler CO Limit**: CO emissions from the Auxiliary boiler exhaust	Aux. Boiler	None

3.2	stack are not to exceed the following: a) 50.0 ppm, corrected to three percent O_2, 1-hr average. b) 1.07 lb/hr, 1-hr average. **Stack Testing:** Compliance with these limits must be determined at 5-year intervals through stack testing according to the Reference Test Methods. **Monitoring:** No ongoing monitoring beyond the required stack testing is required for assuring compliance with the limits of this condition. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Methods 10 and 19 from 40 CFR Part 60 Appendix A must be used, or an equivalent method agreed to in advance by EFSEC. The span and linearity calibration gas concentrations in EPA Method 10 must be appropriate to the CO concentration limits specified in this condition. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 6.2] [Authority: WAC 173-401-600(1)(c)]		
AR 3.3	**Aux. Boiler SO_2 Limit**: SO_2 emissions from the Auxiliary boiler exhaust stack are not to exceed the following: a) 0.07 lb/hr annual average, calculated monthly. b) One ppm at three percent O_2, 1-hr average. **Monitoring:** Ongoing compliance with the hourly rate limit in AR 3.3a) must be determined monthly by mass-balance calculations utilizing the: a) Monthly Fuel consumption records for the auxiliary boiler according to condition M8, b) Sulfur content of the natural gas per condition M8; and, c) SO_2 emissions must be calculated according to condition M10. **Reference Test Method:** When stack testing is conducted for purposes of demonstrating compliance, EPA Method 8 from 40 CFR Part 60 Appendix A or an equivalent method agreed to in advance by EFSEC must be used. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 6.3] [Authority: WAC 173-401-600(1)(c)]	Aux. Boiler	M8 M10
AR 3.4	**Aux. Boiler VOC Limit**: VOC emissions from the Auxiliary boiler exhaust stack are not to exceed 0.20 lb/hr, 1-hr average, reported as propane. **Stack Testing:** Compliance with this limit must be determined at 5-year intervals through stack testing according to the Reference Test Methods. **Monitoring:** No ongoing monitoring beyond the required stack testing is required for assuring compliance with the limit of this condition. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Methods 19 and 25A or 25B from 40	Aux. Boiler	None

	CFR Part 60 Appendix A must be used, or an equivalent method agreed to in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 6.4] [Authority: WAC 173-401-600(1)(c)]		
AR 3.5	**Aux. Boiler Particulate Limit**: PM_{10} emissions from the Auxiliary boiler exhaust stack are not to exceed the following: a) 0.292 lb/hr, hourly average (front & back half). b) 0.005 gr/dscf, 1-hr average, at three percent O_2. **Stack Testing:** Compliance with this limit must be determined at 5-year intervals through stack testing according to the Reference Test Methods. **Monitoring:** Maintaining compliance with the opacity limit in condition AR 3.6 will serve as an indicator of when Aux Boiler maintenance actions, investigations or additional testing is needed to verify or assure compliance with the limits in this condition. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Methods 19, 202 and either 5, 201, or 201A must be used, or an equivalent method agreed to in advance by EFSEC. Use of EPA Reference Method 5 assumes all particulate has an aerodynamic diameter less than 10 microns. Use of EPA Reference Method 201 or 201A assumes that the mass of filterable PM is equal to the mass of filterable PM_{10}. The results of the filterable and condensable particulate analyses must be reported as total particulate, filterable particulate, and condensable particulate. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 6.5] [Authority: WAC 173-401-600(1)(c)]	Aux. Boiler	None
AR 3.6	**Aux. Boiler Opacity Limit**: Opacity at the auxiliary boiler stack is not allowed to exceed a 6-minute average opacity of five percent. **Monitoring:** A certified opacity reader must survey the boiler stack daily during daylight hours to determine if any opacity is present. If opacity is not observed over the course of a week, the frequency for surveying the boiler stack may change to monthly, or another frequency as approved by EFSEC. If the survey detects visible emissions, then the company must investigate the cause of the emissions and repair the problem or take EPA Method 9 observations for determining compliance. **Reference Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Method 9 from 40 CFR Part 60 Appendix A must be used, or an equivalent method agreed to in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 6.6] [Authority: WAC 173-401-600(1)(c)]	Aux. Boiler	M6
AR	**Aux. Boiler Annual Limits**: Annual total emissions from the Auxiliary	Aux.	M12

3.7	Boiler over each 12 consecutive month period and including emissions during start-up, shutdown, and periods of malfunction, must not exceed the following limits in tons per year: a) 1.3 NO_x b) 1.3 CO c) 0.088 SO_2 d) 0.4 PM/PM_{10} (PM and PM_{10} assumed to be equal) e) 0.73 VOC **Monitoring:** Total emissions of each pollutant over the preceding 12-months must be calculated monthly based on the actual amount of natural gas combusted over the 12-month period and emissions factors in terms of pounds per million Btu of fuel combustion. For NOx, CO, PM/PM10 and VOC, Aux. Boiler emissions factors must be based on the most recent results from stack testing. The SO2 emission factor for the Aux. Boiler must be based on the most recent fuel analysis. Unless a specific emission factor is developed representing startup or shut down of the boiler, steady state emissions factors must be used to represent all operations of the Aux. Boiler. **Reference Methods –** Not applicable: Compliance determined through emissions calculations. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 10] [Authority: WAC 173-401-600(1)(c)]	Boiler	
AR 3.8	**Aux. Boiler Sampling Port Requirements:** a) Adequate permanent and safe access to the test ports must be provided. Providing a man-lift to assure safe access to the test ports meets this condition. b) Other arrangements may be acceptable if approved by EFSEC prior to installation. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, PSD condition 16] [Authority: WAC 173-401-600(1)(c)]	Aux. Boiler	None
	Requirements for Emergency Diesel Engines		
AR 4.1	**Nonroad, Temporary Replacement Engines.** Compression Ignition, Internal Combustion Engines (CI ICE) used as temporary replacement units are allowed provided: a) They are located at the facility for less than 1 year; and, b) Meet the nonroad engine requirements of WAC 173-400-035. [Origin: WAC 173-400-030] [Authority: WAC 173-401-600(1)(b)]	Nonroad, Temporary Engines	None
AR 4.2	**Emergency Engine Requirements.** Compression ignition, reciprocating internal combustion engines used for emergency purposes (Emergency Engines) are subject to the following requirements from 40 CFR Part 63, Subpart ZZZZ: a) Operate and maintain Emergency Engines according to the manufacturer's emission-related written instructions or develop your	Emergency Engines	M1 M3

	own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engines in a manner consistent with good air pollution control practice for minimizing emissions. [Origin: 40 CFR 63 Subpart ZZZZ, §63.6625 (e)] b) Each Emergency Engine must be equipped with a non-resettable hour meter. [Origin: 40 CFR 63 Subpart ZZZZ, §63.6625 (f); PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 7.4 and 8.4] c) Minimize time engines are spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [Origin: 40 CFR 63 Subpart ZZZZ, §63.6625 (h)] d) There is no time limit on the use of the Emergency Engines in emergency situations. Emergency situations include periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [Origin: 40 CFR 63 Subpart ZZZZ, §63.6640 (f)] e) Required maintenance [Origin: 40 CFR 63 Subpart ZZZZ, Table 2d, Item 4]: i) Change oil and filter every 500 hours of operation or annually, whichever comes first; ii) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and iii) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. f) If an Emergency Engine is operating during an emergency and it is not possible to shut down the engine in order to perform the scheduled required maintenance, or if performing the scheduled maintenance would otherwise pose an unacceptable risk, the required maintenance can be delayed until the emergency is over or the unacceptable risk has abated. The scheduled maintenance should be performed as soon as practicable after the emergency has ended or the unacceptable risk has abated. [Origin: 40 CFR 63 Subpart ZZZZ, Table 2d, Item 4] [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 7 and 8, and 40 CFR 63, Subpart ZZZZ as listed in each sub-condition] [Authority: WAC 173-401-600(1)(b)]		
AR 4.3	**Emergency Generator Engine Operating Requirements:** The Emergency Generator engine must: a) Burn only on-road specification diesel oil with 500 ppm or less, biodiesel, or a mixture of both. In any case, the fuel used must have a maximum sulfur content that does not exceed 500 ppm by weight. A fuel certification from the fuel supplier may be used to demonstrate compliance with this requirement. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 3.1 and 7.3] b) Not exceed 500 hours per any 12 consecutive months of operating time. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 3.2] c) Be operated only during routine maintenance, testing, and periods when electricity is not available from the power grid. Maintenance and	Emergency Generator Engine	M1 M3

	testing must not exceed 50 hours per consecutive 12-month period. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 7.2] d) The facility must maintain engine operation and maintenance records verifying the engine has been operated, maintained, and repaired in a manner consistent with the manufacturer's emission-related specifications. A copy of the manufacturer's recommendations for maintaining the engine must be kept on-site and made available upon request. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 7.1.1] [Origins indicated for each sub-condition] [Authority: WAC 173-401-600(1)(b) and WAC 173-401-600(1)(c)]		
AR 4.4	**Emergency Fire Water Pump Engine Operating Requirements:** The Emergency Fire Water Pump engine must: a) Burn only on-road specification diesel oil with 500 ppm or less sulfur content, biodiesel, or a mixture of both. In any case, the fuel used must have a maximum sulfur content that does not exceed 500 ppm by weight. A fuel certification from the fuel supplier shall be used to demonstrate compliance with this requirement (An alternative would be testing of the fuel in the storage tank with prior approval). [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 4 and 8.3] b) Be operated only during routine maintenance, testing, and periods when electricity is not available from the power grid. Maintenance and testing must not exceed 50 hours per consecutive 12-month period. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 8.2] c) The facility must maintain engine operation and maintenance records verifying the engine has been operated, maintained, and repaired in a manner consistent with the manufacturer's emission-related specifications. A copy of the manufacturer's recommendations for maintaining the engine must be kept on-site and made available upon request. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 8.1.1] [Origins for each sub-condition] [Authority: WAC 173-401-600(1)(b) and WAC 173-401-600(1)(c)]	Emergency Fire Water Pump Engine	M1 M3

AR 4.5	**BACT Opacity Limit (Emergency Generator Engine only).** Visible emissions from the engine must not exceed an average of ten percent (10%) opacity during any 6-minute period except cold start-up, as determined in accordance with EPA Method 9 (Title 40 CFR, Part 60, Appendix A Method 9). Unless defined by the engine manufacturer, "cold start" as used in this condition shall be defined as the period beginning when the engine is started and ending when the temperature of the engine coolant reaches 150°F. **Monitoring:** During weekly testing of the engine, a certified opacity reader must survey and record if opacity is present after the engine achieves normal operating temperature according to condition M8. If opacity is observed, then Method 9 readings must be performed the nexttime the engine is operated for testing. The Survey frequency can be reduced to monthly once four readings without opacity are observed. **Reference Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Reference Method 9 from 40 CFR Part 60 Appendix A must be used, or an equivalent method agreed to in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 7.5] [Authority: WAC 173-401-600(1)(c)]	Emergency Generator Engine	M7
AR 4.6	**Excess Opacity Triggers Action (Emergency Generator Engine only):** Visible emissions of ten percent (10%) opacity or more from the Emergency Generator Engine must trigger prompt (within a week) action to initiate maintenance and/or repair the engine and eliminate opacity exceeding this standard. Maintenance and repair actions must be documented and available for inspection. [Origin: For Emergency Generator Engine, PSD No. EFSEC/2001-01, AMENDMENT 5, condition 7.6] [Authority: WAC 173-401-600(1)(c)]	Emergency Generator Engine	M1 M7
PSD & NOC Permit Requirements for Cooling Tower			
AR 5.1	**Cooling Tower Particulate Limit**: PM_{10} emissions from the Cooling Tower are not to exceed: a) 24.5 lb/day PM10, annual average. b) 4.5 tpy PM_{10}, rolling total, calculated monthly. **Monitoring:** a) Continuously monitor recirculating water flow rate in gallons per minute. In lieu of monitoring the recirculating water flow rate, the design rate may be used for compliance monitoring purposes. b) Total dissolved solids content of the cooling water must be measured monthly. c) On a monthly basis: i) Calculate the monthly average lbs/day PM_{10} emissions from the cooling tower using the Reference Formula below and actual operating data from monitoring. ii) Calculate the annual average lbs/day PM_{10} emissions from the	Cooling Tower	None

	cooling tower over the previous 12 consecutive months. **Reference Formula:** PM_{10} emissions from the Cooling Tower must be calculated according to the following equation and actual operating data: Q x C x DL x 60 x 8.34/ 1000000 = D Where: Q = Monthly average or design recirculation rate in gallons per minute C = Monthly average total dissolved solids concentration in parts per million by weight (ppmw) D = PM_{10} emission rate in lb/hr. DL = the design drift loss rate in gallon lost/gallon of recirculating cooling water = 1.0 E^{-5} [Origin: NOC No. EFSEC/2017-01, conditions 1, 3 and 4; PSD No. EFSEC/2001-01, AMENDMENT 5, condition 9 & 10] [Authority: WAC 173-401-600(1)(c)]		
AR 5.2	**Cooling Tower O&M Plan**: GHE must implement a plan for maintaining cooling tower water quality. The plan must include procedures for cooling tower chemical use, operating limits for free chlorine levels, schedule for testing free chlorine levels, and test methods. [Origin: NOC No. EFSEC/2017-01, condition 6] [Authority: WAC 173-401-600(1)(c)]	Cooling Tower	None

[END OF SECTION]

VI. MONITORING AND RECORDKEEPING (M)

M1. General Recordkeeping Requirements:

a) Retention. All records required by this Permit must be retained and made available when requested for no less than five years, unless specified otherwise (e.g. Acid Rain, GHG) from the date they were generated. [Authority: WAC 173-401-615(2)(c)]

b) Monitoring Records. Records for required monitoring must include, as applicable:

- **i)** The required monitoring data in units and averaging times that can be compared to the associated emissions limit or required operating standard;
- **ii)** Except for data recorded by an automated system, the date and name of the person making the record entry;
- **iii)** The date, place as defined in the permit, and time of sampling or measurements;
- **iv)** The date(s) any analyses was performed;
- **v)** The company or entity that performed the analyses;
- **vi)** The analytical techniques or methods used;
- **vii)** The results of such analyses;
- **viii)** The operating conditions existing at the time of sampling or measurement; and,
- **ix)** Support information for continuous monitoring systems (CMS) and continuous emissions monitoring systems (CEMS) including all quality assurance and quality control (QAQC) records, maintenance records, certification records, and copies of all associated CEMS or CMS reports required by this Permit. [Authority: WAC 173-401-615(2)(a)]

c) Records Supporting Non-Operation. A contemporaneous record verifying an emissions unit did not combust fuel is required to support the absence of required monitoring records during the specific time period the emissions unit did not operate. [Origin: N/A - gap filling monitoring]

d) Record of Changes. A record describing changes made at the source is required for any changes that resulted in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. [Origin: WAC 173-401-615 (2)(b), and WAC 173-401-724(5)]

e) Startup, Shutdown, Malfunction Records. The Permittee must maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the CGTs; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device was inoperative. [Origin: 40 CFR 60.7 (b)]

f) Excess Emissions Records. For an excess emission event the Permittee intends to claim as unavoidable per conditions P18 or P19, as applicable, the following records must be maintained:

- **i)** Properly signed contemporaneous records or other relevant evidence documenting the Permittee's actions in response to the excess emissions event;
- **ii)** Records documenting whether installed emission monitoring and pollution control systems were operating at the time of the exceedance. If either or both systems were not operating, information on the cause and duration of the outage; and

iii) Any additional information supporting the claim that the excess emissions were unavoidable. [Origin: WAC 173-400-108]

g) **MACT Applicability Records.** For each relevant standard or other applicable requirement under 40 CFR Part 63, which the Permittee determines inapplicable, the Permittee must keep record of the applicability determination on site for 5 years after the determination, or until the facility changes its operations to become an affected source, whichever comes first. For the purposes of this condition, a relevant standard is defined as any standard for which:
   i) The facility emits or has the potential to emit (without considering controls) one or more hazardous air pollutants regulated by the standard; and,
   ii) The facility belongs to the source category regulated by the standard.
   iii) The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) demonstrating why the Permittee believes the facility is not subject to the MACT. The analysis (or other information) must be sufficiently detailed to allow EFSEC to make an independent applicability determination for the MACT. If required, the analysis must be performed in accordance with requirements established in the relevant MACT, and the analysis must be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112, if any. [Origin: 40 CFR 63.1(b)(3); 40 CFR 63.10(b)(3)]

h) **Acid Rain Program Records.** Unless otherwise provided, the owners and operators of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center must keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
   i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certification of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents must be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
   ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period applies;
   iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and
   iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program. [Origin: Acid Rain Permit No. EFSEC/10-01-AR]

i) **Required Manuals and Plans.** The Permittee must maintain written copies of the following manuals:
   i) Operating and Maintenance manual (O&M manual) required by condition AR 1.12
   ii) Start-up, Shutdown, and Malfunction Procedures manual (SSM manual) required

by condition AR1.12;

iii) NOx-diluent CEMS Monitoring Plan according to § 75.53 of 40 CFR Part 75, Subpart F;

iv) CO CEMS Quality Assurance Quality Control (QA/QC) program according to 40 CFR Part 60, Appendix F;

v) NH3 CEMS Quality Assurance Quality Control (QA/QC) program according to 40 CFR Part 60, Appendix F; and,

vi) GHG monitoring plan in accordance with WAC 173-441-050(6)(e).

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5]

j) General Fuel Records. The Permittee must keep Safety Data Sheets (SDS) or equivalent monitoring records verifying the calorific value and sulfur content of the diesel and natural gas combusted at the facility. [Origin: N/A - gap filling monitoring]

k) Pollution control Equipment Maintenance Records. The Permittee must monitor and keep a running log of actions taken to keep the SCR and oxidation catalyst units serving the CGTs in good operating condition and repair. [Origin: "Gap-filling" monitoring]

[Authority: WAC 173-401-615]

M2. Monitoring and Records Required for Greenhouse Gas (GHG) Reporting. The Permittee must monitor Facility operations, fuel rates and composition of fuels as necessary to report GHG emissions to Ecology in accordance with Chapter 173-441 WAC. The following is required:

a) GHG Monitoring Plan. The Permittee must develop a written GHG monitoring plan in accordance with WAC 173-441-050(6)(e). The Permittee must revise the GHG monitoring plan as needed to reflect changes in processes, monitoring instrumentation, and quality assurance procedures; or to improve procedures for the maintenance and repair of monitoring systems to reduce the frequency of monitoring equipment downtime.

b) Monitoring Equipment Maintenance. If needed to monitor fuel consumption, flow meters and other measurement devices used to measure fuel feed rates, process steam flow rates, or feedstock flow rates to provide data to perform the GHG emissions calculations must be calibrated according to the procedures specified in WAC 173-441-050(8).

c) Records. The Permittee must maintain records in accordance with WAC 173-441-050. Required records must be retained for at least at least 10 years from the date of submission of the annual GHG report for the reporting year in which the record was generated. At a minimum, the Permittee must retain the following:

i) A list of all units, operations, processes, and activities for which GHG emissions were calculated.

ii) The data used to calculate the GHG emissions for each unit, operation, process, and activity, categorized by fuel or material type. These data include, but are not limited to, the following information:

1. The GHG emissions calculations and methods used, as required by WAC 173-441-120.
2. Analytical results for the development of site-specific emissions factors.
3. The results of all required analyses for high heat value, carbon content, and other required fuel or feedstock parameters.
4. Any Facility operating data/process information used for the GHG emission calculations.

iii) Copies of the annual GHG reports.
iv) Missing data computations. For each missing data event, also retain a record of the cause of the event and the corrective actions taken to restore malfunctioning monitoring equipment.
v) The GHG Emissions Monitoring Plan required by condition M2.
vi) The results of all required certification and quality assurance tests of continuous monitoring systems, fuel flow meters, and other instrumentation used to provide data for the GHGs reported under this chapter.
vii) Maintenance records for all continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHGs reported under this chapter.

[Origin: WAC 173-441-050(6)(State only)]
[Authority: WAC 173-401-615]

M3. Required Emergency Engine Records. The following records must be maintained for Emergency Engines:

a) Engine operation and maintenance records verifying the engine has been operated, maintained, and repaired in a manner consistent with the manufacturer's emissions-related specifications;
b) A copy of the manufacturer's recommendations for maintaining the engine.
c) Total hours of operation of each engine; and,
d) Total hours of maintenance testing.

[Origin: 40 CFR 63 Subpart ZZZZ, §63.6655 (f) and PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 7.1.1 and 8.1.1]
[Authority: WAC 173-401-615]

M4. Monitoring Air Impacts Detrimental or a Nuisance to Persons or Property:

The Permittee must monitor all air quality related complaints directed to the facility as follows:

a) The Permittee must provide an automatic phone recording system or an onsite contact person available to the general public for filing a complaint whenever the facility is operating.
b) The Permittee must maintain a record of air quality related complaints, which must include, as applicable, the following information:
i) Description of the complaint.
ii) Date and time the alleged impact was first noticed.
iii) Date and time the alleged impact was last noticed.
iv) Location where the alleged impact was experienced.
v) Name and phone number of caller.
vi) The Permittee's assessment of the validity of the complaint.
vii) Description of any corrective action taken.

[Origin: N/A - gap filling monitoring]
[Authority: WAC 173-401-615(1)(b)&(c)]

M5. CGT Requirements for Continuous Emission Monitoring Systems (CEMS):

a) The NOx-diluent CEMS for NOx compliance shall meet the requirements contained in 40 CFR 75,

Emissions Monitoring.

b) CEMS for ammonia shall meet the requirements contained in 40 CFR, Part 63, Appendix A, Reference Method 301, Validation Protocol, and 40 CFR, Part 60, Appendix F, Quality Assurance Procedures, or other EFSEC-approved performance specifications and quality assurance procedures.

c) CEMS for CO shall meet the requirements contained in 40 CFR, Part 60, Appendix B, Performance Specification 4 or 4A, and in 40 CFR, Part 60, Appendix F, Quality Assurance Procedures.

d) Continuous Opacity Monitoring Systems shall meet the requirements contained in 40 CFR Part 60, Appendix B, Performance Specification 1 and in 40 CFR, Part 60, Appendix F, Quality Assurance Procedures.

e) Continuous emission and opacity monitors must meet the requirements of 40 CFR 60.13, except that the term "applicable subpart" as used in 40 CFR 60.13 means this permit. Monitors shall be capable of determining emissions during start-up, shutdown, and periods of malfunction.

f) Stack flows for calculating mass emissions must be determined in accordance with the following. Natural gas combusted in the CGT's and boiler must be sampled and analyzed based on the sampling and analysis frequencies established in condition M8 for composition using Universal Oil Products (UOP) Laboratory Test Method 539-97 "Gas Analysis by Gas Chromatography" or equivalent. The gas composition must be used to determine the heat content of the gas in terms of British thermal unit, high heat value, per standard cubic foot (Btu/scf) and to determine the EPA Method 19 Fd factor for the gas. An alternative method to EPA Method 19 can be used to determine the Fd factor if preapproved

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 18]
[Authority: WAC 173-401-615]

M6. Auxiliary Boiler Opacity Monitoring

Ongoing compliance with the Auxiliary Boiler opacity limit must be monitored as follows:

a) A certified opacity reader must survey the Auxiliary Boiler stack daily when it operates to determine if any opacity is present. Auxiliary Boiler opacity surveys must be conducted as follows:

- **i)** Surveys must be conducted from a location with a clear view of the Auxiliary Boiler stack and where the sun is not directly in the observer's eyes.
- **ii)** Unless the Auxiliary Boiler is not scheduled to operate that day or is down for maintenance, surveys must be performed during daylight hours (from 9:00 am to 4:00 PM) and when the Auxiliary Boiler is operating.
- **iii)** Any visible emissions other than uncombined water must be recorded as a positive reading.
- **iv)** If it is not possible to conduct the survey due to inclement weather conditions the surveyor must note this in the records.

b) If opacity is not observed over the course of seven days, the frequency for surveying the boiler stack may change to monthly when operating.

c) If the opacity reader detects visible emissions, the Permittee must promptly investigate the cause of the emissions and repair the problem or perform EPA Method 9 observations for determining compliance.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 6.6.3 and 18.5]
[Authority: WAC 173-401-615(1)(a) and WAC 173-401-615(1)(b)&(c)]

M7. Opacity Monitoring for the Emergency Generator Engine.
Ongoing compliance with the opacity limit applying to Emergency Generator Engine must be monitored as follows:

- **a)** Weekly, a certified opacity reader must survey and record if opacity is present from the engine whenever the engine is operated for testing and after the engine achieves normal operating temperature.
- **b)** If opacity is observed, then Method 9 readings must be performed immediately or the next time the engine is started.
- **c)** Survey frequency can be reduced to monthly once four readings without opacity are observed.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 7.5.2]
[Authority: WAC 173-401-615(1)(a) and WAC 173-401-615(1)(b)&(c)]

M8. Monitoring Natural Gas Use and Composition.
Composition and the actual hourly rate of natural gas combusted by each Duct Burner, Turbine and Auxiliary Boiler must be monitored as follows:

- **a)** **Facility-wide Monitoring.** The Permittee must record monthly and report to EFSEC on a quarterly basis the quantity, heat value, and sulfur content of the natural gas burned at the facility, and purchase records.
- **b)** **Requirement to Monitor Natural Gas Combustion.** The actual hourly rates of natural gas combusted by each Duct Burner, Turbine, and the Auxiliary Boiler in terms of standard cubic feet per hour (or equivalent) must be continuously monitored using in-line fuel flowmeters per the methods in 40 CFR Part 75, Appendix D, Section 2.1.
- **c)** **Gas Composition.** The natural gas combusted at the facility must be sampled and analyzed at least once per calendar month for composition using Universal Oil Products (UOP) Laboratory Test Method 539-97 "Gas Analysis by Gas Chromatography," or an equivalent method approved by EFSEC. An alternative method to section 12.3.2 of EPA Method 19 can be used to determine the Fd factor if pre-approved by EFSEC. The gas composition must be used to determine:
  - **i)** The heat content of the gas in terms of British thermal unit, higher heat value, per standard cubic foot (Btu/scf); and
  - **ii)** The dry basis fuel factor (Fd) for the natural gas in terms of dry standard cubic feet per million Btu heat input (dscf/MMBtu, heat input) according to section 12.3.2 of EPA Method 19.
  - **iii)** Sulfur content of the natural gas must be determined at least once per calendar month by sampling the natural gas combusted and analyzing samples for total sulfur content per the method specified in 40 CFR Part 75, Appendix D for high variability. Any other analysis method listed in 40 CFR Part 75, Appendix D may be used once approved by EFSEC. Valid sulfur test results from the previous month, or an average of valid sulfur data approved by EFSEC may be used when monthly sampling and analysis of the natural gas is inconclusive or results in invalid data.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 5.3.7 and 18.6; 40 CFR Part 60, Subpart Dc, §60.48c(g); and 40 CFR Part 75, Appendix D, Section 2.1]
[Authority: WAC 173-401-615(1)(a) and WAC 173-401-615(1)(b)&(c)]

M9. Calculating CGT Pollutant Mass Rates (PMR). The following applies:

a) Average and total PMRs for determining compliance with each limit must be calculated consistent with calculation methodologies prescribed in PSD Amendment 5, 40 CFR Part 60 and 40 CFR Part 75, as applicable. Calculation methodologies including specific equations, parameters, and coefficients used for monitoring compliance with each emissions limit must be documented in a written Emissions Calculation Protocol. The Emissions Calculation Protocol must be maintained and made available to EFSEC when requested.

b) **Rolling 12-Month Totals.** Rolling 12-month total emissions must be calculated monthly based on the total monthly emissions from each permitted unit summed for the preceding 12 months. The actual emissions must be based on CEMS, where installed, mass balance and emission factor calculations for SO2 and H2SO4, and emission factors for other pollutants and emission units where CEMS are not installed.

c) **H2SO4 to SO2 Conversion Ratios.** The unit-specific ratios of H2SO4 to SO2 must be determined for each CGT based on the most recent stack test results using EPA Reference Methods 8, CTM013, 6C, or 8A, or an equivalent method approved by EFSEC. Stack testing must be performed at each exhaust stack at 5-year intervals between the months of November – March (unless otherwise approved by EFSEC) at representative maximum heat input rate.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 10]
[Authority: WAC 173-401-615(1)(a) and WAC 173-401-615(1)(b)&(c)]

M10. Monitoring Compliance with Auxiliary Boiler SO_2 Limit.
Ongoing compliance with the Auxiliary Boiler SO_2 Pollutant Mass Rate (PMR) limit must be determined monthly by mass-balance calculations using the:

a) Monthly fuel consumption records for the auxiliary boiler; and,

b) Sulfur content of the natural gas per condition M8.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 6.3]
[Authority: WAC 173-401-615(1)(a-c)]

M11. Monitoring Compliance with CGT Emissions Limits for Start-ups and Shutdowns (SU/SD).
Ongoing compliance with the SU/SD limits must be monitored by determining the total emissions in pounds during each SU/SD event as follows:

a) CO and NO_X must be determined based on the CEMS measurements and the amount of natural gas combusted during each event.

b) VOC must be calculated using a VOC emission factor of 216 lb/startup/shutdown/CGT. The VOC emission factor accounts for combined VOC emissions during start-up and shutdown.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 11]
[Authority: WAC 173-401-615(1)(a) and WAC 173-401-615(1)(b)&(c)]

M12. Monitoring Compliance with Annual Emissions Limits.
Ongoing compliance with annual emissions limits are to be determined monthly as follows:

- **a)** 12-month total emissions must be calculated monthly based on the total monthly emissions from each permitted unit summed for the preceding 12 months.
- **b)** The actual emissions must be based on CEMS, where installed, mass balance and emission factor calculations for SO_2 and H_2SO_4, and emission factors for other pollutants and emission units where CEMs are not installed.
- **c)** For the CGTs, annual emissions must include emissions from start-up and shutdown events and CGT start-up emissions are equally apportioned between the two turbines.
- **d)** PM and PM_{10} are assumed to be equal.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 10]
[Authority: WAC 173-401-615(1)(a) and WAC 173-401-615(1)(b)&(c)]

M13. Relative Accuracy Test Audits (RATA) for NOx-diluent, NH_3, and CO Continuous Emission Monitoring Systems. Relative Accuracy Test Audits (RATA) for NOx-diluent, NH3, and CO Continuous Emission Monitoring Systems must be performed as follows:

- **a)** RATA testing is to be performed at the calendar year/calendar quarter frequency required by the quality assurance procedures contained in:
  - **i)** Requirements for NOx-diluent monitors from 40 CFR 75, Emissions Monitoring;
  - **ii)** Requirements for CO monitors from 40 CFR, Part 60, Appendix B, Performance Specification 4 or 4A, and in 40 CFR, Part 60, Appendix F, Quality Assurance Procedures; and,
  - **iii)** Requirements for NH_3 monitors from PPS-001.
- **b)** The testing must be based on "QA operating quarters" as that term is defined in 40 CFR §72.2.
- **c)** A RATA is to be performed for all pollutants measured by CEMs as required by 40 CFR Part 75, Appendix B, Section 2.3, including minimum frequency of once every eight calendar quarters.
- **d)** A test plan must be prepared and submitted to EFSEC and Olympic Region Clean Air Agency (ORCAA) for review at least 30 days prior to any RATA test:
  - **i)** The test plan must cover all pollutants required to be monitored during that RATA test.
  - **ii)** The test plan must include the proposed dates of the testing.
  - **iii)** The Permittee must revise the test plan to address comments provided by EFSEC or ORCAA.
- **e)** A report of the results of the RATA and other emission testing must be submitted to EFSEC and ORCAA within 45 days of completing the test.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 19]
[Authority: WAC 173-401-615(1)(a) and WAC 173-401-615(1)(b) &(c)]

VII. REPORTING (R)

R1. Certification of Reports. Any application form, report, or compliance certification submitted to EFSEC or the U.S. Environmental Protection Agency Region 10 (EPA) under

requirements of this AOP must contain certification by a responsible official of truth, accuracy, and completeness. This certification must state that, based on information and belief formed after reasonable inquiry, the statements and information in the submittal are true, accurate and complete. Where an applicable requirement requires reporting more frequently than once every six months, the responsible official's certification need only be submitted once every six months, covering all required reporting since the date of the last certification.

[Origin: WAC 173-401-630(1)]
[Authority: WAC 173-401-615(3)]

R2. Annual Compliance Certifications. The Permittee must submit to EFSEC and EPA an Annual Compliance Certification report, which must certify the status of compliance with respect to all AOP conditions in accordance with WAC 173-401-630(5)(d). Annual Compliance Certification Reports must be submitted to EFSEC and EPA by April 15th each year and must certify the status of compliance over the previous January through December period. The reports must be certified by a responsible official in accordance with condition R1. Annual Compliance Certification reports must include:

- **a)** Identification of each term or condition of the AOP that is the basis of the certification.
- **b)** Statement of compliance status;
- **c)** Whether compliance was continuous or intermittent;
- **d)** Method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with WAC 173-401-615;
- **e)** Such other facts as EFSEC may require to determine the compliance status of the source; and,
- **f)** Such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the FCAA.

[Origin: WAC 173-401-630(5)]
[Authority: WAC 173-401-615(3)]

R3. Semi-annual Monitoring Reports. Consistent with WAC 173-401-615(3) the Permittee must submit to EFSEC by October 18th and April 15th for the six-month periods January through June and July through December respectively, a report on the status of all monitoring requirements. All instances of deviation from AOP requirements must be clearly identified. The semi-annual report must contain a certification of any reports submitted during the semi-annual period that have not already been certified. The certification must be consistent with WAC 173-401-520.

[Origin: WAC 173-401-615(3)(a)]
[Authority: WAC 173-401-615(3)]

R4. Quarterly Reports. CEMS and process data must be submitted quarterly, in written form (or electronic if permitted by the EFSEC) within 30 days of the end of each calendar quarter to EFSEC as follows:

- **a)** Format:
  - **i)** For NOx, the format of the data in the quarterly reports must match that required

for demonstrating compliance with the Title IV Acid Rain program reporting requirements.

ii) For all other pollutants and process data, the format of the data in the quarterly reports must be in a format approved by EFSEC.

b) Quarterly Reports must include at the following:

i) Process or control equipment operating parameters required to be monitored;

ii) The hourly maximum and average emissions monitored, in units of each standard, for each pollutant monitored;

iii) The duration and nature of any monitor downtime;

iv) Results of any monitor audits or accuracy checks; and,

v) Excess emissions and monitoring system performance reports for all continuous monitoring devices (CMS, CEMS and COMS) as required under 40 CFR, § 60.7(c).

c) For each occurrence of monitored emissions in excess of the limits in this AOP, the quarterly emissions report must also include the following:

i) For parameters subject to monitoring and reporting under the Title IV, Acid Rain program, the reporting requirements in that program shall govern excess emissions report content.

ii) For all other pollutants:

(1) The time of the occurrence;
(2) Magnitude of the emission or process parameters excess;
(3) The duration of the excess;
(4) The probable cause;
(5) Corrective actions taken or planned; and,
(6) Any other agency contacted.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 20, 21 and 22]
[Authority: WAC 173-401-615(3)]

R5. Reporting Deviations from AOP Conditions. The Permittee must promptly report any deviations from AOP requirements, including those attributable to upset and malfunction conditions as defined in this AOP. The following conditions apply:

a) Prompt Reporting. For purposes of this AOP, submitting a report "promptly" means the following:

i) Potential Threat to Human Health or Safety: If the deviation presents a potential threat to human health or safety, "promptly" means as soon as possible but no later than 12 hours after discovery of the deviation;

ii) Other Deviations: For other deviations, "promptly" means as soon as possible but no later than 30 days after the end of the month during which the deviation was discovered. [Origin: WAC 173-401-615(3)(b)]

b) Deviation Report Content. Permit deviation reports must include:

i) Identification of the emission unit(s) involved;

ii) The duration of the event including the beginning and end times;

iii) For emission and process parameter excesses, the magnitude of the excess;

iv) The probable cause of the deviation;

v) Corrective actions taken or planned; and,

vi) Preventive measures taken. [Origin: WAC 173-401-615(3)(b)]

c) Reporting Unavoidable Excess Emissions. The deviation report may include

demonstration that excess emissions were unavoidable due to start-up, shutdown or upset conditions consistent with the requirements of conditions P18 or P19. [Origin: WAC 173-400- 107(3)]

[Origin: listed by sub-condition]
[Authority: WAC 173-401-615(3)]

R6. [RESERVED]

R7. Washington Requirements for Excess Emissions Reporting (WAC 173-400-108):

a) Applicability:

i) Condition R7 is a State-only requirement and not federally enforceable.

b) Notify EFSEC. The Permittee must notify EFSEC of excess emissions as follows:

i) When excess emissions represent a potential threat to human health or safety, the owner or operator must notify the permitting authority by phone or electronic means as soon as possible, but not later than **twelve hours** after the excess emissions (deviation) were discovered per condition R5.

ii) For all other excess emissions, the Permittee must notify EFSEC in a report no later than 30 days after the end of the month during which the excess emissions (deviation) was discovered per condition R5.

iii) However, notice of emergencies that do not pose a potential threat to human health or safety must be submitted within two working days from the time when emission limitations were exceeded due to the emergency, or shorter periods of time specified in an applicable requirement.

c) Excess Emissions Report Required. The owner or operator must report all excess emissions to the permitting authority according to condition R5.

d) Unavoidable Excess Emissions. To claim emissions as unavoidable under either condition Pl8 or P19 [whichever condition applies, the report must contain the following in addition to the information required under condition R5:

i) Properly signed contemporaneous records or other relevant evidence documenting the owner or operator's actions in response to the excess emissions event;

ii) Information on whether installed emission monitoring and pollution control systems were operating at the time of the exceedance. If either or both systems were not operating, information on the cause and duration of the outage; and

iii) Any additional information requested by EFSEC to support the claim that the excess emissions were unavoidable.

[Origin: WAC 173-400-108]
[Authority: WAC 173-401-615(3)]

R8. Notification of Complaint Received. The Permittee must notify EFSEC by phone call, e-mail or in writing of any complaint received in connection with a term or condition of this AOP as soon as possible, but no later than one week from the time the complaint was received. The notification must include a short description of the complaint, time it was received, actions taken, actions planned and preliminary assessment.

[Origin: condition M3]

[Authority: WAC 173-401-615(3)]

R9. Annual Inventory Report. On an annual basis, the Permittee must submit an inventory of actual emissions emitted during the previous calendar year. The inventory must be submitted to EFSEC within 30 days of receipt of the standard inventory reporting forms. The inventory must be accompanied by all associated calculations and data used in calculating the emissions.

[Origin: WAC 173-400-105(1)]
[Authority: WAC 173-401-615(3)]

R10. Source Test Plans. The Permittee must notify EFSEC in writing at least 30 days prior to any stack emissions testing (Source Test) and provide EFSEC an opportunity to review the Source Test Plan and to observe the test. The Source Test Plan must describe the proposed source test methods, operational conditions proposed for the test, and provisions for monitoring source operation during the test.

[Origin: WAC 173-400-105(4)]
[Authority: WAC 173-401-615(3)]

R11. Source Test and RATA Reports. Reports of all required source or emissions testing and RATA of the CGTs or auxiliary boiler must be submitted to EFSEC within 45 days after test completion.

[Origin: 40 CFR 60.8, WAC 173-400-105(4)]
[Authority: WAC 173-401-615(3)]

R12. State Greenhouse Gas (GHG) Reporting. The Permittee is subject to the requirement to report greenhouse gas (GHG) emissions to Ecology in accordance with Chapter 173-441 WAC if annual facility wide emissions of carbon dioxide equivalents (CO_2e) are 10,000 metric tons per year or more from all source categories listed in WAC 173-441-120. The following requirements apply:

- **a)** Once the facility emits 10,000 metric tons of GHGs or more per calendar year, the Permittee must report emissions of GHGs to Ecology annually thereafter unless the Permittee is allowed to discontinue reporting as allowed by WAC 173-441-030(5) and the specified notice is submitted to Ecology.
- **b)** To calculate GHG emissions, the Permittee must include all GHGs listed in Table A-1 of WAC 173-441-040, including those emitted from the combustion of biomass, using equation A-1 from WAC 173-441-030(1)(b)(iii).
- **c)** Reports must meet the requirements of WAC 173-441-050, and include the annual emissions of the GHGs listed in WAC 173-441-040 from source categories listed in WAC 173-441-120.
- **d)** The annual GHG report must be submitted electronically in accordance with the requirements of WAC 173-441-050 and 173-441-060 and in a format specified by Ecology.
- **e)** GHG emissions reports are due to Ecology:
  - **i)** No later than March 31 of each calendar year for GHG emissions in the previous

calendar year for facilities required to report GHG emissions to the Administrator under 40 C.F.R. Part 98;

ii) No later than October 31st of each calendar year for GHG emissions in the previous calendar year for facilities not required to report GHG emissions to the Administrator under 40 C.F.R. Part 98.

f) All requests, notifications, and communications to Ecology pursuant to GHG emissions reporting, other than submittal of the annual GHG report, must be submitted to the following address:

Greenhouse Gas Report
Air Quality Program
Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

g) The Permittee must submit a revised annual GHG report within 45 days of discovering that an annual GHG report previously submitted contains one or more substantive errors. A substantive error is an error that impacts the quantity of GHG emissions reported or otherwise prevents the reported data from being validated or verified. The revised report must correct all substantive errors.

h) Ecology may notify the Permittee in writing that an annual GHG report previously submitted contains one or more substantive errors. Such notification will identify each such error. The Permittee must, within 45 days of receipt of the notification, either resubmit the report that, for each identified substantive error, corrects the identified substantive error (in accordance with the applicable requirements of this AOP) or provide information demonstrating that the previously submitted report does not contain the identified substantive error or that the identified error is not a substantive error.

[Origin: Chapter 173-441 WAC (State only)]
[Authority: WAC 173-401-615(3)]

[END OF SECTION]

VIII. PERMIT SHIELD CONDITIONS (S)

S1. Permit Shield. Compliance with an AOP condition shall be deemed compliance with the applicable requirements upon which that condition is based, as of the date of permit issuance. The permit shield does not apply to any insignificant emissions units or activity designated under WAC 173-401-530.

[Origin: N/A]
[Authority: WAC 173-401-640(1)]

S2. Inapplicable or Exempt Requirements. The requirements shown in Table 6, as of the date of permit issuance, have been determined not to apply to the corresponding emissions units indicated due to either inapplicability of the requirement or an exemption. Commencing the date this AOP is issued, the AOP shield shall cover the requirements specified in Table 6 with respect to the specific emissions units indicated, unless applicability of the requirement is triggered by an action or change after the date the AOP was issued.

[Origin: N/A]
[Authority: WAC 173-401-640(2)]

S3. Exclusions. Nothing in this AOP shall alter or affect the following:

- **a)** The provisions of Section 303 of the FCAA (emergency orders), including the authority of the administrator under that section,
- **b)** The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of AOP issuance,
- **c)** The applicable requirements of the acid rain program, consistent with section 408(a) of the FCAA,
- **d)** The ability of EPA to obtain information from a source pursuant to section 114 of the FCAA, or
- **e)** The ability of the permitting authority to establish or revise requirements for the use of reasonably available control technology (RACT) as provided in chapter 252, Laws of 1993.

[Origin: N/A]
[Authority: WAC 173-401-640(4)]

[END OF SECTION]

TABLE 6 RELEVANT REQUIREMENTS DETERMINED INAPPLICABLE OR EXEMPT

Note: The requirements listed in the following table include only those requirements for which inapplicability must be based on a determination or comparison of the size, age, emissions or other characteristic of an emission unit with respect to applicability criteria and threshold contained in the requirement. All other requirements are considered obviously inapplicable to the facility and are not included in the table below.

Requirement	Emissions Unit	Exempt or Inapplicable	Brief Description of Requirement	Basis
WAC 173-400-100	Facility-wide	Inapplicable	**Registration Required:** Annual Registration is required for regulated sources of emissions, excluding sources subject to the operating permit program	The facility is subject to the operating permit program.
WAC 173-400-040(4)(b)	Facility-wide	Inapplicable	**Fugitive Emissions (Non-attainment requirements):** Emission units identified as significant contributors to non-attainment must use reasonable and available control methods to control emission of contaminants for which the area is designated non-attainment.	There are no non-attainment areas within Grays Harbor County or neighboring counties.
WAC 173-400-040(9)(b)	Facility-wide	Inapplicable	**Fugitive Dust (Non-attainment requirements):** Fugitive dust sources identified as significant contributors to PM_{10} non-attainment must apply RACT.	There are no non-attainment areas within Grays Harbor County or neighboring counties.
Chapter 173-435 WAC	Facility-wide	Inapplicable	**Emergency episode plan requirements**	The facility has not been requested to prepare such a plan.
40 CFR Part 68	Facility-wide	Inapplicable	**Risk Management Programs:** Requirements for Title V sources.	40 CFR Part 68 applies to any facility that has more than a threshold quantity of a regulated substance in a process, as determined under §68.115. GHE does not use or store any materials above the threshold quantities listed in 40 CFR Part 68. This is documented in GHE's AOP application.
WAC 173-401-635	Facility-wide	Inapplicable	**Temporary Title V Sources:** No "affected source" as defined in WAC 173-401-200(1) shall be permitted as a temporary source [WAC 173-401-635].	WAC 173-401-635 provides that the permitting authority may issue a single AOP authorizing emissions from similar operations at multiple temporary locations, except for "affected sources." Since this AOP is for a single location, this provision does not apply.

40 CFR Part 98 Mandatory Greenhouse Gas Reporting (Federal)	Facility-wide	Not an applicable requirement	**Federal Mandatory Greenhouse Gas Reporting Rule.** Establishes requirements for reporting emissions of GHGs.	These requirements are not pursuant to either the state or federal Clean Air Acts and, therefore, are not "Applicable Requirements" for purposes of Title V.

Requirement	Emissions Unit	Exempt or Inapplicable	Brief Description of Requirement	Basis
		under the state and federal Clean Air Acts		
40 CFR Part 60 Subpart GG	CGTs	Inapplicable	Subpart GG—Standards of Performance for Stationary Gas Turbines	According to the Washington Department of Ecology (Ecology), as documented in the Fact Sheet for PSD Amendment 5, GHE's AGP upgrades triggered applicability of the combustion turbine standards in 40 CFR Part 60, Subpart KKKK (Subpart KKKK). Under § 60.4305 of Subpart KKKK it states, "Stationary combustion turbines regulated under this subpart are exempt from the requirements of subpart GG of this part." Therefore, the requirements under Subpart GG do not apply to the combustion turbines at GHE. It also states, "Heat recovery steam generators and duct burners regulated under this subpart are exempted from the requirements of subparts Da, Db, and Dc of this part."
40 CFR Part 60 Subpart Da	Heat Recovery Steam Generators and Duct Burners	Inapplicable	Subpart Da – Standards of Performance for Electric Utility Steam-Generation Units	According to the Washington Department of Ecology (Ecology), as documented in the Fact Sheet for PSD Amendment 5, GHE's AGP upgrades triggered applicability of the combustion turbine standards in 40 CFR Part 60, Subpart KKKK (Subpart KKKK). Under § 60.4305 of Subpart KKKK it states, "Heat recovery steam generators and duct burners regulated under this subpart are exempted from the requirements of subparts Da, Db, and Dc of this part."
40 CFR Part 60 Subpart Db	Heat Recovery Steam Generators and Duct Burners	Inapplicable	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	
40 CFR Part 60 Subpart Dc	Heat Recovery Steam Generators and Duct Burners	Inapplicable	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	

40 CFR Part 64 Compliance Assurance Monitoring (CAM) Rule	Facility-wide	Inapplicable	Establishes the minimum requirements for compliance assurance monitoring at major sources	• For CGTs, pollutants triggering CAM are continuously monitored. • For the Auxiliary Boiler, pre-controlled emissions of controlled air pollutants (NO_x) are less than the CAM applicability threshold. • For Cooling Tower, pre-controlled emissions of controlled air pollutants (PM) are less than the CAM applicability threshold. • See Technical Support Document

PERMIT ATTACHMENTS

Permit attachments are part of the associated Air Operating Permit (AOP) and may contain applicable requirements that apply as specified by referencing conditions.

Attachment 1: ACID RAIN PERMIT

No. EFSEC/10-01-AR

Issued by the Washington State Energy Facility Site Evaluation Council

Issued to: **Grays Harbor Energy Center,**
Washington Operated by: Grays Harbor Energy LLC

Address:	Grays Harbor Energy Center 401 Keys Road Elma, WA 98541-91491
ORIS code:	7999
Affected units:	Combustion Turbine Generator #1 (CTG1) Combustion Turbine Generator #2 (CTG2)
Effective:	This Acid Rain permit, as part of the Grays Harbor Energy Center Title V permit, will become effective upon the effective date of the Title V permit June 17, 2020. The Acid Rain Permit shall have a permit term ending on June 17, 2025 (the expiration date of Title V Permit No. EFSEC/94-1-AOP).

Acid Rain Permit Contents

1) Statement of Basis

2) SO_2 allowances allocated under this permit and NO_X requirements for each affected unit.

3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions as per WAC 173-406-501, "Acid Rain Permit Contents" as adopted by WAC 463-78.

4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application and in WAC 173-406-106 "Standard Requirements" as adopted by WAC 463-78.

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1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with section 005 of Washington Administrative Code (WAC) 463-78 "General and Operating Permit Regulations for Air Pollution Sources," which adopts 173-406 "Acid Rain Regulation" and WAC 173-401 "Operating Permit Regulation," by reference, the Washington State Energy Facility Site Evaluation Council (EFSEC) issues this permit pursuant to WAC 463-78. WAC 173-406 is based on the provisions of Title 40 Code of Federal Regulations (CFR) parts 72-76, which is

part of the requirements established pursuant to Title IV of the Clean Air Act, 40 U.S.C. 7401, et seq., as amended by Public Law 101-549 (November 15, 1990).

In accordance with WAC 173-406-103(1)(c), Combustion Turbine Generator #1(CTG1) and Combustion Turbine Generator #2 (CTG2) are "utility units" because they serve generators greater than twenty-five (25) MWe and do not qualify for any of the exemptions provided under WAC 173-406-103(2). As such, they are subject to the acid rain requirements under Chapter 173-406 WAC.

2) SO_2 Allowance Allocations and NO_X Requirements for Each Affected Unit

		2010	After 2010
CT1 & CT2 Combined	SO_2 allowances held as of January 31, 2010	20[a]	To be determined
	Acid Rain NO_X limit	N/A[b]	N/A[b]

This Acid Rain Permit shall not be construed to exempt or exclude an affected unit from compliance with any other provisions of the Clean Air Act consistent with 40 CFR 72.9(h) and WAC 173-406-106(8) as adopted by WAC 463-78. Additional requirements for this facility include those contained in Prevention of Significant Deterioration permit EFSEC/2001-01 Amendment 5.

Table Footnotes

[a] Pursuant to 40 CFR 72.9(c)(i) and WAC 173-406-106(3)(a)(i) as adopted by WAC 463-78, this unit is required to hold SO_2 allowances, as of the allowance transfer deadline, in the unit's compliance subaccount not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit. Each combustion turbine has the potential to generate up to 14.5 tons per year of SO_2 emissions. According to 40 CFR 72.2, a fraction of a ton equal to or greater than 0.50 is equal to 1.0 ton and a fraction of a ton less than 0.50 is equal to no tons.
Depending on the unit operating hours, each unit could be required to hold between 0 and 14 SO_2 allowances.

[b] Since this unit is not a coal-fired unit, there are no applicable acid rain NO_X emission limits and a Phase II NO_X permit application is not required. A NO_X limitation is included in PSD permit EFSEC/2001-01 Amendment 5.

3) Comments, Notes and Justifications

This Acid Rain Permit is deemed to incorporate the definition of terms under WAC 173-406-101 as adopted by WAC 463-78 unless otherwise expressly defined in this permit.

4) Permit Application

The permit application was signed on August 7, 2002. A copy of the application is attached.

Standard Requirements

Permit Requirements

(1) The designated representative of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30 and WAC 173-406-301 as adopted by WAC 463-78; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit.

(2) The owners or operators of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operator to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act, applicable requirements of Title 463 WAC, and other provisions of an operating permit for the Grays Harbor Energy Center.

Sulfur Dioxide Requirements

(1) The owners and operator of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall:

(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under WAC 173-406-103(1)(b) as adopted by WAC 463-78; or

(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under WAC 173-406-103(1)(c) as adopted by WAC 463-78.

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7, 40 CFR 72.8, WAC 174-406-104 as adopted by WAC 463-78, or WAC 173-406-105 as adopted by WAC 463-78 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such an authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

(1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.

(2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:

(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and

(ii) Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:

(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certification of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;

(iii) Copies of all reports, compliance certifications, and other submissions and all

records made or required under the Acid Rain Program; and

(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall submit the reports and compliance certifications required under the Acid Rain Program, including those under WAC 173-406-800 as adopted by WAC 463-78 and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7, 40 CFR 72.8, WAC 173-406-104 as adopted by WAC 463-78, or WAC 173-406-105 as adopted by WAC 463-78, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act and by the permitting authority pursuant to Revised Code of Washington (RCW) 80.50.150.

(2) Any person who knowingly makes any false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001 and by the permitting authority pursuant to RCW 80.50.150.

(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

(4) The Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall meet the requirements of the Acid Rain Program.

(5) Any provision of the Acid Rain Program that applies to the Grays Harbor Energy Center (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of the Grays Harbor Energy Center and to the affected units at the Grays Harbor Energy Center.

(6) Any provision of the Acid Rain Program that applies to an affected unit at the Grays Harbor Energy Center (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under WAC 173-406-402 (Phase II repowering extension plans) as adopted by WAC 463-78, and 40 CFR part 76, and except with regard to the requirements applicable to a unit with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 40 CFR 75.17, and 40 CFR 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other unit of which they are not the owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(7) Each violation of a provision of WAC 173-406-100 through 173-406-950 as adopted by WAC 463-78 and 40 CFR 72, 73, 75, 76, 77, and 78, and regulations implementing section 410 of the Act by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit,

or an exemption under 40 CFR 72.7 or 40 CFR 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affect unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or
(5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

[Origin:40 CFR Part 72]
[Authority: WAC 173-401-600(1)(a)]

Attachment 2: DEFINITIONS

Accuracy (A) The accuracy of the CEMS in percent as determined by the equation in section 5.f through a cylinder gas audit.

Add-on control means a pollution reduction control technology that operates independent of the combustion process.

Administrator means the Administrator of the United States Environmental Protection Agency or the Administrator's duly authorized representative.

Air Emission Testing Body (AETB) means a company or other entity that provides to the owner or operator the certification required by section 6.1.2(b) of appendix A to 40 CFR Part 75.

Automated data acquisition and handling system means that component of the CEMS, COMS, or other emissions monitoring system approved by the Administrator for use in the Acid Rain Program, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, moisture monitors, opacity monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by 40 CFR Part 75.

Bias means systematic error, resulting in measurements that will be either consistently low or high relative to the reference value.

Bypass operating quarter means a calendar quarter during which emissions pass through a stack, duct or flue that bypasses add-on emission controls.

Calibration Drift (CD) The difference in the CEMS output reading from a reference value after a period of operation during which no unscheduled maintenance, repair or adjustment took place. The reference value may be supplied by a cylinder gas, gas cell, or optical filter and need not be certified.

Calibration error means the difference between:
(1) The response of a gaseous monitor to a calibration gas and the known concentration ofthe calibration gas;
(2) The response of a flow monitor to a reference signal and the known value of the reference signal; or,
(3) The response of a continuous opacity monitoring system to anattenuation filter and the known value of the filter after a stated period of operation during which no unscheduled maintenance, repair, or adjustment took place.

CEMS precision or precision as applied to the monitoring requirements of 40 CFR Part 75, means the closeness of a measurement to the actual measured value expressed as the uncertainty associated with repeated measurements of the same sample or of different samples from the same process (e.g., the random error associated with simultaneous measurements of a process made by more than one instrument). A measurement technique is determined to have increasing "precision" as the variation among the repeated measurements decreases.

Centroidal Area means a concentric area that is geometrically similar to the stack or duct cross section and is no greater than 1 percent of the stack or duct cross-sectional area.

Common stack means the exhaust of emissions from two or more units through a single flue.

Continuous Emission Monitoring System means the total equipment required for the determination of a gas concentration or emission rate. The sample interface, pollutant analyzer, diluent analyzer, and data recorder are the major subsystems of the CEMS.

Continuous Opacity Monitoring System (COMS) The total equipment required for determining the opacity of exhaust gases.

Coverage Factor k means, in general, a value chosen on the basis of the desired level of confidence to be associated with the interval defined by $U = ku_c$. Typically, k is in the range 2 to 3. When the normal distribution applies and u_c is a reliable estimate of the standard deviation of y, $U = 2\ u_c$ (*i.e.,* k = 2) defines an interval having a level of confidence of approximately 95%, and $U = 3\ u_c$ (*i.e.,* k = 3) defines an interval having a level of confidence greater than 99%.

Data Recorder means that portion of the CEMS that provides a permanent record of the analyzer output. The data recorder may include automatic data reduction capabilities.

Designated representative means a responsible natural person authorized by the owners and operators of an affected source and of all affected units at the source or by the owners and operators of a combustion source or process source, as evidenced by a certificate of representation submitted in accordance with subpart B of this part, to represent and legally bind each owner and operator, as a matter of Federal law, in matters pertaining to the Acid Rain Program. Whenever the term "responsible official" is used in 40 CFR Part 70, in any other regulations implementing title V of the Act, or in a State operating permit program, it shall be deemed to refer to the "designated representative" with regard to all matters under the Acid Rain Program.

Diluent Analyzer means that portion of the CEMS that senses the diluent gas (*i.e.,* CO_2 or O_2) and generates an output proportional to the gas concentration.

Diluent Gas means a major gaseous constituent in a gaseous pollutant mixture. For combustion sources, CO_2 and O_2 are the major gaseous constituents of interest.

Diluent gas monitor means that component of the continuous emission monitoring system that measures the diluent gas concentration in a unit's flue gas. *Emissions* means air pollutants exhausted from a unit or source into the atmosphere.

EPA as used in this permit EPA shall mean Region 10 of the United States Environmental Protection Agency. All reports required by this permit to be submitted to EPA shall be mailed to the following address:

Part 70 Operating Permit Program
U.S. EPA Region 10, Mail Stop: OAW-150

1200 Sixth Avenue, Suite 155
Seattle, WA 98101

EPA Protocol Gas means a calibration gas mixture prepared and analyzed according to section 2 of the "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards," September 1997, as amended August 25, 1999, EPA-600/R-97/121 (incorporated by reference, see §72.13) or such revised procedure as approved by the Administrator.

Equivalent diameter means a value, calculated using the Equation 1-1 in section 12.2 of Method 1 in 40 CFR Part 60, appendix A, and used to determine the upstream and downstream distances for locating CEMS or CEMS components in flues or stacks with rectangular cross sections.

Excess emissions means emissions of an air pollutant in excess of any applicable emission standard or an emission limit established in a permit or order, including an alternative emission limit.

Facility means any institutional, commercial, or industrial structure, installation, plant, source, or building.

File means to send or transmit a document, information, or correspondence to the official custody of the person specified to take possession in accordance with the applicable regulation. Compliance with any "filing" deadline shall be determined by the date that person receives the document, information, or correspondence.

Fuel flowmeter system means an excepted monitoring system (as defined in this section) which provides a continuous record of the flow rate of fuel oil or gaseous fuel, in accordance with appendix D to 40 CFR, part 75. A fuel flowmeter system consists of one or more fuel flowmeter components, all necessary auxiliary components (e.g., transmitters, transducers, etc.), and a data acquisition and handling system (DAHS).

Gaseous fuel means a material that is in the gaseous state at standard atmospheric temperature and pressure conditions and that is combusted to produce heat.

Generator Output capacity means the full-load continuous rating of a generator under specific conditions as designed by the manufacturer.

Heat input rate means the product (expressed in mmBtu/hr) of the gross calorific value of the fuel (expressed in mmBtu/mass of fuel) and the fuel feed rate into the combustion device (expressed in mass of fuel/hr) and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

Kilowatthour saved or *savings* means the net savings in electricity use (expressed in Kwh) that result directly from a utility's energy conservation measures or programs.

Maximum potential hourly heat input means an hourly heat input used for reporting purposes when a unit lacks certified monitors to report heat input. If the unit intends to use appendix D of 40 CFR Part 75 to report heat input, this value should be calculated, in accordance with 40 CFR

Part 75, using the maximum fuel flow rate and the maximum gross calorific value. If the unit intends to use a flow monitor and a diluent gas monitor, this value should be reported, in accordance with 40 CFR Part 75, using the maximum potential flow rate and either the maximum carbon dioxide concentration (in percent CO_2) or the minimum oxygen concentration (in percent O_2).

Maximum potential NO_x emission rate or MER means the emission rate of nitrogen oxides (in lb/mmBtu) calculated in accordance with section 3 of appendix F of 40 CFR Part 75, using the maximum potential nitrogen oxides concentration (MPC), as defined in section 2.1.2.1 of appendix A of 40 CFR Part 75, and either the maximum oxygen concentration (in percent O_2) or the minimum carbon dioxide concentration (in percent CO_2) under all operating conditions ofthe unit except for unit start-up, shutdown, and upsets. The diluent cap value, as defined in this section, may be used in lieu of the maximum O_2 or minimum CO_2concentration to calculate the MER. As a second alternative, when the NO_x MPC is determined from emission test results or from historical CEM data, as described in section 2.1.2.1 of appendix A of 40 CFR Part 75, quality-assured diluent gas (*i.e.,* O_2 or CO_2) data recorded concurrently with the MPC may be used to calculate the MER. For the purposes of §§75.4(f), 75.19(b)(3), and 75.33(c)(7) in 40 CFR Part 75 and section 2.5 in appendix E to 40 CFR Part 75, the MER is specific to the type of fuel combusted in the unit.

Maximum rated hourly heat input rate means a unit-specific maximum hourly heat input rate (mmBtu/hr or lbs/hr) which is the higher of the manufacturer's maximum rated hourly heat input rate or the highest observed hourly heat input rate.

Missing data period means the total number of consecutive hours during which any certified CEMS or approved alternative monitoring system is not providing quality-assured data, regardless of the reason.

Monitor accuracy means the closeness of the measurement made by a CEMS to the reference value of the emissions or volumetric flow being measured, expressed as the difference between the measurement and the reference value.

Monitor operating hour means any unit operating hour or portion thereof over which a CEMS, or other monitoring system approved by the Administrator under 40 CFR Part 75 is operating, regardless of the number of measurements (*i.e.*, data points) collected during the hour or portion of an hour.

Nameplate capacity means the maximum electrical generating output (expressed in MWe) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings, as listed in the NADB under the data field “NAMECAP” if the generator is listed in the NADB or as measured in accordance with the United States Department of Energy standards if the generator is not listed in the NADB.

Natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Additionally, natural gas

must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 Btu per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

Ninetieth (90th) percentile means a value that would divide an ordered set of increasing values so that at least 90 percent are less than or equal to the value and at least 10 percent are greater than or equal to the value.

Ninety-fifth (95th) percentile means a value that would divide an ordered set of increasing values so that at least 95 percent of the set are less than or equal to the value and at least 5 percent are greater than or equal to the value.

Operating when referring to a combustion or process source seeking entry into the Opt-in Program, means that the source had documented consumption of fuel input for more than 876 hours in the 6 months immediately preceding the submission of a combustion source's opt-in application under §74.16(a) of 40 CFR Part 75.

Operating permit means a permit issued under 40 CFR Part 70 and any other regulations implementing title V of the Act.

Out-of-control period means any period:
(1) Beginning with the hour corresponding to the completion of a daily calibration error, linearity check, or quality assurance audit that indicates that the instrument is not measuring and recording within the applicable performance specifications; and
(2) Ending with the hour corresponding to the completion of an additional calibration error, linearity check, or quality assurance audit following corrective action that demonstrates that the instrument is measuring and recording within the applicable performance specifications.

Path CEMS means a CEMS that measures the gas concentration along a path greater than 10 percent of the equivalent diameter of the stack or duct cross section.

Pipeline natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions, and which is provided by a supplier through a pipeline. Pipeline natural gas contains 0.5 grains or less of total sulfur per 100 standard cubic feet. Additionally, pipeline natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 Btu per standard cubic foot.

Point CEMS means a CEMS that measures the gas concentration either at a single point or along a path equal to or less than 10 percent of the equivalent diameter of the stack or duct cross section.

Pollutant Analyzer means that portion of the CEMS that senses the pollutant gas and generates an output proportional to the gas concentration.

Pollutant concentration monitor means that component of the continuous emission monitoring system that measures the concentration of a pollutant in a unit's flue gas.

Potential electrical output capacity means the MWe capacity rating for the units which shall be equal to 33 percent of the maximum design heat input capacity of the steam generating unit, as calculated according to appendix D of 40 CFR Part 72.

Precision as applied to the monitoring requirements of 40 CFR Part 75, means the closeness of a measurement to the actual measured value expressed as the uncertainty associated with repeated measurements of the same sample or of different samples from the same process (e.g., the random error associated with simultaneous measurements of a process made by more than one instrument). A measurement technique is determined to have increasing "precision" as the variation among the repeated measurements decreases.

Probationary calibration error test means an on-line calibration error test performed in accordance with section 2.1.1 of appendix B of 40 CFR Part 75 that is used to initiate a conditionally valid data period.

QA operating quarter means a calendar quarter in which there are at least 168 unit operating hours (as defined in this section) or, for a common stack or bypass stack, a calendar quarter in which there are at least 168 stack operating hours (as defined in this section).

Qualified individual (QI) means an individual who is identified by an AETB as meeting the requirements described in ASTM D 7036-04 "Standard Practice for Competence of Air Emission Testing Bodies" (incorporated by reference, see §72.13), as of the date of testing.

Quality-assured monitor operating hour means any unit operating hour or portion thereof over which a certified CEMS, or other monitoring system approved by the Administrator under 40 CFR Part 75, is operating:
(1) Within the performance specifications set forth in 40 CFR Part 75, appendix A and the quality assurance/quality control procedures set forth in 40 CFR Part 75, appendix B, without unscheduled maintenance, repair, or adjustment; and
(2) In accordance with §75.10(d), €, and (f) of 40 CFR Part 75.

Receive or receipt of means the date the Administrator or a permitting authority comes into possession of information or correspondence (whether sent in writing or by authorized electronic transmission), as indicated in an official log, or by a notation made on the information or correspondence, by the Administrator or the permitting authority in the regular course of business.

Reference method means any direct test method of sampling and analyzing for an air pollutant as specified in appendix A of 40 CFR Part 60 .

Reference value or reference signal means the known concentration of a calibration gas, the known value of an electronic calibration signal, or the known value of any other measurement standard approved by the Administrator, assumed to be the true value for the pollutant or diluent

concentration or volumetric flow being measured.

Relative Accuracy (RA): The absolute mean difference between the gas concentration or emission rate determined by the CEMS and the value determined by the RM's plus the 2.5 percent error confidence coefficient of a series of tests divided by the mean of the RM tests or the applicable emission limit.

Sample Interface means that portion of the CEMS used for one or more of the following: sample acquisition, sample delivery, sample conditioning, or protection of the monitor from the effects of the stack effluent.

Span means the highest pollutant or diluent concentration or flow rate that a monitor component is required to be capable of measuring.

Span Value means the calibration portion of the measurement range as specified in the applicable regulation or other requirement. If the span is not specified in the applicable regulation or other requirement, then it must be a value approximately equivalent to two times the emission standard. For spans less than 500 ppm, the span value may either be rounded upward to the next highest multiple of 10 ppm, or to the next highest multiple of 100 ppm such that the equivalent emission concentration is not less than 30 percent of the selected span value.

Stack operating hour means a clock hour during which flue gases flow through a particular stack or duct (either for the entire hour or for part of the hour) while the associated unit(s) are combusting fuel.

Stack operating time means the portion of a clock hour during which flue gases flow through a particular stack or duct while the associated unit(s) are combusting fuel. The stack operating time, in hours, is expressed as a decimal fraction, with valid values ranging from 0.00 to 1.00.

Standard conditions means 68 °F at 1 atm (29.92 in. of mercury).

Substitute data means emissions or volumetric flow data provided to assure 100 percent recording and reporting of emissions when all or part of the continuous emission monitoring system is not functional or is operating outside applicable performance specifications.

Thermal energy means the thermal output produced by a combustion source used directly as part of a manufacturing process but not used to produce electricity.

Unit means a fossil fuel-fired combustion device.

Unit load means the total (*i.e.*, gross) output of a unit or source in any calendar year (or other specified time period) produced by combusting a given heat input of fuel, expressed in terms of:
(1) The total electrical generation (MWe) for use within the plant and for sale; or
(2) In the case of a unit or source that uses part of its heat input for purposes other than electrical generation, the total steam pressure (psia) produced by the unit or source.

Unit operating day means a calendar day in which a unit combusts any fuel.

Unit operating hour means a clock hour during which a unit combusts any fuel, either for part of the hour or for the entire hour.

Unit operating quarter means a calendar quarter in which a unit combusts any fuel.

Unit operating time means the portion of a clock hour during which a unit combusts any fuel. The unit operating time, in hours, is expressed as a decimal fraction, with valid values ranging from 0.00 to 1.00.

Utility unit means a unit owned or operated by a utility:
(1) That serves a generator in any State that produces electricity for sale, or
(2) That during 1985, served a generator in any State that produced electricity for sale.
(3) Notwithstanding paragraphs (1) and (2) of this definition, a unit that was in operation during 1985, but did not serve a generator that produced electricity for sale during 1985, and did not commence commercial operation on or after November 15, 1990 is not a utility unit for purposes of the Acid Rain Program.
(4) Notwithstanding paragraphs (1) and (2) of this definition, a unit that cogenerates steam and electricity is not a utility unit for purposes of the Acid Rain Program, unless the unit is constructed for the purpose of supplying, or commences construction after November 15, 1990, and supplies, more than one-third of its potential electrical output capacity and more than 25 MWe output to any power distribution system for sale.

Volumetric flow means the rate of movement of a specified volume of gas past a cross-sectional area (e.g., cubic feet per hour).

Zero air material means either:
(1) A calibration gas certified by the gas vendor not to contain concentrations of SO_2, NO_x, or total hydrocarbons above 0.1 parts per million (ppm), a concentration of CO above 1 ppm, or a concentration of CO_2 above 400 ppm;
(2) Ambient air conditioned and purified by a CEMS for which the CEMS manufacturer or vendor certifies that the particular CEMS model produces conditioned gas that does not contain concentrations of SO_2, NO_x, or total hydrocarbons above 0.1 ppm, a concentration of CO above 1 ppm, or a concentration of CO_2 above 400 ppm;
(3) For dilution-type CEMS, conditioned and purified ambient air provided by a conditioning system concurrently supplying dilution air to the CEMS; or
(4) A multicomponent mixture certified by the supplier of the mixture that the concentration of the component being zeroed is less than or equal to the applicable concentration specified in paragraph (1) of this definition, and that the mixture's other components do not interfere with the CEM readings.

Zero, Low-Level, and High-Level Values The CEMS response values related to the source specific span value. Determination of zero, low-level, and high-level values is defined in the appropriate PS in appendix B of this part.

Attachment 3: ABBREVIATIONS

TABLE 1: The following is a list of abbreviations used in this permit.

Administrator	EPA Region X Administrator
AOP	Air Operating Permit
AP-42	EPA Compilation of Emission Factors, AP-42, Fifth Edition, Volume I
AR#	Refers to a specific condition numbered "#" containing an "Applicable Requirement"
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
CEMS	Continuous Emissions Monitoring System
CGT-#	Refers to specific combined cycle gas turbine unit numbered "#"
CMS	Continuous Monitoring System
CFR	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
CO	Carbon monoxide
CPMS	Continuous Parametric Monitoring System
CT-#	Refers to specific combustion turbine unit numbered "#"
DAS	Data Acquisition and System
DB-#	Refers to specific duct burner unit numbered "#"
EFSEC	Washington Energy Facility Site Evaluation Council (a.k.a. the Council)
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
EU-#	Refers to a specific emissions unit numbered "#"
FCAA	Federal Clean Air Act
FGR	Flue Gas Recirculation – means to control NO_x emissions
G#	Refers to a specific "General" permit condition numbered "#"
grain/dscf	Concentration in terms of grains per dry standard cubic feet
HAP	Hazardous Air Pollutant
hp	Horsepower
HRSG	Heat Recovery Steam Generator
IEU-#	Insignificant emission unit numbered "#"
kW	A kilowatt is a unit of electrical power consumption in thousands of watts.
M#	Refers to a specific monitoring term or condition numbered "#"
MW	A megawatt is a unit of electrical power consumption in millions of watts.
MACT	Maximum Achievable Control Technology
MMBtu/hr	Million British Thermal Units per hour
NESHAP	National Emission Standards for Hazardous Air Pollutants
NAICS	North American Industry Classification System
NCASI	National Council of the Paper Industry for Air and Stream Improvement, Inc.
NH3	Ammonia
NOC	Notice of Construction
NO_x	Oxides of Nitrogen
NSPS	New Source Performance Standards (from 40 CFR Part 60)
NSR	New Source Review
O_2	Oxygen
O&M	Operations and Maintenance Plan
ORCAA	Olympic Region Clean Air Agency
P#	Refers to a specific administrative permit term or condition numbered "#"
PM	Particulate matter air pollution

PM_{10}	Particulate matter with aerodynamic diameter less than 10 microns
$PM_{2.5}$	Particulate matter with aerodynamic diameter less than 2.5 microns
ppmvd	Parts per million by volume (assumed standard and dry)
PPS-001	Preliminary Performance Specification for Ammonia
PSD	Prevention of Signification Deterioration
PTE	Potential to emit
RACT	Reasonably Available Control Technology
RCW	Revised Code of Washington
Region 10	Region 10 of the U.S. Environmental Protection Agency
RICE	Reciprocating Internal Combustion Engine
R	Refers to a specific reporting condition numbered "#"
SIP	State implementation plan
SIC	Standard Industrial Classification
SCR	Selective Catalytic Reduction – a means to control NO_x emissions
SO_2	Sulfur dioxide
TAP	Toxic Air Pollutant as defined in Chapter 173-460 WAC
tpy	Tons per year
VOC	Volatile Organic Compounds
WAC	Washington Administrative Code

Terms not otherwise defined in this permit have the meaning assigned to them in the referenced regulations.

[END OF SECTION]

STATE OF WASHINGTON
ENERGY FACILITY SITE EVALUATION COUNCIL (EFSEC)

TECHNICAL SUPPORT DOCUMENT
AND
STATEMENT OF BASIS

GRAYS HARBOR ENERGY CENTER, LLC
<Date>

PERMIT #:	**EFSEC/94-1 AOP – 1st Modification**
PREPARTED FOR:	**Grays Harbor Energy, LLC** **401 Keys Road** **Elma, WA 98541-9149**
PLANT SITE:	**Grays Harbor Energy Center** **401 Keys Road** **Elma, WA 98541-9149**
PERMIT ENGINEER:	**Mark V. Goodin – ORCAA Professional Engineer**
REVIEWED BY:	**Sonia E. Bumpus – EFSEC Executive Director**

ENERGY FACILITY SITE EVALUATION COUNCIL
621 Woodland Square Loop
P.O. Box 47250
Lacey, Washington 98503-3172
Telephone: (360) 664-1345

TABLE OF CONTENTS

1. DISCLAIMER

Information contained in this Technical Support Document is for purposes of background information only and is not enforceable. Applicable requirements including emission limits and monitoring, recordkeeping and reporting requirements are contained in the associated Air Operating Permit (AOP) for the Grays Harbor Energy Center, permit EFSEC/94-1 AOP- 1st Modification, which was issued by the Energy Facility Site Evaluation Council (EFSEC) on <enter Date>.

2. GENERAL INFORMATION

2.1 Table 1: Administrative Information and Contact Information

Company Name	Grays Harbor Energy, LLC (GHE)
Facility/Source Name	Grays Harbor Energy Center (GHEC)
AOP Permit No.	EFSEC/94-1 AOP 1st Modification
Mailing Address	Grays Harbor Energy, LLC 401 Keys Road Elma, WA 98541-9149
Site Address	Grays Harbor Energy, LLC 401 Keys Road Elma, WA 98541-9149
Facility/Plant/Environmental Manager	Peter Valinske Plant Engineer (360) 482-4353 (ext 224)
Responsible Official	Chris Sherin Plant Manager
Unified Business Identification Number	602 082 646
Standard Industrial Classification (SIC) Code	4911
Attainment Area Status	Unclassified for all criteria pollutants.
Permitting Authority	The Washington Energy Facility Site Evaluation Council (EFSEC) is the permitting authority for the GHEC. EFSEC implements an Air Operating Permit program through Chapter 463-78 WAC, which adopts by reference the Washington Operating Permits Regulations under Chapter 173-401 WAC.
Enforcement Manager	Sara Randolph – EFSEC Energy Facility Site Specialist (360) 485-1594
Compliance Contractor	Olympic Region Clean Air Agency (ORCAA) (360) 539-7610
Permit Engineer	Aaron Manley – ORCAA Engineer II (360) 539-7610 ext 104
Compliance Manager	Mike Shults – Compliance Manager (360) 539-7610 ext 113

2.2 Facility Description

Grays Harbor Energy, LLC (GHE) owns and operates an electricity generation facility located at 401 Keys Road in Elma, Grays Harbor County, Washington. The facility is referred to as the Grays Harbor Energy Center (GHEC). GHEC is capable of generating up to 662.4 megawatts (MW,@ 59º F) of electricity from a combined-cycle power plant comprised of two combustion turbines, each equipped with a duct burner and heat recovery steam generator and a single steam turbine and bank of cooling towers shared in common. GHEC also operates an auxiliary boiler, a diesel emergency generator and an emergency fire water pump. Commercial operation of GHEC began on April 25, 2008.

2.3 Basis for Title V Applicability

Facilities with a potential to emit (PTE) at or above the "major source" thresholds defined in WAC 173-401-200(19) are required to operate under an Air Operating Permit (AOP) issued through an approved Washington State AOP program, according to Title V of the Federal Clean Air Act (FCAA). GHEC has the potential to emit several regulated air pollutants above their major source thresholds. In addition, GHEC is an affected source under Title IV (Acid Deposition Control) of the FCAA, which independently triggers the requirement to obtain a Title V AOP.

EFSEC received delegation from EPA Region 10 on August 13, 2001 to implement an AOP program for electric power generating plants in Washington State with capacities exceeding 350 MW. EFSEC implements their AOP program through Chapter 463-78 WAC, which adopts by reference the Washington Operating Permits Regulations under Chapter 173-401 WAC.

Because GHEC is capable of generating up to 662 MW of electricity and is a "major source" as defined in WAC 173-401-200(19), GHEC is required to operate under an AOP issued by EFSEC.

2.4 Preconstruction Permitting

EFSEC is responsible for issuing pre-construction permits to electric power generating plants in Washington with capacities exceeding 350 MW, including Notice of Construction (NOC) permits and Prevention of Significant Deterioration (PSD) permits. Both types of permits have been issued to GHEC by EFSEC.

EFSEC issued the initial PSD approval to the previous owner of the facility (Duke Energy) in 2001 and approved transfer of the PSD permit to GHE in April 2005. The PSD permit for GHEC has been amended five separate times since it was originally issued in 2001. The following list summarizes the PSD permitting history of the facility:

1. Original PSD Approval (EFSEC/2001-01, approved November 2, 2001) – Includes both PSD and minor NOC permits to construct the GHEC;
2. Amendment 1 (EFSEC/2001-01 Amendment 1, January 2, 2003) - Approved modified operating requirements and emission limitations, added equipment as part of the project and removed certain operational restrictions;

3. Amendment 2 (EFSEC/2001-01 Amendment 2, October 19, 2004) - Approved a delay in continuous construction to no later than January 20, 2006 and modified the monitoring requirements and BACT emission limitations based on recently available information;
4. Amendment 3 (EFSEC/2001-01 Amendment 3, approved April 3, 2006) - Approved a second delay in continuous construction to no later than July 20, 2007 and made several administrative corrections; and,
5. Amendment 4 (EFSEC/2001-01 Amendment 4, approved June 28, 2018) corrected certain minor errors in the permit and adopted specific emissions limits for startup and shutdown operations.
6. Amendment 5 (EFSEC/2001-01 Amendment 5, approved January 28, 2021) approved upgrades referred to as Advanced Gas Path (AGP) upgrades. These were upgrades to the two General Electric (GE) combustion turbines at the facility to enable more efficient operation. The AGP upgrades enabled more efficient operation at increased firing temperatures while maintaining compliant emissions levels. The AGP upgrades resulted in the following changes at the facility:

Table 2: AGP - CGT Changes

	CGT01		CGT02	
	MMBtu/hr	**MW**	**MMBtu/hr**	**MW**
Pre-AGP @ 59°F	1,671	175	1,671	175
Pre-AGP Design	NA	175	NA	175
Historical Max (unadjusted for temperature)	1,835	187	1,835	188
Post-AGP @ 59°F	1,823	181.2	1,823	181.2
Post-AGP projected, historical max	0.994	0.969	0.994	0.964

Table 3: AGP – Facility Changes

Max Heat Rates, MMBtu/hr			
	Pre-AGP	Post-AGP	
Ambient Temp.	At 59°F	At 59°F	At 14°F
Turbine	1735	1823	2,011
Duct Burner	505	505	505
Total	2240	2328	2,516
Max Output Rates, MW			
Combustion Turbine	175	181.2	206
Steam Turbine	300	300	300
Total	650	662.4	718
Lb CO2/MW	820	822	822

2.5 Regulatory History

The regulatory history of GHEC is fairly complicated due to:

1. Delays in starting and completing construction of the facility; and,
2. Delays in securing approval of Amendment 4 by Region 10 of the U.S. Environmental Protection Agency (EPA).

Start of construction and construction delays necessitated the need for permit extensions. In addition, construction delays triggered the need to re-permit the facility because effective versions of applicable regulations, which depend on when an affected facility begins construction, required re-evaluation.

PSD Amendment 5, which was issued by EFSEC on January 28, 2021, is the effective pre-construction air permit for GHEC. Table 4 summarizes the permitting history for GHEC.

2.6 Table 4: Permitting History

1995	Construction Authorized - EFSEC authorizes construction and operation
1996	Original PSD Approval - Site Certification Agreement (SCA) with PSD (EFSEC 95-01)
March 1998	Permit extension
September 1999	Permit extension
April 2001	Re-Application - Duke submitted a new PSD application for project
June 2001	EPA Consent Order - Administrative Order on Consent issued by EPA allowing start of construction prior to issuance of the new PSD approval.
September 1, 2001	Start of Construction – authorized by EFSEC
November 2, 2001	PSD Approval - (EFSEC/2001-01)
January 2, 2003	PSD Amendment 1 (EFSEC/2001-01 Amendment 1) - EFSEC approves Amendment 1, which modified operating requirements and emission limitations in the original approval, added equipment as part of the project and removed certain operational restrictions.
October 19, 2004	PSD Amendment 2 (EFSEC/2001-01 Amendment 2) - approved by EFSEC authorizing a delay in continuous construction to not later than January 20, 2006 and modifying the monitoring requirements and BACT emission limitations based on recently available information. Amendment 2 did not change or add any emission units that were either proposed for installation or already installed at the facility.

February 23, 2005	Transfer of Ownership - to Grays Harbor Energy LLC approved by EFSEC.
April 3, 2006	Amendment 3 (EFSEC/2001-01 Amendment 3) - approved by EFSEC authorizing a second delay in continuous construction to not later than July 20, 2007, and making several administrative corrections to errors in Amendment 2.
April 25, 2008	Start of Commercial Operation.
April 24, 2009	Date Complete Title V Application Submitted
August 7, 2009	Application for PSD Amendment 4 was submitted to EFSEC
September 29, 2018	Amendment 4 (EFSEC/2001-01 Amendment 4) - requested by GHE in 2009 to: 1. Rectify issues with the PSD permit identified during development of the Air Operating Permit for the facility; 2. Add specific startup/shutdown emissions limits; and, 3. Rectify permit issued raised by EPA.
January 28, 2021	Amendment 5 (EFSEC/2001-01 Amendment 5, approved January 28, 2021) approved upgrades referred to as Advanced Gas Path (AGP) upgrades.
<enter date>	Draft AOP - issued for public comment
<enter date>	Proposed AOP – submitted to EPA for review
<enter date>	Final AOP - issued by EFSEC

2.7 Compliance History

The EFSEC has issued one Notice of Violation to GHE, which occurred on March 9, 2012. Based on testing of emissions from turbine 2 on September 4, 2011, GHEC violated EFSEC.2001-01 Amendment 3 Condition 5.6.2, which states emission of particulate matter from the turbines must not exceed 0.003 grains per dry standard cubic foot (gr/dscf), including filterable and condensable particulate, and corrected to 15% oxygen. Testing on September 4, 2011 showed particulate emissions slightly above the limit. GHE investigated and concluded the excess particulate was an anomaly and possibly a result of rust from the stack lining. The Notice of Violation was resolved when GHE tested on March 15, 2012, confirming compliance with the standard. Results from this test documented particulate emissions at 0.0003 gr/dscf, which meets the standard.

2.8 Effective Versions of Applicable Requirements

Conditions in this AOP originate from state, federal, and EFSEC regulations and standards and are generally referred to as “applicable requirements.” AOP conditions reflect the versions of

each applicable requirement in effect at the time the AOP modification application was submitted. Certain applicable requirements may have had multiple versions in effect at the time the AOP modification application was submitted due to either:

1. An amendment to the associated regulation/rule/standard that occurred after EFSEC adopted the regulation by reference; or,
2. An older version of the rule/regulation/or standard adopted by EFSEC in their State Implementation Plan (SIP).

In these instances, both versions of the applicable requirement apply and are reflected in the AOP condition.

The following tables clarify the "landmark" dates that establish the effective versions for each applicable requirement contained in the AOP. However, any disputes regarding the exact language of an applicable requirement covered in the AOP should be settled by consulting versions of the associated rules/regulations/standards based on the "landmark dates" shown in the following tables.

Table 5: Landmark Dates for Federal Regulation

Federal Regulations	Date Federal Regulation Adopted by EFSEC[a]	EFSEC Delegation Date[b]
40 CFR 60, Subpart A (§ 60.1 to § 60.19)	11/11/2019	Not Delegated
40 CFR 51, Subpart K	11/11/2019	Not Delegated
40 CFR 52, Subpart A	11/11/2019	Not Delegated
40 CFR 60, Subpart IIII	11/11/2019	Not Delegated
40 CFR 60, Subpart KKKK	11/11/2019	Not Delegated
40 CFR 60, Appendices	11/11/2019	Not Delegated
40 CFR 61, Subpart A	11/11/2019	Not Delegated
40 CFR 61, Subpart M	11/11/2019	Not Delegated
40 CFR 63, Subpart A	11/11/2019	Not Delegated
40 CFR 63, Subpart ZZZZ	11/11/2019	Not Delegated
40 CFR 63, Appendices	11/11/2019	Not Delegated
40 CFR 72	11/11/2019	Not Delegated
40 CFR 75	11/11/2019	Not Delegated
40 CFR 75, Appendices	11/11/2019	Not Delegated
40 CFR 82, Subpart B	11/11/2019	Not Delegated
40 CFR 82 Subpart F	11/11/2019	Not Delegated

a. The "Date Federal regulation Adopted by EFSEC" is set by the date established in WAC 463-78-005(1), which is the effective date of EFSECs adoption by reference for all federal and state regulations adopted by EFSEC. At the time EFSEC submitted their AOP modification application, WAC 463-78-005(1) stated November 11, 2019, as the effected date for adoption by reference. Therefore, the versions of federal regulations cited in this permit are those that existed on 11/11/2019.

b. The "EFSEC Delegation Date" is the date EFSEC was granted delegation to enforce the specific federal regulation. EFSEC has not yet received federal rule delegation from EPA.

Table 6: Landmark Dates for State Regulations

State Regulations	SIP Regulation Version Effective Date[a]	Date State Regulation Adopted by EFSEC[b, c]
WAC 173-400-036	12/29/2012	11/11/2019

WAC l 73-400-040(2)(a & b) - Visible Emissions	4/1/2011	11/11/2019
WAC 173-400-040(3) – Fallout	Not in SIP	11/11/2019
WAC 173-400-040(4)- Fugitive Emissions	9/16/2018	11/11/2019
WAC 173-400-040(5) - Odors	Not in SIP	11/11/2019
WAC 173-400-040(6) - Detrimental Emissions	9/16/2018	11/11/2019
WAC 173-400-040(7) - SO2 Emissions	9/16/2018	11/11/2019
WAC 173-400-040(8) - Concealment and Masking	9/16/2018	11/11/2019
WAC 173-400-040(9) - Fugitive Dust	9/16/2018	11/11/2019
WAC 173-400-050 (Except: 173–400–050(2), (4), (5), and(6).	9/16/2018	11/11/2019
WAC 173-400-060	9/16/2018	11/11/2019
WAC 173-400-105	11/25/2018	11/11/2019
WAC 173-400-107	9/23/1993	11/11/2019
WAC 173-400-108	Not in SIP	Not Adopted Effective version of rule is 4/12/2022
WAC 173-400-109	Not in SIP	Not Adopted
WAC 173-400-110	12/29/2012	11/11/2019
WAC 173-400-114	Not in SIP	11/11/2019
WAC 173-400-230	Not in SIP	4/12/2022
WAC 173-400-700	4/1/2011	11/11/2019
WAC 173-401	Not in SIP	11/11/2019
WAC 173-406	Not in SIP	11/11/2019
WAC 173-425	10/18/1990	11/11/2019
WAC 173-441	Not in SIP	Not Adopted Effective version of rule is 4/12/2022
WAC 173-460	Not in SIP	Not Adopted Effective version of rule is 4/12/2022
WAC 463-78-105 (Fees)	Not in SIP	8/27/2015
WAC 463-78-115	Not in SIP	11/11/2019
WAC 463-78-120 (Testing)	11/11/2004	11/11/2004

a. The "SIP Regulation Version Effective Date" is the effective date of the specific regulation listed in EFSEC's State Implementation Plan.
b. The "State Regulation Version Adoption Date" is set by the date established in WAC 463-78-005(1), which is the effective date of EFSECs adoption by reference for all federal and state regulations adopted by EFSECs. At the time EFSEC submitted their AOP modification application, WAC 463-78-005(1) stated November 11, 2019, as the effected date for adoption by reference. Therefore, the versions of federal regulations cited in this permit are those that existed on 11/11/2019.
c. For those State regulations not adopted by EFSEC, the date the AOP modification application was submitted sets the date of the effective version of the regulation.

Table 7: Effective Dates for PSD and NSR Permits

Regulatory Orders/Permits	Effective Dates
Acid Rain Permit No. EFSEC/10-01-AR	6/17/2020
PSD No. EFSEC/2001-01, AMENDMENT 5	1/28/2021
No. EFSEC NOC 17-01 (Cooling Tower Replacement)	4/18/2017

2.9 AOP Enforcement

Terms and conditions in the AOP apply continuously and are enforceable by EFSEC. Each condition in the AOP cites both the regulatory origin and authority for each permit condition. Any disputes regarding the exact language of an applicable requirement listed in GHEC's AOP should be settled by consulting the regulation cited in the regulatory origin of the condition.

2.10 AOP Enforcement Contractor

Through a Memorandum of Agreement (MOA) signed by EFSEC on November 20, 2007, Olympic Region Clean Air Agency (ORCAA) was given the contract to serve as the air compliance /permitting contractor under EFSEC. Through this agreement, ORCAA is tasked with performing all air-related compliance monitoring and Title V permitting duties for GHEC on behalf of EFSEC. Under EFSEC's oversight and direction, ORCAA performs such tasks as annual inspections, source testing oversight, review of monitoring reports, responding to complaints, drafting the AOP and reporting findings to EFSEC. While ORCAA serves as the compliance/permitting contractor, EFSEC remains the regulatory authority over GHEC. This means that ORCAA reports findings directly to EFSEC who then may act on the findings at their discretion. Only EFSEC can issue Notices of Violation (NOVs) and penalties for non-compliance.

2.11 Owner and Operator

GHE is the current owner and operator of the GHEC and is the entity responsible for complying with the AOP. Ownership of the facility was transferred from the former owners, Duke Energy and Energy Northwest to GHE on February 23, 2005. GHE, a subsidiary of Invenergy, is a private company categorized under Electric Power Generation, and is located in Elma, WA. The parent company, Invenergy and its affiliates develop, own and operate large-scale renewable and other clean energy generation facilities in North America and Europe. Invenergy specializes in developing and operating clean power sources of energy such as combined cycle power plants that operate using natural gas.

2.12 GHEC Responsible Official

AOP regulations under Chapter 173-401 WAC require a "Responsible Official" certify any submittals regarding compliance with the AOP as being true, accurate and complete based on their belief formed after reasonable inquiry. To form a reasonable belief of the truth, accuracy, and completeness of a compliance certification or other AOP-related submittal, the Responsible Official needs to understand the significance of the submittal with respect to assuring compliance

with the AOP. The Responsible Official must have a basic understanding of the Title V permitting program, an understanding of the deviations being reported, how permit deviations are determined and the role of credible evidence in certifying compliance.

AOP compliance-related submittals covers practically every report and submittal associated with an AOP, such as deviation reports, malfunction reports, periodic monitoring reports, test reports, quarterly reports and annual compliance certifications. The AOP as written for GHEC does allow for "batch-wise" certification of routine compliance reports. This is facilitated by condition P21, which states:

> *"Provided, however, where a report is sent more frequently than once every six months, the responsible official's certification need only be submitted once every six months, covering all required reporting since the date of the last certification."*

This allows the Responsible Official to batch-wise certify retroactively all reports submitted since the last certification.

According to WAC 173-401-200(29), the responsible official means one of the following:

a) For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
    (i) The facilities employ more than two hundred fifty persons or have gross annual sales or expenditures exceeding forty-three million in 1992 dollars; or
    (ii) The delegation of authority to such representative is approved in advance by the permitting authority;
b) For a partnership or sole proprietorship: A general partner or the proprietor, respectively;
c) For a municipality, state, federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of EPA); or
d) For affected sources:
    (i) The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the FCAA or the regulations promulgated thereunder and in effect on April 7, 1993 are concerned; and
    (ii) The designated representative for any other purposes under 40 C.F.R. Part 70.

Because GHEC is subject to an acid rain permit under Title IV of the FCAA, the definitions under "d" apply. Therefore, for GHEC, the Responsible Official and "Designative Representative" for the Acid Rain Permit should be the same person.

3. FACILITY DESCRIPTION

3.1 General Overview

GHEC is an electricity production facility occupying approximately 20 acres within the Satsop Redevelopment Park in Grays Harbor County, which is approximately four miles southwest of Elma, Washington. The facility consists of a combined-cycle electric power generating plant including two General Electric natural gas-fired combustion turbine generators (GE 7FA), operated in a "2-x-1" combined cycle gas turbine configuration with one steam turbine (GE D11) shared in common. The steam turbine is part of a steam power cycle that generates additional electric power from the waste heat in the exhaust of the combustion turbines. Each turbine is followed by a duct burner and a heat recovery steam generator (HRSG) to generate the steam used by the steam turbine. The steam turbine itself is not a direct source of air emissions, but requires operation of duct burners, heat recovery steam generators (HRSGs) and a cooling tower. The duct burners and the cooling towers are sources of air emissions themselves. GHEC also includes an auxiliary natural gas fired boiler, a diesel-fired emergency generator and a diesel-fired water pump.

3.2 Fuel

All combustion equipment except the diesel-fired emergency generator and diesel-fired water pump are fueled by natural gas received from the Williams Co.'s., Northwest Pipeline. The natural gas is sampled monthly by GHE and analyzed to determine its sulfur and heat content.

The diesel fuel allowed for use in the emergency generator and fire water pump engines is non-road specification diesel fuel with a maximum sulfur content of 15 ppm.

3.3 Combined Cycle Gas Turbines (CGT1 & CGT2)

Description

The combustion turbine generators are identical GE 7FA units and are each rated at maximum power generating capacity of 181.2 MW @ 59ºF. Each combustion turbine has a design maximum heat-rate of 1,823 million British thermal units per hour (MMBtu/hr). Each combustion turbine is equipped with a heat recovery steam generator (HRSG) which has a duct burner. Each duct burner has a design maximum heat-rate of 505 MMBtu/hr.

In this Technical Support Document and the associated AOP, each combustion turbine, duct burner and HRSG combination is referred to as a "Combined–Cycle Gas Turbine Unit" or CGT unit. Each CGT unit has a separate exhaust stack. The western-most CGT is designated as CGT1 and the eastern-most CGT is designated as CGT2.

The combustion turbines take in filtered air that is compressed in the compressor stage of the turbine and then mixed with natural gas. The compressed fuel and air mixture is then burned in the combustion chamber of the turbine where it is expanded through a series of turbines to convert the energy to mechanical rotating shaft power. This mechanical energy is then used to

run the compressor section of the turbine and to directly power the electric generator.

High temperature exhaust produced by each combustion turbine is augmented with supplemental heat from its duct burner to generate high pressure steam in its connected HRSG. Each HRSG produces steam that is used by the steam turbine to generate power in a standard steam power cycle.

Each CGT exhaust through its own exhaust stack at a height of 180 feet above ground level. Exhaust stacks are each equipped with a caged ladder and stack testing platform that provide a permanent and safe access to stack testing ports. The testing ports conform to the requirements of 40 CFR, Part 60, Appendix A, Method 20.

Air emissions from the CGTs result from combustion of natural gas both in the combustion turbines and duct burners. Natural gas is the only fuel combusted. Air pollutant emissions from the CGTs include nitrogen oxides (NO_x), carbon monoxide (CO), particulate matter (PM_{10}), sulfur dioxide (SO_2), volatile organic compounds (VOCs), sulfuric acid mist (H_2SO_4), ammonia (NH_3) and several Hazardous Air Pollutants (HAPs). Actual as well as potential emissions rates are described in section 4 of this TSD below.

CGT NO_x Control and Monitoring

The combustion turbines incorporate "Advanced, Dry Low NO_x" combustor technology. This technology is guaranteed by the manufacturer to reduce NO_x emissions from the combustion turbines to 9 ppm. It accomplishes NO_x reduction by maintaining a "lean" premix of fuel to air, staging the combustion into three-stages and utilizing a central diffusion flame for overall flame stabilization. The lean, premixed technology burns a lean fuel-to-air mixture for a lower peak combustion flame temperature, which results in lower "thermal NO_x" formation. The combustion turbines operate with just one of the lean premixed stages and the diffusion pilot at lower loads, and additional stages at higher loads. This provides efficient combustion and lower temperatures throughout the combustor-loading regime.

The duct burners also incorporate low NO_x combustor technology. This burner technology is capable of maintaining NO_x emissions below 10 ppmvd at 15% oxygen.

The typical NO_x emission concentration from each CGT is in the 3 to 9 ppm range. NOx from each CGT is further treated by separate selective catalytic reduction (SCR) units downstream of each HRSG. The SCR units are capable of maintaining NO_x concentrations to less than 2.0 ppm at 15% oxygen during steady state operation of the CGTs.

SCR is a post-combustion NO_x control technology where ammonia (NH_3) is injected into the flue gas upstream of a vanadium oxide catalytic reactor. The catalyst bed operates most efficiently at temperatures between 600 and 800°F, which match the temperature range typically found within HRSG units. On the catalyst surface, the NH_3 reacts with NO_x to form molecular nitrogen and water. The process uses approximately 1 – 1.3 moles of NH_3 per mole of NO_x reduced. The rate of NH_3 injection is automatically controlled based on the amount of "NH_3 slip," which is the concentration of unreacted NH_3 downstream of the SCR units. NH_3 slip is continuously

monitored.

The primary variable affecting SCR performance is temperature. If operating below the optimum temperature range, the catalyst activity is reduced, allowing unreacted NH_3 to slip through into the exhaust stream. If operating above the optimum temperature range, NH_3 is oxidized, forming additional NO_x. In addition, the catalyst may suffer thermal stress damage. Temperature of the catalyst beds as well as NO_x concentrations are required to be continuously monitored in order to maintain NO_x rates below the permitted limits.

An aqueous solution of NH_3 is used as the source for NH_3 in order to minimize impacts of possible spills or the unlikely event of rupture of an NH_3 tank. The solution is approximately 19% NH_3 as received and used. The rate of NH_3 solution injection is automatically regulated based on the NH_3 slip rate, which is continuously monitored. NH_3 slip is limited to 5 ppm on a 24-hour average basis. The NH_3 pump is controlled to maintain NH_3 slip between 1 and 3 ppm.

Per the PSD permit, NO_x emission concentrations and rates from the CGTs are required to be continuously monitored. As such, both CGTs are equipped with continuous emissions monitoring systems (CEMS) for NO_x and O_2, which is referred to as a NOx-diluent CEMS. The NOx-diluent CEMS is subject to the requirements contained in 40 CFR Part 75, Continuous Emission Monitoring, which contains the continuous emissions monitoring requirements for facilities subject to the Acid Rain program. Because 40 CFR Part 75 establishes the monitoring requirements for all pollutants and parameters required to be monitored under the acid Rain program (NO_x, O_2, SO_2, CO_2, volumetric flow, and opacity), and for different types of combustion units, much of it is not applicable to GHEC. For this reason, 40 CFR Part 75 is incorporated by reference in the permit.

On a real-time basis, GHEC can verify compliance with any of the short term NO_x limits from the NO_x-diluent CEMS. In addition, the NO_x-diluent CEMS triggers an alarm to notify the operator when concentrations approach any short term limit. NO_x concentrations measured by the NOx-diluent CEMS is used to determine the NO_x concentrations in terms of parts per million by volume at 15%O_2, which is the metric of the CGT emissions concentration limits. For pollutant mass rate (PMR) limits, measured NO_x concentrations are coupled with the natural gas combustion rate measured by the fuel monitoring system and a Fuel Factor (Fd) measured monthly to calculate the NO_x PMR in terms of pounds per hour.

The natural gas combustion rate is monitored continuously by separate fuel flow meters on each CGT and Duct Burner (DB) in terms of cubic feet per hour. Cubic feet per hour of natural gas combusted by each unit is multiplied by the Fd (measured monthly) to compute the exhaust gas flowrate for each unit in terms of dry standard cubic feet per hour at 15% O_2. This result is then multiplied by the concentration to compute the NO_x PMR as shown in the following equation.

$$PMRx = (NG)(HHV)(Fd)(Cx)(MW_{pollutant})/[(1000)(Molar\ Volume_{stp}]$$

Where:

- *PMRx = The calculated pollutant mass rate of pollutant "x" in terms of pound per hour (lbs/hr).*
- *NG = The actual amount of natural gas combusted by the unit over the hour per condition M6(a) in terms of dry standard cubic feet of natural gas (dscfng/hr).*
- *HHV = The Higher Heat Value of the natural gas determined for the month per condition M6(b)(i) in terms of million Btu per dry standard cubic feet of natural gas (MMBtu/dscf$_{ng}$).*
- *Fd = The dry basis fuel factor determined for the month per condition M6(b)(ii) in terms of dry standard cubic feet of exhaust per million Btu of natural gas combusted (dscf$_{exhaust}$/MMBtu)*
- *Cx = The average concentration of pollutant "x" monitored by CEMS over the hour in terms of parts per million by volume, dry (ppmvd), uncorrected.*

-Although the detailed equations for PMRs were removed from the AOP, this equation is maintained in the TSD intentionally as a reference point.

CGT CO Control and Monitoring

The dry low NO_x combustors in the CGTs also minimize the formation of CO. Minimizing NO_x is usually at the expense of higher CO emissions, however, the "Advanced, Dry Low NO_x" combustor technology is able to optimize the combustors to minimize emissions of both pollutants. The dry low NO_x combustors are expected to maintain a CO emission rate well below 9 ppm. In addition to CO control through the dry low NO_x combustors, exhaust from each CGT passes through a platinum catalyst (following the SCR units) where oxygen in the gas stream reacts with CO to produce CO_2. The CO oxidation catalyst technology is capable of reducing CO concentration by 90+%.

Per the PSD permit, CO emission concentrations and rates from the CGTs are required to be continuously monitored. The CO CEMS must meet the requirements contained in 40 CFR Part 60, Appendix B: Performance Specification 4 or 4a, and in 40 CFR, Part 60, Appendix F: Quality Assurance Procedures. CO CEMS requirements are incorporated by reference in the permit.

From the CO CEMS data, GHE can verify compliance with both short-term and long-term average limits. In addition, the CEMS triggers an alarm when CO concentrations approach any of the short CO limits. This is done automatically by the CO data acquisition system (DAS).

CGT SO_2, H_2SO_4 and PM_{10} Control and Monitoring

Combusting only natural gas is the principle means for minimizing emissions of particulate matter, sulfur dioxide and sulfuric acid from each CGT. Per the PSD permit, continuous monitoring of the rate of natural gas combustion by each turbine and DB is required. In addition, natural gas is required to be sampled monthly and analyzed to determine sulfur and heat content.

For SO_2 and H_2SO_4, the PSD permit imposes only PMR limits. Monitoring compliance is accomplished by calculating emissions rated using sulfur balance calculations based on the actual amount and composition of natural gas combusted and emissions factors from stack testing relating the percent of H_2SO_4 to SO_2. The amount of natural gas combusted is

continuously monitored by a gas flow meters on each turbine and DB. Meters measure the gas flow rate and automatically correct to standard temperature and pressure units based on the monitored pipeline gas temperature and pressure. This data is periodically crossed checked by GHE against fuel certifications provided by the Williams Pipeline Company.

Per the PSD permit, gas flow meters are required to be installed, operated and maintained according to 40 CFR Part 75, Appendix D. Also, natural gas heat and sulfur content are required to be determined monthly through direct sampling and analyzing the natural gas per 40 CFR Part 75, Appendix D. 40 CFR Part 75, Appendix D is incorporated by reference in the permit.

PM_{10} emissions from the CGTs are each limited to no more than 22.6 lb/hr of filterable plus condensable PM_{10}. The required monitoring means is to calculate PM_{10} emissions based on the actual amount of natural gas combusted during each 24-hr period time an emissions factor based on the most recent particulate stack testing.

Reference method testing is the required means for monitoring compliance with the particulate grain loading limit. For the first three years of operation testing was required annually. Provided testing verifies compliance, the required testing frequency is relaxed to once every 5-years. Stack testing results must be reported as total particulate, filterable particulate and condensable particulate.

CGT Ammonia Emissions Monitoring

Per the PSD permit, NH_3 emissions (NH_3 slip) from each CGT is required to be continuously monitored. NH_3 CEMSs must meet the requirements contained in 40 CFR, Part 63, Appendix A, Reference Method 301, Validation Protocol (Validation Protocol), and 40 CFR, Part 60, Appendix F, Quality Assurance Procedures (Appendix F), or other EFSEC-approved performance specifications and quality assurance procedures. Because neither the Validation Protocol nor Appendix F contain actual performance specifications for operating NH_3 CEMSs, performance specifications needed to be adopted into the AOP to fill this void. Washington's Title V regulations under WAC 173-401-615(1)(b) allow adopting monitoring requirements into a Title V AOP when requirements are not adequately specified. This approach to adding monitoring to a Title V AOP is referred to as "gap-filling monitoring".

Until NH_3 CEMS performance specifications are adopted as final by EPA, EPA's Preliminary Performance Specification for Ammonia Continuous Emission Monitors (PPS-001, EPA, 2005) can serve as a surrogate performance specification. PPS-001 has not yet been published in the Federal Register but is proposed by EPA as their preferred performance specifications for NH_3 CEMS. PPS-001 establishes specifications for the allowable range, calibration drift and accuracy for NH_3 CEMS. The PPS-001 performance specifications are then inserted into the Validation Protocol for initial testing of NH_3 CEMS and Appendix F for ongoing quality assurance and control of NH_3 monitors.

CGT Opacity Monitoring

Per the PSD permit, opacity of the exhaust from each CGT must be monitored. Two options are

provided for opacity monitoring:

- A certified opacity reader can read and record the opacity of each operating unit during daylight hours daily and then weekly of compliance is maintained for the previous calendar month; or,
- Opacity can be monitored using a Continuous Opacity Monitoring System (COMS) on each CGT as an alternative.

Per the PSD permit, COMS must meet the requirements contained in 40 CFR Part 60, Appendix B, Performance Specification 1 and in 40 CFR, Part 60, Appendix F, Quality Assurance Procedures. Both are incorporated by reference in the permit.

3.4 Steam Turbine

Description

The GE D11 steam turbine generates electricity using steam produced by the Heat Recovery Steam Generators (HRSGs). Each HRSG produces superheated steam using leftover heat energy from its associated gas turbine plus supplemented heat energy from its associated DB. The steam turbine itself is not an emissions unit but is an integral part of the combined cycle power plant. The steam turbine power cycle requires operation of the CGTs (turbines + DBs), Cooling Tower and Auxiliary Boiler during startup. The steam turbine generator can produce up to an additional 300 MW of electric power. The steam power cycle is a closed loop process where exhaust steam from the steam turbine is condensed by passing through the cooling towers and then pumped as liquid water back to the HRSGs in a continuous closed-loop arrangement. Since the steam turbine has no direct air pollutant emissions, it is not designated as an emissions unit.

3.5 Auxiliary Boiler

Description

Start-up of the combined cycle power plant requires an auxiliary heat source to provide heat while the CGTs are warming up. This is accomplished by a separate, 29.3 MMBtu/hr natural gas-fired Auxiliary Boiler. The Auxiliary Boiler is used primarily to assist with start-up of the CTG units. The Auxiliary Boiler also provides initial steam for the steam turbine during startup.

Auxiliary Boiler Emissions Control and Monitoring

The Auxiliary Boiler employs low NO_x burners, good combustion practices and the use of natural gas for controlling air pollutant emissions.

The PSD permit establishes hourly and annual emissions limits for the Auxiliary Boiler for NO_x, CO, SO_2, VOC, PM_{10}, and opacity. The PSD permit does not require CEMS for the Auxiliary Boiler but does require periodic stack testing to demonstrate compliance with permit limits. The PSD permit also requires monthly calculation of emissions over the previous 12-consecutive month period to monitor compliance with annual emissions limits to verify compliance with annual emissions limits. The prescribed calculation method for all pollutants except SO_2 requires using

actual natural gas consumption data and emissions factors based on the most recent stack testing results. For SO_2, emissions must be based on fuel sulfur monitoring data and sulfur balance calculations. For opacity, certified opacity readings are required once per month.

3.6 Cooling Tower

Description

As mentioned previously, the steam power cycle is a closed-loop process whereby steam remaining after expanding through the steam turbine is condensed so the entire flowrate of the "working fluid" can be pumped back to the HRSGs in order to complete the steam power cycle. Pumping produces the high pressures in the working fluid loop, which is needed by the steam turbine to generate power. The Cooling Tower enables the closed loop steam power cycle by expelling waste heat through one, nine-cell, forced draft cooling unit. The Cooling Tower transfers heat to the ambient air through evaporation of water. Water used by the Cooling Tower is pumped from a well located nearby on the Chehalis River.

GHE maintains Cooling Tower water quality to prevent high concentrations of chemicals and dissolved solids that would lead to particulate emissions and odors. Cooling Tower water is continuously monitored for pH, free chlorine, oxidation reduction potential (ORP) and conductivity to assure water quality. Sodium Hypochlorite (bleach) is added to prevent biological growth in the Cooling Tower. The sodium hypochlorite is added automatically to maintain 0.2 – 0.6 ppm free chlorine. Sulfuric acid (H_2SO_4) to prevent scaling is added automatically to maintain pH between 8.1 and 8.5. The bleach, H_2SO_4 and bromine are all added to the water via constant volume pumps that are automatically controlled based on continuous monitoring of the water quality.

Design operating specifications for GHEC's Cooling Tower are as follows:

- 1,535,200 cubic feet per minute (ft3/min) air flow at design conditions (9 fans total)
- 175,000 gallons per minute (gpm) recirculating water flow
- 1165 milligrams per liter (mg/L) total dissolved solids
- Addition of 93% H_2SO_4 (sulfuric acid) to water at a variable rate, but approximately 70 gallons per day (gpd) average when the plant is running.
- Addition of 12.5% NaClO (sodium hypochlorite) to water at a variable rate, but approximately 104 gal/day average when the plant is running.
- 2H Drift Eliminators manufactured by ENEXIO with a drift rate less than 0.0005 percent.

Cooling Tower Monitoring

The Cooling Tower emits PM_{10} in the form of particulate suspended or dissolved in tiny airborne water droplets, which are referred to as "drift." VOCs and chlorine compounds may also be emitted in drift if Cooling Tower water quality is not maintained. The GHEC Cooling Tower is equipped with "drift eliminators" to reduce drift and air emissions associated with the drift. GHEC's Cooling Tower employs drift eliminators rated at a drift loss rate of less than 0.0005% of the recirculating cooling water flow rate.

The permit requires monthly calculation of the daily (annual average) and annual cooling tower PM_{10} emissions rates based on design flow rates for the circulating water pumps, circulating water pump operating records, conductivity, conductivity to total dissolved solids (TDS) correlation factor and a drift loss rate of 0.000005 gallons per gallon of recirculating water. The level of TDS in the cooling tower water determines the potential for PM_{10} emissions as dissolved solids precipitate to particulate as the cooling tower water evaporates using the following formula:

$$\frac{Q \times C \times 0.000005 \times 60 \times 8.34}{1000000} = D$$

Where:

Q = Either the actual or design recirculating water flow rate in gallons per minute
C = total dissolved solids concentration in parts per million by weight (ppmw)
D = particulate emission rate in lb/hr.
0.000005 = the drift loss rate in gallon lost/gallon of recirculating cooling water

TDS is monitored indirectly by monitoring conductivity of the cooling tower water (TDS is directly related to conductivity). The level of TDS is controlled by adjusting the rate of make-up water to the cooling tower to maintain conductivity below 1200 microohms conductivity. Conductivity is monitored continuously and an alarm is triggered in the control room when conductivity reaches 1200 micro ohms to alert operators to manually adjust the make-up water-up water rate.

3.7 Emergency Generator

Description

GHEC relies on one 400 kilowatt (536 horsepower) Caterpillar, model 3456, diesel-fired emergency generator (Emergency Generator) to provide electricity during power outages. This is critical for GHEC to power down equipment and maintain operation of lubricating oil pumps during power outages. The manufacture date of the Emergency Engine was 2002.

Engine Make & Model	Caterpillar, model 3456
Engine Serial #	CER00348
Date engine was ordered	7/22/2002
Model year of engine	2002
Engine BHP	536 BHP
Engine KW	400 KW

40 CFR Part 60, Subpart IIII (Subpart IIII) does not apply to the Emergency Generator at GHEC because the order date of the Emergency Generator precedes the effective date of Subpart IIII. 40

CFR Part 63, Subpart ZZZZ (Subpart ZZZZ) does apply. In addition to Subpart ZZZZ, the Emergency Generator is subject to requirements from PSD Amendment 5.

Emergency Generator Monitoring

The permit requires monitoring sufficient to verify the Emergency Generator engine is operated, maintained and repaired in a manner consistent with the manufacturer's emissions-related specifications. In addition, total hours of operation and hours of maintenance testing must be tracked and recorded.

3.8 Diesel-fired Water Pump Engine (Fire Water Pump Engine)

Description

The facility includes a 205 kilowatt (275 horsepower) Fire Water Pump Engine for fire suppression during electrical power outages.

Engine Make & Model	John Deere, model No. 6081AF001
Engine Serial #	RG6081A146553
Date engine was ordered	Pre 2002
Model year of engine	2001
Engine BHP	275 BHP
Engine KW	205 KW

40 CFR Part 60, Subpart IIII (Subpart IIII) does not apply to the Fire Water Pump Engine at GHEC because the order date of the Fire Water Pump Engine precedes the effective date of Subpart IIII. 40 CFR Part 63, Subpart ZZZZ (Subpart ZZZZ) does apply. In addition to Subpart ZZZZ, the Fire Water Pump Engine is subject to requirements from PSD Amendment 4.

Fire Water Pump Engine Emissions Control and Monitoring

The permit requires monitoring sufficient to verify the Fire Water Pump Engine is operated, maintained and repaired in a manner consistent with the manufacturer's emissions-related specifications. In addition, total hours of operation and hours of maintenance testing must be tracked and recorded.

3.9 Table 8: Summary of Emissions Units

ID	Description	Control Devices	Permit #s
EU-1	**Combined Cycle Gas Turbine 1 (CGT1)**: • Combustion Turbine 1 (CT1) – General Electric 7FA natural gas turbine with a nominal design heat rate of 1,823 mmBtu/hr and an output of 234 KVA. • Duct Burner 1 (DB1) – 505 mmBtu/hr natural gas duct burner	• CT1 equipped with Dry-Low NO_x Combustors • DB1 equipped with Low NO_x Burners. • Exhaust from both CT1 and DB1 pass through	EFSEC/2001-01 Amendment 5

ID	Description	Control Devices	Permit #s
		Selective Catalytic Reduction (SCR) and CO catalyst systems	
EU-2	**Combined Cycle Gas Turbine 2 (CGT2):** • Combustion turbine – General Electric 7FA natural gas turbine with a nominal design heat rate of 1,823 mmBtu/hr and an output of 234 KVA. • Duct Burner – 505 mmBtu/hr natural gas duct burner	• CT2 equipped with Dry-Low NO_x Combustors • DB2 equipped with Low NO_x Burners. • Exhaust from both CT2 and DB2 pass through Selective Catalytic Reduction (SCR) and CO catalyst systems	
EU-3	**Auxiliary Boiler:** 29.3 mmBtu/hr natural gas fired boiler used to assist with start-up.	• Low NO_x burners • Flue Gas Recirculation (FGR)	
EU-4	**Cooling Tower:** Nine cell, 175,000 gal/min forced draft cooling tower	• Equipped with drift eliminators	
EU-5	**Emergency Generator:** 400 kW (536 hp) emergency generator used to help power down equipment and maintain operation of lubricating oil pumps in the event of power outages.	None	
EU-6	**Emergency Fire Water Pump:** 205 kW (275 bhp) diesel-fired water pump to provide for fire suppression during electrical power outages.	None	

3.10 Insignificant Emissions Units (IEUs)

The equipment listed in Table 9 were identified by the GHE as insignificant emissions units (IEUs) as defined under WAC 173-401-200(17). IEUs are exempt from Title V permit program requirements as provided under WAC 173-401-530. None of the IEUs listed in Table 9 are a significant source of emissions or subject to equipment-specific air quality requirements. Because all of the IEUs listed in Table 9 are "categorically exempt" IEUs, they are not required to be listed in in the GHEC AOP.

3.11 Table 9: Insignificant Emissions Units (IEUs)

ID	Description	Size/Capacity	IEU Basis
IEU	Mobile Fugitive Emissions	Na	WAC 173-401-530(1)(d)
IEU	Lubricating Oil Tank	Na	WAC 173-401-532(3)
IEU	Hydraulic Oil Tank	Na	WAC 173-401-532(4)
IEU	Storage of Pressurized Gases	Na	WAC 173-401-532(5)
IEU	Maintenance Shops	Na	WAC 173-401-532(7)
IEU	Continuous Emissions Monitoring Systems (CEMs)	Na	WAC 173-401-532(7)

ID	Description	Size/Capacity	IEU Basis
IEU	Vents	Na	WAC 173-401-532(9)
IEU	Vehicle Internal Combustion Engines	Na	WAC 173-401-532(10)
IEU	Welding Operations	Na	WAC 173-401-532(12)
IEU	Plant Upkeep Activities	Na	WAC 173-401-532(33)
IEU	Pavement Cleaning and Sweeping	Na	WAC 173-401-532(35)
IEU	Food Preparation	Na	WAC 173-401-532(41)
IEU	Portable Drums and Totes	Na	WAC 173-401-532(42)
IEU	Lawn and Landscaping Activities	Na	WAC 173-401-532(43)
IEU	General Vehicle Maintenance	Na	WAC 173-401-532(45)
IEU	Comfort Air Conditioning	Na	WAC 173-401-532(46)
IEU	Office Activities	Na	WAC 173-401-532(49)
IEU	Sampling Connections	Na	WAC 173-401-532(51)
IEU	Parking Lot Exhaust	Na	WAC 173-401-532(54)
IEU	Indoor Activities	Na	WAC 173-401-532(55)
IEU	Repair and Maintenance	Na	WAC 173-401-532(74)
IEU	Air Compressors	Na	WAC 173-401-532(88)
IEU	Steam Leaks	Na	WAC 173-401-532(89)
IEU	Vacuum System Exhaust	Na	WAC 173-401-532(108)

4. Emissions

GHEC's emissions of criteria air pollutants and ammonia are characterized in the following tables. Table 10 shows cumulative, facility-wide emissions in terms of maximum potential to emit (PTE). PTE values represent maximum permitted emissions from all emissions units at GHEC based on enforceable emissions limits and maximum operating rates for all regulated emissions units. Table 11 shows actual emissions for calendar year 2017. Actual emissions are based on monitored fuel consumption rates, measured natural gas heat and sulfur content, and monitored emissions concentrations over calendar 2017. Table 12 shows cumulative, facility-wide HAP emissions in terms of maximum potential to emit (PTE).

4.1 Table 10: Criteria Pollutant Potential to Emit (PTE)

Pollutant	Potential to Emit (tons)	Source of Data
CO (Carbon Monoxide)	144	AOP Permit Application
PM 2.5 (Fine Particulate (<= 2.5 microns))	203	AOP Permit Application
PM-10 (Fine Particulate (<=10 microns))	203	AOP Permit Application
NO_x (Nitrogen Oxides)	245	AOP Permit Application
VOC as Volatile Organic Compounds	92	AOP Permit Application
SO_2 (Sulfur Dioxide)	29	AOP Permit Application
H_2SO_4 (sulfuric acid)	19	AOP Permit Application
NH_3 (ammonia)	141	AOP Permit Application

4.2 Table 11: 2017 Actual Emissions

Pollutant	2017 Emissions (tons)	Source of Data
CO (Carbon Monoxide)	11.9	ORCAA 2017 Inventory
PM 2.5 (Fine Particulate: <= 2.5 microns)	24.1	ORCAA 2017 Inventory
PM-10 (Fine Particulate:<=10 microns)	24.1	ORCAA 2017 Inventory
NO_x (Nitrogen Oxides)	84.9	ORCAA 2017 Inventory
VOC as Volatile Organic Compounds	2.8	ORCAA 2017 Inventory
SO_2 (Sulfur Dioxide)	2.9	ORCAA 2017 Inventory
H_2SO_4 (sulfuric acid)	0.2	ORCAA 2017 Inventory
NH_3 (ammonia)	10.3	ORCAA 2017 Inventory

4.3 Table 12: HAP Potential to Emit (PTE)

Pollutant	Potential to Emit (tons)	Source of Data
Acedaldehyde	0.64	AOP Permit Application
Acrolein	0.0102	AOP Permit Application
Arsenic	0.00087	AOP Permit Application
Benzene	0.20	AOP Permit Application
Beryllium	5.20E-5	AOP Permit Application
1,3-Butadiene	0.0069	AOP Permit Application
Cadmium	0.0048	AOP Permit Application
Chromium, trivalent	0.0030	AOP Permit Application
Chromium, hexavalent	0.0030	AOP Permit Application
Cobalt	0.00036	AOP Permit Application
Ethylbenzene	0.51	AOP Permit Application
Formaldehyde	1.75	AOP Permit Application
Hexane	7.81	AOP Permit Application
Manganese	0.0016	AOP Permit Application
Mercury	0.0011	AOP Permit Application
Naphthalene	0.023	AOP Permit Application
Nickel	0.0091	AOP Permit Application
Poly Aromatic Hydrocarbons	0.035	AOP Permit Application
Propylene Oxide	0.46	AOP Permit Application
Selenium	0.00010	AOP Permit Application
Toluene	2.09	AOP Permit Application
Xylenes	1.02	AOP Permit Application
Total HAP	**14.67**	**AOP Permit Application**

5. Regulatory Determinations

Table 13 summarizes regulatory determinations made for GHEC's AOP.

Table 13 Applicability Determinations

Citation	Description	Applicable Requirement under Title V?	Basis
40 CFR Part 60 Subpart GG	Stationary Gas Turbine NSPS	No	According to the Washington Department of Ecology (Ecology), as documented in the Fact Sheet for PSD Amendment 5, GHE's Advanced Gas Pathway (AGP) upgrades triggered applicability of the combustion turbine standards in 40 CFR Part 60, Subpart KKKK (Subpart KKKK). Under § 60.4305 of Subpart KKKK it states, "Stationary combustion turbines regulated under this subpart are exempt from the requirements of subpart GG of this part." Therefore, the requirements under Subpart GG do not apply to the combustion turbines at GHE. It also states, "Heat recovery steam generators and duct burners regulated under this subpart are exempted from the requirements of subparts Da, Db, and Dc of this part."
40 CFR Part 60 Subpart Da	Electric Utility Steam-Generation Units	No	According to Ecology, as documented in the Fact Sheet for PSD Amendment 5, GHE's AGP upgrades triggered applicability of the combustion turbine standards in 40 CFR Part 60, Subpart KKKK (Subpart KKKK). Under § 60.4305 of Subpart KKKK it states, "Heat recovery steam generators and duct burners regulated under this subpart are exempted from the requirements of subparts Da, Db, and Dc of this part."
40 CFR Part 60 Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	No	
40 CFR Part 60 Subpart Dc	Small Institutional-Commercial-Industrial Steam Generation Units	No – for heat recovery steam generators and duct burners Yes – Auxiliary boiler	
40 CFR Part 60 Subpart KKKK	Subpart KKKK - Standards of Performance for Stationary Combustion Turbines	Yes	According to Ecology, as documented in the Fact Sheet for PSD Amendment 5, GHE's AGP upgrades triggered applicability of the combustion turbine standards in 40 CFR Part 60, Subpart KKKK (Subpart KKKK). Subpart imposes standards for NOx and SO2 and associated monitoring requirements.
WAC 463-78-100	Registration	No	The latest version of EFSECs registration regulations in WAC 463-78-100 (effective 3/26/06) exempts air operating permit sources from EFSECs registration program.
WAC 173-400-112	Requirements for Sources in Nonattainment Areas	No	GHEC is not located in a nonattainment area for any criteria pollutant. Therefore, this regulation is not applicable facility-wide.
WAC 173-400-120	Bubble Rules	No	GHEC has not requested an emission bubble for any regulated pollutant. Therefore, this regulation is not applicable.
WAC 173-400-131	Issuance of Emission Reduction Credits	No	GHEC has not sought emission reduction credits (ERCs). Therefore, this regulation is not applicable.
WAC 173-400-136	Use of Emission Reduction Credits	No	GHEC has not sought to use emission reduction credits (ERCs). Therefore, this regulation is not applicable.
40 CFR Part 63.6080 et seq. Subpart YYYY	National Emission Standards for Hazardous Air Pollutants for Stationary Combustion	No	Subpart YYYY applies to combustion turbines built after January 14, 2003 and located at major sources of HAP emissions. GHEC is facility is not a major source of HAP emissions. Therefore, Subpart YYYY does not apply.

Citation	Description	Applicable Requirement under Title V?	Basis
	Turbines		
40 CFR Part 64	Compliance Assurance Monitoring	No	For NOx, CO, Ammonia and opacity emissions, 40 CFR 64.2(b)(iv) provides an exemption from the requirements of Part 64 when a CEMS is otherwise required. Compliance Assurance Monitoring rule requirements do not apply to particulate, SO2, and H2SO emissions per 40 CFR 64.2(a)(2), which includes an applicability criteria that the unit uses a control device to achieve compliance. A "control device" as defined in 40 CFR Part 64 does not include passive control measures that act to prevent pollutants from forming, such as the use low-polluting fuel or feedstocks. Because no control device is used to control particulate, SO2 or H2SO, this rule does not apply to those pollutants.
40 CFR Part 98	Federal Greenhouse Gas Reporting Requirements	No	The EPA greenhouse gas reporting rule was finalized September 22, 2009. In the preamble EPA responds to a question regarding whether it is an applicable requirement for the purposes of Title V: *As currently written, the definition of "applicable requirement" in 40 CFR 70.2 and 71.2 does not include a monitoring rule such as today's action, which is promulgated under CAA sections 114(a)(1) and 208.* Therefore, these requirements will be enforced directly by the USEPA outside of the Title V AOP program.
40 CFR 63.11193 et seq. Subpart JJJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers - Area Sources	No	GHEC operates the following three steam generating units (boilers): CGT1 Heat Recovery Steam Generator (HRSG), CGT2 HRSG, and the Auxiliary Boiler. Both HRSGs are preceded by duct burners. All three units combust only natural gas and, therefore, are not subject to this regulation.
40 CFR Part 60 Subpart TTTT		No	In conjunction with the PSD Amendment 5 regulatory review, Ecology concluded that that the upgrade triggering PSD Amendment 5 (the Advanced Gas Pathway Project or AGP) would increase CO2 emissions by approximately 9.1 percent, which is less than the applicability threshold in 40 CFR 60.5509(b)(7) of 10 percent or less (rounded to two significant figures). Ecology further concluded that, to assure the 10 percent CO2 threshold is not crossed, "ESEC will monitor to confirm that the project will not trigger NSPS Subpart TTTT." To enable this monitoring, an additional monitoring condition, M14, was added to the permit requiring ongoing CO2 monitoring and confirmation .
40 CFR Part 63 Subpart YYYY	National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines	No	This facility is not a major source of HAP emissions, therefore this regulation is not applicable to the combustion turbines at this facility.
Chapter 463-80 WAC	Carbon Dioxide Mitigation under the Carbon Dioxide Mitigation Program for Thermal Electric Generating Facilities	No.	Chapter 463-80 WAC is not pursuant to either the Federal Clean Air Act (FCAA) or Washington Clean Air Act (WCAA). Therefore, by definition, it is not an "Applicable Requirement" under Title V. GHE is subject to a CO_2 mitigation plan, which was required by EFSEC as a part of an amendment of the site

Citation	Description	Applicable Requirement under Title V?	Basis
			certification agreement and EFSEC Resolution 298. However, the CO_2 mitigation plan does not qualify as an "Applicable Requirement" under Title V.
Chapter 463-85 WAC	Greenhouse Gas Emissions Performance Standard and Sequestration Plans and Programs for Baseload Electric Generating Facilities	No	Chapter 463-85 WAC is not pursuant to either the Federal Clean Air Act (FCAA) or Washington Clean Air Act (WCAA). Therefore, by definition, it is not an "Applicable Requirement" under Title V.
40 CFR Part 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	No	The "order date" for both the Emergency Generator and Fire Water Pump precede the effective date of Subpart IIII.
40 CFR Part 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.	Yes	Applies to both Emergency Generator and Fire Water Pump.

6. Basis for AOP Terms and Conditions

Energy facilities under the jurisdiction of EFSEC are subject to EFSEC's rules under Chapter 463-78 WAC (EFSEC's Rules). Therefore, the underlying regulatory basis for all conditions in GHEC's AOP comes from EFSEC's Rules. However, because EFSEC's Rules adopt by reference (ABR) relevant state and federal rules which apply to energy facilities, the pertinent details of applicable requirements reside within the adopted rules and regulations themselves. Table 14 provides a mapping of relevant state and federal regulations that have been ABR by EFSEC.

6.1 Table 14: EFSEC Rules Adopted by Reference

Title of Rule Adopted by Reference	Citation	Citation of EFSEC Adopting Rule
Washington Air Operating Permit Regulation	Chapter 173-401 WAC	WAC 463-78-005(2)
Washington's General Regulations for Air Pollution Sources except for Ecology specific sections and adoption of federal New Source Performance Standards	Chapter 173-400 WAC	WAC 463-78-005(1)
Washington's Acid Rain Program	Chapter 173-406	WAC 463-78-005(3)
Washington's Controls for New Sources of Toxic Air Pollutants	Chapter 173-460 WAC	WAC 463-78-005(4);
Federal New Source Performance Standards	40 CFR Part 60	WAC 463-78-115;
National Emission Standards for Hazardous Air Pollutants	40 CFR Part 61	WAC 463-78-005(1)
National Emission Standards for Hazardous Air Pollutants for Source Categories	40 CFR Part 63	WAC 463-78-005(1)

In order to avoid compounding already long strings of regulatory citations in GHEC's AOP, and because pertinent details of applicable requirements reside within the ABR regulations themselves, the ABR regulations are cited in GHEC's AOP without citing the corresponding Chapter 463-78 WAC section that adopts them. Therefore, the following sections discuss the regulatory basis for AOP conditions from the standpoint of state and federal regulations that have been ABR by EFSEC.

Per the Washington Air Operating Permit Program under WAC 173-401-600, the regulatory origin and authority for each condition must be stated in an AOP. For GHEC's AOP, origin and authority are stated at the end of each permit condition. The "origin" cites the state or federal regulation or PSD/NSR permit where the applicable requirement came from. The "authority" cites the specific section in WAC 173-401 providing authority to include the requirement.

The following authorities from the Washington AOP program were used in GHEC's AOP:

6.2 Table 15: Required Permit Content, Washington AOP Program

WAC 173-401 Section:	Provides authority to include in AOP:
WAC 173-401-600(1)(a)	Federal emissions limits and standards.
WAC 173-401-600(1)(b)	State emissions limits and standards.
WAC 173-401-600(1)(c)	Requirements from permits issued by a local air pollution control authority (NOC and PSD permits).
WAC 173-401-615(1)(a)	Monitoring required by an applicable requirement.
WAC 173-401-615(1)(b)	Periodic monitoring where the applicable requirement does not require specific monitoring (commonly referred to as "gap-filling monitoring).
WAC 173-401-615(1)(c)	As necessary, requirements concerning the use, maintenance, and, where appropriate, installation of monitoring equipment or methods.
WAC 173-401-615(2)	All applicable recordkeeping requirements and require, where applicable: • Records of required monitoring; • Records of changes made at the facility that result in emissions of a regulated air pollutant, but not otherwise regulated under the permit; • Retention of records of all required monitoring data and support information for a period of five years from the date the record originated; and, • Monitoring support information including all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation; and, • Copies of all reports required by the permit.
WAC 173-401-615(3)	All applicable reporting requirements and require: • Submittal of reports of any required monitoring at least once every six months; and, • Prompt reporting of deviations from permit requirements, including those attributable to upset conditions.
WAC 173-401-620(2)	Standard Title V provisions from WAC 173-401-620(2).
WAC 173-401-605(1)	Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance.
WAC 173-401-630(1)	Additional requirements for monitoring or monitoring equipment

	when monitoring is required by an applicable requirement, but it is not sufficient to assure compliance. This category of monitoring is referred to by EPA as "Sufficiency Monitoring."
WAC 173-401-640(1)	Upon request, the permitting authority shall include in the permit or in a separate written finding issued with the permit a determination identifying specific requirements that do not apply to the source.

6.3 Permit Administration (P1 – P21)

Permit administrative conditions (conditions P1 – P21) include conditions specifying how the AOP is managed according to the State AOP program under Chapter 173-401 WAC and conditions having implications on assuring compliance with all other conditions in the AOP. Many of the permit administrative conditions are "standard terms and conditions" and required to be in the AOP per either Chapter 173-401 WAC or per federal requirements for AOPs.

The origin of each permit administrative condition is stated at the end of each condition. Authority to include permit administrative conditions comes from primarily from WAC 173-401-600(1)(b), which specifies AOPs contain requirements from the Washington Clean Air Act (Chapter 70.94 RCW) and rules implementing that chapter (Washington's AOP program is pursuant to RCW 70.94.162, which under the Washington Clean Air Act.).

Permit administrative conditions specify terms of the AOP such as the permit duration, expiration, renewal and revision requirements. They also explain the "Permit Shield," extent of AOP enforceability and how the AOP can be revoked or re-opened for cause. They are essential to the proper functioning of the AOP under the State of Washington Program. Because permit administrative conditions do not include any applicable emissions limitations or operational standards, monitoring is not applicable. However, general recordkeeping and reporting requirements apply. Also, compliance with permit administrative conditions must be certified annually.

Permit Duration (condition P1)

This condition simply states the fixed term of the permit from the date of issuance is 5 years. It is important to point out that permit amendments and modifications midway during the permit term do not reestablish the permit term unless the entire permit, including the acid rain portion of the permit is subject to review and reissuance.

Federally Enforceable Requirements (condition P2)

Condition P2 distinguishes between AOP conditions containing federally enforceable requirements from those that are not federally enforceable.

Requirements that only the Washington Department of Ecology (Ecology) has authority to enforce are designated as "State only." Although EFSEC may enforce the specific provisions of the AOP permit condition containing a "State only" requirement, only Ecology may enforce the underlying rule, regulation or standard that imposes the requirement. The best example is the State's rules for reporting greenhouse gas emissions titled, Reporting of Emissions of

Greenhouse Gases, under Chapter 173-441 WAC. The "core" requirements from Chapter 173-441 WAC to monitor, record, and report greenhouse gas emissions are included as conditions in GHE's AOP and may be enforced by EFSEC. However, only Ecology may directly enforce the rule itself.

AOP conditions containing requirements that are not federally enforceable but are directly enforceable by both Ecology and EFSEC are identified as "State/EFSEC only." In general, these include State air regulations that have no implications on achieving or maintaining the National Ambient Air Quality Standards. Examples include the State's nuisance odor prohibitions and the standards for toxic air pollutant emissions. These are enforceable by Ecology and EFSEC but are not federally enforceable.

AOP conditions containing requirements that are federally enforceable and enforceable by EFSEC and Ecology do not include "State only" or "State/EFSEC" in the permit condition basis statement at the end of the condition.

Compliance Maintenance (condition P3)

This condition contains the requirement that the Permittee must maintain compliance with all applicable requirements in the AOP and those that become effective during the permit term.

Standard Conditions (condition P4)

Both the origin and authority to include this condition come from WAC 173-401-620(2). The condition identifies general duty and administrative requirements that are standard for all AOPs including the duty to comply and duty to provide information.

AOP Administration Conditions (conditions P5-P14)

Conditions P4 through P14 contain requirements for AOP permit administration from the State's Air Operating Permit regulation like permit renewal requirements, permit modifications, administrative amendments, duty to supplement or correct an application. These are all considered standard terms of the permit.

Greenhouse Gas Reporting Fee (condition P15)

Condition P15 contains the requirement from WAC 173-441-110 that a Greenhouse Gas (GHG) reporting fee be paid to Ecology each year a GHG report to Ecology is required. This requirement is not federally enforceable and is a "State only" requirement.

Confidential Information (condition P16)

The origins of this condition are WAC 173-401-500(5) and WAC 173-401-620(2)(e). The condition identifies the essential standards for considering and handling confidential information. Justification for its inclusion in the AOP is that it establishes the standard for handling confidential information under Title V. Authority to include the condition in the permit comes

from WAC 173-401-600(1)(b).

Credible Evidence (condition P17)

Condition P17 contains important provisions from the Credible Evidence Rule under 40 CFR Part 51, and from provisions under 40 CFR Part 60 and 61 concerning credible evidence. In general, these rules provide that the permittee may use any credible evidence outside of the monitoring and testing required by the AOP to support a compliance determination. The authority to include this condition is WAC 173-401-600(1)(a), which requires AOPs contain terms and conditions that assure compliance with all applicable federal requirements. There may be times when the permittee must augment the monitoring and testing required by the AOP with other information in order to demonstrate or assure continuous compliance. This conditions allows for the use of credible evidence.

Emergency Provisions (condition P18)

Condition P18 contains the requirements governing how to treat emergencies under the Washington AOP program including what constitutes an emergency, criteria for demonstrating an emergency and effect of an emergency relative to AOP enforcement actions. This applicable requirement is required to be included in all AOPs.

Unavoidable Excess Emissions (conditions P19 & P20)

Condition P19 contains requirements from WAC 173-400-107 governing treatment of unavoidable excess emissions, which are included in the current Washington State Implementation Plan (SIP). The SIP is comprised of rules, which the State of Washington has adopted and EPA has approved, for maintaining the National Ambient Air Quality Standards. The current SIP was adopted by EPA September 20, 1993.

Recently, Washington Department of Ecology (Ecology) adopted updated rules governing unavoidable excess emissions events. These updated rules were adopted under WAC 173-400-108. They were adopted with a provision making them effective on the date EPA removes the currently effective rules under WAC 173-400-107. The future effective date provision was adopted knowing that the length of time for EPA to approve and update the SIP was uncertain. Therefore, the current rule governing unavoidable excess emissions, WAC 173-400-107, remains effective up to the date the EPA removes it from the SIP and inserts WAC 173-400-108.

Condition P19 was written with this "sunset" provision anticipating this change will likely happen sometime during the five-year AOP permit term. Likewise, condition P20, which contains the updated unavoidable excess emissions requirements under WAC 173-400-108, is written into the AOP with an effective date commencing the date EPA adopts it into the SIP.

Following recommendation from Ecology's Air Quality Program, both conditions were included in GHEC's AOP in order to avoid re-opening and modifying GHEC's AOP mid permit term.

Certification (condition P21)

In accordance with WAC 173-401-520, all application forms, reports, and compliance certifications must be certified for truth and accuracy by a responsible official. Therefore, this requirement has implications all other requirements in the AOP requiring compliance reports to EFSEC. The requirement to certify reports for truth and accuracy is considered an applicable requirement. It is included in the AOP under the general authority provided by WAC 173-401-600(1)(b), which requires permits contain terms and conditions sufficient to assure compliance with all applicable requirements under the Washington Clean Air Act.

6.4 General Terms and Conditions (G1 – G16)

General terms and conditions (G1 – G16) cover general compliance and permitting requirements including:

- Access for inspection of GHEC;
- Treatment of insignificant emissions units;
- Pre-construction permitting requirements;
- Temporary source requirements;
- Asbestos and demolition permitting;
- Chemical Accident Prevention Program;
- Stratospheric Ozone Protection Program;
- Outdoor burning requirements;
- General emissions testing requirements; and,
- Acid Rain Program.

These conditions are categorized as General Terms and Conditions in GHEC's AOP because they either have broad implications on multiple conditions in the AOP, or are entire programs that are applicable if triggered, such as the Stratospheric Ozone Protection program. Authority for each condition varies depending on whether the applicable requirement originated from a state or federal regulation.

Inspection and Entry (condition G1)

Condition G1 contains requirements for inspection and entry to the facility. The specific provisions and requirements governing inspection and entry originate from WAC 173-401-630(2) and WAC 173-400-105(3)&(4). Authority to include these requirements in the AOP comes from WAC 173-401-600(1)(b).

Insignificant Emission Units (condition G2)

Condition G2 contains specific Title V requirements for insignificant emissions units determined insignificant based on actual emissions in accordance with WAC 173-401-530(1)(a).

New Source Review Requirements (conditions G3 & G4)

Conditions G3 & G4 reference the procedural requirements for securing EFSEC's approval prior

to commencing any project triggering an air permit from EFSEC. These requirements include requirements for NOC, PSD and modifications and are generally referred to as "New Source Review." They become applicable when triggered and must be complied with prior to commencing any project triggering an air permit through EFSEC. Authority to include the requirements in GHECs AOP comes from the general authority provided by WAC 173-401-600(1)(b).

Temporary Source provisions (condition G5)

Condition G5 contains EFSEC's requirements for temporary, portable sources that remain no longer than one year at the facility.

Asbestos, Demolition and Renovation Projects (condition G6)

Condition G6 identifies 40 CFR 61, Subpart M as the applicable regulation for asbestos, demolition, and renovation projects.

Chemical Accident Prevention (condition G7)

Chemical accident prevention under the federal Risk Management Plan (RMP) program (40 CFR Part 68) applies to any industrial facility that uses or stores any extremely hazardous substance. The RMP program requires subject facilities to develop an RMP for all substances used above a threshold quantity.

GHE does use and store aqueous ammonia, which is a chemical regulated under the RMP program. The RMP program applies to facilities that use or store 20,000 pounds of aqueous ammonia (conc 20% or greater) during any year. GHECs use of aqueous ammonia has been below this threshold concentration since the facility began operation. However, because there is a potential for aqueous ammonia to be used above the RMP rule threshold quantity, condition G8 was added to GHECs AOP. The specific requirements of the RMP rule remain dormant unless a regulated substance is used above its threshold quantity.

The RMP program is considered an applicable federal regulatory program. Therefore, authority to include condition G8 comes from WAC 173-401-600(1)(a), which requires permits contain terms and conditions sufficient to assure compliance with all applicable federal emissions limits and standards. Although it is unlikely GHEC will trigger the RMP program, the program must be acknowledged in the AOP as applicable if triggered.

Protection of Stratospheric Ozone (condition G8)

Incorporates by reference the federal requirements for protection of stratospheric ozone from 40 CFR Part 82, Subpart F. Because EFSEC has not adopted by reference these standards and had not requested delegation to enforce them, they are not directly enforceable by EFSEC. However, they are required to be in all Title V permits and EFSEC is responsible for verifying compliance with the requirements is both assured and monitored by GHE.

Outdoor Burning (condition G9)

Outdoor burning is generally prohibited but may be permitted as allowed by WAC 173-425. However unlikely for GHEC, the requirement was included in the AOP to allow for permitted outdoor burning. Authority to include it in the AOP comes from the general authority provided by WAC 173-401-600(1)(b). Any permit allowing outdoor burning would be issued by EFSEC's contractor, ORCAA.

Concealment and Masking Prohibited (condition G10)

This condition contains the state-wide requirement that prohibits concealing an air emission that would otherwise cause a violation of an applicable standard, such as use of gaseous diluents to achieve compliance a standard.

Circumvention (condition G11)

This condition contains the federal requirement that prohibits concealing an air emission that would otherwise cause a violation of an applicable standard, such as use of gaseous diluents to achieve compliance a standard.

General Emissions Testing Requirement (condition G12)
This condition states EFSEC's general authority to require testing .

Acid Rain Program – Duty to reapply (condition G13)
Condition G13 states the requirement that an acid rain permit renewal application must be submitted along with the AOP renewal application. Both permits expire on June 17, 2025. Renewal applications for each are due to EFSEC no later than December 17, 2024.

In addition to modifying GHE's AOP to incorporate new applicable requirements from PSD Amendment 5, EFSEC also took the opportunity to correct certain factual errors in the permit. One such error was an incorrect expiration date stated for the acid rain permit. The acid rain permit is included as an attachment to the AOP.

Both permits were issued at the same time and both have a five year term. Therefore, both permits should expire at the same time. However, while the AOP expires on June 17, 2025, the acid rain permit expiration date stated in the previous permit was a December 17, 2024. In addition, while the previous permit lists December 17, 2024 as its expiration date, it also references the expiration date of the AOP.

After careful investigation by EFSEC's Attorney and Title V contractor, it was concluded that the December 17, 2024 date for expiration of the acid rain permit was incorrect and should be changed to June 17, 2025. EFSEC's Title V contractor, the Olympic Region Clean Air Agency believes that the due date for submitting the acid rain permit renewal application, which is December 17, 2024, was mistakenly used in place of the expiration date in the permit. These conclusions and the corresponding expiration date changes made to the AOP align correctly with WAC 173-406-601(4)(d): Each acid rain permit shall have a term of five years commencing on its effective date…." Therefore, the correct expiration date for the acid rain permit is June 17th, 2025. This misalignment of dates was corrected.

Acid Rain Program – Designated Representative (condition G14)

This condition contains the definition of the "Designated representative" as required under the State's Acid Rain Program.

Reporting to Verify PSD Applicability Determinations (condition G15)

This condition was recommended by the Washington Department of Ecology to satisfy the monitoring, recordkeeping and reporting needed to assure ongoing relevance of PSD applicability determinations.

Prevention of Significant Deterioration (PSD) (Condition G16)

This condition includes EFSECs PSD and major New Source Review requirements and applies for projects triggering PSD.

6.5 Applicable Requirements

Applicable requirements (AR1 – AR5) cover applicable emissions limits and operating standards from applicable state and federal regulations and NOC and PSD permits issued by EFSEC to GHEC. Origin and authority are stated at the end of each condition. All monitoring and recordkeeping details are included in the Monitoring section of the AOP.

Applicable requirements are divided into the following subcategories:

- General facility-wide standards and prohibitions primarily from Chapter 173-400 WAC;
- NSPS for gas turbines and duct burners from 40 CFR 60 Subpart KKK;
- PSD Amendment 5 permit requirements for the CGTs;
- PSD Amendment 5 permit requirements for the Auxiliary Boiler;
- PSD Amendment 5 permit requirements for the emergency diesel engines; and,
- PSD and NOC permit requirements for the Cooling Tower.

NSPS General Duty Requirements (condition AR1.1)

This condition contains the general "blanket" requirement that emissions units subject to NSPS be operated in a manner consistent with good air pollution control practice for minimizing emissions. It is a requirement from the general NSPS requirements under 40 CFR60.11(d) and applies to all emissions units subject to a federal NSPS. For GHEC, the CGTs, Duct Burners, Auxiliary Boiler and Emergency Engines are all subject to federal NSPS and, therefore must abide by this general requirement.

Washington General Standards (condition AR1.2 – 1.10)

Conditions AR1.2 – AR1.10 contain applicable requirements from the States General Regulations for Air Pollution Sources under Chapter 173-400 WAC. These requirements apply plant-wide to all emissions units including insignificant emissions units (IEUs). However, IEUs are not subject to the monitoring, recordkeeping and reporting requirements of the AOP.

Acid Rain Program (condition AR1.11)

Condition AR1.11 contains the plant-wide SO_2 allowance requirement from the GHEC's Acid Rain Program permit. This is the primary requirement from the Acid Rain Program permit.

Required Plans (condition AR1.12)

Condition AR1.12 requires the permittee develop, maintain, and follow:

- An Operating and Maintenance manual (O&M Manual); and,
- An equipment Start-up, Shutdown, and Malfunction Procedures manual (SSM Manual).

Both manuals are required to describe accepted operating procedures for minimizing emissions from all emissions units at the facility. The origin of this requirement is PSD Amendment 4.

NSPS for Stationary Gas Turbines (conditions AR2.1 – AR2.2)

Conditions AR2.1 – AR2.2 contain applicable requirements from the federal Standards of Performance for Stationary Gas Turbines under CFR 60 Subpart KKKK (Subpart KKKK). Subpart KKKK applies to stationary gas turbines with a heat input at peak load equal to or greater than 10 million Btu per hour (MMBtu/hr), based on the lower heating value of the fuel fired. Because both turbines at GHEC have heat input rates well above this threshold, and because they were modified after the effective date of the regulation (February 18, 2005), Subpart KKKK applies.

Subpart KKKK imposes both NO_x and SO_2 standards for stationary gas turbines that apply at all times including startup, shutdown, and malfunction events.

The Subpart KKKK standard for NO_x is based on the standard stated for turbines firing natural gas and with heat rates greater than 850 MMBtu/hr, which is provided in Table 1of the regulation:

NOx standard for new, modified, or reconstructed turbine firing natural gas > 850 MMBtu/h: 15 ppm at 15 percent O2 or 54 ng/J of useful output (0.43 lb/MWh) NOx standard for heat recovery units operating independent of the combustion turbine: 54 ppm at 15 percent O2 or 110 ng/J of useful output (0.86 lb/MWh)

The Subpart KKKK NO_x standards are included in condition AR 2.1. Subpart KKKK requirements for the NOx-diluent CEMS incorporate by reference the monitoring requirements from 40 CFR Part 75.

The Subpart KKKK standard for SO_2 for natural gas fired turbines is:

You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO2/J (0.060 lb SO2/MMBtu) heat input

The SO2 standard from Subpart KKKK is included as a limit in condition AR2.2. Required monitoring is based on sulfur mass balance calculations as specified in conditions M9 and M14, which rely on fuel combustion monitoring and periodically measuring the heat and sulfur content of the natural gas per methods and protocols from 40 CFR Part 75.

PSD Requirements for CGTs (conditions AR2.3 – AR2.17)
Conditions AR2.3 – AR2.17 include applicable requirements from PSD Amendment 5 (PSD permit) applying to the CGTs. All requirements are in equivalent to the conditions as written in the PSD permit except for some reorganization and adding clarification of requirements for continuous emissions monitoring systems (CEMS) and continuous monitoring systems (CMS).

Clarification of requirements for CEMS and CMS was necessary for two reasons:

1. The CGTs are subject to multiple standards for the same pollutant from different regulations, each which have their own unique CEMS and CMS requirements. As a result, there are redundancies in CEMS and CEM requirements and some apparent conflicting requirements that needed to be resolved and harmonized in the AOP.
2. The PSD permit incorporates by reference federal performance standards and quality assurance procedures for CEMS and CMS, which are general and cover all possible scenarios and fuel types for affected facilities. As a result, requirements applying specifically to GHEC are difficult to identify due to the sheer volume of inapplicable provisions within the referenced federal standards. For example, the adopted requirements for NO_x monitoring under 40 CFR Part 75 spans well over 300 pages of CFR and itself references several other equally extensive sections of the CFR.

Because of this, requirements for CEMS and CMS in general rely heavily on adopting the federal requirements by reference in the permit.

PSD Requirements for the Auxiliary Boiler (conditions AR3.1 – AR3.8)
Conditions AR3.1 – AR3.8 include applicable requirements from PSD Amendment 5 (PSD permit) applying to the Auxiliary Boiler. All requirements are in equivalent to the conditions as written in the PSD permit except for some reorganization and adding clarification of requirements for monitoring.

Requirements for Emergency Diesel Engines (conditions AR4.1 – AR4.6)
Conditions AR4.1 – AR4.6 include applicable federal requirements and requirements from PSD Amendment 5 (PSD permit) applying to diesel fired emergency engines at the facility.

PSD and NOC Requirements for Cooling Towers (conditions AR5.1 – AR5.2)
Conditions AR5.1 – AR5.2 include applicable requirements from the NOC approving upgrades to GHE's cooling towers as well as applicable PSD permit conditions.

6.6 Monitoring and Recordkeeping Conditions

Applicable monitoring and recordkeeping conditions (M1 – M13) include all required monitoring from applicable federal subparts and the PSD permit, and additional monitoring determined necessary to assure sufficient monitoring meeting title V requirements. Origin and authority are stated at the end of each condition. Regulatory origins are stated at the end of each condition.

6.7 General Recordkeeping Requirements

Applicable recordkeeping requirements were aggregated with monitoring conditions in the permit.

6.8 Reporting

Applicable reporting terms and conditions (R1–R13) include all required reporting requirements for Title V AOPs as required under WAC 173-401-615(32). Origin and authority are stated at the end of each condition.

6.9 Permit Shield

WAC 173-401-640 under Washington's Operating Permit regulations requires AOPs to include a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit. This provision is referred to as the "Permit Shield." Sub-section (2) of WAC 173-401-640 clarifies the effect of the Permit Shield on requirements determined inapplicable, and requires the permitting authority to include in the permit or in a separate written finding issued with the permit, a determination identifying specific requirements that do not apply to the source.

Conditions S1-S3 in GHE's AOP provides the "Permit Shield" and list relevant requirements determined inapplicable.

7. Environmental Justice

EPA defines Environmental Justice (EJ) as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The purpose of an EJ review in conjunction with a Title V permitting action is to ensure no group of people are bearing a disproportionate share of any negative environmental consequences from the facility subject to the Title V permitting action. Further, EFSEC strives to engage the affected community meaningfully and effectively regarding the permitting action, and to ensure compliance with obligations pursuant to Title VI of the Civil Rights Act.

With respect to integrating EJ into air permitting decisions, EPA Region 10 expects air agencies including EFSEC to:

- Identify overburdened communities;
- Engage with communities;
- Evaluate cumulative impacts; and,
- Use available authority to minimize emissions.

However, EPA Region 10 does not expect air agencies or EFSEC to use the Clean Air Act's authorities to address disproportional impacts to communities that are designated as

“attainment/unclassifiable” with respect to meeting the National Ambient Air Quality Standard (NAAQS).

A designation is a label that EPA assigns to an area to describe the air quality for any of six common air pollutants for which EPA has established a NAAQS. These pollutants are called “criteria pollutants.” If the air quality in a geographic area meets or is cleaner than the national standard, it is called an attainment area and designated “attainment/unclassifiable.” Areas that don't meet the national standard are called nonattainment areas. In some cases, EPA is not able to determine an area's status after evaluating the available information and those areas are designated "unclassifiable." GHE is located within Grays Harbor County, which is designated “attainment/unclassifiable” for all the criteria air pollutants.

The following subsections describe how EPA’s expectations for EJ were met for this Title V permitting action.

7.1 Identify Overburdened Communities

The initial step in an EJ review is to identify any affected populations or communities of concern and to identify whether they are disproportionally impacted.

EPA’s environmental justice screening and mapping tool, EJ Screen, was used to answer the first part of this question. An EJ Screen Community Report was generated for Grays Harbor County. The Community Report estimates a minority population of 22%, with approximately 7% of the total population speaking Spanish and 2% speaking another non-English language at home. All demographic indicators were below the 80th percentile for the nation.

The Community Report also ranks the community with respect to environmental indicators such as toxic releases to the air, traffic, hazardous waste discharges, and others. The 80th nation-wide percentile for any environmental indicator is used as a threshold to identify communities may already be disproportionately impacted. Grays Harbor County ranks below the 80th nation-wide percentile for all environmental indicators. Therefore, based on EJ Screen, the area surrounding GHE does not include any preexisting, overburdened communities. A copy of the Community Report with more detailed information will be filed as part of the supporting documentation for this Title V permitting action.

7.2 Engage with Communities

EFSEC’s policy is to engage the public through a public comment period on the draft AOP. EFSEC’s current public noticing and outreach policies and procedures are sufficient to effectively provide notice of the hearing and meaningfully engage with the community. Public noticing actions that will be taken by EFSEC for this AOP modification include:

- Publishing the Public Notice and Draft AOP on EFSEC’s web site.
- Noticing the action through the Washington State Permit Register.
- Providing notice via email or mail to “Affected States” within 50 miles of the GHE.
- Providing notice via email or mail to interested persons and entities.

After the public comment period, and hearing if one is held, and after considering all comments submitted, EFSEC will prepare a written Responsiveness Summary. The Responsiveness summary will include a description of EFSEC's Final Decision as well as responses to questions and comments received during the comment period and public hearing. EFSEC's Responsiveness Summary will be forwarded to all persons and entities who submitted comments during the comment period and public hearing.

7.3 Evaluate Cumulative Impacts

EJ policies require that cumulative impacts be identified and addressed in any permit decision. However, as mentioned previously, EPA does not expect air agencies or EFSEC to use Clean Air Act authorities to address any disproportionate impacts to communities that are designated as "attainment/unclassifiable" with respect to the NAAQS. Therefore, a cumulative impacts evaluation was not performed for this Title V permitting action because:

1. Grays Harbor County is designated "attainment/unclassifiable" with respect to all criteria air pollutants;
2. Title V permitting actions do not require an evaluation of ambient air quality impacts; and,
3. EJ Screen results did not indicate any preexisting, overburdened communities.

7.4 Use Available Authority to Minimize Emissions

The purpose of Title V permitting actions is to assimilate all applicable air requirements for existing air pollution sources at a facility that is a "Major Source," into a single permit that must be renewed every five years. Title V does not provide authority to impose additional air pollution control requirements or limits, except for monitoring. Therefore, because the permitting action was a Title V permitting action, EFSEC did not have authority to minimize emissions by imposing new limits or requirements. However, GHE did impose additional monitoring requirements for emissions limits that do not specify any monitoring, or when the applicable monitoring requirements were determined insufficient to assure compliance.

EFSEC Monthly Council Meeting Facility Update

Facility Name: Columbia Solar Projects (Penstemon, Camas and Urtica)
Operator: Tuusso Energy, LLC
Report Date: July 12, 2024
Reporting Period: 30 Days from June 1, 2024
Site Contact: Thomas Cushing
Facility SCA Status: Construction

Construction Status

- Penstemon
    - Currently operational
    - Total Generation during the month of May was 1.481 Gigawatt hours

- Camas
    - Currently operational
    - Total Generation during the month of May was 1.434 Gigawatt hours

- Urtica
    - Currently operational
    - Total Generation during the month of May was 1.560 Gigawatt hours

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EFSEC Monthly Council Meeting

Facility Name: **Columbia Generating Station and Washington Nuclear Project 1 and 4 (WNP-1/4)**
Operator: **Energy Northwest**
Report Date: **July 17th, 2024**
Reporting Period: **June 2024**
Site Contact: **Denis Mehinagic**
Facility SCA Status: **Operational**

CGS Net Electrical Generation for June 2024: **805,756 Mega Watt-Hours.**

The following information must be reported to the Council if applicable to the facility:

Environmental Compliance:
No update.

Safety Compliance
No update.

Current or Upcoming Projects
No update.

Other
No update.

EFSEC Monthly Council Meeting – Facility Update Format

Facility Name: Goose Prairie Solar
Operator: Brookfield Renewable US
Report Date: 07/12/24
Reporting Period: 06/11/24 to 07/12/24
Site Contact: Jacob Crist
Facility SCA Status: (Pre-construction/**Construction**/Operational/Decommission)

Construction Status (only applicable for projects under construction)
-On schedule or not. If not, provide additional information/explanation.

1. **Project is on schedule.**
2. **Upcoming Milestone Dates for commissioning activities.**
    a. **TBD, Start of BPA 90 Day Soak. (Sungrow Commissioning team was repurposed to an unrelated project and new mobilization date is TBD)**
    b. **Goose Prairie is considered Mechanically Complete Contractually.**
    c. **On or Around September 30th, Utility Signoff and COD.**

-Phase/Brief update on status/month in review.

1. **All major scope items are complete. Modules, racking, trackers, substation**
2. **Clean up items and current punchlist items are complete.**
3. **Back feed of the substation is complete up to the inverters.**
4. **Hot commissioning and BPA testing remains.**

Operations & Maintenance (only applicable for operating facilities)
-Energy generated for the reporting period.
-Relevant energy generation information, such as wind speed, number of windy or sunny days, gas line supply updates, etc.
O&M site certificate deliverables are in draft with Brookfield O&M and Tetratech.

The following information must be reported to the Council if applicable to the facility:

Environmental Compliance
-Permit status if any changes.
-Update on progress or completion of any mitigation measures identified.

1. **No discharge on the site reported in June.**

-Any EFSEC-related inspections that occurred.

1. **Frequent Monitoring is occurring through WSP with no findings reported for June other than some filter socks that needed replaced**

-Any EFSEC-related complaints or violations that occurred.
-Brief list of reports submitted to EFSEC during the monthly reporting period.
Safety Compliance
-Safety training or improvements that relate to SCA conditions.
Current or Upcoming Projects
-Planned site improvements.
-Upcoming permit renewals.

1. **O&M Office Building Permit has been submitted to Yakima County with EFSEC on Copy.**

-Additional mitigation improvements or milestones.

Other

-Current events of note (e.g., Covid response updates, seasonal concerns due to inclement weather, etc.).

-Personnel changes as they may relate to EFSEC facility contacts (e.g., introducing a new staff member who may provide facility updates to the Council).

1. Currently preparing for a transition to Brookfield Operations and a new contact list is in draft and will be provided ASAP.

-Public outreach of interest (e.g., schools, public, facility outreach).

High Top and Ostrea Solar Project

July 2024 project update

[Place holder]

Badger Mountain Solar Energy Project

July 2024 project update

[Place holder]

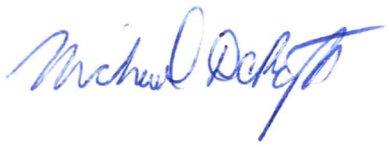
June 27, 2024

Ms. Ami Hafkemeyer, Siting Manager
Washington Energy Facility Site Evaluation Council
PO BOX 43172
Olympia, WA, 98504-3172

Dear Ms. Hafkemeyer,

Avangrid is pausing permitting activities for the Badger Mountain Solar Project for 2-3 months while we re-evaluate public comments, including from our project landowners and affected tribal nations. Avangrid recognizes the importance of obtaining input from stakeholders to ensure our renewable energy projects benefit the communities they operate within for years to come. Please pause all project activities and expenditures until further notice from Avangrid.

Yours Sincerely,



Michael DeRuyter
Senior Permitting Manager

Avangrid Renewables
2701 NW Vaughn St. Suite 300, Portland, OR 97210
Telephone 612.619.7405
www.avangridrenewables.com, michael.deruyter@avangrid.com

Wautoma Solar

July 2024 project update

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Hop Hill Solar Project

July 2024 project update

[Place holder]

Carriger Solar

July 2024 project update

[Place holder]

Wallula Gap Solar Project

July 2024 project update

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Whistling Ridge Energy Project

July 2024 project update

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BEFORE THE STATE OF WASHINGTON

ENERGY FACILITY SITE EVALUATION COUNCIL

	COUNCIL ORDER NO. 893
In the Matter of Docket No. 096000 WHISTLING RIDGE ENERGY LLC WHISTLING RIDGE ENERGY PROJECT	ORDER DENYING APPLICATION FOR TRANSFER AND REQUEST FOR EXTENSION OF SITE CERTIFICATION AGREEMENT; DECLARING SITE CERTIFICATION AGREEMENT EXPIRED

Summary

In this Order, the Council:

(1) Denies Twin Creeks Timber LLC's (TCT's) application for approval of transfer of control of the Whistling Ridge site certification agreement from SDS Lumber Company.

(2) Denies TCT's request for an extension of the site certification's expiration date and declares the SCA expired.

(3) Denies as moot Friends of the Columbia Gorge's petition for an adjudicative proceeding on TCT's transfer and extension requests.

Background

Governor Christine Gregoire signed the Whistling Ridge SCA on March 5, 2012, consistent with the Council's recommendation after an adjudicative hearing and issuance of an environmental impact statement. The Whistling Ridge Site Certification Agreement authorized Whistling Ridge Energy LLC (WRE) and its "parent companies, and any and all assignees or successors approved by the Council" to "construct and/or operate" the Whistling Ridge Energy Project, a wind powered generation facility to be located in Skamania County. According to the March 10, 2009, application for site certification WRE was a subsidiary of S.D.S. Co., LLC, which was an affiliate of SDS Lumber Company. The president of S.D.S. Co., LLC and of WRE was Jason Spadaro.

The Governor's approval of WRE's application for site certification of the Whistling Ridge Wind Energy Project was challenged on various legal grounds by Friends of the Columbia Gorge (Friends) and Save our Scenic Area (SOSA). Approximately twenty months after the Governor signed the SCA, following a final decision by the Washington Supreme Court upholding the Governor's decision, Mr. Spadaro signed the SCA on November 18, 2013.

Friends and SOSA filed another legal challenge in September of 2015, this time to the Bonneville Power Administration's decision granting the Whistling Ridge Energy Project interconnection to BPA's transmission system. That appeal was decided in WRE and BPA's favor by the federal Court of Appeals in July of 2018.

On October 15, 2018, Mr. Spadaro came before the Council at its monthly open meeting and made a short presentation for purposes of compliance with WAC 463-68-060. That rule requires the certificate holder to report to the Council if construction under an SCA has not commenced within five years. In essence, Mr. Spadaro stated there were no changes to the project and no changes in environmental conditions requiring supplemental evaluation. Friends submitted a letter to the Council arguing that WRE was late with its report, contesting WRE's interpretation of the effective date of the SCA, and raising a number of other issues with WRE's filing and presentation. No action was requested by WRE and WAC 463-68-060 allows, but does not require, any action by the Council in response to such a report. Consequently, the Council issued no decision regarding the presentation.

Thereafter, according to TCT, from 2018 to 2021 SDS Lumber Co. (parent company of WRE) fell into internal conflict and dissolved as a company. TCT represents SDS Lumber Co. assets were sold to other companies.

TCT says it acquired a substantial portion of the SDS timberland assets, as well as all membership interests in Whistling Ridge Energy LLC[1] and the property on which the project was to be built, in November of 2021.

WRE (now under the ownership and control of TCT) applied, on September 13, 2023, for approval from the Council for the indirect transfer of control of the SCA. EFSEC rules require such approval when a certificate holder business entity changes ownership.

TCT also requested, preliminarily on March 2, 2022, and finally on September 13, 2023, an extension of the SCA's deadline for start of construction—which WRE argues was November 18, 2023—for an additional three years. TCT counts the ten year expiration from the date that Mr. Spadaro signed the SCA, which was approximately 20 months after Governor Gregoire signed the SCA on March 5, 2012. Friends argues that the SCA expired March 5, 2022, ten years after the Governor's signature and decision to approve the application. TCT submitted its preliminary request for an extension of the WRE SCA to EFSEC just before the SCA would have expired under Friends' theory.

On April 25, 2024, Friends submitted an application for an adjudicative proceeding on TCT's SCA transfer application and extension request.

TCT is an owner and manager of timber lands and not itself a developer of energy projects. It states in its transfer application that it is "developing a memorandum of understanding" with

[1] There is no indication that the WRE business entity has any active business operations. However, it is the entity listed as holder of the site certification agreement. A search of the Washington Secretary of State's corporations filing system shows that Whistling Ridge Energy LLC is and has been duly registered since 2009 and that its current governor is Twin Creeks Timber, LLC.

energy project developer Steelhead Americas to "potentially take a leading or controlling interest in the Project and its further development." If an initial review shows the project to be feasible, TCT and WRE (or a subsequent certificate transferee) would "propose the installation of fewer but taller wind turbine generators and associated facilities within the designated and approved micrositing corridors" and would "update natural resource studies including season-specific data (e.g., avian nesting surveys) and new visual simulations from key viewing areas (KVAs) within the Columbia River Gorge Scenic Area." However, TCT admits that it would need to "fully review the financial and environmental feasibility of constructing the facility prior to commencing any studies." TCT admits the project would not be ready to be built within the three year extension it has requested and that an additional extension of the SCA's expiration date would be needed to present an amendment to the SCA to authorize new turbine design.

Analysis

1. TCT's request for the Council's approval of transfer of control of the SCA fails to meet the requirements of WAC 463-66-100(4).

WAC 463-66-100 provides that no site certification agreement may be transferred, including indirectly through transfer of control of the site certification agreement owner, without Council approval. If the SCA is to be acquired by a change in corporate ownership—as was the case here—the successor in interest must apply to the Council for approval to continue activities under the certificate.

An informational hearing is required on the application, after which the Council may approve the application for transfer of the site certification agreement if the applicant provides an appropriate description of its organization and affiliations, provides adequate financial assurance for site restoration costs (if yet required), demonstrates that it is entitled to possession of the facility or site described in the SCA, agrees to abide by all of the terms and conditions of the SCA, and "has demonstrated it has the organizational, financial, managerial, and technical capability and is willing and able to comply with the terms and conditions of the certification agreement being transferred." WAC 463-66-100(4).

EFSEC rules state that the Council shall issue a formal order either approving or denying the application for transfer of the site certification agreement. If the Council denies the request, it shall state the reasons for its denial. WAC 463-66-100(5).

In this case, because construction of facility has not yet begun, the sole consideration for the Council is whether TCT "has demonstrated it has the organizational, financial, managerial, and technical capability and is willing and able to comply with the terms and conditions of the certification agreement being transferred." WAC 463-66-100(4).

TCT's application fails to demonstrate that TCT itself has the organizational, managerial, and technical capability to construct the Whistling Ridge Energy project. Instead, TCT represents that if the project proves financially viable based on input from a development consultant to be hired by TCT, then the project could be taken over by a project developer like Steelhead Americas.

TCT also essentially concedes its inability to comply with the terms and conditions of the certificate agreement that is proposed to be transferred to its control. First, TCT admits that the project will not be ready for construction even within three years of the already expired ten year deadline for starting construction—thereby necessitating the present request to extend SCA's expiration date and a further request again in three years. Second, TCT admits that the SCA would need to eventually be amended to allow for taller but fewer turbines. Given the history of this project, taller turbines could very well represent a substantial change requiring the governor's approval. The Council already recommended conditioning the project to remove strings of shorter turbines that would have impacted views from the Columbia Gorge Scenic Area. Numerous public commenters, including Friends and SOSA, expressed concern about the potential for greater visual impacts from taller turbines.

Under these circumstances, the Council finds that the transfer request should be denied.

2. Even if the Council were to grant the request to transfer control of the SCA, TCT has failed to provide a compelling basis for extending the SCA's expiration date for start of construction.

WAC 463-68-080 (site certification agreement expiration) provides that:

> (1) If the certificate holder does not start or restart construction within ten years of the effective date of the site certification agreement, or has canceled the project, the site certification agreement shall expire.
>
> (2) If commercial operations have not commenced within ten years of the effective date of the site certification agreement, the site certification agreement expires unless the certificate holder requests, and the council approves, an extension of the term of the site certification agreement.
>
> (3) Upon a request to extend the term of the site certification agreement, the council may conduct a review consistent with the requirements of WAC 463-68-060 and 463-68-070, and other applicable legal requirements.[2]

The most logical reading of this rule is that a certificate holder may request an extension of the ten year deadline for start *of commercial operations,* as stated in subsection (2). But subsection (1) does not expressly allow a certificate holder to request an extension of the expiration date imposed under that subsection based on a failure to even *start construction* within ten years.

SCAs have a ten year termination date because the original environmental review is likely to become outdated within that timeframe, and the original public comment and adjudication topics may not reflect the current concerns of the community. Although environmental impact

[2]Consistent with this, WAC 463-68-030 states: "Subject to conditions in the site certification agreement and this chapter, construction may start any time within ten years of the effective date of the site certification agreement," and the Whistling Ridge Energy SCA provides: "If the Certificate Holder does not begin construction within ten (10) years of the execution of the SCA, all rights under this SCA will cease."

statements can be supplemented with new information, at some point, to honor the public input requirements of RCW 80.50, it is necessary to start the application process anew.

The Whistling Ridge SCA is based on a now twelve year old decision of the Council and the Governor, and EFSEC rules plainly state that an SCA shall expire if construction has not begun within ten years of an SCA's effective date. Although in some circumstances an agency can decline to follow its own rule, it must be able to "explain[] the inconsistency by stating facts and reasons to demonstrate a rational basis for the inconsistency." RCW 34.05.570(3)(h).

There is a dispute about when the Whistling Ridge SCA became "effective," and therefore when the SCA's ten year expiration period began to run.[3] This question is academic at this time because under Friends' interpretation, the SCA expired March 5, 2022, and under WRE's interpretation the SCA expired November 18, 2023. In either case, the SCA expired without the certificate holder starting construction.

An unusual aspect of this SCA is its allowance that *completion of construction* and initiation of operations (called "Substantial Completion") need not be achieved until ten years after exhaustion of appeals of necessary state and federal permits. In essence, the SCA provides what amounts to an automatic extension of time for the *completion* of construction and commencement of operations following state and federal permit appeals, while nonetheless retaining the ten year expiration date for failure to *start* construction. This provision about when construction must be completed is not particularly relevant here, because the certificate holder has not met the ten year deadline for starting construction.

This Council did recently decide that there were valid reasons to grant the holder of the Desert Claim Wind Power Project SCA an extension of deadline to start construction.[4] But in that case, the Project had undergone a public comment process and EFSEC had prepared an addendum to the Supplemental Environmental Impact Statement for a 2018 SCA amendment that authorized the Project's redesign. In addition, the certificate holder was able to represent that it had actively been competing in requests for proposals for power purchase contracts, and was ready and able to proceed with construction as soon as it could secure a power purchase contract.

Without a compelling justification such as this, the Council finds that even if it were to approve transfer of control of the SCA, the extension request should be denied on its merits and the SCA declared to have expired. Expiration of the SCA does not preclude the filing of a new application for site certification for the same or similar project at this site if a new developer should conclude that such a project is viable.

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[3] Although common sense suggests the SCA was effective when signed by the Governor, there is an argument based on the statutory text that the SCA did not become effective, and the ten year expiration date did not begin to run until the applicant's president signed the document twenty months after the Governor signed. Friends argues that "effective date" refers to the date of the Governor's signature of the SCA, while WRE argues that "effective date" and "execution" refer to the date the applicant signs the SCA, following the Governor's signature.

[4] Council Resolution No. 353, Amendment No. 2 to the Desert Claim Wind Power Project Site Certification Agreement, Extension of Term (Oct. 18, 2023).

ORDER

THEREFORE, IT IS HEREBY ORDERED that:

(1) Whistling Ridge Energy, LLC's Application to Transfer Site Certification Agreement for the Whistling Ridge Energy Project to Twin Creeks Timber, LLC, as the new Parent of Whistling Ridge Energy is denied.

(2) Whistling Ridge Energy, LLC's Request to Extend Term of Site Certificate Agreement Pursuant to WAC 463-68-080 is denied.

(3) The Whistling Ridge Energy Project Site Certification Agreement is declared expired, but without prejudice to filing of a new application for site certification for a project at the site.

(4) Friends of the Columbia Gorge's petition for an adjudicative proceeding in the above-captioned matters is denied as moot.

DATED at Olympia, Washington and effective on __ day of July, 2024.

WASHINGTON ENERGY FACILITY
SITE EVALUATION COUNCIL

_____

Horse Heaven Wind Project

July 2024 project update

[Place holder]

Horse Heaven Wind Farm

Mitigation Alternatives

Sean Greene, Environmental Planner

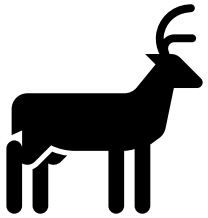
Non-exclusion FEIS/SCA Mitigation for Priority Habitat

- Vegetation-1
  - Requires that tree removal in Priority Habitat will be avoided where possible and mitigated for if necessary
- Vegetation-4
  - Requires an as-built report and revegetation monitoring to ensure that success of revegetation and shrub-steppe restoration
- Vegetation-7
  - Requires the preparation and execution of a Detailed Site Restoration Plan and revegetation plan for Priority Habitat
- Habitat-5 and Habitat-8
  - Require an assessment of indirect habitat loss and alteration, especially to Priority Habitats, and outlines how compensatory habitat mitigation for indirect loss will be developed

Veg-10: Solar Priority Habitat Avoidance

FEIS	Draft SCA
N/A	No solar arrays would be sited on any rabbitbrush shrubland or WDFW-designated Priority Habitat types (shrub-steppe).
Project Reduction	**Project Reduction**
N/A	• 1,092.8 of 10,755.9 acres of proposed solar siting area (10.16%) • 75 of 5,231.3 acres of current proposed solar footprint (1.44%) • Relocation of excluded solar arrays to other areas of the solar siting area could occur during micrositing

Non-exclusion FEIS/SCA Mitigation for Wildlife Movement Corridors



- Wildlife-6
  - Requires maintenance of a road mortality database and adaptive management based on results of impacts to wildlife movement
- Habitat-2
  - Required minimization of transmission line crossing of canyons and draws to reduce potential wildlife movement barriers
- Habitat-7
  - Requires that all Project roadways be removed during decommissioning to restore pre-Project levels of wildlife movement

Hab-1: Wildlife Movement Corridors

FEIS	Draft SCA

All Project components located within Medium+ linkage corridors must:
• be avoided to the extent feasible
• be accompanied by a Corridor Mitigation Plan
  • Adjacent habitat improvements
  • Features to accommodate passage (i.e. culverts)
  • Monitoring
  • Restoration
	• Primary Project components (turbines, solar, BESS) prohibited in Medium+ linkage corridors
	• Secondary Project components (i.e. roads, transmission lines) prohibited in High+ linkage corridors, unless co-located with existing infrastructure
	• Secondary Project components in Medium+ linkage corridors require a Corridor Mitigation Plan

Project Reduction	**Project Reduction**
None	• 30 of 222 Option 1 turbines (13.51%) or 20 of 147 Option 2 turbines (13.61%) • 678.6 of 10,755.9 acres of proposed solar siting area (6.31%) • 0 of 5,231.3 acres of current proposed solar footprint (0%) • 3.4 miles of the 19.4-mile optional 230 kV intertie transmission line (17.53%)

Non-exclusion FEIS/SCA Mitigation for the Ferruginous Hawk

- Wildlife-1
  - Implements a mortality monitoring program and adaptive management strategy
- Wildlife-8
  - Prohibits siting of turbines within 0.25 miles of all documented raptor nests, including ferruginous hawks
- Wildlife-9
  - Requires that vegetation clearing and grubbing during ferruginous hawk breeding periods be avoided where feasible and mitigated for if necessary

Spec-5: Ferruginous Hawk (FH)

FEIS	Draft SCA	Draft SCA Option with 0.6 (1km) Buffer

• Components prohibited within 2 miles of documented FH nests where nesting site is available and foraging habitat is viable
• Components sited within 2 miles of unavailable or non-viable FH nest require a Ferruginous Hawk Mitigation and Management Plan
  • Habitat loss offsets
  • Turbine curtailment
  • Active nest disturbance avoidance
  • Pre-and post-monitoring
• Wild-1, Wild-8, Wild-9 apply
	• Turbines prohibited within 2 miles of documented FH nests
	• Solar arrays and BESS prohibited within 0.5 miles of documented FH nests
	• Components sited within 2 miles of FH nest require a Ferruginous Hawk Mitigation and Management Plan
	  • Habitat loss offsets
	  • Turbine curtailment
	  • Active nest disturbance avoidance
	  • Pre-and post-monitoring
	• Wild-1, Wild-8, Wild-9 apply
		• 0.6 mile (1km) buffer adapted from 2004 WDFW Seasonal Disturbance Guidelines for active FH nests
		• Turbines, solar, and BESS prohibited within 0.6 miles of documented FH nests
		• Components sited within 2 miles of FH nest require a Ferruginous Hawk Mitigation and Management Plan
		  • Habitat loss offsets
		  • Turbine curtailment
		  • Active nest disturbance avoidance
		  • Pre-and post-monitoring
		• Wild-1, Wild-8, Wild-9 apply

Project Reduction	**Project Reduction**	**Project Reduction**
• 0 - 107 of 222 Option 1 turbines (0 - 48.20%) or 0 - 71 of 147 Option 2 turbines (0 - 48.30%) • 0 - 3,306.46 of 10,755.9 acres of proposed solar siting area (0 - 30.74%) • 0 - 639.1 of 5,231.3 acres of current proposed solar footprint (0 - 12.25%) • 0 - 1 of 3 proposed BESS sites (a maximum of 2 BESS are allowed by the Draft SCA)	• 107 of 222 Option 1 turbines (48.20%) or 71 of 147 Option 2 turbines (48.30%) • 1,029 of 10,755.9 acres of proposed solar siting area (9.57%) • 217 acres 5,231.3 acres of current proposed solar footprint (4.15%)	• 12 of 222 Option 1 turbines (5.41%) or 8 of 147 Option 2 turbines (5.44%) • 1,315.29 of 10,755.9 acres of proposed solar siting area (12.23%) • 316.12 of 5,231.3 acres of current proposed solar footprint (6.04%)

Non-exclusion FEIS/SCA Mitigation for Cultural Resources

- Cultural Resources-1
  - Requires that the Applicant maintain ongoing engagement with affected Tribes that, where appropriate, could result in the implementation of relevant and effective mitigation measures
- Cultural Resources-2
  - Outlines required DAHP permitting and/or avoidance buffer areas necessary for identified archaeological and architectural resources of a historic and/or cultural nature, including TCPs, that may be impacted by the Project.

Traditional Cultural Properties

New Mitigation Option 1	New Mitigation Option 2
In 3/2/21 letter, the Yakama Nation identified Webber Canyon as an area of particular concern • This option would prohibit siting turbines within 0.5 mile of Webber Canyon to reduce TCP impacts	In 3/2/21 letter, the Yakama Nation identified Webber Canyon as an area of particular concern • This option would prohibit siting turbines within 1 miles of Webber Canyon to reduce TCP impacts
Project Reduction	**Project Reduction**
• 4 of 222 Option 1 turbines (1.8%) or 7 of 147 Option 2 turbines (4.76%)	• 17 of 222 Option 1 turbines (7.66%) or 17 of 147 Option 2 turbines (11.56%)

Non-exclusion FEIS/SCA Mitigation for Health and Safety (Aerial Firefighting)

- Public Health and Safety-1
  - Requires that turbines be shut down in the event of a major wildfire occurring in an area where fire suppression aircraft may need access near the Project

Public Health and Safety (Aerial Firefighting)

New Mitigation Option 1	New Mitigation Option 2
• Area of historic fires located along ridgeline to the northwest, within and adjacent to Lease Boundary • This option would prohibit siting turbines within the perimeter of one or more historic (since 2000) wildfires	• Area of historic fires located along ridgeline to the northwest, within and adjacent to Lease Boundary • DNR has advised that their firefighting aircraft would provide all turbines with a 0.25-mile standoff buffer • This option would prohibit siting turbines within 0.25 miles of the perimeter of one or more historic (since 2000) wildfires
Project Reduction	**Project Reduction**
• 3 of 222 Option 1 turbines (1.35%) or 2 of 147 Option 2 turbines (1.36%)	• 7 of 222 Option 1 turbines (3.15%) or 7 of 147 Option 2 turbines (4.76%)

Questions?

Goldeneye BESS

July 2024 project update

[Place holder]

Energy Facility Site Evaluation Council

Non-Direct Cost Allocation
for
1st Quarter FY 2025

July 1, 2024 – Sept 30, 2024

The EFSEC Cost Allocation Plan (Plan) was approved by the Energy Facility Site Evaluation Council in September 2004. The Plan directed review of the past quarter's percentage of EFSEC technical staff's average FTE's, charged to EFSEC projects. This along with anticipated work for the quarter is used as the basis for determining the non-direct cost percentage charge, for each EFSEC project.

Using the procedures for developing cost allocation, and allowance for new projects, the following percentages shall be used to allocate EFSEC's non direct costs for the 1st quarter of FY 2025.

Kittitas Valley Wind Power Project	**4%**
Wild Horse Wind Power Project	**4%**
Columbia Generating Station	**20%**
Columbia Solar	**4%**
WNP-1	**2%**
Grays Harbor 1&2	**6%**
Chehalis Generation Project	**6%**
Desert Claim Wind Power Project	**4%**
Goose Prairie Solar Project	**4%**
Horse Heaven Wind Farm Project	**11%**
Badger Mountain	**0%**
CCR High Top	**4%**
CCR Ostrea	**4%**
Wautoma Solar Project	**7%**
Hop Hill	**5%**
Carriger Solar	**5%**
Wallula Gap	**5%**
Goldeneye	**5%**

Date: 7/11/2024

Sonia E. Bumpus, EFSEC Manager