Washington State
Energy Facility Site Evaluation Council
AGENDA

MONTHLY MEETING
Tuesday, December 20, 2016
1:30 PM

1300 S Evergreen Park Drive SW
Olympia, WA 98504
Hearing Room 206

1. Call to Order ..... Bill Lynch, EFSEC Chair

2. Roll Call ..... Tammy Mastro, EFSEC Staff

3. Proposed Agenda ..... Bill Lynch, EFSEC Chair

4. Minutes

Meeting Minutes ..... Bill Lynch, EFSEC Chair

- November 15, 2016

5. Projects

a. Kittitas Valley Wind Project

- Operational Update ..... Eric Melbardis, EDP Renewables

b. Wild Horse Wind Power Project

- Operational Update ..... Jennifer Diaz, Puget Sound Energy

c. Columbia Generating Station

- Operational Update ..... Shannon Khounnala, Energy Northwest

d. WNP – 1/4

- Non-Operational Update ..... Shannon Khounnala, Energy Northwest

e. Grays Harbor Energy Center

- Operational Update ..... Pete Valinske, Grays Harbor Energy

f. Chehalis Generation Facility

- Operational Update ..... Mark Miller, Chehalis Generation Staff
- Title V Air Operating Permit ..... Jim LaSpina, EFSEC Staff

The Council may consider and take ***Final Action*** on issuing the Permit.

g. Tesoro/Savage Vancouver Energy Distribution Terminal

- Project Update ..... Sonia Bumpus, EFSEC Staff

6. Other

a. EFSEC Council

7. Adjourn ..... Bill Lynch, 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 42.30.02

WASHINGTON STATE
ENERGY FACILITY SITE EVALUATION COUNCIL
Richard Hemstad Building
1300 South Evergreen Park Drive Southwest
Conference Room 206
Olympia, Washington
Tuesday, November 15, 2016
1:30 p.m.

MONTHLY COUNCIL MEETING
Verbatim Transcript of Proceeding

REPORTED BY: TAYLER RUSSELL, CCR# 3358

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APPEARANCES

Councilmembers:

BILL LYNCH, Chairman
JAIME ROSSMAN, Department of Commerce
CULLEN STEPHENSON, Department of Ecology
JOE STOHR, Department of Fish and Wildlife
DENNIS MOSS, Utilities and Transportation Commission

Local Government and Optional State Agency:

KEN STONE, Department of Transportation
BRYAN SNODGRASS, City of Vancouver (via phone)
LARRY PAULSON, Port of Vancouver (via phone)

Attorney General's Office:

DAVID STEARNS, Assistant Attorney General

EFSEC Staff:

STEPHEN POSNER
JIM LASPINA
TAMMY MASTRO
SONIA BUMPUS
JOAN AITKEN
AMI KIDDER
HALEIGH MISSILDINE

Guests:

JEFF AYRES, Department of Ecology (via phone)
SHANNON KHOUNNALA, Energy Northwest (via phone)
ERIC MELBARDIS, EDP Renewables (via phone)
JENNIFER DIAZ, Puget Sound Energy
BARB CRAIG, Stohl Rives
HALEY EDWARDS, Puget Sound Energy
PETE VALINSKE, Grays Harbor Energy
MARK MILLER, Chehalis Generation Staff
JUSTIN ALLEGRO, Washington Department of Fish & Wildlife

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OLYMPIA, WASHINGTON; NOVEMBER 15, 2016
1:30 P.M.
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PROCEEDINGS

CHAIRMAN LYNCH: Good afternoon. Today is November 15th, it is 1:30, it is the regular monthly meeting of the Energy Facility Site Evaluation Council. Could we please have the clerk call the roll.

MS. MASTRO: Department of Commerce.

MR. ROSSMAN: Jaime Rossman is here.

MS. MASTRO: Department of Ecology.

MR. STEPHENSON: Cullen Stephenson, here.

MS. MASTRO: Department of Fish and Wildlife.

MR. STOHR: Joe Stohr is here.

MS. MASTRO: Natural Resources.

CHAIRMAN LYNCH: Mr. Siemann is going to try to call in.

MS. MASTRO: Utilities and Transportation Commission.

MR. MOSS: Dennis Moss is here.

MS. MASTRO: Local Government and Optional State Agencies Department of Transportation.

MR. STONE: Ken Stone, here.

MS. MASTRO: City of Vancouver.

MR. SNODGRASS: Bryan Snodgrass is on the phone.

MS. MASTRO: Clark County.

CHAIRMAN LYNCH: Not sure if Mr. Shafer is available or not. He's excused if he's not here.

MS. MASTRO: Port of Vancouver.

MR. PAULSON: Larry Paulson is on the phone.

MS. MASTRO: Chair, there is the quorum for the regular Council and for the Tesoro Project Council.

CHAIRMAN LYNCH: Great. Thank you.

If I could just have the Councilmembers take a look over the proposed agenda, see if they have any other items that they are -- would like to add, and just for your information, we're going to take some time at the very end regarding the Wild Horse Wind Power Project. We got some people here to give us an update on the eagle incident, so that will be taking some time at the end of our Council meeting.

We do not have any action items today. Just so you know, regarding the Chehalis Generation Facility, the Title 5 Air Permit update. Previously, we had given our approval to this measure pending no significant changes by EPA, any significant comments by EPA. EPA

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has commented and we'll get an update about that. But just to be on the safe side with everything, we're going to actually at our December -- December is when the final comment period will be for -- for EPA. It's either the end of this month or early December, but anyway, I will be asking for the Council to take action on the Title 5 Air Permit at our December Council meeting and not today. So I am just saying that now because there were some various versions of our agenda floating around, and I'm not sure if you were having questions about that, but I just wanted to flag that.

So with that, if there's anybody on the phone who has not identified themselves already who is affiliated with our -- first of all, with our projects, if you'd like to identify yourself now though you're not required to.

MR. AYRES: This is Jeff Ayres, Department of Ecology Nuclear Waste Program.

MS. KHOUNNALA: Shannon Khounnala, Energy Northwest.

MR. MELBARDIS: Eric Melbardis, EDP Renewables.

CHAIRMAN LYNCH: Anyone else? Okay. Very good.

And let's turn our attention to the proposed

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minutes for -- we've got two sets of minutes in front of us. Excuse me. First of all, there were -- there's meeting minutes for October 18th for our regular meeting, and then we've got meetings for -- the minutes for a special meeting on October 26th that we also need to approve. Let's approve those with two separate motions. I have had a chance to look through the minutes and they seem fine with me.

MR. STEPHENSON: Chair Lynch, I will move to approve the meeting minutes from Tuesday, October the 18th.

CHAIRMAN LYNCH: Councilmember Stephenson has moved for approval of the minutes for October 18th, do we have a second?

MR. MOSS: I will second it.

CHAIRMAN LYNCH: Councilmember Moss has seconded it. All those in favor say "Aye."

COUNCILMEMBERS: Aye.

CHAIRMAN LYNCH: Minutes from October 18th are approved. And now for -- I would entertain a motion for the minutes -- approval of the minutes for the special meeting on October 26th.

MR. MOSS: Chair Lynch, I'd move for approval of the minutes of the meeting October 26th, 2016, as transcribed.

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CHAIRMAN LYNCH: Do we have a second?

MR. STONE: Second.

CHAIRMAN LYNCH: It's been moved and seconded that we approve the Council minutes for a special meeting on October 26th. All those in favor say "Aye."

COUNCILMEMBERS: Aye.

CHAIRMAN LYNCH: Motion carries.

So let's go ahead and turn to our updates on our projects, and we will first hear from Mr. Melbardis with Kittitas Valley Wind Project.

MR. MELBARDIS: Good afternoon, Chair Lynch, EFSEC Council. This is Eric Melbardis for the EDP Renewables for the Kittitas Valley Wind Power Project. There was nothing bad or routine to report for the month of October. The site is running smoothly, and we're well-prepared for our winter and winter season.

CHAIRMAN LYNCH: Very good.

Any questions for Mr. Melbardis regarding the Kittitas Valley Wind Project?

Thank you, Mr. Melbardis.

Ms. Khounnala, the -- could you give us an update on the Columbia Generating Station?

MS. KHOUNNALA: Good afternoon, Chair Lynch and members of the Council. This is Shannon Khounnala

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with Energy Northwest. In regard to Columbia Generating Station, we have no nonroutine items to report for the month of October. We did submit our Evaporation Pond Overflow closeout report to EFSEC, and I believe Jim will lead the discussion with the Council on that matter and happy to report with any additional questions.

CHAIRMAN LYNCH: Okay. Any questions for Ms. Khounnala? And we will take up the Evaporation Pond Overflow update following the update from WNP 1/4.

Please proceed, Ms. Khounnala.

MS. KHOUNNALA: Understood. So in regard to WNP 1/4, we continue to work with the Department of Energy on the NEPA environmental assessment. The cultural resource review was completed last month and submitted to the Tribes in the state. We do have a meeting tentatively scheduled for early December to work through some additional questions that the Tribes have.

In parallel to that effort, the NEPA environmental assessment documents need to be in preparation by the Department of Energy. So that process is ongoing and no other items to report on WNP 1/4.

CHAIRMAN LYNCH: Thank you, Ms. Khounnala.

Any questions for Ms. Khounnala regarding WNP 1/4?

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Now we will turn to our Staff. Mr. LaSpina, if you want to update us regarding the Evaporation Pond Overflow.

MR. LASPINA: Good afternoon, Chair Lynch and Councilmembers. In your meeting packets is a report by Energy Northwest in a memo to the Council describing an unauthorized wastewater discharge from Energy Northwest Evaporative wastewater treatment pond system. This treatment system is regulated by the NPDES permit issued by the Council to Energy Northwest in September 2014. The Energy Northwest report describes the details of the discharge incident and Energy Northwest proposed corrective actions.

The memo to the Council describes the regulatory background of the incident and the finding of EFSEC's compliance contractor, the Department of Ecology. In response to the incident and based on Ecology's recommendation, EFSEC's plan is to issue a warning letter to Energy Northwest. With the issuance of the warning letter, this matter will be closed pending the submittal of an approval of the revised O&M Manual.

I would be happy to answer any questions you may have.

CHAIRMAN LYNCH: Before we get to questions,

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I would like to add a little bit to Mr. LaSpina's presentation. The Department of Ecology as indicated in the report, reviewed the incident and agrees with the corrective action but recommends no penalty be issued for this incident. Essentially, it was a case where the flocculent just kept building up over time and eventually there ended up plugging the -- the -- the valve, the -- that the -- that the flocculent flowed through to the pond, and it was something that was not foreseen. And I had Mr. LaSpina and myself just use that one particular penalty criteria that we had adopted either last year or the year before, I don't remember, and we both went through it independently and saw no -- using that criteria, saw no grounds for the issuance of a penalty.

There would be a -- so I'm -- we're both agreeing with Department of Ecology's recommendation of issuing a warning letter, and just so you know, you might question as well do we have authority to issue warning letters. Well, we don't have anything specifically in our policy or regulations that talk about warning letters, but if you're authorized to do X, you're authorized to do something somewhat less than X.

So -- and some of you might remember we had discussions right before the Tesoro adjudication began

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about doing some -- that final step for enforcement authority and that included -- and I actually put together a draft enforcement policy that laid out some additional steps, and that included informal enforcement by Staff such as the issuance of warning letters. And warning letters actually do serve an important function because it indicates that, yes, you are on notice of a particular incident and if something -- if this were to occur again, that's definitely something that you were put on notice about and would lead to a penalty. So they're not -- they do have an important function.

So I am hoping that when we get this Tesoro project out the door in the spring, that we can pick this up again and finish the final few pieces that remain on enforcement that would clarify this one piece that we're doing today. I think we have the authority to do it, it's just not specifically called out.

Any questions for either Mr. LaSpina or myself or Ms. Khounnala regarding the Evaporation Pond Overflow?

Yes, Councilmember Stohr.

MR. STOHR: Mr. Chair, I am -- concur with the warning letter. And I am just curios as to whether this triggers any kind of Nuclear Regulatory Commission at your activity. I understand it was backlash from a

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portable water filter plant, but are there any other agencies involved, regulatory agencies involved?

CHAIRMAN LYNCH: Mr. LaSpina?

MR. LASPINA: No, sir. The discharge occurred -- the evaporative ponds are regulated by the NPDES Permit and the NRC has nothing to do with that.

MR. STOHR: Great. Thank you.

CHAIRMAN LYNCH: Any additional questions? Thank you.

Let's go turn to the Grays Harbor Energy Center and the dynamic Mr. Valinske is here.

MR. VALINSKE: Good afternoon, Chair Lynch, EFSEC Council. My name is Pete Valinske, I'm the plant manager at Grays Harbor Energy. We have nothing out of the ordinary to report, but I would like to bring your attention to one item in our -- in our report and that was that the cooling tower monitor -- cooling tower replacement project will begin on Monday, the 21st of November. Our contractor will be mobilizing for that. And that's all I have.

CHAIRMAN LYNCH: Excellent.

Any questions for Mr. Valinske regarding the Grays Harbor Energy Center?

Good to see you, thank you.

MR. VALINSKE: Thank you.

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CHAIRMAN LYNCH: Now if we could hear from the equally dynamic Mr. Miller for the Chehalis Generation Facility.

MR. MILLER: Good afternoon, Chair Lynch, and Councilmembers. I'm Mark Miller, the plant manager of PacifiCorp Generation Facility. I apologize for not having been to your recent EFSEC meetings. It's been a while. I have a couple of nonroutine comments to provide and a couple of questions.

The last of the approved energy efficiency carbon mitigation projects are beginning the design engineering phase, so we issued a purchase order last week to our engineer, Burns & McDonnell, so that's proceeding as promised.

The Washington State Fire Marshal conducted a site inspection and noted six issues that required maintenance attention. One item remains to be addressed. This is replacing a number of defective sprinklers that surround our 500,000 volt transformers, the step-up transformers. So we will not be able to address those until an outage is planned and those are taken out of service the 1st of May next year.

Regarding the questions that, Chair Lynch, you spoke to Title 5 discussion being continued to the next EFSEC meeting, I will defer -- after speaking with

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Staff, Mr. LaSpina, I will defer my questions regarding those until then. And that's all I have.

Any questions?

CHAIRMAN LYNCH: Any questions for Mr. Miller?

I have got a question with regarding -- you said there were defective sprinklers, are those --

MR. MILLER: Defective.

CHAIRMAN LYNCH: I'm sorry?

MR. MILLER: Defective sprinklers.

CHAIRMAN LYNCH: Didn't I said that?

MR. MILLER: I thought you said effective. Sorry.

CHAIRMAN LYNCH: Oh, I'm sorry. Yeah, we're on the same page.

MR. MILLER: Okay.

CHAIRMAN LYNCH: Were those defective sprinklers, are those something that get periodically tested or -- I am just kind of curious.

MR. MILLER: As far as operating the deluge system which surrounds the transformers, there is no routine testing except when they are put into service. What's unusual about the transformer that has the -- the one of the three step-up transformers that has the system on it, they've been recently actuated with the

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sudden pressure event, which is the explosion and fire that happened a couple years ago. So they've been recently tested by an actual fault, but no routine testing as far as operating the -- spraying water on these transformers.

CHAIRMAN LYNCH: So how were they determined to be defective, then?

MR. MILLER: Just by physical inspection where the inspector can see that there are, you know, some of these, like sprinklers in this room, some of the pieces have been broken off, so there wasn't -- wouldn't be a uniform spray pattern.

CHAIRMAN LYNCH: I see, and is that --

MR. MILLER: That's just physical observation.

CHAIRMAN LYNCH: Mm-hmm. And that would be something that would be -- and assuming that's something he looked at, that's something the fire marshal looks at at each annual inspection?

MR. MILLER: Correct, so there are a number of others, some 20-some throughout the plant that's a simple maintenance evolution of unscrewing and screwing in new ones. And these we can't access because they're within the 20-foot minimum distance for approach to 500,000 volts.

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CHAIRMAN LYNCH: Okay. Any other questions for Mr. Miller?

MR. STEPHENSON: Let me ask one.

CHAIRMAN LYNCH: Yes, Councilmember Stephenson.

MR. STEPHENSON: Thank you, Mr. Chair.

Mr. Miller, is there now a plan in place -- since the fire marshal could see these on inspection, is there a plan in place for plant personnel to look at those on a routine basis so that this doesn't happen again?

MR. MILLER: Since this inspection, we have added a number of preventative maintenance processes and procedures in our -- in our enterprise software which, you know, oversees not just the finance but also the maintenance activities. So they routinely pop up either monthly, quarterly, or even weekly. So yes, that has been added to that PM schedule, preventative maintenance.

CHAIRMAN LYNCH: And would you mind just sending a brief summary of those to Mr. LaSpina afterwards just to say here's the sorts of things that we'll be doing now.

MR. MILLER: Yeah, absolutely. I think Mr. LaSpina was copied on the report from the fire

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marshal, if not, but I will ensure that our response back with the fire marshal. And his reinspection actually is going to occur next week prior to Thanksgiving holiday.

CHAIRMAN LYNCH: Okay. Very good. Thank you.

MR. MILLER: Great.

CHAIRMAN LYNCH: Now if we can have an update on the Tesoro/Savage Vancouver Energy Distribution Terminal. Excuse me, Mr. LaSpina.

MR. LASPINA: Title 5 update.

CHAIRMAN LYNCH: Oh, yeah, you were going to give us the update. I'm sorry.

MR. LASPINA: Good afternoon, Chair Lynch and Councilmembers. Over the last nine months, EFSEC Staff has been working with our permitting contractor, Clint Lamoreaux, of the Southwest Clean Air Agency on the Title 5 Permit renewal. That is an air emissions permit. Public notice for the draft permit began on August 25th and ended on September 26th. Comments were received from only one party, the U.S. Environmental Protection Agency. The comments were of an administrative nature and quickly resolved by EPA and Clint.

At this time, EPA is conducting its final

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review of the proposed Title 5 Permit. EPA's review will conclude on or about November 25th. At the December Council meeting, you will have the opportunity to discuss all of EPA's comments and EFSEC's responses to those comments.

Thank you.

CHAIRMAN LYNCH: Thank you.

Any questions for Mr. LaSpina?

And we don't anticipate, since EPA's already looked at this and commented, we don't anticipate getting much back, if anything; is that correct?

MR. LASPINA: Well, there will be different people reviewing it, so we could conceivably get another comment.

CHAIRMAN LYNCH: Okay. Thank you.

And now we are ready for the Tesoro/Savage Vancouver Energy Distribution Terminal update.

Ms. Bumpus.

MS. BUMPUS: Thank you. Good afternoon, Chair Lynch and Councilmembers. Just a few things, not a whole lot to update here. For the SEPA update Cardno's working to incorporate new and updated information and analysis into what will be the preliminary draft final EIS for EFSEC to review. As you know, we've been working on a schedule for the EIS with

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Cardno, and I want to share with you that we do expect to have our first chance at a comprehensive internal review of a preliminary draft in early January. And this will include a legal review by EFSEC's AG and EFSEC Staff, and I will keep you updated on milestones that follow as we get closer to that milestone.

That's all I have on SEPA. Are there any questions before I move on to permits?

CHAIRMAN LYNCH: Any questions for Staff regarding SEPA?

MR. ROSSMAN: I do have a question.

CHAIRMAN LYNCH: Councilmember Rossman.

MR. ROSSMAN: So we would see it in January after those other reviews. We won't be reviewing in parallel; is that correct?

MS. BUMPUS: Correct.

MR. ROSSMAN: Thank you.

CHAIRMAN LYNCH: Please proceed.

MS. BUMPUS: Okay. For the update on the NPDES Stormwater Industrial Permit, EFSEC received some additional information that we requested from the applicant the end of October, and our Ecology contractor is reviewing the information. We'll continue to work with the applicant to get more information, but we do have a few of -- of the preliminary draft documents for

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that permit that are being looked at by EFSEC Staff. So we're getting close there, and I will keep you updated on our progress with that. But with these things and as we saw with the construction permit, we will typically go through multiple rounds of internal review and as things come up, questions come up, we go back to the applicant and ask for more information so that we can keep going. So I expect this will go much the same way so I will keep you updated.

For the NPDES Stormwater Construction Permit, that permit went out for -- or the draft permit went out for public comment on October 31st and the public comment period ends on November 29th, which is also the day we're having the public meeting for that permit to receive public comment. And that's going to be at the Clark College campus at the Geyser Hall Center. And I wanted to let Councilmembers know that as of today, on our online commenting system, we have approximately 20 comments that we've received on the permit so far. We have not received any by mail yet.

CHAIRMAN LYNCH: And we're hoping that people who comment keep their comments focused on the Construction Stormwater Permit.

MS. BUMPUS: Yes.

CHAIRMAN LYNCH: In fact, that's what I'll

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be doing when we have our hearing in Vancouver at Clark College, I will be -- and I will be presiding, I'll be ensuring the people keep their comments focused on the Construction Stormwater Permit. Please proceed.

MS. BUMPUS: Okay. The last update I have on permits is related to the notice of construction permit. EFSEC Staff completed an internal review of some of the preliminary draft permit documents. We have provided that back to our air permit contractor at the Southwest Clean Air Agency, and we're expecting to receive that shortly, and we'll look at the updated version of the permit. And it, too, will go through multiple rounds of internal review including legal review before we would provide that to Council to look at.

So with all of these permits, like I said before, I will keep you updated on our progress and let you know in advance with the -- give you some information about time frames of when you'll be looking at draft permit documents.

CHAIRMAN LYNCH: Any questions for Ms. Bumpus? And Mr. Posner and Ms. Kidder have anything to add today?

MS. BUMPUS: I don't think Ami has anything to add.

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MR. POSNER: No, I have nothing to add.

CHAIRMAN LYNCH: Okay. Any questions for Staff regarding the Tesoro/Savage Vancouver Energy Distribution Terminal?

Very good. And at this point in time, I would like to call up the -- our guests today. I believe we have Ms. Edwards and Ms. Craig and along with Ms. Diaz?

MS. DIAZ: Yes.

CHAIRMAN LYNCH: Yes, please.

MS. DIAZ: I will start. Thank you, Chair Lynch and Councilmembers. For the record, can you hear me?

MS. MASTRO: Press the button on that microphone.

MS. DIAZ: Can you hear me now? Okay. For the record, my name is Jennifer Diaz. I'm the project manager for Puget Sound Energy at the Wild Horse Wind Facility in Ellensburg, Washington. I'm going to provide for you today a routine update on operations and maintenance of the facility, and then Barb Craig from Stoel Rives and Haley Edwards, our senior resource scientist from Puget Sound Energy, will come forward and provide a more detailed update on the most recent eagle incident at Wild Horse as well as the federal process

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for obtaining an Eagle Take Permit and where we're at for that.

So for the routine update for safety, there are no lost-time accidents or safety illnesses or injuries to report for October. PSE did conduct an internal safety audit on October 19th and no major findings were identified. The hunting season, the general elk hunting season just concluded on November 8th. It was a very successful season this year with over 600 hunters coming through the facility. We implemented the new hunting plan that TAC reviewed and that EFSEC approved, which included new online permits for hunters and it went very well. The program was very smooth. We received great feedback from the hunting community saying that the overall hunting was successful. The safety issues went down and the quality of hunt had gone up, so that's what we were hoping to achieve with the new plan.

For weed control, roadsides and roads and turbine pads and foundations were treated with sterilants to control the speed of weeding vegetation. And then a plant, total plant outage, was scheduled the last week of October to repair four off-site transmission line poles and to perform maintenance in the substation.

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And that's all I have for the routine update. Are there any questions before Barb Craig comes up?

CHAIRMAN LYNCH: Any questions for Ms. Diaz?

MS. DIAZ: Okay. I'll turn it over to Barb. And you all have this on your screen, too, right? Can you see that?

CHAIRMAN LYNCH: Yes, at least I do.

MS. DIAZ: We have hard copies as well. Would you like hard copies of the presentation?

CHAIRMAN LYNCH: They are in our packets.

MS. CRAIG: Good afternoon, Chair Lynch and Staff. I gave a presentation like this I think it was maybe a year and a half ago, but there's updates, and then I was going to provide just the -- the context for Haley, who is our expert, from her scientific perspective and also leading the permitting process for the Wild Horse Eagle Permit. So feel free to go ahead and interrupt me if you have any questions.

So there's three federal laws that protect avian species in the United States, the Endangered Species Act, the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act. The Bald and Golden Eagle Act protects bald eagles and golden eagles, and it protects take of the eagles, of their nests and eagles'

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eggs as well as -- unless there's, of course, a permit.
So there's more notoriety and attention these days given to Bald and Golden Eagle Protection Act in part because Fish and Wildlife Service was successful in recovering bald eagles and they listed the bald eagle. Its decline was primarily BDT, elimination of that, the population rebound.
So as a result of the delisting of the bald eagle, Fish and Wildlife Service wanted an ability to continue to conserve and regulate, and it no longer felt like -- and it seems a little ironic, but as a result of the delisting under the Endangered Species Act.
So in 2009, for the first time, Fish and Wildlife Service worked on an incidental permit under the Eagle Act so it would have jurisdiction. And it went into effect in 2009, but it was slow to actually get guidance for folks trying to apply for the permit until April of 2013. And in 2009, the authorization of the regulation for Eagle Take Permit incidental to other lawful activities was a five-year permit.
So in 2013, the Fish and Wildlife Service decided that they had gotten a lot of feedback, that five-year permit, you're almost finished getting the permit when it's subject to renewal, so they extended the Eagle Take Permit to a maximum of 30 years, and the

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issuance of an Eagle Take Permit was going to be subject -- is still subject to federal NEPA evaluation and consideration. But that was challenged by the American Bird Conservancy and was successful as it related to the NEPA challenge.
And so the district court remanded it back to the Fish and Wildlife Service and just last week, the Fish and Wildlife Service released its final EIS. We still don't have a final permit rule. There's a 30-day window of comment as it relates to the EIS, but they're making progress. They're hoping -- Fish and Wildlife Service is hoping to have a new 30-year permit rule available by the end of the year. So that's actually an update from this because there is a proposed rule, but it's just not final.
So PSE's been consulting with Fish and Wildlife Service for some time. Originally applied for a 30-year permit, but then that was invalidated or remanded back, and so we've continued to pursue the Eagle Take Permit without really -- since it's -- you evaluate the project as well as the permit under -- for the life of the project whether you're getting a 30-year permit or you're getting a five-year permit subject to renewal. We've -- we've -- from a scientific perspective and comprehensive business perspective,

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we've -- taking a look at the full terms, so hopefully it will be an easy transition under the new rule that we anticipate soon.
And we have been working closer with Fish and Wildlife Service as well as outreach to the State on the development of the Eagle Conservation Plan. This is what Haley will spend more time talking about. If you have questions, she's clearly our expert, and we've also been working on an applicant, prepare an environmental assessment to accompany the Eagle Conservation Plan to assist the service in its compliance approach. They're understaffed and so having that draft EA for them to review and approve hopefully should expedite the process.
And PSE's met with Washington Department of Fish and Wildlife and has discussed the Eagle Conservation Plan process and development and continues to routinely update the TAC.
So I'm happy to take questions, but Haley will provide more depth, so either way.
CHAIRMAN LYNCH: Any questions for Ms. Craig at this time? Thank you.
At this time, then, Ms. Edwards.
MS. EDWARDS: Good afternoon, Chair Lynch, Councilmembers. For the record, my name is Haley

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Edwards, and I am the senior resource scientist with Puget Sound Energy and support the Avian Protection Program. And I'm going to start out by giving a little bit of an overview of the project in general and then we will talk more about eagles.
CHAIRMAN LYNCH: Do you mind pulling the microphone a little closer to you, please.
MS. EDWARDS: Sure.
CHAIRMAN LYNCH: Thank you.
MS. EDWARDS: So just a brief overview if you're not familiar with the project. We have 127 Vestas V80 1.8 MW wind turbine generators for the original project area, and then 22 Vestas V80 2.0 wind turbine generators in the expansion area. And the overall project footprint is 11,000 acres. We have approximately 38 miles of new or improved roads and about a hundred miles of underground 34.5 kV electrical distribution lines and then less than one mile of overhead 34.5 kV electrical lines.
CHAIRMAN LYNCH: Excuse me, if I could have you slow down a little bit.
MS. EDWARDS: Sure.
CHAIRMAN LYNCH: Thank you.
MS. EDWARDS: So this is a map of the Wild Horse Wind Facility here. The shaded red area is the

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original project area, which became operational in December of 2006, and the area to the north of that that isn't shaded as much is the expansion area which went operational in November of 2009. So to give the timeline there.

So this next map shows the locations of the four eagle incidents that we've identified since the project became operational. You can see they're all generally in the same area. And let's see, so the one that's in the center was the most recent location.

So on Monday, September 26th, Vestas' technicians incidentally discovered the remains of an immature golden eagle during a routine turbine maintenance at Turbine N-4. Vestas notified the site -- the on-site environmental manager, Jennifer Diaz, immediately, who responded by reporting all of the incident data. She collected the bird and notified myself and the other Avian Protection biologists. All the proper notification procedures were followed as per our Special Purpose Utility Permit, our Wildlife Incident Handling and Reporting System and -- and our Site Certification Agreement.

So that included notification to the U.S. Fish and Wildlife Service, Regional Migratory Bird Permit office, notification to the U.S. Fish and

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Wildlife Service Office of Law Enforcement, and notification to the EFSEC and TAC representative, Jim LaSpina, as well as notification to the Washington Department of Fish and Wildlife biologist and TAC member Justin Allegro, and Fish and Wildlife Service biologist and TAC member Steven Lewis.

So as I mentioned, this is the fourth golden eagle found at Wild Horse since the project began operation. The first eagle fatality incident involved two immature golden eagles that were also discovered incidentally and that was in June of 2014, and they were found near Turbine F-4 [sic]. The second incident involved one immature golden eagle that was discovered by a WEST biologist while they were doing eagle fatality monitoring on site in April of 2015 at Turbine O-2, which is approximately one mile west of the previous incident location. And for all of these incidents, we've followed similar notification and response procedures.

So I wanted to talk a little bit about PSE's Avian Protection Program. We have a history of cooperation with U.S. Fish and Wildlife Service in responding to avian incidents in general and then eagles in particular. We do have eagle incidents that occur on our power lines as well. We have a very good and

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long-standing relationship with Fish and Wildlife Service regarding eagle incidents.

We've had a formal avian protection program with them since 2000, but we've been implementing measures that protect birds since the 1970s. And we have revised our avian protection plan in 2013. And then in 2014, we developed Bird and Bat Conservation Strategies for each of our wind facilities which are consistent with the Fish and Wildlife Service Land-Based Wind Energy Guidelines.

And to add to that, in response to the previous incidents, we are still working through the Fish and Wildlife Service law enforcement process, their federal legal process, under the Bald and Golden Eagle Protection Act, and we are working to resolve the prior take, which is under the purview of the Fish and Wildlife Service and their solicitor's office. We are currently in the settlement process to resolve this past take and so this most recent eagle will be considered as part of that.

In October of 2015, PSE contributed funding to two different entities in an effort to take some proactive action proactively to resolve the takes, and we have asked that these contributions be considered as part of the settlement process with Fish and Wildlife.

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We contributed funding to Hawk Watch International to support a study that they were doing looking at eagles and vehicle road strikes, and we also contributed funding to the Blue Mountain Wildlife Rehab Facility.

So this is just a list of the wildlife studies that have occurred at Wild Horse. We did all the preconstruction baseline surveys that were part of the guidance provided by Washington Department of Fish and Wildlife at the time. We did raptor nest surveys, we did sage-grouse lek surveys and avian use surveys.

And then for our postconstruction monitoring, we monitored the original project in 2007 and again in 2010 and the expansion area that was in 2010 and then again in 2012. We did raptor nest surveys both in 2008 and 2011, and no eagle nests were identified during those surveys. And then we repeated the sage-grouse lek surveys in 2008 and did additional habitat monitoring for five years.

And then just this past year, we did some additional eagle fatality monitoring and eagle use surveys to look specifically at how eagles are using the site and try to identify any fatalities.

So as Barb mentioned, we've been working on an Eagle Conservation Plan which gets folded into our

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Eagle Take Permit application since 2014. We have the four golden eagle fatalities, and the Eagle Take Permit would provide a framework that would address fatalities that would occur in the future and ensure that our actions are consistent with the Fish and Wildlife Service Goals for protection of eagles.

The Eagle Conservation Plan guidance, as Barb also mentioned, has been available since 2013, so it wasn't available at the time when we were siting the projects or during the early operation of the projects.

This just provides an outline for the different parts that compose the Eagle Conservation Plan, so it's a summary of all the baseline studies and conservation measures we've implemented through the FDA, additional sage-grouse conservation measures, all of our postconstruction monitoring, and et cetera. It also includes a risk assessment that's consistent with the U.S. Fish and Wildlife Service Eagle Conservation Plan guidance and their take prediction model using the results of the studies that have been done at Wild Horse.

It includes a plan for mitigation and offsetting compensatory mitigation and other potential mitigation options for the original project because it was considered in the Fish and Wildlife Services'

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assessment of the population baseline. There is a little more flexibility when you're looking at mitigation options for the original project, and then also a monitoring plan going forward that we would be implementing as part of the Eagle Conservation Plan. And then there's an adaptive management piece, as well, and additional conservation measures that we would implement if the level of take nears the estimated threshold.

And then, again, as part of the ECP development and to support our eagle fatality estimate, we implemented the one year of eagle fatality monitoring, so they were looking at every turbine monthly to identify any eagle, and we just had that one that was found during that year of studies. And we just provided that report to the TAC, as well.

Here is an overview of the timeline. We submitted the Draft ECP to Fish and Wildlife in December of 2014, and we have received comments from them. We've been working through revisions, and as Barb also mentioned, we've been working on the draft Environmental Assessment for the ECP, and we are in the process of making revisions to the Preliminary Draft EA and the ECP as well. And then we are also working with the Fish and Wildlife Service. They are providing us some additional

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input.

We have been holding biweekly conference calls with Fish and Wildlife Service to discuss ECP progress and provide updates, and we've also met in person several times to review their comments and discuss the process and different elements to the ECP. We also meet annually with the Fish and Wildlife Service law enforcement and additionally as needed in response to other eagle incidents. We have also been coordinating with the Department of Fish and Wildlife, and we have coordinated with them on portions of the eagle conservation plan and potential opportunity for partnership and mitigation. Since 2012 we've been working with them on eagle issues.

In August of 2016, PSE met with Matt Stuber who is the Fish and Wildlife Service regional eagle coordinator and our local representative, Steven Lewis, along with Justin Allegro, Mike Ritter, Bret Renfrow, Scott McCorquodale and Jim Watson from Department of Fish and Wildlife to discuss our Eagle Conservation Plan and provide an update. And we've begun coordinating with them on potential mitigation options and efforts that provide benefits to golden eagles in Washington State. And we continue those conversations.

PSE has helped support Washington Department

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of Fish and Wildlife's golden eagle nest surveys in 2013 and 2014. And, let's see, and we just continue to coordinate with them, and I have some more information about that here, too.

As far as the TAC goes, we've met at least once annually since 2006, we met with Steven Lewis, our Fish and Wildlife Service TAC member and Corky Roberts, who was formerly our U.S. Fish and Wildlife Service law enforcement agent in March of 2014, to provide an overview of our Avian Protection Program and to provide all of the supporting documents. Steven Lewis was new to our TAC at that time, so we provided information to him to help him become familiar with the project. And we've notified them within 24 to 48 hours of every eagle incident that we've identified.

In 2014 -- in July of 2014, the TAC met in person and discussed the June 2014 eagle incident, PSE's plan to develop the ECP and apply for an eagle take permit and we provided background information from the baseline avian surveys and raptor nest surveys and the postconstruction monitoring. In February of 2015, PSE held the annual TAC meeting by conference call. The TAC discussed the Draft Wild Horse ECP, the proposed eagle fatality monitoring protocol, and PSE provided a status update regarding the Eagle Take Permit process.

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In April of 2015, PSE notified law enforcement within 24 hours of the eagle incident as we stated for our permit, and also provided notification to the Fish and Wildlife Service and Department of Fish and Wildlife TAC members. And then in April of 2015, PSE provided an eagle update to the TAC including the April -- oh, I'm sorry, including the eagle incident and also inform the TAC of the corrective action PSE had taken in an effort to resolve the eagle incidents. So I'm sorry, that was January of 2016 that we had that update.

And then in October of this year, we provided an email update to the TAC, which included notification of the 2016 eagle incident, a brief summary of the eagle fatality monitoring study, and the eagle use surveys, and we provided the Wild Horse Eagle Report from those recent studies that were completed.

So the next steps, we will complete the revisions to the Draft ECP and submit them to Fish and Wildlife Service. We will also complete the Draft Environmental Assessment and submit that to Fish and Wildlife Service for their review and input. And then Fish and Wildlife Service will provide the final Draft EA for public review and comment, and then they will work to prepare the final EA and then make a

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determination of whether or not to issue an Eagle Take Permit.

So that's all I have. Are there any questions?

CHAIRMAN LYNCH: I believe there are some questions. And I will start first.

Thank you, Ms. Edwards. I have a little trouble understanding how these different groups come together. I understand that you work on a conservation plan with U.S. Fish and Wildlife Service and that will eventually lead to an Eagle Take Permit, but I'm not quite sure how the -- how the state Fish and Wildlife fits in with that and how the TAC fits in with everything, or is it that they're just worried about the particular incident and what's appropriate mitigation or -- in fact I'm -- our Haleigh, do you mind letting Ms. Craig just sit up next to -- yeah, thank you.

MS. EDWARDS: I understand the confusion.

CHAIRMAN LYNCH: I just want to see how they -- I've got a pretty good sense of the U.S. Fish and Wildlife Service role, but I'm not quite sure how our state and the TAC fits in with that.

MS. EDWARDS: Yeah, and I think we're kind of still working through that. From my perspective, for one, we try to look at the two processes separately. So

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one is involving past take and dealing with the fatalities that we've identified, and then the other piece is working on the Eagle Conversation Plan and trying to obtain the permit. They are both federal processes through the Fish and Wildlife Service. However, we feel that it -- it's beneficial to work with the State as well to understand the measures that we can take that will provide benefits to eagles in our area, and they also provide information on the local eagle population.

So I don't know if...

MS. CRAIG: No, unless you have more questions, I think that's a great answer.

CHAIRMAN LYNCH: I guess I'm still not quite sure. So if there is an incident that results in a take of an eagle, then that weighs into the development of the conservation plan and Eagle Take Permit, but our state Fish and Wildlife department and the TAC determine what's appropriate mitigation for that particular take or what happens?

MS. CRAIG: I'll give you the complex letter law answer. It -- this is a federal process and the Fish and Wildlife Service has jurisdiction so it divides, as Haley indicated, the process in two different compartments. One is what they refer to

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legacy takes, so that would be dealt with and is being dealt with through a civil settlements. The ongoing Eagle Take Permit is forward-looking, so there's even within the Fish and Wildlife Service there's a separation really in terms of the processes and coordination.

But PSE, as well as in my practice, likes to coordinate and use all the best resources and the State has really, you know, good local knowledge and information and this was an EFSEC-sited project. So we have on the technical side, and the service has been appreciative of this, coordinated with the State, but it is a federal process and, you know, if push came to shove, Fish and Wildlife Service would understand that this is their jurisdiction, especially when it comes to the civil settlement side of it. So --

MS. EDWARDS: Yeah, the other thing I would add is at the time that we did the siting for the project and we did all of our baseline surveys, there wasn't a method identified at that time to model our estimated take for the project. And so since the rule came out and since the guidance came out, we now have a process to estimate our take at the project. The TAC's role is to suggest additional mitigation if there were unanticipated affects from the project.

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We didn't really have a number to put to that at the time, so now through the ECP process, we're working towards getting a take estimate based on the studies that have been done. So I would think that as part of the adaptive management process of the ECP and the potential there for mitigation for the original project, which doesn't need to be quantified, we have the ability to have that flexibility. And if we have folks that are involved in TAC that have, you know, some good guidance on some mitigation options or if we get near those take thresholds where we have some concern about the numbers of eagles that we're actually taking with regards to that estimate, so that's, I think, where the TAC can have some input.

CHAIRMAN LYNCH: I see.

Any Council questions?

Yes, Councilmember Stohr.

MR. STOHR: Thanks, Mr. Chair. I just wanted to express some appreciation to PSE for the close cooperative arrangement in working these things out together, and we do think there's value added with the local biologists developing this process together with the Federal Government, the Company, and ourselves, you know, to move forward because it is a new thing to do at the facility. And so I just wanted to say thank you for

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that, and I hope that continues as we think about mitigation and some of the other issues that you listed.

CHAIRMAN LYNCH: Thank you.

Councilmember Stephenson.

MR. STEPHENSON: Thank you, Chair Lynch, and thanks, again, for all the work. I agree with what Joe just said. I am just wondering, because I am new to this, but looking at the map, there's sort of this straight line thing going, you know, east to west or west to east or however the incidents happened. Did we at least look at that? Are there some geographic or other factors that might have caused that so that -- yes, take is okay -- no, we don't like take. We'd like to have zero, I am sure all of us, but did we at least look at is there a factor there that might help us to take that out of the equation?

MS. EDWARDS: We are looking at that. We had Matt Stuber, who is the regional eagle coordinator out on site, and he said it was the most obvious geographic connection between fatalities at a site that he's seen. Often they are very random. So we -- there is a seep drainage there. We don't have a high appraisings [phonetic] we haven't seen a concentration of eagles using that area, but we find it interesting as well and we are going to continue to look at that and --

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yeah, so we're -- we're -- we definitely have our eye on that and we'll see if there is something that -- some connection between them and we'll continue to watch that area. And we have some ideas about that going forward.

MR. STEPHENSON: Thank you.

CHAIRMAN LYNCH: Any further Council questions?

Thank you for coming today. This was very helpful.

MR. POSNER: Chair Lynch, I just have a few comments. I would just like to note that we do have Justin Allegro here. He is our WDFW contractor. He's worked very close with PSE, U.S. Fish and Wildlife Service, so I just want to make sure Councilmembers know he is available if you did have questions for him. He's been actively involved in the -- this process and he is a TAC representative.

And the other thing just to note as far as the TAC goes, you know, the TAC, I'm not sure all the Councilmembers understand, but the TAC is really the means by which the Council sort of keys in to what's happening at the project as far as if, in fact, there are other mitigation measures that might be -- need to be considered that maybe were not considered initially or were not known through adaptive management. So we

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haven't talked much about the TAC at Council meetings, you know, we've been focused on other projects, but it is very important I think that Councilmembers understand it is a way in which information concerning the impacts of the project can be relayed to the Council. So if, in fact, there are unanticipated or unplanned for impacts, the Council has the discretion to require extra mitigation. So it's just something I think that's important for the Council to be aware of.

CHAIRMAN LYNCH: Any questions for Mr. Posner? Any questions for Mr. Allegro?

I knew I saw that face before. Welcome.

MS. EDWARDS: Thank you for coming.

CHAIRMAN LYNCH: And I think -- I think we're done with Wild Horse, then.

MS. EDWARDS: Thank you.

MS. CRAIG: Thank you.

CHAIRMAN LYNCH: And let's see, now we're just down to the good of the order and, Mr. LaSpina, do you just want to remind us again where -- Ecology is, I think, later this month going to submit the SIP to EPA; is that correct?

MR. LASPINA: Yes, sir, that is -- you have it exactly right, and what the remainder of the process is -- the Environmental Protection Agency has to do a

public notice in the Federal Register and then once that's completed, then -- then we would -- the process would be completed and hopefully we would get our full delegation.

CHAIRMAN LYNCH: Great.

MR. LASPINA: Hopefully -- hopefully in the spring, early spring.

CHAIRMAN LYNCH: But we're one step closer. Thank you.

Anything else for the good of the order? Seeing none, thank you for all your participation today and we're adjourned.

(Adjourned at 2:33 p.m.)

CERTIFICATE

STATE OF WASHINGTON
COUNTY OF THURSTON

I, Tayler Russell, a Certified Shorthand Reporter in and for the State of Washington, do hereby certify that the foregoing transcript is true and accurate to the best of my knowledge, skill and ability.

Tayler Russell, CCR

Wild Horse Wind Facility - Monthly Compliance Report - October 2016

Safety

No lost-time accidents or safety injuries/illnesses to report for October. PSE conducted an internal safety audit on October 19th. No major findings were identified.

Compliance/Environmental

Hunting - The general elk hunting season concluded on November 8th.
Weed Control – Roads/roadsides and turbine pads/foundations were treated with sterilant to control the spread of weedy vegetation.

Operations/Maintenance

A planned total plant outage was scheduled the last week of October to repair four off-site transmission line poles and to perform maintenance in the substation.

Wind Production

October wind generation totaled 43,350 MWh for an average capacity factor of 21.37%

Eagle Update

Haley Edwards, PSE Senior Resource Scientist, and Barb Craig, Stoel Rives, will provide a detailed update on the most recent eagle incident and the USFWS process for obtaining an eagle take permit (see presentations attached).

PACIFICORP
A BERKSHIRE HATHAWAY ENERGY COMPANY

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

Chehalis Generation Facility----Monthly Plant Report – October 2016
Washington Energy Facility Site Evaluation Council

11-10-2016

Safety:

- There were no recordable incidents this reporting period and the plant staff has achieved 459 days without a Lost Time Accident.

Environment:

- There were no air emissions or stormwater deviations or spills during the month of October 2016.
- Wastewater and Stormwater monitoring results were in compliance with the permit limits for the month of October 2016.

Personnel:

- The Chehalis plant staffing level is currently 17 of 19 approved positions filled.
- The open positions are for Operations Manager and Administrative Coordinator.

Operations and Maintenance Activities:

- The Plant generated 135,664 MW-hrs in October for a 2016 YTD generation total of 1,085,999 MW-hrs and a capacity factor of 29.3%.

Regulatory/Compliance:

- The Washington Office of the State Fire Marshal conducted the 2016 Annual site Inspection on October 6, 2016. There were six (6) items requiring plant maintenance action. The Fire Marshal has scheduled a re-inspection for Wednesday November 3rd.

Sound monitoring:

- There were no noise complaints to report.

PACIFICORP
A BERKSHIRE HATHAWAY ENERGY COMPANY

Carbon Offset Mitigation

- PacifiCorp has received the scoping proposal from the engineer (Burns & McDonnell) for the reverse osmosis and closed cooling water systems, variable frequency drive design efficiency project implementation. A purchase order has been issued and engineering design is underway.

Respectfully,

Mark A. Miller
Manager, Gas Plant

EFSEC Monthly Operational Report

October, 2016

1. Safety and Training

   1.1. There was one injury during the month of October. An employee cut a finger on insulation banding while touring the plant. The injury was classified as a first aid case and treated on site.
   1.2. Conducted scheduled and required monthly training.
   1.3. Conducted the scheduled safety committee meeting.

2. Environmental

   2.1. Submitted the September Outfall Discharge Monitor Report (DMR) to Ecology.
   2.2. Submitted the 2016 Q3 and Q4 Storm Water DMRs to Ecology.
   2.3. Submitted the 2016 Q3 Emissions Data Report (EDR) to EFSEC and EPA.
   2.4. Submitted the 2016 Priority Pollutant sample results to Ecology
   2.5. Submitted the 2016 RATA and stack test report to EFSEC.
   2.6. Mobilization for the cooling tower replacement is scheduled to begin on 11/21/16.

3. Operations & Maintenance

   3.1. Grays Harbor Energy (GHE) operated 14 days and generated 173,217 MWh during the month of October.
   3.2. The capacity factor (CF) was 37.6% in October, and 56.4% YTD.
   3.3. The availability factor (AF) was 95.1% in October, and 90.1% YTD.

4. Noise and/or Odor

   4.1. There were no complaints made to the site during the month of September.

5. Site Visits

   5.1. The State Fire Marshal completed his annual site inspection. There were no discrepancies identified.

6. Other

   6.1. Grays Harbor is staffed with 20 personnel. The Plant Engineer and Operations Manager positions are vacant. Interviews for both position are in progress.

MEMO

TO: EFSEC Council

FROM: EFSEC Staff

DATE: November 15, 2016

SUBJECT: Columbia Generating Station NPDES Permit No. WA-002515-1: Evaporation Pond 1B Overflow and Discharge to Ground

Background

The Energy Facility Site Evaluation Council (EFSEC) issued National Pollutant Discharge Elimination System (NPDES) Permit No. WA-002515-1 to Energy Northwest (EN) for its Columbia Generating Station (CGS) on September 30, 2014. This permit regulates CGS wastewater and stormwater discharges to the environment. The permit allows two discharges: 1) cooling water blowdown through Outfall 001 to the nearby Columbia River, and 2) a variety of smaller volume wastewater discharges through Outfall 002 to an onsite evaporative wastewater treatment system. An unauthorized discharge from the onsite evaporative wastewater treatment system to ground is the subject of this memo.

The evaporative pond treatment system is approximately 14 acres in area and consists of five cells of varying sizes. Please refer to the diagram in EN's report. Both the treatment system engineering report and the operations and maintenance (O&M) manual for the treatment system were reviewed by EFSEC's compliance contractor, the Department of Ecology (Ecology), and were approved by EFSEC on March 2, 2015. This approval was granted based on a recommendation from Ecology.

Pond 1B, the source of the overflow, receives non-power block wastewaters consisting of backwash water from the potable water filter plant, reverse osmosis filtrate, and fire test water. The backwash is potable water and includes filtrate and some flocculation agents. The non-power block water is conveyed to pond 1B where the water is used for construction purposes or road watering.

Incident Report

On the morning of June 13, 2016, pond 1B was found to be overflowing on the south side. An estimated 500-1,000 gallons of water had flowed over the side of the pond and down into the graveled area south of the pond. The overflow was caused by a plugged drain in pond 1B. The plugged drain was caused by a buildup of flocculant present in the potable water plant backwash.

In accordance with the requirements in condition S3.E of the permit, EN reported the incident to EFSEC and Ecology within approximately 24 hours of discovering the overflow. EN also submitted an initial written report to EFSEC and Ecology within the prescribed five-day timeframe.

EN submitted a draft summary report to EFSEC on October 6, 2016 describing the incident and proposing measures to prevent reoccurrence of overflows at the treatment system. The primary measures include removal of the pond 1B overflow drain screen to prevent future clogging and establishing an inspection schedule in the O&M manual to more closely monitor drains and other operational features of the treatment system. EN committed to submit a revised O&M manual to EFSEC by January 27, 2017 for review and approval.

Summary-Next Steps

Ecology has reviewed EN's summary report describing the incident and EN's proposed corrective actions. Ecology's review determined the proposed corrective actions appear appropriate and recommends no enforcement action be taken at this time.

In response to the incident, EFSEC staff believes an appropriate response is for the EFSEC Manager to issue a warning letter to EN for the following reasons: 1) EN voluntarily designed and built the treatment system, the regulatory agencies did not require it, 2) the treatment system was constructed in accordance with the EFSEC-approved engineering report and operated in accordance with the EFSEC-approved O&M manual, 3) the discharge from pond 1B did not cause a threat to the environment or human health, 4) the discharge from pond 1B consisted of water that is intended for such purposes as dust suppression on roads and at construction projects, 5) EN complied with permit requirements to report the incident, and 6) EN has worked collaboratively with EFSEC and Ecology to develop operational measures to prevent recurrence of overflows to the environment. With the issuance of the warning letter this matter will be closed pending the submittal of and approval of the revised O&M manual.

Robert A. Dutton
Columbia Generating Station
P.O. Box 968, MD PE13
Richland, WA 99352-0968
Ph. 509-377-4650 | F. 509-372-5330
radutton@energy-northwest.com

November 8, 2016
GO2-16-115
DIC 409

EFSEC Manager
Energy Facility Site Evaluation Council
P.O. Box 43172
Olympia, WA 98504-3172

ELECTRONIC SUBMITTAL ONLY

Subject: **COLUMBIA GENERATING STATION**
EVAPORATION POND OVERFLOW CLOSEOUT REPORT

References: 1) NPDES Permit No. WA002515-1

2) Letter (GO2-16-091), R.A. Dutton (EN) to EFSEC Manager, "Columbia Generating Station Evaporation Pond Overflow," dated 06/20/2016

Energy Northwest is providing a National Pollutant Discharge Elimination System (NPDES) closeout report for the overflow of evaporation pond 1B at Columbia Generating Station. Energy Northwest previously provided a 5-day report related to this issue as referenced above.

If you have any questions concerning this information, please contact SE Khounnala at (509) 377-8639.

Respectfully,

Robert A. Dutton,
General Counsel and Chief Ethics Officer

Enclosure

cc: J LaSpina (EFSEC, email)
J Ayres (WDOE, email)

RAD/nb

Columbia Generating Station
Evaporation Pond Overflow Closeout Report

Enclosure

National Pollutant Discharge Elimination System
Evaporation Pond Overflow Closeout Report

Description of evaporation pond overflow and cause
As described in the original 5-day report, the event and cause of the Pond 1B overflow remains unchanged as described below:

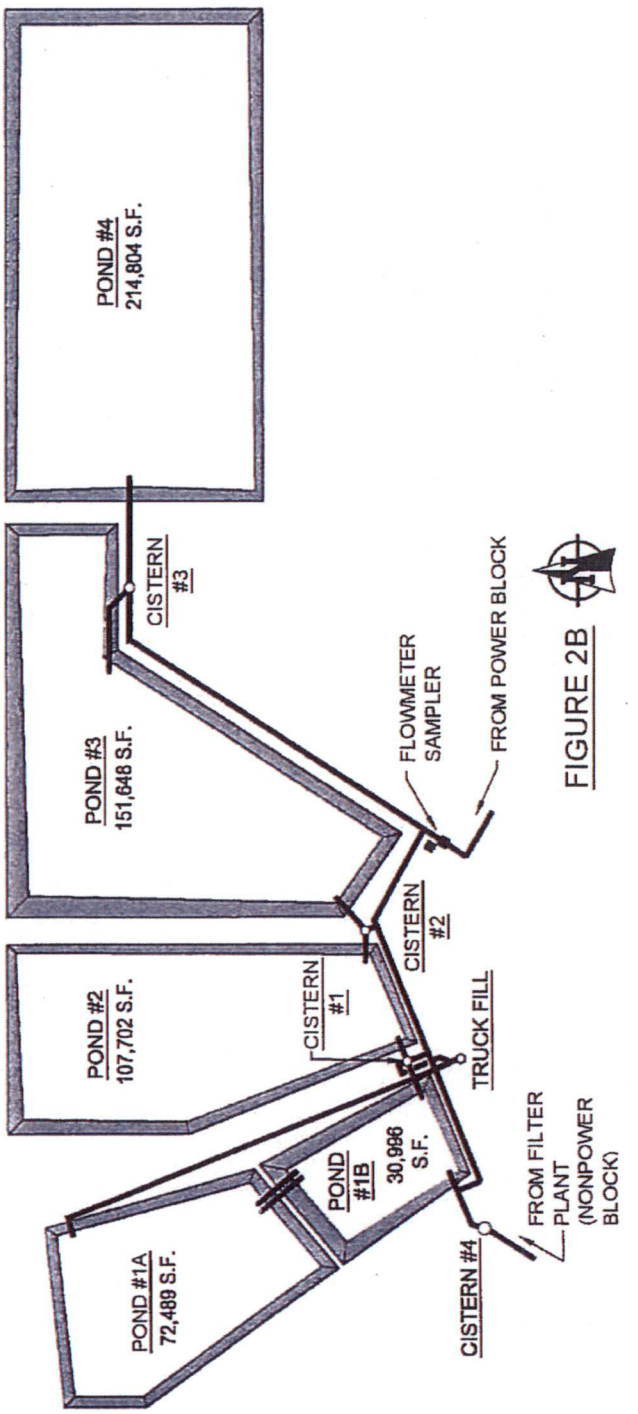
On the morning of June 13, 2016, evaporation pond 1B was found to be overflowing on the south edge; approximately 15 feet from the east corner of the pond (see Figure 2B). Evaporation pond 1B receives backwash water from the potable water filter plant, reverse osmosis filtrate, and fire test water. These non-power block wastewaters are typically sent directly to Ponds 1A, 1B, and 2, where the water can be utilized for construction water or road watering. An estimated 500-1000 gallons of water drained over the edge of the pond and washed down into the graveled area south of the evaporation pond. The overflow was caused by a partially-plugged drain in pond 1B. Evaporation pond 1B is designed to automatically overflow to pond 2 at cistern 1 to preclude it from overflowing. However, the partially-plugged drain in pond 1B precluded the overflow feature from functioning as designed.

Evaporation Pond System Design and Engineering
The potable water backwash stream was designed to first discharge to evaporation pond 1B then into pond 2. This sequence helps reduce the transport of solids into the other ponds. The pond 1B drain was built with ½" screen, designed to accomodate some solids when the water filled pond 1B and drained to pond 2. While the clinging nature of the backwash flocculating agent doesn't show up as restricting on short term tests, this event reveils that the agent does builds up over time. It took nearly two years to clog the ½" screen.

The original evaporation pond design included assumptions for solids accumulation and settlement in the ponds and estimated that the ponds would require cleaning every few years. Cleaning the ponds is included in the Operations and Maintenance Manual.

Steps taken or planned to reduce, eliminate, and prevent recurrence:
Energy Northwest hosted a site inspection by EFSEC and the Department of Ecology staff on September 20, 2016. Agency staff observed the actions taken and discussed future planning to prevent recurrence, which includes the following:

1. The screen over the 10" drain from pond 1B has been cleaned.
2. The 10" drains of pond 1B & pond 2 were replaced with a modified larger intake screen. Additionally, the overflow pipe was modified with an open (no screen) inlet so solids accumulation cannot plug the drain/overflow line.
3. Pond 1B was cleaned with a vacuum truck to remove the accumulated solids.
4. Accumulation of backwash and other solids will be monitored on a scheduled frequency-this frequency will be outlined in a revision to the O&M Manual and submitted to EFSEC staff by January 27, 2017.



Source: Operation and Maintenance Manual For Stormwater/Industrial Wastewater Evaporation System, Energy Northwest Columbia Generating Station, Figure 2B

National Pollutant Discharge Elimination System
Evaporation Pond Overflow Closeout Report
Certification Statement

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

RA Dutton
General Counsel and Chief Ethics Officer

8 NOV 2016
Date

Energy Northwest
EFSEC Council Meeting
November 15, 2016
Shannon Khounnala

I. Columbia Generating Station Operational Status

Columbia is online at 100% power and producing 1136 MWs. The plant has been online for 228 days.

There are no other events, safety incidents, or regulatory issues to report.

II. WNP 1/4 Water Rights

NEPA/Leasing

The Department of Energy continues to work on the NEPA Environmental Assessment (EA) for WNP 1/4. The Cultural Resources report was submitted for comment. Energy Northwest and the Department of Energy will participated in a meeting with tribes in early December. Following completion of the EA, a new lease will be signed between EN and the Department of Energy. The new lease will allow for use of the water rights obtained in January 2015.

Kittitas Valley Wind Power Project
Monthly Project Update

November 15, 2016

Project Status Update

October Production Summary:

Power generated:	6,882 MWh
Wind speed:	4.3 m/s or 9.6 mph
Capacity Factor:	9.2%

Safety:
No incidents

Compliance:
Project is in compliance as of November 7, 2016.

Sound:
No complaints

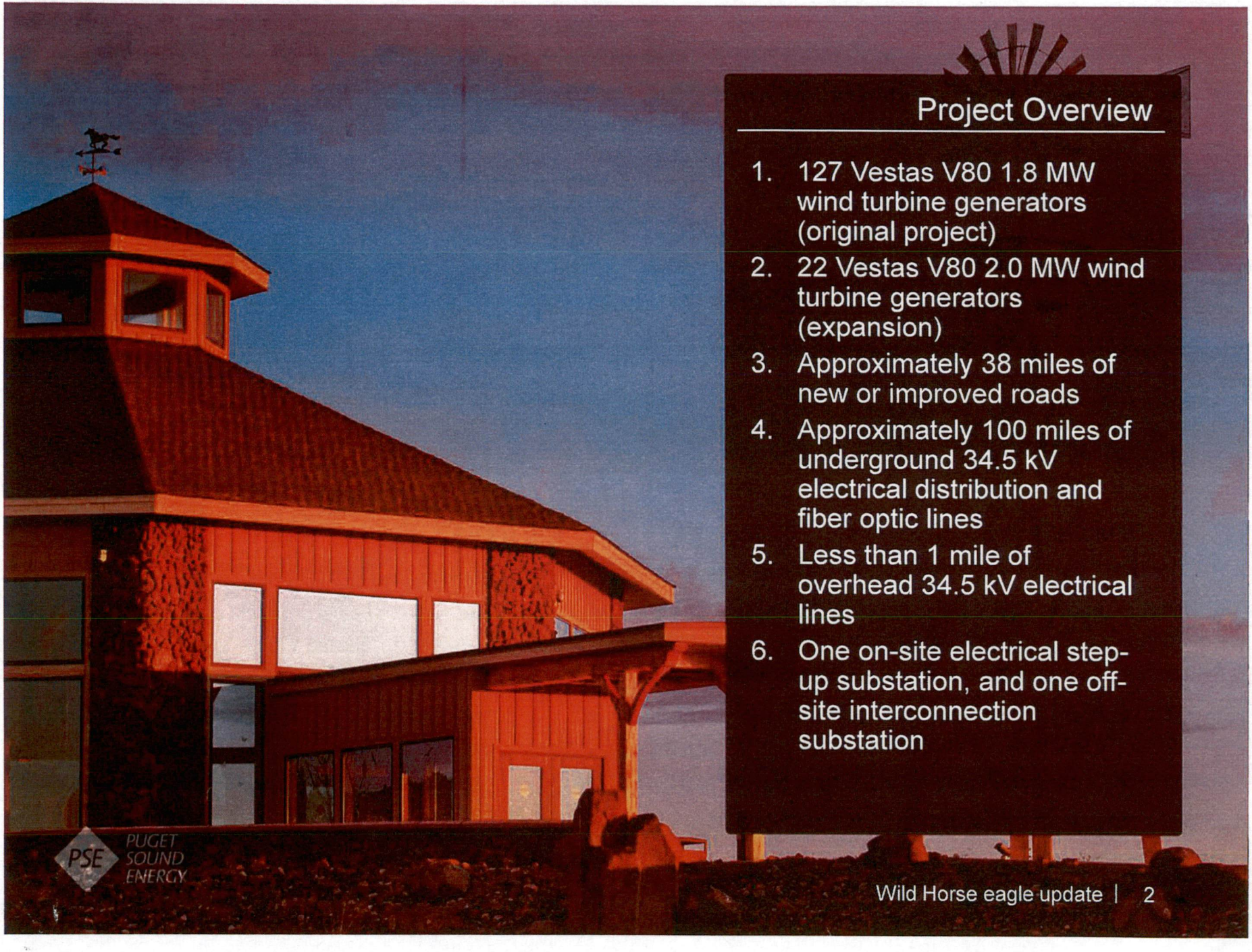
Shadow Flicker:
No complaints

Environmental:
No incidents

Wild Horse Wind Facility
EFSEC Eagle Update

November 15, 2016

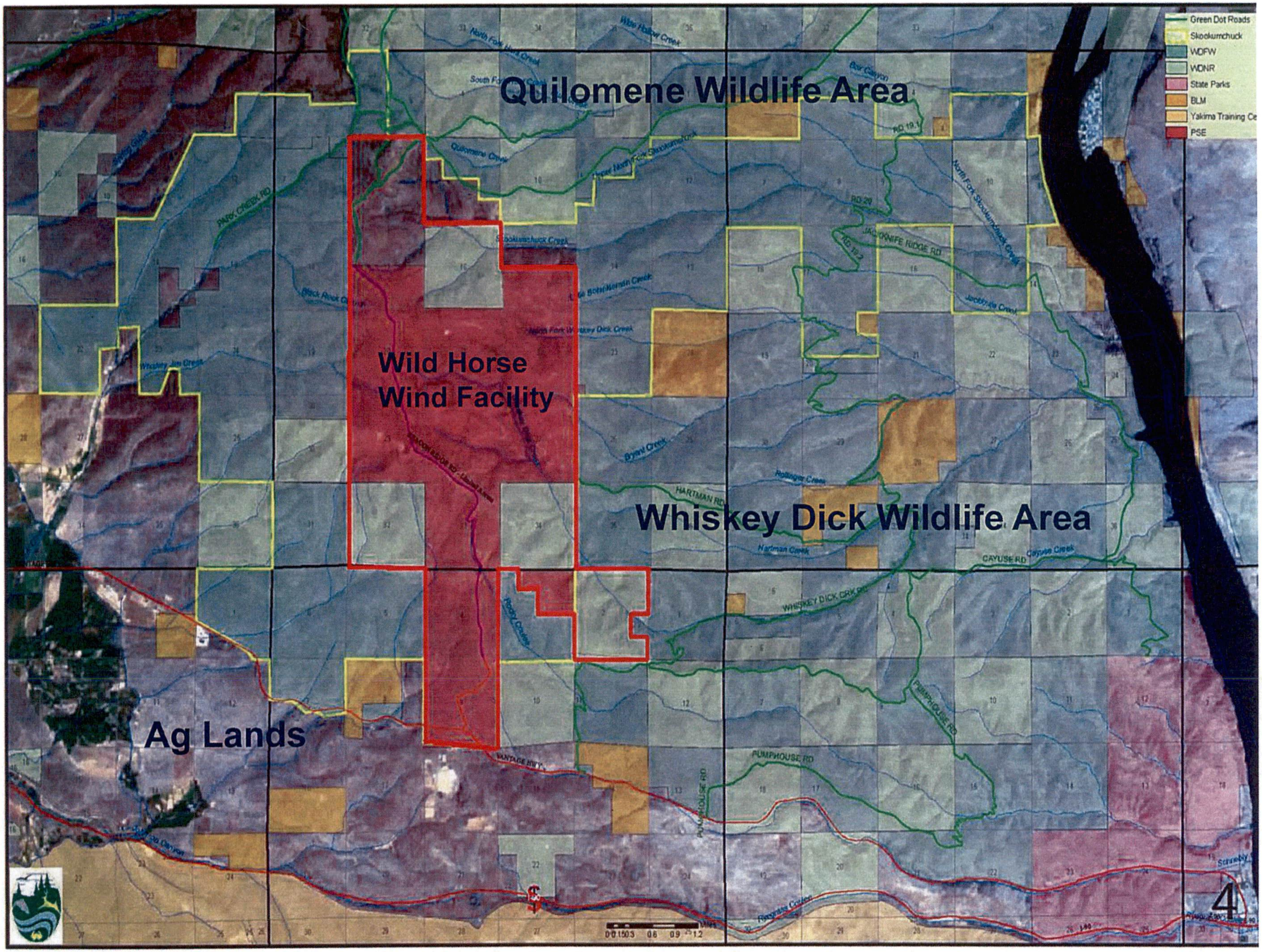
PSE PUGET SOUND ENERGY



Project Overview

1. 127 Vestas V80 1.8 MW wind turbine generators (original project)
2. 22 Vestas V80 2.0 MW wind turbine generators (expansion)
3. Approximately 38 miles of new or improved roads
4. Approximately 100 miles of underground 34.5 kV electrical distribution and fiber optic lines
5. Less than 1 mile of overhead 34.5 kV electrical lines
6. One on-site electrical step-up substation, and one off-site interconnection substation

PSE PUGET SOUND ENERGY


Green Dot Roads
Skookumchuck
WDFW
WDNR
State Parks
BLM
Yakima Training Ce
PSE
Quilomene Wildlife Area
Wild Horse
Wind Facility
Whiskey Dick Wildlife Area
Ag Lands
PARK CREEK RD
JACKKNIFE RIDGE RD
RD 20
HARTMAN RD
CAYUSE RD
WHISKEY DICK CRK RD
PUMPHOUSE RD
VANTAGE HWY
Skookumchuck Creek
Quilomene Creek
North Fork Skookumchuck Creek
Whiskey Jim Creek
Black Rock Canyon
Bryant Creek
Hartman Creek
Cayuse Creek
Rocky Coulee
4

Map of eagle incident locations

All known eagle incidents have occurred in northern portion of the original project area. PSE followed all proper notification procedures in response to each of the eagle fatality incidents.

- **Turbine F-2**

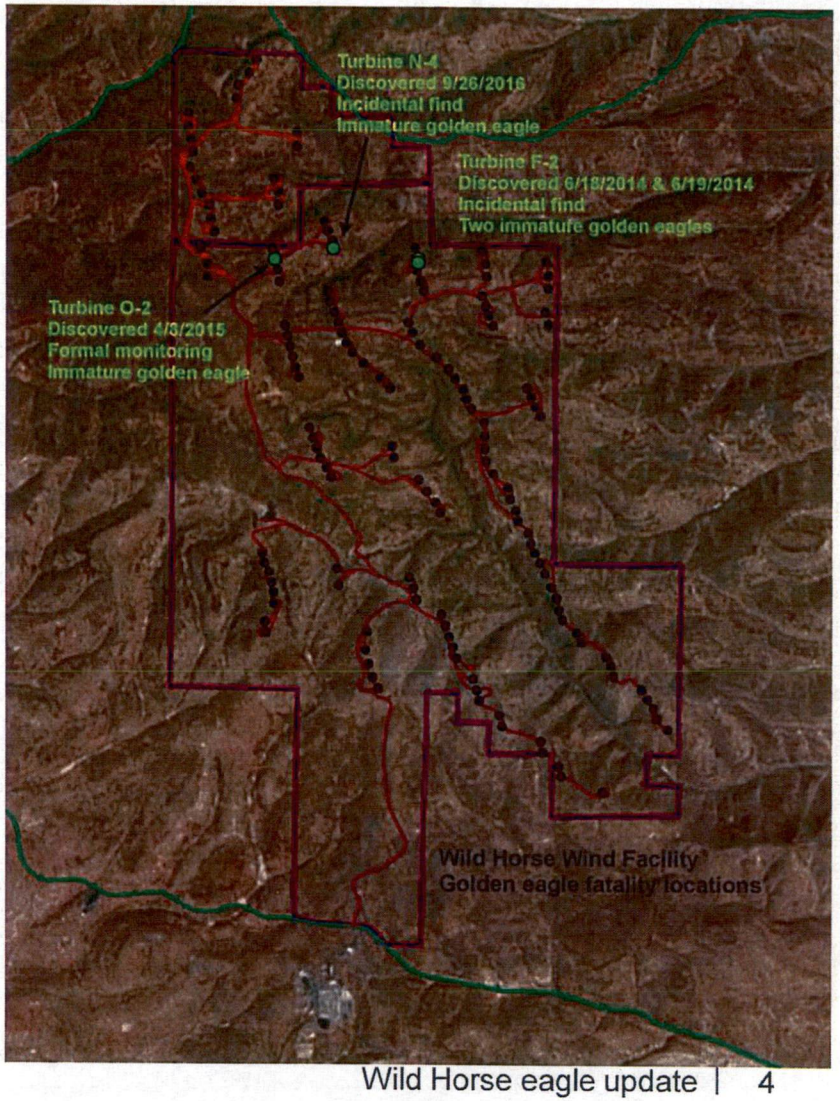
Two immature golden eagles incidentally found on 6/18/2014 and 6/19/2014

- **Turbine O-2**

One immature golden eagle found during formal eagle fatality monitoring on 4/8/2015

- **Turbine N-4**

One immature golden eagle found incidentally on 9/26/2016



PSE PUGET SOUND ENERGY

PSE's Avian Protection Program

- PSE has a history of cooperation with USFWS in responding to avian incidents in general, and eagle incidents in particular.
- PSE has had a formal avian protection program since 2000, however, PSE has been implementing measures to help protect birds since the 1970's.
- PSE developed its original Avian Protection Plan (APP) in 2005, and revised the APP in 2013.
- In 2014, PSE completed Bird and Bat Conservation Strategies (BBCSs) for each of it wind facilities, consistent with USFWS Land-Based Wind Energy Guidelines.
- In 2014, PSE began development of Eagle Conservation Plans for its wind facilities, consistent with USFWS Eagle Conservation Plan Guidance.

PSE PUGET SOUND ENERGY

Wildlife Studies at Wild Horse

- Pre-Construction Baseline Studies
  - Raptor nest surveys
  - Sage-grouse lek surveys
  - Avian use surveys
- Post-construction monitoring
  - Original project – avian monitoring (2007, 2010)
  - Expansion – avian monitoring (2010, 2012)
  - Raptor nest surveys (2008, 2011)
  - Sage-grouse lek surveys (2008)
  - Habitat monitoring (5 years)
- Eagle fatality monitoring and eagle use surveys (2015/2016)

PUGET SOUND ENERGY

PSE's Wild Horse ECP

PSE decided in 2014 to voluntarily apply for an Eagle Take Permit (ETP)

- There have been four golden eagle mortalities documented at Wild Horse since the beginning of operations. An ETP would provide a framework for addressing eagle mortalities in the future and ensure that actions taken are consistent with USFWS goals for the protection of eagles.
- This is the process that USFWS recommends, particularly for wind facilities.
- The Eagle Conservation Plan Guidance has been available since 2013, which provides recommendations and procedures for developing an Eagle Conservation Plan and applying for/implementing an ETP.

PUGET SOUND ENERGY

PSE's Wild Horse ECP

ECP Outline consistent with the US Fish and Wildlife Service ECP Guidance for Land-Based Wind Energy

- Project background
- Regulatory framework
- Stage 1 – Preliminary assessment
- Stage 2 – Site-specific surveys and assessments
- Stage 4 – Avoidance and minimization of risk/conservation measures
- Stage 5 – Post-construction monitoring
- Stage 3 – Assessing risk and predicting fatalities
- Ongoing monitoring and reporting
- Compensatory mitigation
- Adaptive management under the ECP

PUGET SOUND ENERGY

PSE's Wild Horse ECP

ECP Timeline

- Dec 2014 - PSE submitted a Preliminary draft ECP to USFWS.
- Mar 2015 - USFWS provided comments to PSE.
- Mar 2016 - PSE revised the Preliminary draft ECP in response to USFWS comments, and met with USFWS to discuss.
- After meeting with USFWS, USFWS agreed that PSE should draft an applicant-prepared Environmental Assessment for the USFWS's review. The proposed federal action for purposes of NEPA is the proposed issuance of an Eagle Take Permit.
- PSE is in the process of revising the Preliminary Draft EA, and making further revisions to the Draft ECP in response to USFWS comments/discussion at the August 30th meeting with USFWS.
- USFWS is in the process of applying data from Wild Horse to the take prediction model, which would support discussions related to mitigation and adaptive management under the ECP.

PUGET SOUND ENERGY

PSE and TAC Coordination

- The TAC has met at least once annually since 2006.
- July 2014 TAC meeting: PSE provided information about the eagle fatality incident, discussed PSE's plan to develop an ECP and apply for an ETP, and also discussed WDFW's two-year Golden Eagle survey program, providing the most current data on nesting golden eagles in WA, which PSE supported.
- February 2015 TAC meeting : we discussed the draft ECP, the proposed eagle fatality monitoring protocol, and a status update of the Eagle Take permit process.
- January 2016 TAC meeting : PSE provided an update on the draft ECP and Eagle Take Permit process, the corrective action taken by PSE in coordination with USFWS OLE, and an update on the most recent eagle fatality incident.
- PSE notified WDFW, EFSEC, and USFWS TAC representatives within 48 hours of each eagle fatality incident as per the Site Certification Agreement, and provided updates to the TAC at the annual meetings.

More detail about TAC coordination is provided in the EFSEC monthly report handout.

PUGET SOUND ENERGY

PSE's Wild Horse ECP

Next steps

- PSE to complete revisions to the Draft ECP and submit to USFWS
- PSE to revise draft EA in response to USFWS comments
- PSE to submit the revised draft EA to USFWS for review and approval
- USFWS to provide final draft EA for public review and comment
- Once the ECP is finalized and ready for public review, PSE will provide a copy to the TAC
- USFWS to review EA, respond to public comments, and prepare the final EA
- USFWS will make a determination on whether to issue an ETP

PUGET SOUND ENERGY

Kittitas Valley Wind Power Project
Monthly Project Update

December 20, 2016

Project Status Update

November Production Summary:

Power generated:	8,751 MWh
Wind speed:	4.5 m/s or 10 mph
Capacity Factor:	12%

Safety:
No incidents

Compliance:
Project is in compliance as of December 15, 2016.

Sound:
No complaints

Shadow Flicker:
No complaints

Environmental:
No incidents

Wild Horse Wind Facility- Monthly Compliance Report- November 2016

Safety
No lost-time accidents or safety injuries/illnesses to report for November.

Compliance/Environmental
In accordance with the Stormwater Pollution Prevention Plan (SWPPP), a semi-annual stormwater inspection was completed. All BMPs were observed to be in good condition, no maintenance was required. The site remains in compliance with the SWPPP.

Operations/Maintenance
Nothing to report.

Wind Production
November wind generation totaled 48,462 MWh for an average capacity factor of 24.69%

Energy Northwest
EFSEC Council Meeting
November 15, 2016
Shannon Khounnala

I. Columbia Generating Station Operational Status

Columbia is online at 100% power and producing 1138 MWs. The plant has been online for 264 days.

Rad Waste Shipping Suspended

Columbia's permitted disposal privileges at the US Ecology commercial disposal site have been temporarily suspended by the Department of Health. A shipment made in November 2016 was not accepted due to dose rates higher than expected compared to the station manifest. The shipment contained materials from our used fuel cleanup campaign. Prior to shipment, projected dose rates were calculated based on characterization of the manifest – a low-risk approach for worker exposure. A qualified vendor performs the dose projection calculations based on information we provide them. A cause determination is in progress and an inspection by the NRC occurred the week of December 12 to review the Rad Waste shipping process in an effort to identify factors that led to this incident. Energy Northwest will be working closely with the Department of Health to demonstrate that we have implemented actions taken to prevent reoccurrence.

There are no other events, safety incidents, or regulatory issues to report.

II. WNP 1/4 Water Rights

NEPA/Leasing

The Department of Energy has completed the draft of the NEPA Environmental Assessment (EA) for WNP 1/4. The document is being routed for review. Energy Northwest continues to work with the tribes on completing the cultural review. Following completion of the EA, a new lease will be signed between EN and the Department of Energy. The new lease will allow for use of the water rights obtained in January 2015.

EFSEC Monthly Operational Report

November, 2016

1. Safety and Training

   1.1. Conducted scheduled and required monthly training.
   1.2. Conducted the scheduled safety committee meeting.

2. Environmental

   2.1. Submitted the October Outfall Discharge Monitor Report (DMR) to Ecology.
   2.2. Our contractor mobilized on site for the cooling tower replacement. Two of 9 cells are currently under construction. The first is expected to complete the week of 12/19/16.

3. Operations & Maintenance

   3.1. Grays Harbor Energy (GHE) operated 10 days and generated 75,633 MWh during the month of November.
   3.2. The capacity factor (CF) was 16.9% in November, and 52.9% YTD.
   3.3. The availability factor (AF) was 100% in November, and 91.0% YTD.

4. Noise and/or Odor

   4.1. There were no complaints made to the site during the month of November.

5. Site Visits

   5.1. There were no site visits during the month of November.

6. Other

   6.1. Grays Harbor is staffed with 20 personnel. The Plant Engineer and Operations Manager positions are vacant. Offers will go out in mid-December with the expectation to have both positions filled in early January.

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A BERKSHIRE HATHAWAY ENERGY COMPANY

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

Chehalis Generation Facility----Monthly Plant Report – November 2016
Washington Energy Facility Site Evaluation Council

12-16-2016

Safety:

- There were no recordable incidents this reporting period and the plant staff has achieved 489 days without a Lost Time Accident.

Environment:

- There were no air emissions or stormwater deviations or spills during the month of November 2016.
- Wastewater and Stormwater monitoring results were in compliance with the permit limits for the month of November 2016.

Personnel:

- The Chehalis plant staffing level is currently 18 of 19 approved positions filled.
- The open position is for an Operations Manager.

Operations and Maintenance Activities:

- The Plant generated 151,755 MW-hrs in November for a 2016 YTD generation total of 1,237,755 MW-hrs and a capacity factor of 29.9%.

Regulatory/Compliance:

- Kevin Hancock with the Washington State Department of Ecology (DOE) made an unannounced site visit to Chehalis Generation on November 1st. He examined the following:
    - Certification of our SWPPP following the turbidity higher than benchmark sample in the first quarter of 2014.
    - Certification of our SWPPP following the re-issuance of the Industrial Stormwater General Permit (ISGP) in 2015.
    - Quarterly sweeping of site roads required by the ISGP.
    - Annual reports stating the corrective actions following the turbidity higher than benchmark sample.
    - Previous years Stormwater DMR's

PACIFICORP
A BERKSHIRE HATHAWAY ENERGY COMPANY

- Monthly Stormwater site inspections.
- Training rosters for Stormwater training for the Chehalis personnel.

At the end of his audit, Mr. Hancock verbally indicated there were no deficiencies or actionable findings. A written report was to follow.

Sound monitoring:

- There were no noise complaints to report.

Carbon Offset Mitigation

- PacifiCorp conducted the engineering scoping meeting at the Chehalis plant site with Burns & McDonnell for the reverse osmosis and closed cooling water systems, variable frequency drive design efficiency project implementation.

Respectfully,

Mark A. Miller
Manager, Gas Plant

STATE OF WASHINGTON

ENERGY FACILITY SITE EVALUATION COUNCIL (EFSEC)

TITLE V AIR OPERATING PERMIT (AOP)

Issued To

PACIFICORP

For The

CHEHALIS GENERATON FACILITY

PERMIT #:	EFSEC/06-01 AOP Rev. 2
ISSUED:	Date XXXX
EXPIRATION:	To be determined

ENERGY FACILITY SITE EVALUATION COUNCIL
1300 South Evergreen Park Drive SW
PO Box 43172
Olympia, WA 98504-3172
Telephone: (360) 664-1345

AIR OPERATING PERMIT #: EFSEC/06-01-AOP Rev. 2

ISSUED TO: PacifiCorp
1407 West North Temple
Salt Lake City, UT 84116

PLANT SITE: Chehalis Generation Facility, 1813 Bishop Road
Chehalis, WA 98532

ISSUED BY: Energy Facility Site Evaluation Council
1300 South Evergreen Park Drive SW - PO Box 43172
Olympia, WA 98504-3172

NATURE OF BUSINESS:	Electrical Generating Facility
SIC / NAICS:	4911 / 221112
AIRS NUMBER:	53041-00005
EFFECTIVE DATE:	To be determined
EXPIRATION DATE:	To be determined
RENEWAL APPLICATION DUE:	To be determined (6 months prior to exp.)

PERMIT ENGINEER:

_____ _____
Clint H. Lamoreaux – SWCAA Date

REVIEWED BY:

_____ _____
Stephen Posner – EFSEC Manager Date

APPROVED BY:

_____ _____
William Lynch - EFSEC Chair Date

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Appendix A Visual Emissions Evaluation Method

Appendix B Auxiliary Boiler Source Emission Testing Requirements

Appendix C Auxiliary Boiler Performance Monitoring Requirements

Appendix D Acid Rain Permit

I. ABBREVIATIONS

List of Common Abbreviations

Administrator	EPA Region X Administrator
AOP	Air Operating Permit
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
CO	Carbon monoxide
CFR	Code of Federal Regulations
DAS	Data Acquisition and System
EFSEC	Washington Energy Facility Site Evaluation Council (a.k.a. the Council)
EPA	U.S. Environmental Protection Agency
EU	Emission Unit
EU-#	Refers to a specific emission unit numbered "#"
FCAA	Federal Clean Air Act
G#	Refers to a specific general term and condition numbered "#"
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous air pollutant
HRSG	Heat Recovery Steam Generator
IEU	Insignificant emission unit
IEU#	Insignificant emission unit numbered "#"
K#	Refers to a specific recordkeeping requirement numbered "#"
M#	Refers to a specific monitoring requirement numbered "#"
NO_X	Oxides of nitrogen
NCASI	National Council of the Paper Industry for Air and Stream Improvement, Inc.
NSPS	New Source Performance Standards (40 CFR 60)
NSR	New source review
Oil	"On-road specification diesel fuel" with a sulfur content of 0.05% or less
O_2	Oxygen
P#	Administrative permit constraint numbered "#"
PM	Particulate matter
ppmvd	Parts per million by volume, dry
PTE	Potential to emit
R#	Refers to a specific reporting requirement numbered "#"
RCW	Revised Code of Washington
Region 10	Region 10 of the U.S. Environmental Protection Agency
Req-#	Applicable requirement numbered "#"
SIP	State implementation plan
SO_2	Sulfur dioxide
SWCAA	Southwest Clean Air Agency
TAP	Toxic air pollutant
tpy	Tons per year
VOC	Volatile organic compound
WAC	Washington Administrative Code

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

CHEHALIS GENERATION FACILITY
TITLE V AIR OPERATING PERMIT

II. REGULATORY BASIS

This Air Operating Permit (AOP), issued to PacifiCorp, for the Chehalis Generation Facility, is authorized under the procedures established in WAC 173-401 as adopted by EFSEC in WAC 463-78, and Title V of the 1990 Federal Clean Air Act Amendments. The terms and conditions of this permit describe the emissions limitations, operating requirements, monitoring requirements, recordkeeping requirements, and reporting requirements for the permitted source.

Permit terms and conditions are divided into the following categories: General Terms and Conditions, Operating Terms and Conditions, Monitoring Terms and Conditions, Recordkeeping Terms and Conditions, and Reporting Terms and Conditions. As used in this permit, there is no distinction between "terms" and "conditions." As such, "condition" shall mean the same as "terms and conditions" as referred to in Title V of the 1990 Federal Clean Air Act Amendments.

The conditions required under this permit are determined necessary to assure and provide for certification of compliance with applicable local, state, and federal air pollution regulations and standards. A comprehensive list of the local, state, and federal air pollution requirements applicable to emissions units and other air pollution sources located at the Permittee's facility is provided in Sections V through IX. These requirements were determined applicable based on the equipment specifications and regulatory history of each emissions unit as described in the Basis Statement for this permit. These requirements are drawn from numerous regulations. The date of each requirement generally coincides with the most recent rulemaking activity. In some cases, there are multiple effective dates that reflect differences in federal versus state/local applicability. This situation is most notable with requirements that are in the Washington SIP. To clarify which version of a requirement is applicable to the facility, the effective dates of applicable requirements are presented in the following tables.

Where WAC 173-400 is cited in this permit, it is as adopted by WAC 463-78-005 [8/27/15]. WAC 463-78-005 [8/27/15] adopts the version of WAC 173-400 in effect on December 29, 2012. Where the version of WAC 173-400 adopted in the latest version of WAC 463-78-005 differs from the SIP approved version for EFSEC, both versions are cited. Where WAC 173-401 is cited in this permit, it is as adopted by WAC 463-78-005 [8/27/15]. WAC 463-39-005 [8/27/15] adopts the version of WAC 173-401 in effect on September 10, 2011.

Federal Regulations	SIP State Effective Date	Effective Date
40 CFR 60	—	7/1/2015
40 CFR 61	—	7/1/2015
40 CFR 64	—	7/1/2015
40 CFR 68	—	7/1/2015
40 CFR 75	—	7/1/2015
40 CFR 82, Subparts B and F	—	7/1/2015
40 CFR 98	—	7/1/2015

State Regulations	SIP State Effective Date	State/Local Effective Date
WAC 173-400-035	—	12/29/12

State Regulations	SIP State Effective Date	State/Local Effective Date
WAC 173-400-036	—	12/29/12
WAC 173-400-040(1)(a & b) – Visible Emissions	9/20/93	Renumbered -040(2)(a & b)
WAC 173-400-040(2)(a & b) – Visible Emissions	—	12/29/2012
WAC 173-400-040(3)- Fugitive Emissions	9/20/93	Renumbered -040(4)
WAC 173-400-040(3) - Fallout	—	12/29/2012
WAC 173-400-040(4) – Fugitive Emissions	9/20/93	12/29/2012
WAC 173-400-040(5) – Odors	—	12/29/2012
WAC 173-400-040(5) – Detrimental Emissions	9/20/93	Renumbered -040(6)
WAC 173-400-040(6) - Detrimental Emissions	—	12/29/2012
WAC 173-400-040(7) – Concealment and Masking	9/20/93	Renumbered -040(8)
WAC 173-400-040(8) – Concealment and Masking	—	12/29/2012
WAC 173-400-040(8) – Fugitive Dust	9/20/93	Renumbered -040(9)
WAC 173-400-040(9) – Fugitive Dust	—	12/29/2012
WAC 173-400-060	3/22/91	12/29/2012
WAC 173-400-075	—	12/29/2012
WAC 173-400-105	9/20/93 SIP version does not include (7) & (8)	12/29/2012
WAC 173-400-107	9/20/93	12/29/2012– Note will be superseded by WAC 173-400-108/109 upon EPA approval
WAC 173-400-110	9/20/93	12/29/2012
WAC 173-400-114	—	12/29/2012
WAC 173-400-700	—	12/29/2012
WAC 463-78-115	—	8/27/15
WAC 173-401	—	9/10/11
WAC 173-425	10/18/1990	4/13/00
WAC 173-441	—	3/1/15
WAC 173-460	—	8/21/98

Regulatory Orders / Permits	SIP Federal Effective Date	Local Effective Date
EFSEC/95-02 Amendment 2	—	7/17/06
EFSEC/2009-01	—	9/4/09

III. EMISSION UNIT IDENTIFICATION

The following table contains emission unit identifications. Descriptions of each emission unit are contained in the Basis Statement for this Air Operating Permit.

EU #	Generating Equipment/Activity	Emission Control
EU-1	Combustion Turbine #1	Oxidation catalyst and selective catalytic reduction system
EU-2	Combustion Turbine #2	Oxidation catalyst and selective catalytic reduction system
EU-3	Auxiliary Boiler	Low emission, external flue gas recirculation

IV. PERMIT ADMINISTRATION

P1. Credible Evidence 40 CFR 51.212, 40 CFR 52.12, 40 CFR 52.33, 40 CFR 60.11, 40 CFR 61.12

For the purposes of submitting compliance certifications or establishing whether a violation of any term or condition of this permit has occurred or is occurring, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether the permittee would have been in compliance with a specific term or condition if the appropriate performance or compliance test or procedure would have been performed.

P2. Confidentiality of Records and Information WAC 173-401-500(5), WAC 173-401-620(2)(e)

In the case where the 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. [WAC 173-401-500(5)]

Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permittee or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205. [WAC 173-620(2)(e)]

P3. Permit Duration WAC 173-401-610

This permit shall be valid for a fixed term of 5 years.

P4. Standard Provisions WAC 173-401-620(2)

(a) *Duty to comply.* The permittee must comply with all conditions of this Chapter 401 permit. Any permit noncompliance constitutes a violation of Revised Code of Washington (RCW) Chapter 70.94 and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(b) *Need to halt or reduce activity not a defense.* It shall not be a defense for a 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 permit.

(c) *Permit actions.* This permit 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 reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(d) *Property rights.* This permit does not convey any property rights of any sort, or any exclusive privilege.

(e) *Duty to provide information.* The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permittee or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205.

(f) *Permit fees.* The permittee shall pay fees in accordance with RCW 70.94.162 as a condition of this permit in accordance with the permitting authority's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as prescribed in RCW 70.94.430 and 70.94.431.

(g) *Emissions 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 this permit.

(h) *Severability.* If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable.

(i) *Permit appeals.* This permit is subject to judicial review pursuant to WAC 463-78-140(3) and the Administrative Procedure Act, Chapter 34.05 RCW. 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.

(j) *Permit continuation.* This permit and all terms and conditions contained herein 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.

P5. Insignificant Emission Unit - Permit Revision WAC 173-401-530(6)

Any emission unit or activity that qualifies as insignificant solely on the basis of provisions in WAC 173-401-530(1)(a) shall not exceed the emissions thresholds specified in WAC 173-401-530(4) until this permit is modified pursuant to WAC 173-401-725.

P6. Federally Enforceable Requirements WAC 173-401-625

(a) All terms and conditions in an air operating permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the FCAA, except as indicated in paragraph (b) below.

(b) Notwithstanding subsection (a), any terms and conditions included in this permit that are not required under the FCAA or under any of its applicable requirements are specifically designated as "state" or "local" only, and are not federally enforceable under the FCAA. Terms and conditions so designated are not subject to the requirements of WAC 173-401-810.

P7. Permit Shield WAC 173-401-640

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements that are specifically identified in this permit as of the date of permit issuance. Nothing in this permit 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 permit 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; and

(e) The ability of the permitting authority to establish or revise requirements for the use of reasonably available control technology (RACT) as defined in RCW 70.94.

P8. Emergency Provision WAC 173-401-645

An "emergency" as defined in WAC 173-401-645(1) shall constitute an affirmative defense to an action brought for noncompliance with technology based emission limitations. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(a) An emergency occurred and that the permittee can identify the causes(s) of the emergency;

(b) The permitted facility was at the time being properly operated;

(c) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(d) The permittee submitted notice of the emergency to the permitting authority within two working days of the time when emission limitations were exceeded due to the emergency or shorter periods of time specified in an applicable requirement. This notice fulfills the requirement of WAC 173-401-615(3)(b) unless the excess emissions represent a potential threat to human health and safety. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

Burden of proof lies with the permittee.

P9. Permit Expiration – Application Shield WAC 173-401-705(2) WAC 173-401-710(3)

Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with WAC 173-401-710(1) and WAC 173-401-500. All terms and conditions of the permit shall remain in effect after the permit expires if a timely and complete permit application has been submitted. Operation under the terms and conditions of the expired permit will be allowed until EFSEC takes final action on the renewal application.

P10. Permit Revocation WAC 173-401-710(4)

The permitting authority may revoke a permit only upon the request of the permittee or for cause. The permitting authority shall provide at least thirty days written notice to the Permittee prior to revocation of the permit 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 the permitting authority prior to the authority's final 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.

P11. Reopenings for Cause WAC 173-401-730

This permit shall be reopened and revised under any of the following circumstances:

(a) Additional applicable requirements become applicable to a major air operating permit source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 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 permit is due to expire, unless the original permit 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 permit;

(c) The permitting authority or Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or

(d) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

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

P12. Excess Emissions WAC 173-400-107

The permittee shall report excess emissions to EFSEC as soon as possible. Excess emissions due to startup or shutdown conditions or due to scheduled maintenance shall be considered unavoidable provided the source reports as required under subsection (1) of WAC 400-107 and adequately demonstrates that the excess emissions could not have been prevented or avoided.

Excess emissions due to upsets shall be considered unavoidable provided that the permittee reports as soon as possible but no later than 48 hours after discovery, and adequately demonstrates that:

(a) The event was not caused by poor or inadequate design, operation, or maintenance, or any other reasonably preventable conditions;

(b) The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance;

(c) The operator 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 operator knew or should have known that an emission standard or permit condition was being exceeded; and

(d) The owner or operator(s) actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence.

V. GENERAL TERMS AND CONDITIONS

G1. Asbestos 40 CFR 61 Subpart M
WAC 173-400-075

The permittee shall comply with the provisions of 40 CFR 61 Subpart M when conducting any renovation, demolition or asbestos storage activities at the facility.

G2. Chemical Accident Prevention 40 CFR 68

The permittee shall comply with the requirements of the Chemical Accident Prevention Provisions of 40 CFR 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. [40 CFR 68.10]

G3. Protection of Stratospheric Ozone 40 CFR 82, Subparts B and F

The permittee shall comply with the standards for recycling and emissions reduction as provided in 40 CFR Part 82, Subparts B and F.

G4. Duty to Supplement or Correct Application WAC 173-401-500(6)

The permittee, upon becoming aware that relevant facts were omitted or incorrect information was submitted in a permit application, shall promptly submit such supplementary facts or corrected information. In addition, an applicant shall 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 permit.

G5. Certification WAC 173-401-520

All application forms, reports, and compliance certifications must be certified by a responsible official. Certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information contained in the submittal are true, accurate, and complete.

G6. Inspection and Entry WAC 173-401-630(2)
WAC 173-400-105(3) & (4)

The permittee shall allow inspection and entry, upon presentation of credentials and other documents as may be required by law, by the permitting authority or an authorized representative to perform the following:

(a) Enter upon the permittee's premises where an air operating permit source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

(d) As authorized by WAC 400-105 and the FCAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

G7. Schedule of Compliance WAC 173-401-630(3)

The permittee shall continue to comply with all applicable requirements with which the source is currently in compliance, and meet on a timely basis any applicable requirements that become effective during the permit term.

G8. Permit Renewal Application WAC 173-401-710(1)

The permittee shall submit a complete permit renewal application to EFSEC no later than the date established in the permit. This permit expires on **XXXX**. A renewal application is due on **October 10, 2015** and a complete renewal application is due no later than **XXXXX.**

G9. Transfer of Ownership or Operational Control WAC 173-401-720(1)(d)

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.

G10. Portable Sources WAC 173-400-036 (State Only)
WAC 173-400-110(6)

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 173-040-036(2) through (4) are met. Operation at any location under this provision is limited to one year or less.

G11. Misrepresentation and Tampering
WAC 173-400-105(6 & 8) (State Only)

(a) The permittee shall not make any false material statement, representation or certification in any form, notice, or report.

(b) The permittee shall 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.

G12. New Source Review WAC 173-400-110

WAC 173-400-700
WAC 173-460-040 (State Only)

The permittee shall not construct or modify a source which is required to be reviewed under WAC 173-400 or WAC 173-460 without first receiving an approval or permit under such provisions. Portable sources may be exempt from the requirement to obtain a site-specific permit if they fulfill the criteria described in **G10 - Portable Sources**.

G13. Replacement or Substantial Alteration of Emission Control Technology at an Existing Stationary Source

WAC 173-400-114 (State Only)

Prior to replacing or substantially altering emission control technology or equipment installed at an existing stationary source or emission unit, the permittee shall file an air discharge permit application with EFSEC. Construction shall not commence on a project subject to review until EFSEC issues a final air discharge permit or other regulatory order. However, any air discharge permit application filed under this section shall be deemed to be approved without conditions if EFSEC takes no action within thirty days of receipt of a complete application.

G14. Outdoor Burning WAC 173-425

The permittee is prohibited from conducting outdoor burning except as allowed by WAC 173-425.

G15. Reporting of Emissions of Greenhouse Gases WAC 173-441 (State Only)

WAC 173-441 requires owners and operators of affected facilities to quantify and report emissions of greenhouse gases from applicable source categories listed in WAC 173-441-120. This regulation applies to any facility located in Washington State with total greenhouse gas emissions of ten thousand metric tons CO_2e or more per calendar year. The permittee shall prepare and submit greenhouse gas reports to Ecology in accordance with the provisions of WAC 173-441-050 for each affected facility.

VI. OPERATING TERMS AND CONDITIONS

The following table lists all federal, state, and/or locally enforceable operating terms and conditions applicable to the permittee. The legal authority for each requirement is enclosed in brackets below each requirement. Applicable requirements identified as having "plantwide" applicability apply to both EUs and IEUs. Some of the requirements have been partially adopted into the Washington State Implementation Plan (SIP). Only those parts adopted into the Washington SIP are federally enforceable. Requirements which are not required under the FCAA are denoted as state or local only. Monitoring requirements are used to provide a reasonable assurance of compliance with the applicable requirements, and may or may not involve the use of a reference test method.

Req. #	Requirement	Emission Point	Monitoring
Req-1	Permittee shall not cause or permit any emission which exceeds 20% opacity for more than three minutes, in any one hour. Reference Method: Ecology Method 9A [WAC 173-400-040(1)(a)&(b) – SIP Only WAC 173-400-040(2)(a)&(b) – State Only]	Plantwide	M1 Visible Emissions
Req-2	Permittee shall not cause or permit fallout of particulate matter beyond the source's property boundary in sufficient quantity to interfere unreasonably with the use and enjoyment of the property on which the fallout occurs. [WAC 173-400-040(3)]	Plantwide	M1 Visible Emissions, M2 Fugitive Emissions, M3 Complaints
Req-3	Permittee shall take reasonable precautions to prevent the release of fugitive emissions from any emission unit which is a source of fugitive emissions. [WAC 173-400-040(3)(a) – SIP Only WAC 173-400-040(4)(a) – State Only]	Plantwide	M2 Fugitive Emissions
Req-4	Permittee shall use recognized good practice and procedures to reduce odors to a reasonable minimum. [WAC 173-400-040(5) – State Only]	Plantwide	M3 Complaints
Req-5	Permittee shall not cause or permit emissions detrimental to persons or property. [WAC 173-400-040(5) – SIP Only WAC 173-400-040(6) – State Only]	Plantwide	M3 Complaints

Req. #	Requirement	Emission Point	Monitoring
Req-6	Permittee shall not cause or permit the installation or use of any means which conceals or masks an emission which would otherwise violate any provisions of WAC 173-400-040. [WAC 173-400-040(7) – SIP Only WAC 173-400-040(8) – State Only]	Plantwide	N/A
Req-7	Permittee shall take reasonable precautions to prevent emissions of fugitive dust and operate the source to minimize emissions. Reference Method: Ecology Method 9A [WAC 173-400-040(9)(a) – SIP Only WAC 173-400-040(9)(a) – State Only]	Plantwide	M2 Fugitive Emissions, M3 Complaints
Req-8	Permittee shall not cause or allow emissions of particulate matter from a general process unit (excluding combustion) in excess of 0.1 gr/dscf of exhaust gas. Reference Method: EPA Method 5 [WAC 173-400-060]	Plantwide	M1 Visible Emissions
Req-9	Permittee shall maintain and operate equipment in a manner consistent with good air pollution control practices for minimizing emissions. [40 CFR 60.11(d) WAC 463-78-115]	EU-1, EU-2, EU-3	N/A
Req-10	No fuel which contains sulfur in excess of 0.8 percent by weight shall be burned in the combustion turbines. [40 CFR 60.333(b) WAC 463-78-115]	EU-1, EU-2	M6 SO_2 General Standard Monitoring
Req-11	The combustion turbines shall be fueled only by natural gas except when natural gas is not available and during limited test periods. When natural gas is not available and during limited test periods, the combustion turbines may be fueled by "on-road specification diesel fuel" (oil) containing no more than 0.05% sulfur by weight, as specified in 40 CFR 80.29 as amended through July 1, 1992. Each turbine may not fire oil more than 720 hours per year. [EFSEC/95-02 Amendment 2, Conditions 1.1 & 1.2]	EU-1, EU-2	M5 CEMS and Process Monitoring, M6 SO_2 General Standard Monitoring

Req. #	Requirement	Emission Point	Monitoring
Req-12	Emissions of nitrogen oxides from each HRSG exhaust stack shall not exceed any of the following: (a) 3.0 ppmvd @ 15% O_2 (1-hour average) when firing natural gas (b) 491 pounds per day when firing natural gas (c) 14.0 ppmvd @ 15% O_2 (1-hour average) when firing oil (d) 2,538 pounds per day when firing oil (e) 241 tons per year (annual total rolled monthly, both units combined) The hourly emission limit for oil firing shall apply in any hour in which both oil and natural gas are fired. If oil and natural gas are fired in the same calendar day, the calendar day emissions shall not exceed the weighted average emission limits for natural gas and oil firing, weighted according to the fraction of the day each fuel is fired. Except when reference method source testing is being conducted, these emission limits shall be applied on CEM clock hours and calendar days. Reference Method: EPA Method 7E [40 CFR 60.332(a)(1) WAC 463-78-115 [EFSEC/95-02 Amendment 2, Conditions 2.1, 2.2, 2.3, & 24]	EU-1, EU-2	M4 Performance Testing, M5 CEMS and Process Monitoring
Req-13	Emissions of carbon monoxide from each HRSG exhaust stack shall not exceed any of the following: (a) 3.0 ppmvd @ 15% O_2 (1-hour average) when firing natural gas (b) 7.7 pounds per hour (1-hour average) when firing natural gas (c) 8.0 ppmvd @ 15% O_2 (1-hour average) when firing oil (d) 24.4 pounds per hour (1-hour average) when firing oil The hourly emission limits for oil firing shall apply in any hour in which both oil and natural gas are fired. Except when reference method source testing is being conducted, these emission limits shall be applied on CEM clock hours and calendar days. Reference Method: EPA Method 10 [EFSEC/95-02 Amendment 2, Conditions 3.1, 3.2 & 24]	EU-1, EU-2	M4 Performance Testing, M5 CEMS and Process Monitoring
Req-14	Emissions of sulfur dioxide from each HRSG exhaust stack shall not exceed any of the following: (a) 10.4 pounds per hour when firing natural gas (b) 119 pounds per hour when firing oil The hourly emission limits for oil firing shall apply in any hour in which both oil and natural gas are fired. [EFSEC/95-02 Amendment 2, Conditions 4.1 & 4.2]	EU-1, EU-2	M4 Performance Testing, M5 CEMS and Process Monitoring, M6 SO_2 General Standard Monitoring

Req. #	Requirement	Emission Point	Monitoring
Req-15	Emissions of volatile organic compounds from each HRSG exhaust stack shall not exceed any of the following: (a) 7.0 pounds per hour or 152 pounds per day, whichever is more restrictive, when firing natural gas (b) 11.5 pounds per hour or 252 pounds per day, whichever is more restrictive, when firing oil The hourly emission limits for oil firing shall apply in any hour in which both oil and natural gas are fired. If oil and natural gas are fired in the same calendar day, the calendar day emissions shall not exceed the weighted average emission limits for natural gas and oil firing, weighted according to the fraction of the day each fuel is fired. Emission rates shall be expressed "as propane" unless speciation of the volatile organic compounds has been conducted sufficient to determine actual mass emission rates. Reference Method: EPA Method 18 or 25A [EFSEC/95-02 Amendment 2, Conditions 5.1 & 5.2]	EU-1, EU-2	M4 Performance Testing, M5 CEMS and Process Monitoring
Req-16	Emissions of filterable PM_{10} from each HRSG exhaust stack shall not exceed any of the following: (a) 379 pounds per day when firing natural gas (b) 480 pounds per day when firing oil If oil and natural gas are fired in the same calendar day, the calendar day emissions shall not exceed the weighted average emission limits for natural gas and oil firing, weighted according to the fraction of the day each fuel is fired. Reference Method: EPA Method 5 or 201A [EFSEC/95-02 Amendment 2, Conditions 6.1 & 6.2]	EU-1, EU-2	M4 Performance Testing, M5 CEMS and Process Monitoring
Req-17	Emissions of H_2SO_4 (sulfuric acid) from each HRSG exhaust stack shall not exceed any of the following: (a) 2.0 pounds per hour when firing natural gas (b) 19.0 pounds per hour when firing oil The hourly emission limits for oil firing shall apply in any hour in which both oil and natural gas are fired. Reference Method: EPA Conditional Test Method 8A (CTM-8A (NCASI Method 8A)) [EFSEC/95-02 Amendment 2, Conditions 7.1 & 7.2]	EU-1, EU-2	M4 Performance Testing, M5 CEMS and Process Monitoring, M6 SO_2 General Standard Monitoring
Req-18	Opacity from each HRSG exhaust stack shall not exceed 10 percent over a six minute average as measured by EPA Reference Method 9, or an equivalent method approved in advance by EFSEC. Reference Method: EPA Method 9 [EFSEC/95-02 Amendment 2, Condition 8]	EU-1, EU-2	M1 Visible Emissions

Req. #	Requirement	Emission Point	Monitoring
Req-19	Emissions of ammonia from each HRSG exhaust stack shall not exceed any of the following: (a) 10.0 ppmvd @ 15% O_2 (1-hour average) when firing natural gas (b) 612 pounds per day when firing natural gas (c) 10.0 ppmvd @ 15% O_2 (1-hour average) when firing oil (d) 683 pounds per day when firing oil If oil and natural gas are fired in the same calendar day, the calendar day emissions shall not exceed the weighted average emission limits for natural gas and oil firing, weighted according to the fraction of the day each fuel is fired. Reference Method: BAAQMD Method ST-1B [EFSEC/95-02 Amendment 2, Conditions 9.1, 9.2, 9.3 & 9.4]	EU-1, EU-2	M4 Performance Testing, M5 CEMS and Process Monitoring
Req-20	Turbine startups and shutdowns include fuel-switching activities. No more than 2 startups may occur within a 24-hour period, and no more than 200 startups may occur per calendar year (startups resulting from upset conditions are exempted). Startups end when a turbine reaches 60% load, ammonia flow is stabilized, and the selective catalytic reduction and oxidation catalyst systems have reached stable normal operating temperatures, or when one of the following time limits is reached, whichever occurs first: (a) On a cold startup, 5 hours have elapsed since fuel was first fired in the combustion turbine. A cold startup is any startup occurring after the combustion turbine as been shut down for 72 hours or more. (b) For all other startups, 3 hours have elapsed since fuel was first fired in the combustion turbine. Shutdowns are limited to 3 hours per occurrence. Shutdowns begin when the combustion turbine is initially ramped down from normal operation with the intent of shutting the unit down. Shutdowns end when fuel feed to the combustion turbine ceases. [EFSEC/95-02 Amendment 2, Conditions 10.2, 10.3, 10.6, & 10.7]	EU-1, EU-2	M5 CEMS and Process Monitoring

Req. #	Requirement	Emission Point	Monitoring
Req-21	With the exception of the emission limits listed below, the emission and opacity limitations from EFSEC/95-02 – Amendment 2 do not apply during defined startup and shutdown periods. During startup and shutdown, emissions from each HRSG exhaust stack shall not exceed any of the following: (a) 263 pounds CO per hour (averaged per occurrence) when firing natural gas (b) 417 pounds CO per hour (averaged per occurrence) when firing oil (c) 292 pounds NO_X per hour (averaged per occurrence) when firing natural gas (b) 407 pounds NO_X per hour (averaged per occurrence) when firing oil Reference Method: EPA Methods 7E and 10 [EFSEC/95-02 Amendment 2, Conditions 10,1, 10.4, & 10.5]	EU-1, EU-2	M5 CEMS and Process Monitoring
Req-22	Sampling ports and platforms shall be provided on each stack, after the final pollution control device. The ports shall meet the requirements of 40 CFR 60, Method 20. [EFSEC/95-02 Amendment 2, Condition 12]	EU-1, EU-2	N/A
Req-23	Adequate permanent and safe access to the test ports shall be provided. Other arrangements may be acceptable if approved by EFSEC prior to installation. Adequate utilities for sampling and testing equipment shall be provided. [40 CFR 60.8(e) WAC 463-78-115 EFSEC/95-02 Amendment 2, Condition 13]	EU-1, EU-2	N/A
Req-24	Operation and maintenance manuals for all equipment that has the potential to affect emissions to the atmosphere shall be developed. Copies of the manuals shall be available to EFSEC or the authorized representative of EFSEC. If a failure to follow the requirements of the manuals results in excess emissions that failure may be considered credible evidence that the event was caused by poor or inadequate operation or maintenance for purposes of applying WAC 173-400-107. [EFSEC/95-02 Amendment 2, Conditions 19.1 & 19.2]	EU-1, EU-2	N/A
Req-25	Permittee shall hold SO_2 allowances not less than the total annual emissions of SO_2 for the previous calendar year (see Appendix D Acid Rain Permit). [40 CFR 72.9(c)(1) WAC 173-406-106 and –400]	EU-1, EU-2	M6 SO_2 General Standard Monitoring

Req. #	Requirement	Emission Point	Monitoring
Req-26	Emissions from the Auxiliary Boiler shall not exceed: Pollutant — Emission Limit Nitrogen oxides — 12.0 ppmvd @ 3% O_2 (1-hour average) Carbon monoxide — 50 ppmvd @ 3% O_2 (1-hour average) PM_{10} — 0.3 pounds per hour $PM_{2.5}$ — 0.3 pounds per hour Reference Methods: EPA Methods 7E, 10, 201A (EPA Method 5 is an alternative if all PM is assumed to be $PM_{2.5}$), and 202. [EFSEC/2009-01 Condition 1]	EU-3	M7 Auxiliary Boiler Monitoring, M8 Auxiliary Boiler Source Emissions Testing and Performance Monitoring
Req-27	Opacity of emissions from the Auxiliary Boiler shall not exceed zero percent for more than three minutes in any one hour period as determined in accordance with EPA Method 9 utilizing data reduction as described in Ecology Method 9A. Reference Method: EPA Method 9 with data reduction using Ecology Method 9A [EFSEC/2009-01 Condition 2]	EU-3	M1 Visible Emissions
Req-28	The Auxiliary Boiler shall burn only natural gas as fuel. [EFSEC/2009-01 Condition 3]	EU-3	N/A

VII. MONITORING TERMS AND CONDITIONS

To assure compliance with all applicable requirements, the permittee shall perform the monitoring program specified below. Each monitoring requirement is indexed according to the underlying requirement(s). Pursuant to WAC 173-401-530(2)(c), none of the following monitoring requirements apply to IEUs except as indicated. Records of monitoring activities shall be maintained in accordance with Section VIII of this permit.

M1. Visible Emission Monitoring

WAC 173-401-615(1) - (All sources other than EU-1 and EU-2)
EFSEC/95-02 Amendment 2, Conditions 8.1, 8.2, 8.3, & 8.4 – (EU-1 and EU-2)

This monitoring requirement applies to Operating Terms and Conditions 1, 2, 8, 18, and 27.

The permittee shall perform visible emissions monitoring of EU-1 and EU-2 during daylight hours on the following schedule:

1. Weekly when firing natural gas
2. Daily when firing fuel oil

Visible emissions from other sources shall be monitored if indicated by a complaint or if otherwise unusual emissions are observed.

Visible emissions monitoring shall consist of at least 6 minutes of observation using EPA Method 22 or EPA Method 9 and Washington Department of Ecology Method 9A (EPA Methods 9 and 22 may be found at 40 CFR 60, Appendix A). If visible emissions are observed from EU-1 or EU-2 when conducting visible emissions monitoring, both EPA Method 9 and Washington Department of Ecology Method 9A must be utilized to demonstrate compliance with Condition 8 of EFSEC/95-02 Amendment 2 and the State opacity standards respectively. The EPA Method 9 or Washington Department of Ecology Method 9A monitoring must be conducted within 2 non-holiday weekdays of observing visible emissions with EPA Method 22. If a holiday falls during this 2-day period, the monitoring shall be performed on the first non-holiday weekday after the holiday. If the turbine is shut down during this 2-day period before monitoring can be conducted, then monitoring shall be conducted on the first non-holiday weekday after restarting.

EPA Method 22 may only be used if no visible emissions are observed during the 6-minute observation period.

If visible emissions are observed during visible emissions monitoring of sources other than EU-1 or EU-2, Washington Department of Ecology Method 9A must be used to determine the opacity of emissions.

When visible emissions monitoring with Washington Department of Ecology Method 9A is necessary, a minimum of 6 minutes of observation shall be conducted. For every reading in excess of the opacity standard, opacity shall be read for an additional 6 minutes to a maximum total of 60 minutes or 13 readings in excess of the opacity standard. For example, if a single reading of 30% opacity is made during the initial 6-minute observation period, then monitoring is required for an additional 6 minutes. If two readings of 30% opacity are recorded during the second observation period, two additional 6-minute observations must be performed. Observations continue in this manner until 60 minutes of observations or 13 readings in excess of the opacity standard have been recorded. Implementation of corrective action does not relieve the permittee from the obligation of reporting permit deviations as specified in WAC 401-615(3).

M2. Fugitive Emissions Monitoring WAC 173-401-615(1)

This monitoring requirement applies to Operating Terms and Conditions 2, 3, and 7.

The permittee shall perform monthly inspections of the facility during daylight hours to identify any excess fugitive emissions, including fugitive dust. Inspections shall also be conducted if indicated by a complaint or if otherwise unusual emissions are observed. Whenever fugitive emissions, including excessive fugitive dust, are observed during the monthly inspection or any other time, the permittee shall verify the source of the emissions. The permittee shall within 2 hours of discovery initiate investigation of the equipment involved to confirm whether the equipment is or is not experiencing a malfunction, and whether reasonable precautions and good work practices are being employed to minimize emissions.

M3. Complaint Monitoring WAC 173-401-615(1)

This monitoring requirement applies to Operating Terms and Conditions 2, 4, 5, and 7.

The permittee shall record, and maintain record of, any air quality related complaints concerning the Chehalis Generation Facility that are received by either the permittee or EFSEC. All complaints shall be investigated no later than one workday after the permittee has been notified, and those complaints subject to requirement M2 shall be addressed in a timely manner consistent with M2. The permittee shall investigate the validity of each complaint and the cause of any emissions that prompted the complaint, and initiate corrective action, if needed, in response to the complaint. Within 24 hours of notification and investigation, the permittee shall resolve the subject of the complaint, or notify EFSEC by the next working day of progress made in resolving the complaint.

M4. Performance Testing

EFSEC/95-02 Amendment 2, Conditions 15.1 & 15.2

This monitoring requirement applies to Operating Terms and Conditions 12, 13, 14, 15, 16, 17, and 19.

The permittee shall conduct source testing of EU-1 and EU-2 at least once for every eight calendar quarters to quantify emissions of PM_{10}, VOCs, and H_2SO_4. This testing must be completed no more than 720 operating hours after the end of the eighth calendar quarter. An operating quarter is any quarter in which the combustion turbine is operated for 168 or more hours.

Source testing for these parameters is to coincide with the Relative Accuracy Test Audit (RATA) required for each CEMS. If the results of three consecutive tests indicates that the source can maintain compliance with a specific pollutant's (PM_{10}, VOCs, or H_2SO_4) emission limitations, and EFSEC agrees to allow a reduced frequency of source testing, then the compliance testing frequency for that pollutant can be reduced to once every four calendar years, until a test indicates noncompliance. When a compliance test for a pollutant indicates noncompliance with the emission limitations for a specific pollutant, the frequency of source testing to quantify emissions of that pollutant shall return to once for every eight calendar quarters until the above criteria are met again.

Source testing shall consist of a minimum of three 60-minute test runs. All source testing shall be conducted at base load. Base load is the normal maximum loading for continuous turbine operation as determined by turbine exhaust temperature levels.

M5. Continuous Emission and Process Monitoring WAC 173-400-105(7)
40 CFR 75
WAC 173-401-630(1)
EFSEC/95-02 Amendment 2, Conditions 14 .1, 14.2, 14.3, 14.5, & 16

This monitoring requirement applies to Operating Terms and Conditions 11, 12, 13, 14, 15, 16, 17, 19, 20, and 21.

A CEMS shall be installed and maintained to monitor NO_X, CO, and NH_3 emissions from each combustion turbine exhaust stack as follows:

(a) The permittee shall install and maintain a system for monitoring the concentration and emission rate of NO_X, emission rates of CO_2, and the concentration of O_2, from each combustion turbine exhaust stack in accordance with the requirements and specifications found in the following regulations:

- 40 CFR 75 – Continuous Emissions Monitoring

In order to provide for a reasonable assurance of compliance with the permitted emission limits, the NO_X CEMS shall meet the following performance criteria:

- A Relative Accuracy of 20% when the average reference method value is used in the denominator of Equation A-10 of 40 CFR 75; or a Relative Accuracy of 10% when the applicable emission standard (3.0 ppmvd @ 15% O_2, 0.011 lb/MMBtu) is used in the denominator of Equation A-10 of 40 CFR 75 in place of the arithmetic mean of the reference method values. For the purposes of this requirement, the Relative Accuracy shall be calculated from the CEMS and Reference Method output in units of pounds of NO_X per million British thermal units (lb/MMBtu) of fuel consumed.
- The calibration error as defined in 40 CFR 75, Appendix A, Section 7.2.1 shall not exceed 5%.

(b) The permittee shall install and maintain a system for monitoring the concentration and emission rate of CO from each combustion turbine exhaust stack in accordance with the requirements and specifications found in the following regulations:

- 40 CFR 60, Appendix B - Performance Specification 4A "Specifications and Test Procedures for Carbon Monoxide Continuous Emission Monitoring Systems in Stationary Sources"
- 40 CFR 60, Appendix F "Quality Assurance Procedures"
- WAC 173-400-105(7) "Continuous Emission Monitoring System Operating Requirements"

In order to provide for a reasonable assurance of compliance with the permitted emission limits, the CEMS shall meet the following performance criteria:

- A Relative Accuracy of 20% when the average reference method value is used in the denominator of Equation 2-6 of 40 CFR 60, Performance Specification 2; or a Relative Accuracy of 10% when the applicable emission standard (3.0 ppmvd @ 15% O_2) is used in the denominator of Equation 2-6 of 40 CFR 60, Performance Specification 2. For the purposes of this requirement, the Relative Accuracy shall be calculated from the CEMS and Reference Method output in units of parts per million, dry volume basis, corrected to 15% O_2.
- The criteria for excessive audit inaccuracy found in Section 5.2.3(2) of 40 CFR 60, Appendix F, Procedure 1 (cylinder gas audits) is replaced by a maximum audit inaccuracy of ±15 percent of the average audit value or 0.5 ppm, whichever is greater.

Notwithstanding the requirements in the above regulations, Relative Accuracy Test Audits (RATAs) shall be conducted at least once for every four operating quarters or eight calendar quarters, whichever comes first. RATAs shall be completed no later than 720 operating hours after the end of the fourth operating quarter or eighth calendar quarter, whichever comes first. An operating quarter is any quarter in which the combustion turbine is operated for 168 or more hours.

(c) The permittee shall install and maintain a system for monitoring the concentration and emission rate of NH_3 from each combustion turbine exhaust stack in accordance with the requirements and specifications found in the following regulations:

- 40 CFR 60, Appendix B - Performance Specification 2 "Specifications and Test Procedures for SO_2 and NO_X Continuous Emission Monitoring Systems in Stationary Sources"
- 40 CFR 60, Appendix F "Quality Assurance Procedures" In order to provide for a reasonable assurance of compliance with the permitted emission limits, the criteria for excessive audit inaccuracy in Section 5.2.3(2) of Procedure 1 is replaced by a maximum audit inaccuracy of ±15 percent of the average audit value or 1.0 ppm, whichever is greater.
- WAC 173-400-105(7) "Continuous Emission Monitoring System Operating Requirements"

Notwithstanding the requirements in the above regulations, Relative Accuracy Test Audits (RATAs) shall be conducted at least once for every four operating quarters or eight calendar quarters, whichever comes first. RATAs shall be completed no later than 720 operating hours after the end of the fourth operating quarter or eighth calendar quarter, whichever comes first. An operating quarter is any quarter in which the combustion turbine is operated for 168 or more hours.

(d) The following hourly average CEMS/data acquisition system (DAS) data shall be collected for each combustion turbine:

(1) NO_X emission concentration (ppmvd @ 15% O_2, 1-hour average);
(2) NO_X emission rate (pounds per calendar day);
(3) CO emission concentration (ppmvd @ 15% O_2, 1-hour average);
(4) CO emission rate (lb/hr, 1-hour average);
(5) NH_3 emission concentration (ppmvd @ 15% O_2, 1-hour average);
(6) NH_3 emission rate (pounds per calendar day)
(7) NH_3 flow to the SCR system (lb/hr, 1-hour average);
(8) O_2 concentration (dry volume percent, 1-hour average);
(9) Turbine fuel consumption (MMBtu/hr, 1-hour total) and type (gas or oil); and
(10) Turbine generator net electrical output (megawatts, 1-hour total).

M6. SO_2 General Standard Monitoring

40 CFR 60.334(h)(3)
WAC 463-78-115
40 CFR 75.11(d)

This monitoring requirement applies to Operating Terms and Conditions 10, 11, 14, 17, and 25.

The permittee shall calculate hourly SO_2 emission rates in accordance with 40 CFR Part 75 Appendix D. For pipeline natural gas, an emission factor of 0.0006 lb/MMBtu may be used to calculate emissions. For natural gas that does not qualify as pipeline natural gas, SO_2 emissions shall be calculated using equation D-1h of 40 CFR 75 and the results of fuel sulfur content monitoring as provided in 40 CFR 75, Appendix D, Section 2.3.

M7. Auxiliary Boiler Monitoring

40 CFR 60.48c(g)
EFSEC/2009-01 Conditions 4 & 5

This monitoring requirement applies to Operating Term and Condition 26.

The total amount of natural gas consumed by the Auxiliary Boiler shall be recorded for each calendar month.

Maintenance activities for the Auxiliary Boiler that affect emissions shall be logged for each occurrence.

M8. Auxiliary Boiler Source Emissions Testing and Performance Monitoring

EFSEC/2009-01 Conditions 9 & 10

This monitoring requirement applies to Operating Term and Condition 26.

Source emissions testing of the Auxiliary Boiler shall be conducted initially and at least once every 60 calendar months (no later than the end of the calendar month during which the initial source emissions testing was conducted) in accordance with Appendix B of this Permit. Initial source emissions testing shall be conducted within 60 days after achieving the maximum operating rate but no later than 180 days after initial operation. The Permittee shall provide adequate and safe access to sampling ports meeting the criteria of EPA Method 1 (40 CFR 60, Appendix A).

Performance monitoring of the Auxiliary Boiler shall be conducted as described in Appendix C of this Permit no later than the end of April each year in which source emissions testing is not conducted.

VIII. RECORDKEEPING TERMS AND CONDITIONS

All monitoring records shall be maintained in a readily accessible form for a minimum period of five years from the date of the monitoring sample, measurement, report, or application (WAC 173-401-615(2)(c)). Pursuant to WAC 173-401-530(2)(c), none of the recordkeeping requirements

apply to IEUs. The permittee shall maintain records of required monitoring per M1 through M8. The following information shall be included in the records as applicable:

K1. General Recordkeeping WAC 173-401-615(2)
EFSEC/2009-01, Condition 6

Permittee is required to keep the following records:

(a) Inspections & Certifications
- (i) The date, place, and time of activity;
- (ii) Who conducted the inspection or certification;
- (iii) The operating conditions existing at the time of the activity; and
- (iv) Compliance status of each monitored requirement as described in this permit; and

(b) Complaints
- (i) The date, and time of complaint;
- (ii) Name of the complainant;
- (iii) The nature of the complaint;
- (iv) Date and time of the follow-up inspection;
- (v) The results of the inspection and the cause of the complaint, if discovered; and
- (vi) Corrective action taken in response to complaints and when such action was initiated.

(c) Upset Conditions (including excess emissions)
Auxiliary Boiler [EFSEC/2009-01, Condition 6]
- (i) Excess emissions, and upset conditions that cause excess emissions, shall be recorded for each occurrence.

(d) Sampling and Emissions Testing
- (i) The date, place, and time sampling was performed;
- (ii) The entity that performed the sampling;
- (iii) The analytical techniques used to take the sample or perform the observation;
- (iv) The operating conditions existing at the time of sampling or measurement;
- (v) The date analyses were performed;
- (vi) The entity that performed the analyses;
- (vii) The analytical techniques or methods used to perform the analyses; and
- (viii) The results of such analyses.

(e) General Recordkeeping (parameter logging requirements, design parameters, etc.)
- (i) The date and time the data was collected (as applicable) and, if not recorded by a computerized data acquisition system, the name of the person making the record; and
- (ii) The relevant parameters or data.

K2. Continuous Emissions and Process Data Recordkeeping Requirements

40 CFR 75.57, 75.58, & 75.59
WAC 173-401-615(2)
WAC 173-400-105(7)

The permittee shall record and maintain for emission units EU-1 and EU-2 a file of all measurements, data, reports, and other information required by this permit at the source in a readily accessible form suitable for inspection for at least five (5) years from the date of each record. This file shall include all information required in 40 CFR Part 75 Sections 57, 58, and 59.

For all periods of operation, the file shall include the following data for each combustion turbine exhaust stack (EU-1 and EU-2):

(a) NO_X emission concentration (ppmvd @ 15% O_2, 1-hour average);
(b) NO_X emission rate (pounds per calendar day);
(c) CO emission concentration (ppmvd @ 15% O_2, 1-hour average);
(d) CO emission rate (lb/hr, 1-hour average);
(e) NH_3 emission concentration (ppmvd @ 15% O_2, 1-hour average);
(f) NH_3 emission rate (pounds per calendar day)
(g) NH_3 flow to the SCR system (lb/hr, 1-hour average);
(h) O_2 concentration (dry volume percent, 1-hour average);
(i) Turbine fuel consumption (MMBtu/hr, 1-hour total) and type (gas or oil);
(j) Turbine generator net electrical output (megawatts, 1-hour total).

The permittee must maintain a record of all repairs, adjustments, and maintenance performed on the CO and NH3 monitoring systems. [WAC 173-400-105(7)(e)]

IX. REPORTING TERMS AND CONDITIONS

All required reports must be certified by a responsible official consistent with WAC 173-401-520. 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.

Addresses of regulatory agencies are the following, unless otherwise instructed:

Energy Facility Site Evaluation Council
1300 South Evergreen Park Drive SW
PO Box 43172
Olympia, WA 98504-3172

Clean Air Act Compliance Manager
US EPA Region 10, Mail Stop: OCE-101
1200 Sixth Avenue, Suite 900
Seattle, WA 98101

R1. Deviations from Permit Conditions

WAC 173-400-107
WAC 173-401-615(3)(b)
EFSEC/95-02 Amendment 2, Condition 18
EFSEC/2009-01, Conditions 11 & 13

Deviations from permit requirements shall be reported no later than thirty days after the end of the month during which the deviation is discovered. Deviations that represent a potential threat to human health or safety shall be reported as soon as possible but no later than twelve hours after the deviation is discovered. Reports of deviations shall include:

(a) Identification of the emission unit(s) involved;
(b) The duration of the event including the beginning and end times;
(c) For emission and process parameter excesses, the magnitude of the excess;
(d) Any other agency contacted; and
(e) A brief description of the event, including:
  (i) Whether or not the deviation was due to an upset condition;
  (ii) The probable cause of the deviation; and
  (iii) The corrective action taken or planned and when the corrective action was, or will be initiated.

In accordance with WAC 400-107, excess emissions that the permittee wishes to be considered unavoidable must be reported as soon as possible. The permittee shall report the upset condition by telephone, e-mail or fascimile as initial notification to EFSEC.

R2. Complaint Reports WAC 173-401-615(3)

The permittee shall report all complaints related to air quality and the Chehalis Generation Facility to EFSEC within three business days of receipt. Complaint reports shall include the date and time of the complaint, the name of the complainant, and the nature of the complaint.

R3. Quarterly Reports 40 CFR 75.64
WAC 173-401-615(3)
WAC 173-400-105(7)
EFSEC/95-02 Amendment 2, Conditions 16 & 17

The permittee shall submit the following CEMS and process data to EFSEC and EPA for each combustion turbine no later than 30 days after the end of each calendar quarter:

(a) NO_X emission concentration (ppmvd @ 15% O_2, 1-hour average);
(b) NO_X emission rate (pounds per calendar day);
(c) CO emission concentration (ppmvd @ 15% O_2, 1-hour average);
(d) CO emission rate (lb/hr, 1-hour average);
(e) NH_3 emission concentration (ppmvd @ 15% O_2, 1-hour average);
(f) NH_3 emission rate (pounds per calendar day)
(g) NH_3 flow to the SCR system (lb/hr, 1-hour average);
(h) O_2 concentration (dry volume percent, 1-hour average);
(i) Turbine fuel consumption (MMBtu/hr, 1-hour total) and type (gas or oil); and
(j) Turbine generator net electrical output (megawatts, 1-hour total).

The permittee shall submit all electronic monitoring reports required by 40 CFR 75 to EFSEC and EPA for each combustion turbine no later than 30 days after the end of each calendar quarter. For each report, a copy of EPA's response shall be submitted with each submission to EFSEC.

For each reporting element with an hourly averaging or totalizing period, the permittee shall provide data for each clock hour. For each reporting element with a daily totalizing period, the permittee shall provide data for each calendar day. The permittee shall indicate in each report whether the time is reported as "standard time" or "daylight savings" time.

The permittee shall submit all reports required by 40 CFR 75 to EFSEC (in addition to the required electronic submission to EPA's Clean Air Markets Division) in the form (electronic or paper) required by the EPA. The permittee shall submit all CEMS and process data listed in "a" through "j" above in an electronic spreadsheet format approved by EFSEC.

The permittee must submit the following CEMS and process data to EFSEC for each combustion turbine CO and NH_3 CEMS no later than 30 days after the end of each calendar quarter: [WAC 173-400-105(7)]

(k) The number of hours that the monitored emission unit operated each month and the number of valid hours of monitoring data that the monitoring system recovered each month;

(l) The date, time period, and cause of each failure to meet the data recovery requirements of WAC 173-400-105(7)(a) and any actions taken to ensure adequate collection of such data;

(m) The date, time period, and cause of each failure to recover valid hourly monitoring data for at least 90 percent of the hours that the turbine was operated each day; and

(n) The results of all cylinder gas audits conducted during the month.

R4. Semi-annual Reports WAC 173-401-615(3)

Consistent with WAC 173-401-615(3) the permittee shall submit to EFSEC by October 15th 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 permit requirements shall be clearly identified. The semi-annual report shall contain a certification of any reports submitted during the semi-annual period that have not already been certified. The certification shall be consistent with WAC 173-401-520.

R5. Annual Compliance Certifications WAC 173-401-630(5)

(a) General: The permittee shall submit to EFSEC and EPA a certification of compliance with all terms and conditions of this permit in accordance with WAC 173-401-630(5)(d). The permittee shall submit by April 15th of the following year the following information for the period of January through December:

(i) Identification of each term or condition of the permit that is the basis of the certification;
(ii) Statement of compliance status;
(iii) Whether compliance was continuous or intermittent;
(iv) Method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with WAC 173-401-615;
(v) Such other facts as EFSEC may require to determine the compliance status of the source; and

(vi) Such additional requirements as may be specified pursuant to Sections 114(a)(3) and 504(b) of the FCAA.

R6. Emission Inventory Reports WAC 173-400-105
EFSEC/2009-01, Condition 14

The permittee shall submit an inventory of annual emissions from the source each calendar year to EFSEC by April 15th of the following year in accordance with WAC 173-400-105. The inventory shall include stack and fugitive emissions of NO_X, SO_2, CO, VOC, PM, and toxic air pollutants identified in WAC 173-460.

The following emissions related records for the Auxiliary Boiler shall be reported to EFSEC by March 15th for the previous calendar year:

(a) The total amount of natural gas consumed by the Auxiliary Boiler;
(b) Air emissions of criteria air pollutants, volatile organic compounds, hazardous air pollutants, and toxic air pollutants.

R7. Source Test Reports 40 CFR 75.60(b)
EFSEC/95-02 Amendment 2, Condition 17.5
EFSEC/2009-01, Condition 12

Reports of all required source or emissions testing of the combustion turbines shall be submitted to EFSEC no later than 30 days after the end of the calendar quarter during which the testing was performed. For relative accuracy test audits conducted to comply with 40 CFR 75 requirements, if requested in writing (or by electronic mail) by EPA Regional X or EFSEC, the designated representative shall submit a hardcopy report to EPA Region X or EFSEC within 45 days after test completion or within 15 days of receiving the request, whichever is later.

The results of all source emissions testing of the Auxiliary Boiler shall be reported to EFSEC within 45 days of test completion.

X. NON-APPLICABLE REQUIREMENTS WAC 173-401-640(2)

This section lists all federal, state, and/or local requirements which might reasonably apply to the permittee, but are deemed nonapplicable after review by EFSEC. In accordance with WAC 173-401-640, the permittee is provided a permit shield for not complying with the requirements described below where they have been identified to be non-applicable to specific emission units.

1. Registration Program WAC 463-78-100

The permittee is under the jurisdiction of Washington's Energy Facility Site Evaluation Council (EFSEC) and is therefore required to register with EFSEC pursuant to WAC 463-39-100 (SIP), however the latest version adopted by EFSEC in WAC 463-78-100 (effective 8/27/15) exempts air operating permit sources from the registration requirements.

2. Requirements for Sources in Nonattainment Areas WAC 173-400-112

The permittee is not located in a nonattainment area for any criteria pollutant. Therefore, this regulation is not applicable.

3. Bubble Rules WAC 173-400-120

The permittee has not requested an emission bubble for any regulated pollutant. Therefore, this regulation is not applicable.

4. Issuance of Emission Reduction Credits WAC 173-400-131

The permittee has not sought emission reduction credits (ERCs). Therefore, this regulation is not applicable.

5. Use of Emission Reduction Credits WAC 173-400-136

The permittee has not sought to use emission reduction credits (ERCs). Therefore, this regulation is not applicable.

6. National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines 40 CFR Part 63.6080 et seq. Subpart YYYY

Subpart YYYY applies to combustion turbines built after January 14, 2003 and located at major sources of HAP emissions. The combustion turbines at this facility were built and installed prior to January 14, 2003, and this facility is not a major source of HAP emissions, therefore this regulation is not applicable to the combustion turbines at this facility.

7. Compliance Assurance Monitoring 40 CFR Part 64

Part 64 applies to certain pollutant-specific emissions units at major sources. In general, Part 64 applies to emission units that utilize a control device to achieve compliance with an emission limit for a pollutant that otherwise could be emitted at a rate exceeding the applicable major source threshold (e.g. 100 tpy criteria pollutants and VOCs, 10 tpy individual HAP). Each combustion turbine could emit more than 100 tpy of CO and NO_X if emission controls were not installed, has emission limits for these pollutants, and utilize control equipment in order to achieve compliance with the applicable emission limits. ~~However, 40 CFR 64.2(b)(vi) exempts these emission limitations from additional requirements of Part 64 because the permittee is already required to utilize CEMS to measure concentrations and emission rates of these pollutants.~~

The NO_X and CO CEMS meet the monitoring design criteria of 40 CFR 64.3(d). NO_X emission limits for the turbines are expressed in ppmvd @ 15% O_2 (1-hour average), lb/day and tons per 12-month period. CO emission limits for the turbines are expressed in ppmvd @ 15% O_2 (1-hour average) and lb/hr. The required CEMS provide CO, NO_X, and O_2 concentrations continuously (which is defined as at least one cycle of measurement every 15 minutes), which allows calculation of the hourly average NO_X and CO concentrations for each hour. In addition, the permittee is required to continuously monitor fuel consumption in

accordance with 40 CFR 75 to allow the calculation of pollutant mass emission rates. In accordance with requirement M5, the permittee is required to collect NO_X and CO emission data in the units of the emissions standards. In accordance with requirement K2, the permittee is required to keep records of NO_X and CO emission data in units of the emission limitations. In accordance with requirement R3, the permittee is required to report NO_X and CO emissions in units of the emission limitations.

Missing data substitution is not used for evaluating compliance with the short term NO_X and CO limits and there are no long-term CO emission limits. In accordance with requirement M5, procedures from 40 CFR 75 apply to the NO_X CEMS, and procedures from 40 CFR 60 apply to the CO CEMS. In accordance with 40 CFR 75, data substitution is used for determining compliance with the long-term NO_X limit unless there is other credible evidence (see Permit Provision P1) indicating compliance.

8. Standards of Performance for Stationary Compression Ignition Internal Combustion Engines 40 CFR 60.4200 et seq. Subpart IIII
&
National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines 40 CFR 63.6580 et seq. Subpart ZZZZ

The Permittee operates a diesel-fired compressor engine at the facility. This engine is used for a variety of activities including:

1. Providing air pressure when all sources of outside power to the facility are turned off for maintenance to prevent the fire control system from activating.
2. Cleaning the HRSGs.
3. Running portable equipment (previously used to power a jackhammer).

The following engine details were gathered during a visit to the facility on March 23, 2010:

Engine Make / Model:	John Deere / 5030TF270B
Engine Capacity:	61.5 kW (82.5 hp)
Fuel:	Diesel
EPA Emission Certification:	At least Tier 2 (complies with model year 2007 standards)
Ordered:	July 19, 2007
Installed / Delivered:	December 27, 2007

The compressor engine is mobile (mounted on a trailer) and may move from location to location within the facility. If the engine moves from site to site within the facility, never staying at any one site for more than 12 consecutive months, it is a nonroad engine. This engine never stays in the same site for more than 12 consecutive months and is therefore classified as a nonroad engine. Nonroad engines are excluded from the definition of a stationary source and therefore not subject to stationary source standards such as Subpart IIII or Subpart ZZZZ and are not subject to the Air Operating Permit program.

9. Federal Greenhouse Gas Reporting Requirements 40 CFR Part 98

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.*

These requirements will be enforced directly by the USEPA outside of the Air Operating Permit Program.

10. National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers - Area Sources 40 CFR 63.11193 et seq. Subpart JJJJJJ

The Permittee operates the following three steam generating units (boilers): Unit #1 Heat Recovery Steam Generator, Unit #2 Heat Recovery Steam Generator, and the Auxiliary Boiler.

The Unit #1 Heat Recovery Steam Generator and the Unit #2 Heat Recovery Steam Generator do not meet the definition of "boiler" in Subpart JJJJJJ and therefore are not subject to this regulation. The heat recovery steam generators are not fired; all heat utilized by the units originates in the combustion turbines. In accordance with 40 CFR 63.11237, the definition of "boiler" does not include "waste heat boilers". A "waste heat boiler" is defined as "...a device that recovers normally unused energy and converts it to usable heat. Waste heat boilers are also referred to as heat recovery steam generators." Subpart JJJJJJ only applies to boilers as defined in the rule.

The Auxiliary boiler is fired solely on natural gas and therefore is not subject to this regulation. Natural gas fired boilers are not included in the description of the affected sources found in 40 CFR 63.11194. 40 CFR 63.11195(e) specifically lists "gas-fired boilers" as sources that are not subject to this regulation.

APPENDIX A

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY SOURCE TEST METHOD 9A

VISIBLE DETERMINATION OF OPACITY FOR A THREE MINUTE STANDARD

1. Principle

The opacity of emissions from stationary sources is determined visually by a qualified observer.

2. Procedure

The observer must be certified in accordance with the provisions of Section 3 of 40 CFR Part 60, Appendix A, Method 9, as in effect on July 1, 1990, which are hereby adopted by reference.

The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented in the 140° sector to his/her back. Consistent with maintaining the above requirement, the observer shall, as much as possible, make his/her observations from a position such that his/her line of vision is approximately perpendicular to the plume direction, and when observing opacity of emissions from rectangular outlets (e.g., roof monitors, open baghouses, noncircular stacks), approximately perpendicular to the longer axis of the outlet. The observer's line of sight should not include more than one plume at a time when multiple stacks are involved, and in any case, the observer should make his/her observations with his/her line of sight perpendicular to the longer axis of such a set of multiple stacks (e.g., stub stacks on baghouses).

The observer shall record the name of the plant, emission location, type of facility, observer's name and affiliation, a sketch of the observer's position relative to the source, and the date on a field data sheet. The time, estimated distance to the emission location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), and plume background are recorded on a field data sheet at the time opacity readings are initiated and completed.

The observer should make note of the ambient relative humidity, ambient temperature, the point in the plume that the observations were made, the estimated depth of the plume at the point of observation, and the color and condition of the plume. It is also helpful if pictures of the plume are taken.

Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. The observer shall not look continuously at the plume, but instead shall observe the plume momentarily at 15 second intervals.

When condensed water vapor is present within the plume as it emerges from the emission outlet, opacity observations shall be made beyond the point in the plume at which condensed water vapor is no longer visible.

When water vapor in the plume condenses and becomes visible at a distinct distance from the emission outlet, the opacity of emissions should be evaluated at the emission outlet prior to the condensation of water vapor and the formation of the steam plume.

Opacity observations shall be recorded to the nearest 5 percent at 15 second intervals on an observational record sheet. Each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15 second period.

3. Analysis

The opacity of the plume is determined by individual visual observations. Opacity shall be reported as the range of values observed during a specified time period, not to exceed 60 consecutive minutes. The opacity standard is exceeded if there are more than 12 observations, during any consecutive 60-minute period, for which an opacity greater than the standard is recorded.

4. References

Federal Register, Vol. 36, No. 247, page 24895, December 23, 1971.

"Criteria for Smoke and Opacity Training School 1970 - 1971" Oregon-Washington Air quality Committee."

"Guidelines for Evaluation of Visible Emissions" EPA 340/1-75-007

Appendix B
Source Emission Testing Requirements
Auxiliary Boiler

1. Introduction:

a. The purpose of this testing is to quantify emissions of nitrogen oxides and carbon monoxide emitted from the Auxiliary Boiler in order to assure compliance with the emission limitations contained in NOC Approval EFSEC/2009-01.

2. Testing Requirements:

a. Source emissions testing of the Auxiliary Boiler shall be conducted initially and at least once every 60 calendar months (no later than the end of the calendar month during which the initial source test was conducted). Initial source emissions testing shall be conducted within 60 days after achieving the maximum operating rate but no later 180 days after initial operation. The use of an alternative test schedule or method must be pre-approved by EFSEC in writing.

b. A comprehensive test plan shall be submitted to EFSEC for review and approval at least 10 business days prior to testing.

c. EFSEC shall be notified of the test date at least 5 business days prior to testing.

d. Unless otherwise specified, for each boiler, testing for each constituent shall consist of a minimum of three sampling runs of the duration specified below.

Constituent	Test Method or Equivalent[1]	Minimum Test Duration
Stack gas velocity, flow rate	EPA Methods 1 and 2	N/A
Stack gas dry molecular weight, O_2, CO_2	EPA Method 3A	N/A
Stack gas moisture content	EPA Method 4	60 minutes
Nitrogen oxides	EPA Method 7E	60 minutes
Carbon monoxide	EPA Method 10	60 minutes

[1] The use of an alternate or equivalent test method must be pre-approved by EFSEC in writing.

Appendix B
Source Emission Testing Requirements
Auxiliary Boiler

3. Source Operation:

a. A complete record of production related parameters applicable to the testing, including but not limited to the following shall be kept during emissions testing to correlate operations with emissions and shall be recorded in the final report of the test results:

1. Unit startups and shutdowns
2. Boiler firing rate (fuel flow rate or fuel consumption rate)

b. Source operations during emissions testing must be representative of the most challenging of the intended operating conditions (e.g. full load).

4. Reporting:

The results of all required testing shall be submitted to EFSEC within 45 days of test completion. Each report shall be provided in an electronic format acceptable to EFSEC, and as a hard (paper) copy. Each report shall include:

a. A description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations.
b. Time and date of the test and identification and qualifications of the personnel involved.
c. A summary of results, reported in units and averaging periods consistent with the applicable emission standard or limit. CO and NO_X emissions shall be reported in units of ppmvd @ 3% O_2 and pounds per hour.
d. A summary of control system or equipment operating conditions.
e. A summary of production related parameters.
f. A description of the test methods or procedures used including all field data, quality assurance/quality control procedures and documentation.
g. A description of the analytical procedures used including all laboratory data, quality assurance/quality control procedures and documentation.
h. Copies of field data and example calculations.
i. Chain of custody information.
j. Calibration documentation.
k. Discussion of any abnormalities associated with the results.
l. A statement signed by the senior management official of the testing firm certifying the validity of the source test report.

Appendix C
Performance Monitoring Requirements
Auxiliary Boiler

1. Introduction:

a. The purpose of periodically monitoring the exhaust of the Auxiliary Boiler is to minimize emissions and provide a reasonable assurance that the unit is operating properly.

b. Periodic monitoring may be conducted with an electrochemical cell combustion analyzer, analyzers used for reference method testing, or other analyzers pre-approved by EFSEC.

2. Monitoring Requirements:

a. Monitoring to determine emission concentrations of the following constituents shall be conducted for the boiler during each calendar year. The use of an alternative test schedule must be pre-approved by EFSEC in writing.

Constituents to be Measured
Carbon Monoxide (CO)
Nitrogen Oxides (NO_X)
Oxygen (O_2)

b. Source operation during monitoring must be representative of maximum intended operating conditions during that year.

c. Alternative monitoring methodologies must be pre-approved by EFSEC.

3. Minimum Quality Assurance/Quality Control Measures:

a. The analyzer(s) response to span gas of a known concentration shall be determined before and after testing. No more than 12 hours may elapse between span gas response checks. The results of the analyzer response check shall not be valid if the difference between the pre-test and post-test response checks exceeds 10% of the pre-test response value.

b. The CO and NO_X span gas concentrations shall be no less than 50% and no more than 200% of the emission concentration corresponding to the permitted emission limit. A lower concentration span gas may be used if it is more representative of measured concentrations. Ambient air may be used to zero the CO and NO_X cells/analyzer(s) and span the oxygen cell/analyzer.

Appendix C
Performance Monitoring Requirements
Auxiliary Boiler

3. Minimum Quality Assurance/Quality Control Measures (continued):

c. Sampling of each exhaust stack shall consist of at least 1 test consisting of at least 5 minutes of data collection following a "ramp-up phase." The ramp-up phase ends when analyzer readings have stabilized (less than 5%/minute change in emission concentration). Emission concentrations shall be recorded at least once every 30 seconds during testing. All test data collected following the ramp-up phase(s) shall be reported to EFSEC. Alternative testing methods may be utilized provided pre-approval is obtained from EFSEC.

If the test results from any monitoring event indicate that emission concentrations may exceed 12 ppmvd NO_X @ 3% O_2 or 50 ppmvd CO @ 3% O_2, the permittee shall either perform 60 minutes of additional monitoring to more accurately quantify CO and NO_X emissions, or initiate corrective action. Additional testing or corrective action shall be initiated as soon as practical but no later than three days after the potential exceedance is identified. Corrective action includes tuning, maintenance by service personnel, limitation of boiler load, or other action taken to maintain compliance with permitted limits. Monitoring of unit emissions must be conducted within three days following completion of any corrective action to confirm that the corrective action has been effective. Corrective action shall be pursued until observed emission concentrations no longer exceed 12 ppmvd NO_X or 50 ppmvd CO, corrected to 3% O_2. Initiation of corrective action does not shield the permittee from enforcement actions by EFSEC.

4. Reporting:

a. All monitoring results shall be recorded at the facility and reported to EFSEC. The following information shall be included in the report:

(1) Time and date of the emissions evaluation;
(2) Identification of the personnel involved;
(3) A summary of results, reported in units consistent with the applicable emission standard(s) or limit(s);
(4) A summary of equipment operating conditions;
(5) A description of the evaluation methods or procedures used including all field data, quality assurance/quality control procedures and documentation; and
(6) Analyzer response check documentation.

b. Performance monitoring test results shall be corrected to 3% O_2.

c. Monitoring results shall be reported to EFSEC within 15 calendar days of test completion.

Appendix D
Acid Rain Permit No. EFSEC/06-01-AR Rev. 2

Issued by the Washington State Energy Facility Site Evaluation Council

Issued to:	**Chehalis Generation Facility, Washington**
Operated by:	**PacifiCorp**
Address:	1813 Bishop Road Chehalis, Washington 98532
ORIS code:	55662
Affected units:	CT1 CT2
Effective:	This Acid Rain permit, as part of the Chehalis Generation Facility Title V permit, will become effective upon the effective date of the Title V permit (Date XXXX). The Acid Rain Permit shall have a permit term ending on October 10, 2016 (the expiration date of Title V Permit No. **EFSEC/06-01-AOP Rev. 1**

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.

---

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 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).

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

CT1	Facilitywide SO_2 allowances	To be determined [a]
	Acid Rain NO_X limit	N/A [b]
CT2	Facilitywide SO_2 allowances	To be determined [a]
	Acid Rain NO_X limit	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/95-02 Amendment 2.

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 85 tons per year of SO_2 emissions. According to 40 CFR 72.2, a fraction of a ton 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 85 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/95-02 Amendment 2.

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 renewal application was signed on October 2, 2015. A copy of the application is attached.

Standard Requirements

Permit Requirements

(1) The designated representative of the Chehalis Generation Facility and each affected unit at the Chehalis Generation Facility 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 Chehalis Generation Facility and each affected unit at the Chehalis Generation Facility 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 Chehalis Generation Facility and each affected unit at the Chehalis Generation Facility 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 the operating permit for the Chehalis Generation Facility.

Sulfur Dioxide Requirements

(1) The owners and operator of the Chehalis Generation Facility and each affected unit at the Chehalis Generation Facility shall:
   (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the Chehalis Generation Facility; 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 Chehalis Generation Facility and each affected unit at the Chehalis Generation Facility 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 Chehalis Generation Facility and each affected unit at the Chehalis Generation Facility 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 Chehalis Generation Facility and each affected unit at the Chehalis Generation Facility 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 Chehalis Generation Facility and each affected unit at the Chehalis Generation Facility shall meet the requirements of the Acid Rain Program.

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

(6) Any provision of the Acid Rain Program that applies to an affected unit at the Chehalis Generation Facility (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, 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 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.

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2012

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ New ☐ Revised ☒ for ARP permit renewal

STEP 1

Identify the facility name, State, and plant (ORIS) code.

Chehalis Generating Facility Facility (Source) Name	Washington State	55662 Plant Code

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
CT1	Yes
CT2	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

EPA Form 7610-16 (Revised 7-2014)

Chehalis Generating Facility
Facility (Source) Name (from STEP 1)

STEP 3

Read the standard requirements.

Permit Requirements

(1) The designated representative of each affected source and each affected unit at the source 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
(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 and operators of each affected source and each affected unit at the source 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 each affected source and each affected unit at the source 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 source or unit, as appropriate, 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 operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:
(i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; 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 40 CFR 72.6(a)(2); 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 40 CFR 72.6(a)(3).

Chehalis Generating Facility
Facility (Source) Name (from STEP 1)

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

(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 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such 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 source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

(1) The designated representative of an affected source 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 source 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 source and each affected unit at the source 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 certificate 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

Chehalis Generating Facility
Facility (Source) Name (from STEP 1)

of a new certificate of representation changing the designated representative;

STEP 3, Cont'd.

Recordkeeping and Reporting Requirements, Cont'd.

(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 an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I 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 or 72.8, 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.
(2) Any person who knowingly makes a 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.
(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) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 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 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 affected unit from compliance with

Chehalis Generating Facility
Facility (Source) Name (from STEP 1)

any other provision of the Act, including the provisions of title I of the Act relating

STEP 3, Cont'd.

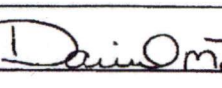
Effect on Other Authorities, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a source can hold; *provided,* that the number of allowances held by the source 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.

STEP 4
Read the certification statement, sign, and date.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	David M. Lucas	
Signature		October 2, 2015 Date

STATE OF WASHINGTON
ENERGY FACILITY SITE EVALUATION COUNCIL (EFSEC)

TITLE V BASIS STATEMENT FOR AIR OPERATING PERMIT – EFSEC/06-01-AOP Rev. 2

Issued To

PACIFICORP

For The

CHEHALIS GENERATION FACILITY

Issued: Date XXXX

PERMIT #:	**EFSEC/06-01-AOP Rev. 2**
PREPARED FOR:	**Chehalis Generation Facility** **1813 Bishop Road** **Chehalis, WA 98532**
PLANT SITE:	**Chehalis Generation Facility** **1813 Bishop Road** **Chehalis, WA 98532**
PERMIT ENGINEER:	**Clint H. Lamoreaux – SWCAA Air Quality Engineer**
REVIEWED BY:	**Jim LaSpina – EFSEC Energy Facility Site Specialist**

ENERGY FACILITY SITE EVALUATION COUNCIL
1300 South Evergreen Park Drive SW - PO Box 43172
Olympia, WA 98504-3172
Telephone: (360) 664-1345

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I. GENERAL INFORMATION AND CERTIFICATION

1. Company Name: PacifiCorp

2. Facility Name: Chehalis Generation Facility

3. Responsible Official: Mr. David M. Lucas

4. Inspection Contact Person: Mr. Mark Miller – Gas Plant Manager

5. Unified Business Identification Number: 601-571-608

6. Standard Industrial Classification (SIC) Code: 4911

7. Basis for Title V Applicability:

   The Chehalis Generation Facility has the potential to emit more than 100 tons per year of sulfur dioxide, nitrogen oxides, particulate matter less than 10 micrometers, and carbon monoxide, all of which are criteria air pollutants listed under the Federal Clean Air Act. This facility has the potential to emit more than 100,000 tons per year of CO_2e. A facility with the potential to emit at or above these thresholds is subject to the Title V Air Operating Permit Program. In addition, this facility is required to obtain a Title V Air Operating Permit because it is an affected source under Title IV (Acid Deposition Control) of the federal Clean Air Act.

   Facilitywide Potential To Emit Summary

Pollutant	Emissions (tons per year)
Nitrogen oxides	242
Carbon monoxide	487
Volatile organic compounds	59
Sulfur dioxide	170
Particulate Matter	225
PM_{10}	225
$PM_{2.5}$	225
Combined HAPs	2.0
Individual HAP	2.0 (formaldehyde)
CO_2 equivalent	1,926,904

8. Current Permitting Action:

   This Title V Air Operating Permit is being issued in response to a Title V renewal application submitted by PacifiCorp Energy in accordance with the deadline contained in Air Operating Permit EFSEC/06-01-AOP Rev. 1.

9. Attainment Area:

   The Chehalis Generation Facility is located in an area that is in attainment status for all criteria pollutants.

10. Facility Description:

The Chehalis Generation Facility began commercial operation (for the purposes of Title IV) in June 2003. Power is generated by two GE model 7FAe+ combustion turbines operated in combined cycle mode with a single steam turbine. The facility has a nameplate capacity of 593.3 MW, an actual net summer capacity of 477 MW, and a net winter capacity of 506 MW. The Site Certification Agreement nominal generating capacity of 520 MW is an accurate representation of the capacity under average annual conditions. An air-cooled condenser system is used in lieu of a wet cooling tower system to minimize water consumption. A 16.9 MMBtu/hr Auxiliary Boiler was commissioned in 2010 to provide steam to the facility to reduce the duration of startup events. No duct burners, emergency generators, or emergency fire pumps have been installed at this facility.

11. Permitting Authority:

The Washington Energy Facility Site Evaluation Council (EFSEC) is the permitting authority for the Chehalis Generation Facility. EFSEC implements its Air Operating Permit program through Washington Administrative Code (WAC) 463-78. WAC 463-78 adopts the operating permits regulations of WAC 173-401 by reference.

11. Approvals and Regulatory Orders:

The following table lists each Notice of Construction approval and Regulatory Order issued for this facility. Permits or Regulatory Orders in bold contain no active requirements. The requirements may have been superseded or may have been of limited duration.

Number	Date Issued	Description
EFSEC/95-02	6-18-97	Initial approval for construction and operation of the Chehalis Generation Facility. Approved installation of two 230 MW combined cycle combustion turbines and single auxiliary boiler.
EFSEC/95-02 Extension 1	11-16-98	Approved an 18 month extension of the PSD approval to begin actual construction.
EPA Administrative Order on Consent No. CAA-10-2001-0095	3-22-01	Allowed the facility to begin actual construction prior to receiving PSD permit. Required the facility to request a PSD permit revision requiring the installation of SCR to control NO_X to 3.0 ppmvd @ 3% O_2 when firing natural gas, and 14 ppmvd @ 3% O_2 when firing oil.
EFSEC/95-02 Amendment 1	4-17-01	Approved a revision of the NO_X limits to 3.0 ppmvd @ 3% O_2 when firing natural gas, and 14 ppmvd @ 3% O_2 when firing oil.
EFSEC/95-02 Amendment 2	7-17-06	Modified opacity monitoring requirements when firing natural gas, modified startup provisions for cold startups, removed references to auxiliary boilers (were not constructed, approval had expired).

Number	Date Issued	Description
EFSEC/2009-01	9-4-09	Approval of a natural gas startup boiler with a capacity of up to 30 MMBtu/hr.

II. EMISSIONS UNIT DESCRIPTIONS

EU-1 Combustion Turbine #1 (CT1)

CT1 consists of one General Electric model 7FAe+ gas turbine (serial number 298136) and an unfired heat recovery steam generator (HRSG). The turbine drives a 60-hertz, 18-kilovolt generator (serial number 338X439). The gas turbine is designed to produce approximately 175 MW of electrical power and the steam turbine is designed to produce approximately 170 MW of electrical power (using steam from both HRSGs). The gas turbine operates primarily on natural gas, however, in the case of a natural gas curtailment, the turbine can operate on low sulfur distillate oil. When firing natural gas, the turbine has a heat input capacity of 2,067 MMBtu/hr at peak load and an estimated annual average heat input capacity of 1,782 MMBtu/hr (51 °F, 60% relative humidity). When firing fuel oil, the turbine has a heat input capacity of 2,067 MMBtu/hr at peak load and an estimated annual average heat input capacity of 1,930 MMBtu/hr (51 °F, 60% relative humidity). An inlet air fogging system was added to this unit in 2005 but subsequently removed.

Emissions from the combustion turbine consist primarily of NO_X, CO, SO_2, PM, and VOC. A Babcock-Hitachi selective catalytic reduction (SCR) system, using ~19% aqueous ammonia as a reducing reagent, controls emissions of nitrogen oxides (NO_X) and causes emissions of ammonia (NH_3). An Engelhard Corporation oxidation catalyst controls carbon monoxide (CO) emissions. Emissions of particulate matter and volatile organic compound emissions are minimized by the use of fuels with low ash contents and optimization of combustion parameters to provide for complete combustion. Combustion gases from the combustion turbine are discharged to the atmosphere through a stack measuring 19 feet 4 inches in diameter by 149 feet tall. CT1 is located to the north of CT2. The stack is located at approximately 46°37'21.09"N, 122°54'52.48"W.

The SCR is comprised of a plate-type catalyst consisting of titanium dioxide (TiO2), molybdenum trioxide (MoO_3), and vanadium pentoxide (V_2O_5) catalytic material contained in a ceramic fiber binder. Each SCR is comprised of 72 individual blocks arranged in a 4 block wide by 18 block high configuration. Each catalyst block is 1,628 mm (5.34 ft) wide, 706 mm (2.32 ft) thick, and 946 mm (3.10 ft) high with an individual weight of 473 kg (1,043 lb). The combined volume of the 72 blocks comprising one SCR is 49.3 m^3.

When the combustion turbines are fired on natural gas, the SCR NO_X removal efficiency is equal-to-or-greater-than 66.67% at an exhaust gas inlet temperature of 568°F.

The Engelhard carbon monoxide catalytic oxidation system is used to oxidize carbon monoxide (CO) to carbon dioxide (CO_2). The CO converter system consists of a honeycomb-shaped stainless steel substrate core utilizing an alumina and platinum catalytic matrix which oxidizes CO into CO_2.

Each unit includes an oxidation catalyst consisting of 250 modules. The modules are housed in a carbon steel framework and are arranged in the combustion turbine exhaust ductwork in a 10-wide by 25-high configuration. Each catalyst module weighs approximately 30 pounds and is 25.5 inches wide by 26.08 inches high and 2.452 inches deep. The frame housing the CO oxidation modules has an overall width of 24.3 feet and an overall height of 59.3 feet. Under design conditions when firing on natural gas at an ambient temperature of 51°F, the combustion turbine exhaust gas is at a nominal temperature of 627°F (+/-25°F) and the oxidation catalyst has a minimum CO-to-CO_2 conversion efficiency of 59.8%. Similarly, when firing on fuel oil at an ambient temperature of 51°F, the combustion turbine exhaust gas is at a nominal temperature of 630°F (+/-25°F) and the oxidation catalyst has a minimum CO-to-CO_2 conversion efficiency of 44.2%.

CT1 was first fired on May 25, 2003. CT1 commenced commercial operation on June 13, 2003.

CT1 is subject to the 40 CFR 60 Subpart GG "Standards of Performance for Stationary Gas Turbines" because its heat input capacity at peak load exceeds 10 MMBtu/hr and it was constructed after the applicability date of October 3, 1977. The turbine has not undergone reconstruction or modification that would trigger the applicability of 40 CFR 60 Subpart KKKK "Standards of Performance for Stationary Combustion Turbines".

EU-2 Combustion Turbine #2 (CT2)

CT2 consists of one General Electric model 7FAe+ gas turbine (serial number 298137) and an unfired heat recovery steam generator (HRSG). The turbine drives a 60-hertz, 18-kilovolt generator (serial number 338X440). The gas turbine is designed to produce approximately 175 MW of electrical power and the steam turbine is designed to produce approximately 170 MW of electrical power (using steam from both HRSGs). The gas turbine operates primarily on natural gas, however, in the case of a natural gas curtailment, the turbine can operate on low sulfur distillate oil. When firing natural gas, the turbine has a heat input capacity of 2,067 MMBtu/hr at peak load and an estimated annual average heat input capacity of 1,782 MMBtu/hr (51 °F, 60% relative humidity). When firing fuel oil, the turbine has a heat input capacity of 2,067 MMBtu/hr at peak load and an estimated annual average heat input capacity of 1,930 MMBtu/hr (51 °F, 60% relative humidity). An inlet air fogging system was added to this unit in 2005 but subsequently removed.

Emissions from the combustion turbine consist primarily of NO_X, CO, SO_2, PM, and VOC. A Babcock-Hitachi selective catalytic reduction (SCR) system, using ~19% aqueous ammonia as a reducing reagent, controls emissions of nitrogen oxides (NO_X) and causes emissions of ammonia (NH_3). An Engelhard Corporation oxidation catalyst controls carbon monoxide (CO) emissions. Emissions of particulate matter and volatile organic compound emissions are minimized by the use of fuels with low ash contents and optimization of combustion parameters to provide for complete combustion. Combustion gases from the combustion turbine are discharged to the atmosphere through a stack measuring 19 feet 4 inches in diameter by 149 feet tall. CT2 is located to the south of CT1. The stack is located at approximately 46°37'19.88"N, 122°54'52.46"W.

The SCR is comprised of a plate-type catalyst consisting of titanium dioxide (TiO2), molybdenum trioxide (MoO_3), and vanadium pentoxide (V_2O_5) catalytic material contained in a ceramic fiber binder. Each SCR is comprised of 72 individual blocks arranged in a 4 block wide by 18 block high configuration. Each catalyst block is 1,628 mm (5.34 ft) wide, 706 mm (2.32 ft)

thick, and 946 mm (3.10 ft) high with an individual weight of 473 kg (1,043 lb). The combined volume of the 72 blocks comprising one SCR is 49.3 m^3.

When the combustion turbines are fired on natural gas, the SCR NO_X removal efficiency is equal-to-or-greater-than 66.67% at an exhaust gas inlet temperature of 568°F.

The Engelhard carbon monoxide catalytic oxidation system is used to oxidize carbon monoxide (CO) to carbon dioxide (CO_2). The CO converter system consists of a honeycomb-shaped stainless steel substrate core utilizing an alumina and platinum catalytic matrix which oxidizes CO into CO_2.

Each unit includes an oxidation catalyst consisting of 250 modules. The modules are housed in a carbon steel framework and are arranged in the combustion turbine exhaust ductwork in a 10-wide by 25-high configuration. Each catalyst module weighs approximately 30 pounds and is 25.5 inches wide by 26.08 inches high and 2.452 inches deep. The frame housing the CO oxidation modules has an overall width of 24.3 feet and an overall height of 59.3 feet. Under design conditions when firing on natural gas at an ambient temperature of 51°F, the combustion turbine exhaust gas is at a nominal temperature of 627°F (+/-25°F) and the oxidation catalyst has a minimum CO-to-CO_2 conversion efficiency of 59.8%. Similarly, when firing on fuel oil at an ambient temperature of 51°F, the combustion turbine exhaust gas is at a nominal temperature of 630°F (+/-25°F) and the oxidation catalyst has a minimum CO-to-CO_2 conversion efficiency of 44.2%.

CT2 was first fired on May 31, 2003. CT2 commenced commercial operation on June 5, 2003.

CT2 is subject to the 40 CFR 60 Subpart GG "Standards of Performance for Stationary Gas Turbines" because its heat input capacity at peak load exceeds 10 MMBtu/hr and it was constructed after the applicability date of October 3, 1977. The turbine has not undergone reconstruction or modification that would trigger the applicability of 40 CFR 60 Subpart KKKK "Standards of Performance for Stationary Combustion Turbines".

EU-3 Auxiliary Boiler

Installation of the Auxiliary Boiler was required by Council Order #836 authorizing the transfer of the Chehalis Generation Facility Site Certification Agreement to PacifiCorp. On September 15, 2008 EFSEC received notice that the Chehalis Generation Facility had been merged into PacifiCorp. The Auxiliary Boiler is used to provide steam to the gas turbine generators' support equipment and to reduce the required duration of gas turbine startup events.

The Auxiliary Boiler is a natural gas fired CB NAT-COM package boiler utilizing a low-NO_X model P-17-G-14-0911 burner set. The boiler was built, installed, and commissioned in 2010. The following equipment details were available:

Location:	South of main building, between main building and the air cooled condensers
Startup Date:	December 8, 2010
Make / Model:	Cleaver Brooks – NATCOM / NB-200D-35
Fuel:	Natural gas

Heat Input Capacity: 16.9 MMBtu/hr
Burners: Model P-17-G-14-0911, serial number 11497, designed to provide ≤ 9 ppmvd NO_X @ 3% O_2 utilizing external flue gas recirculation.
Stack Description: Exhausts vertically through stack measuring 30" diameter, 88' above grade, 28.1 ft/s, 200 °F. The tallest adjacent structure is 76.75' above grade. Located at approximately 46°37'18.17"N, 122°54'53.56"W

The Auxiliary Boiler is subject to the 40 CFR 60 Subpart Dc "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units" because its heat input capacity is less than 100 MMBtu/hr and equal to or greater than 10 MMBtu/hr and it was constructed after the applicability date of June 9, 1989.

III. EXPLANATION OF INSIGNIFICANT EMISSIONS UNIT DETERMINATIONS

The following equipment was identified by the permittee as insignificant. Each emission unit listed as insignificant in the permit has been reviewed by EFSEC to confirm its status. None of the listed equipment is a significant source of emissions or is subject to any equipment specific air quality requirements.

Equipment Description	Size or Capacity	Justification
Fuel Oil (#2 diesel) piping fugitive emissions	Not applicable	WAC 173-401-530(1)(d) – only fugitive emissions
Fuel Oil Storage Tanks (two tanks)	1,700,000 gallons each	WAC 173-401-530(1)(c) – actual vapor pressure less than 5 mm Hg @ 21°C (category listed in WAC 173-533(2)(t)).
Natural Gas Piping	not applicable	WAC 173-401-530(1)(d) – only fugitive emissions
Inlet Gas Drain Tank	250 gallons	WAC 173-401-530(1)(a) – below emissions thresholds
19% Aqueous Ammonia Storage Tanks	32,000 gallons	WAC 173-401-530(1)(a) – below emissions thresholds
Oil/Water Separator	<500 gallons	WAC 173-401-530(1)(b) – actual vapor pressure less than 550 mm Hg @ 21°C, tank less than 1,100 gallons (category listed in WAC 173-533(2)(b)).
Waste Oil Tank (as separator)	150 gallons	WAC 173-401-530(1)(b) – actual vapor pressure less than 550 mm Hg @ 21 °C, tank less than 1,100 gallons (category listed in WAC 173-533(2)(b)).
Waste Fuel Drain Tanks (2)	500 gallons each	WAC 173-401-530(1)(b) – actual vapor pressure less than 550 mm Hg @ 21°C, tank less than 1,100 gallons (category listed in WAC 173-533(2)(b)).
Miscellaneous Wastewater Collection Sumps	1,000 – 2,500 gallons each	WAC 173-401-530(1)(b) – categorically exempt equipment listed in WAC 173-401-532(120)

Equipment Description	Size or Capacity	Justification
Sanitary Waste Storage Area	3,100 gallons	WAC 173-401-530(1)(b) – categorically exempt as per WAC 173-401-532(6)
Lubricating oil storage tanks	Not applicable	WAC 173-401-530(1)(b) – categorically exempt as per WAC 173-401-532(3)
Pressurized storage tanks containing oxygen, nitrogen, carbon dioxide or inert gases	Not applicable	WAC 173-401-530(1)(b) – categorically exempt as per WAC 173-401-532(5)
Vents from continuous emissions monitors and analyzers	Not applicable	WAC 173-401-530(1)(b) – categorically exempt as per WAC 173-401-532(8)

IV. EXPLANATION OF SELECTED TERMS AND CONDITIONS

Req. 1-7 General Standards for Maximum Emissions
[WAC 173-400-040]

WAC 173-400-040 establishes maximum emission standards for various air contaminants. These requirements are general statewide standards, and apply to all sources of air contaminants. Therefore, these requirements apply to all emission units at the source, both EU and IEU. Pursuant to WAC 173-401-530(2)(c), the permit does not contain any testing, monitoring, recordkeeping, or reporting requirements for IEUs except those specifically identified by the underlying requirements.

Req-6 prohibits any concealment or masking. At present, the permittee does not operate any equipment capable of masking emissions, therefore monitoring is limited to the annual compliance certification.

Req. 8 Emission Standards for General Process Units
[WAC 173-400-060]

WAC 173-400-060 establishes maximum particulate matter emission standards for general process units. These requirements apply to any general process units at the source, including IEUs. The definition of a "general process unit" excludes combustion units; therefore this requirement does not apply to the exhaust stacks of EU-1, EU-2, or EU-3. Pursuant to WAC 173-401-530(2)(c), the permit does not contain any testing, monitoring, recordkeeping, or reporting requirements for IEUs except those specifically identified by the requirements as applying to IEUs.

At the current time, no general process units have been identified at this facility with the potential to emit particulate matter. This requirement was included in the permit to apply to operations not currently identified or not yet installed at the facility.

Req. 11 – Fuel Firing Restrictions
EFSEC/95-02 Amendment 2, Conditions 1.1 & 1.2

Conditions 1.1 and 1.2 of EFSEC/95-02 Amendment 2 requires that the combustion turbines be fired on natural gas except when natural gas is not available and during limited test periods. "On-road specification diesel fuel" may be burned during these periods.

"On-road specification diesel fuel" refers to the on-road specifications from 40 CFR 80.29 as amended through July 1, 1992.

Hours of operation on oil for test periods and startup count towards the 720 hour limit of operation on oil.

Req. 12 – NO_X Emission Limits

40 CFR 60.332(a)(1)
WAC 463-78-115
EFSEC/95-02 Amendment 2, Conditions 2.1, 2.2, 2.3, & 24

Conditions 2.1, 2.2, and 2.3 of EFSEC/95-02 Amendment 2 provide NO_X emission limits during both natural gas and oil firing. In accordance with Condition 24 of EFSEC/95-02 Amendment 2, these limits apply on a CEM clock hour or calendar day basis when the CEMS is being used to measure emissions. For days when a turbine is fired on both natural gas and oil, a time-weighted average of the gas and oil firing emission limits applies. The last sentence in this requirement states that the oil-firing limit applies for any hour in which oil is fired. It is not practical to split up emission limits into fractions of an hour according to which fuel is being burned, therefore it was determined that the emission limit would need to apply to any hour in which fuel oil is burned.

40 CFR 60.332(a)(1) provides a parallel NO_X emission limit for combustion turbines, however this limit is far less restrictive that the limits provided by Conditions 2.1 and 2.2 of EFSEC/95-02 Amendment 2. Compliance with the emission limits of Conditions 2.1 and 2.2 will assure compliance with the NO_X emission limit in 40 CFR 60.332(a)(1), therefore only the limits from Conditions 2.1 and 2.2 were listed. 40 CFR 60.332(a)(1) provides for a limit of at least 75 ppmvd @ 15% O_2 (the limit can increase based on the magnitude of any fuel-bound nitrogen allowance and the manufacturer's rated heat rate at manufacturer's rated load).

Req. 13 – CO Emission Limits

EFSEC/95-02 Amendment 2, Conditions 3.1, 3.2, & 24

Conditions 3.1 and 3.2 of EFSEC/95-02 Amendment 2 provide CO emission limits during both natural gas and oil firing. In accordance with Condition 24 of EFSEC/95-02 Amendment 2, these limits apply on a CEM clock hour or calendar day basis when the CEMS is being used to measure emissions. The last sentence in this requirement states that the oil-firing limit applies for any hour in which oil is fired. It is not practical to split up emission limits into fractions of an hour according to which fuel is being burned, therefore it was determined that the emission limit would need to apply to any hour in which fuel oil is burned.

Req. 14 – SO_2 Emission Limits

EFSEC/95-02 Amendment 2, Conditions 4.1 & 4.2

Conditions 4.1 and 4.2 of EFSEC/95-02 Amendment 2 provide SO_2 emission limits during both natural gas and oil firing. The last sentence in this requirement states that the oil-firing limit applies for any hour in which oil is fired. It is not practical to split up emission limits into

fractions of an hour according to which fuel is being burned, therefore it was determined that the emission limit would need to apply to any hour in which fuel oil is burned.

Req. 15 – VOC Emission Limits

EFSEC/95-02 Amendment 2, Conditions 5.1 & 5.2

Conditions 5.1 and 5.2 of EFSEC/95-02 Amendment 2 provide VOC emission limits during both natural gas and oil firing. Because the term "volatile organic compounds" (VOCs) describes a large class of compounds, a standard compound (in this case propane) must be used in order to compare emission limits and source test results using EPA Method 25A. If the relative concentrations of each volatile organic species is known, the actual emission rate of each species and the total emission rate of VOCs can be determined. VOC speciation data is not required.

For days when a turbine is fired on both natural gas and oil, a time-weighted average of the gas and oil firing emission limits applies. The last sentence in this requirement states that the oil-firing limit applies for any hour in which oil is fired. It is not practical to split up emission limits into fractions of an hour according to which fuel is being burned, therefore it was determined that the emission limit would need to apply to any hour in which fuel oil is burned.

Req. 16 – PM_{10} Emission Limits

EFSEC/95-02 Amendment 2, Conditions 6.1 & 6.2

Conditions 6.1 and 6.2 of EFSEC/95-02 Amendment 2 provide PM_{10} emission limits during both natural gas and oil firing. EPA Method 5 was listed as a possible reference test method because it is presumed that all particulate matter generated from this source will have an aerodynamic diameter of 10 μm or less. EPA Method 201A would be considered a superior test method for the determination of PM_{10}, but is not required due to inherent method limitations and the fact that all particulate matter is expected to be PM_{10}. This permit limit is based solely on the filterable component of PM_{10} and does not require consideration or testing of the condensable fraction of PM_{10}.

For days when a turbine is fired on both natural gas and oil, a time-weighted average of the gas and oil firing emission limits applies.

Req. 17 – Sulfuric Acid Emission Limit

EFSEC/95-02 Amendment 2, Conditions 7.1 & 7.2

Conditions 7.1 and 7.2 of EFSEC/95-02 Amendment 2 limits sulfuric acid emissions from EU-1 and EU-2. Because of the interference caused by ammonia in the exhaust gas, EPA Method 8 cannot be used without modification to measure sulfuric acid emissions.

The last sentence in this requirement states that the oil-firing limit applies for any hour in which oil is fired. It is not practical to split up emission limits into fractions of an hour according to which fuel is being burned, therefore it was determined that the emission limit would need to apply to any hour in which fuel oil is burned.

Req. 18 – Opacity Limit

EFSEC/95-02 Amendment 2, Condition 8

Condition 8 of EFSEC/95-02 Amendment 2 limit opacity from the HRSG exhaust stacks to 10 percent or less on a 6-minute average. EPA Method 9 or an equivalent method must be used daily to confirm compliance. When no visible emissions are present, EPA Method 22 is an equivalent method. Both EPA Method 9 (which requires a certified observer) and EPA Method 22 can be used to determine the presence or absence of visible emissions. The presence of visible emissions is highly unlikely at this facility, except during periods of extreme upset conditions.

Req. 19 – Ammonia Emission Limits

EFSEC/95-02 Amendment 2, Conditions 9.1, 9.2, 9.3, & 9.4

Conditions 9.1, 9.2, 9.3, and 9.4 of EFSEC/95-02 Amendment 2 limits ammonia emissions from EU-1 and EU-2. For days when a turbine is fired on both natural gas and oil, a time-weighted average of the gas and oil firing emission limits applies.

Req. 20, 21 – Startup and Shutdown Provisions

EFSEC/95-02 Amendment 2, Conditions 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, & 10.7

Conditions 10.2, 10.3, 10.6, and 10.7 of EFSEC/95-02 Amendment 2 provide for special provisions regarding the duration and number of combustion turbine startup and shutdown events because during startup and shutdown the combustion turbines cannot meet all the emission limits that apply during normal operation. Alternative CO and NO_X emission limits are provided by Conditions 10.4 and 10.5 of EFSEC/95-01 Amendment 2. These alternative limits only apply during the startup and shutdown periods defined in Condition 10.6 of EFSEC/95-01 Amendment 2.

The number of startups per 24-hour period and per year were not limited to assure compliance with ambient air impact limitations. The limits on the number of startups apply to normal startups. Startups resulting from upset conditions (e.g. after emergency shutdowns or unit trips) do not count towards the limitations provided in Conditions 10.2 and 10.3. After a unit trip, the unit can often return to service quickly; to require an extended period of time to elapse before allowing it to return to service (e.g. to get outside of a 24-hour period with two startups) could result in a longer cooling period and a longer startup resulting in greater overall emissions.

Req. 23 – Source Emission Sampling Access

40 CFR 60.8(e)
WAC 463-78-115
EFSEC/95-02 Amendment 2, Condition 13

40 CFR 60.8(e) requires the owner or operator of an NSPS applicable unit to provide safe access to adequate test ports, and the utilities necessary to conduct applicable sampling required of NSPS applicable units. Both turbines are subject to 40 CFR 60 Subpart GG, and therefore such access is required for the performance of EPA Method 20. Condition 13 of EFSEC/95-02 Amendment 2 requires safe access to test ports, but does not mention providing testing utilities. The sentence in Req. 23 concerning utilities is solely from 40 CFR 60.8(e).

Req. 24 – Operating and Maintenance Manuals
EFSEC/95-02 Amendment 2, Condition 19

Condition 19 of EFSEC/95-02 Amendment 2 requires the permittee to maintain operation and maintenance manuals for equipment at the facility that can affect emissions. Operations and maintenance manuals may be used to investigate excess emissions events and determine if such events were avoidable. Reasonable inquiry conducted for the annual compliance certification is adequate to assure that these manuals are maintained at the facility.

Req. 26 – Auxiliary Boiler Emission Limits
EFSEC/2009-01, Condition 1

Condition 1 of EFSEC/2009-01 establishes concentration emission limits for NO_X and CO and mass emission limits for PM_{10} and $PM_{2.5}$. The emission limits are based on reference method testing that is conducted utilizing 1-hour test runs, therefore the Title V permit clarifies that these emission limits apply on one-hour averages.

The PM_{10} and $PM_{2.5}$ mass emission rate limits are based on total PM emissions (filterable and condensable utilizing EPA Methods 201A and 202). Because natural gas combustion is expected to only produce fine particulate matter, EPA Method 5 can be used in place of EPA Method 201A to measure filterable particulate matter if all PM measured using EPA Method 5 is assumed to be $PM_{2.5}$. PM_{10} and $PM_{2.5}$ mass emission rate limits are based on a 30 MMBtu/hr boiler, however only a 16.9 MMBtu/hr boiler was installed, therefore compliance with these limits will presumably be by a large margin.

Req. 27 – Auxiliary Boiler Visual Emissions Limit
EFSEC/2009-01, Condition 2

Condition 2 of EFSEC/2009-01 establishes a zero percent opacity limit (not to be exceed for more than 3 minutes in any one hour period). EPA Method 9 is cited as the monitoring method; however Ecology Method 9A is the method that must be used for the data reduction to determine compliance with this limitation. The data reduction utilized by EPA Method 9 is utilized for determining average opacity. The data reduction of Ecology Method 9A is used to determine compliance with three minute standards such as Condition 2.

V. EXPLANATION OF OBSOLETE AND FUTURE REQUIREMENTS

1. Obsolete Air Emission Permits/Orders

EFSEC/95-02 was issued on June 18, 1997 for construction and operation of the Chehalis Generation Facility. EFSEC/95-02 approved installation of two 230 MW combined cycle combustion turbines and a single auxiliary boiler. The turbines would primarily fire natural gas, but could fire fuel oil when natural gas was not available. SCR was not required.

EFSEC/95-02 Extension 1 was issued on November 16, 1998. EFSEC/95-02 Extension 1 approved an 18 month extension of the PSD approval to begin actual construction of the Chehalis Generation Facility.

EPA Administrative Order On Consent No. CAA-10-2001-0095 was issued March 22, 2001. The Consent Order required the facility to request a PSD permit revision requiring the installation of SCR to control NO_X emissions to 3.0 ppmvd @ 3% O_2 while firing natural gas and 14 ppmvd @ 3% O_2 when firing fuel oil. The Consent Order also allowed the facility to begin actual construction of the facility prior to receiving the revised PSD permit. The Consent Order terminated with issuance of PSD permit EFSEC/95-02 Amendment 1.

EFSEC/95-02 Amendment 1 was issued on April 17, 2001. EFSEC/95-02 Amendment 1 approved a revision of the NO_X emission limit to 3.0 ppmvd @ 3% O_2 while firing natural gas and 14 ppmvd @ 3% O_2 when firing fuel oil.

EFSEC/95-02 Amendment 2 was issued July 17, 2006. EFSEC/95-02 Amendment 2 modified opacity monitoring requirements when firing natural gas, modified the exempted startup time applicable to cold startups and removed references to the previously approved auxiliary boilers (the boilers were never constructed and approval to construct the boilers had expired).

Prevention of Significant Deterioration (PSD) review was conducted for initial installation of Combustion Turbines #1 and #2 resulting in issuance of EFSEC/95-02 on June 18, 1997. Nitrogen oxides, carbon monoxide, sulfur dioxide, particulate matter with an aerodynamic diameter less than 10 micrometers, volatile organic compounds, and sulfuric acid mist underwent PSD review in this permitting action. No permitting action since that time has triggered PSD review.

2. Future Requirements

No future requirements are anticipated.

3. 40 CFR 60.7 "Notification and Record Keeping"

The combustion turbines are subject to 40 CFR 60.330 et seq. (Subpart GG) "Standards of Performance for Stationary Gas Turbines." Therefore, these units are also subject to the notification requirements of 40 CFR, Section 60.7. These requirements have been met as described below.

Combustion Turbine
Notification of construction: Submitted to EFSEC via letter dated October 25, 2001
Notification of anticipated startup: Submitted to EFSEC via letter dated March 13, 2003
Notification of actual startup: Submitted to EFSEC via letter dated June 17, 2003

The Auxiliary Boiler is subject to 40 CFR 60.40c et seq. (Subpart Dc) "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units." This unit was subject to the initial notification requirements of 40 CFR, Section 60.7. These notifications have been completed as described below:

Notification of construction: Submitted to EFSEC via letter dated March 5, 2009
Notification of anticipated startup: Submitted to EFSEC via letter dated November 8, 2010
Notification of actual startup: Submitted to EFSEC via letter dated January 7, 2011

4. 40 CFR 60.8 "Performance Tests"

The combustion turbines are subject to the NO_X standard described in 40 CFR 60.332. Therefore the unit is also subject to the performance testing requirements of 40 CFR 60.8. These requirements have been met as described below.

Notification of source test dates:	Submitted to EFSEC on July 29, 2003
Initial source test:	Performed on August 20-21, 2003 (CT1)
	Performed on August 23-24, 2003 (CT2)
Source test report:	Initial Report Dated November 25, 2003
	Revised Report Dated April 22, 2004

5. 40 CFR 75.61 "Notifications"

The combustion turbine is subject to the requirements of 40 CFR 75.61 "Notifications." These requirements have been met as described below.

Notification of actual startup date:	Submitted to EFSEC on June 17, 2003
Notification of initial CEMS certification:	Submitted to EFSEC on July 29, 2003
Initial CEMS certification test:	Completed on August 21, 2003 (CT1)
	Completed on August 23, 2003 (CT2)

6. 40 CFR 75.62 "Monitoring Plan"

The combustion turbine is subject to the requirements of 40 CFR 75.62 "Monitoring Plan." The initial monitoring plan required by 40 CFR 75.62 was submitted to EFSEC and EPA on July 15, 2003.

7. 40 CFR 75.63 "Initial Certification or Recertification Application"

The combustion turbine is subject to the requirements of 40 CFR 75.63. The results of the initial CEM certification tests were submitted to EPA on December 23, 2003.

VI. EXPLANATION OF MONITORING REQUIREMENTS

M1. Visible Emission Monitoring

This monitoring requirement is used to provide a reasonable assurance of compliance with the applicable requirements drawn from WAC 173-400, and EFSEC/95-02 Amendment 2. Visible emissions monitoring of EU-1 and EU-2 is required by Condition 8 of EFSEC/95-02 Amendment 2. Condition 8 requires daily monitoring when firing oil, or weekly monitoring when firing natural gas, utilizing EPA Reference Methods 9, 22, or an equivalent method approved by EFSEC. EPA Method 22 may be used when no visible emissions are observed. It is expected that no visible emissions will be observable during normal operations.

Because EPA Method 9 cannot be used to demonstrate compliance with the 20% opacity standard listed in WAC 173-400-040(1), Washington Department of Ecology Method 9A must be utilized in addition to EPA Method 9 whenever visible emissions are observed when conducting the daily monitoring. This monitoring was added under the "gap-filling" provisions of WAC 173-401. The only significant difference in these two methods is the data reduction methods and the fact that Washington Department of Ecology Method 9A may require a longer period of observation to demonstrate compliance with the opacity standard.

Only the general standards of WAC 173-400 apply to sources of emissions other than EU-1 and EU-2. WAC 173-400 does not directly establish any specific regime of monitoring and recordkeeping. Consequently, EFSEC has implemented monitoring and recordkeeping requirements for these sources under the "gap filling" provisions of WAC 173-401-615. These requirements consist of measuring the opacity of emissions from these sources when indicated by a complaint or if otherwise unusual emissions are observed.

M2. Fugitive Emissions Monitoring

This monitoring requirement is used to provide a reasonable assurance of compliance with the applicable requirements drawn from WAC 173-400 with regard to fugitive emissions. These requirements do not directly establish any specific regime of fugitive emissions monitoring or recordkeeping. Consequently, EFSEC has implemented monitoring and recordkeeping requirements under the "gap filling" provisions of WAC 173-401-615. Because there is not much opportunity for the generation of fugitive emissions at this facility, and most fugitive emissions would be readily noticeable by plant personnel or indicated by a complaint (especially in the event of excessive road dust), monthly monitoring was believed to provide a reasonable assure of compliance.

M2 is designed to assure compliance through a combination of periodic facility inspections and prompt corrective action whenever necessary.

M3. Complaint Monitoring

This monitoring requirement is used to provide a reasonable assurance of compliance with the applicable requirements drawn from WAC 173-400 and EFSEC/95-02 Amendment 2. These requirements do not directly establish any specific regime of complaint monitoring or recordkeeping. Consequently, EFSEC has implemented monitoring and recordkeeping requirements under the "gap filling" provisions of WAC 173-401-615. M3 is designed to assure compliance through prompt complaint response and corrective action whenever necessary.

M4. Performance Testing

This monitoring requirement is used to provide a reasonable assurance of compliance with the emission limits identified in EFSEC/95-02 Amendment 2. Initial source testing for 40 CFR 60 Subpart GG, and all initial testing required by EFSEC/95-02 Amendment 2 was completed in August 2003. The only on-going source testing requirements are found in Condition 15 of EFSEC/95-02 Amendment 2.

M5. Continuous Emissions and Process Monitoring

This monitoring requirement is used to provide a reasonable assurance of compliance with the emission limits identified in EFSEC/95-02 Amendment 2 and the monitoring requirements of 40 CFR 75 (for the Acid Rain program).

EFSEC/95-02 Amendment 2 stated that CEMS for NO_X and O_2, "shall meet the requirements contained in 40 CFR 75, Emissions Monitoring". 40 CFR 75 was designed to achieve the goals of the Acid Rain Program, not demonstrate compliance with the relatively low concentration permit limit of 3.0 ppmvd @ 15% O_2 at this facility. 40 CFR 75 allows for NO_X/O_2 CEMS to have a relative accuracy of 0.020 lb/MMBtu (5.4 ppmvd @ 15% O_2). Similarly, 40 CFR 75 App. B Section 2.1.4(a) does not classify the CEMS as "out of control" until the calibration error exceeds 5.0 ppm (for span values $\leq$ 50 ppm), or 10.0 ppm (for span values greater than 50 and $\leq$ 200 ppm). A NO_X/O_2 CEMS needs to be more accurate than this to provide a reasonable assurance of compliance with the 3.0 ppmvd @ 15% O_2 permit limit.

The quality assurance requirements cited in EFSEC/95-02 Amendment 2 for the CO CEMS allow for a relative accuracy of $\pm$5 ppm and a cylinder gas audit accuracy of $\pm$5 ppm. The CO CEMS needs to be more accurate than this to provide a reasonable assurance of compliance with the 3.0 ppmvd @ 15% O_2 permit limit.

The quality assurance requirements cited in EFSEC/95-02 Amendment 2 for the NH_3 CEMS allows for a cylinder gas audit accuracy of $\pm$5 ppm. The NH_3 CEMS needs to be more accurate than this to provide a reasonable assurance of compliance with the 10.0 ppmvd @ 15% O_2 permit limit.

WAC 173-401-630(1) requires that all Air Operating Permits "...contain compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit." To meet this

requirement, the following improved CEMS quality assurance requirements were "gap-filled" into the Air Operating Permit.

CEMS	Gap-Filled Quality Assurance Requirements
NO_X/O_2	• Relative accuracy $\leq$ 20% of reference method or 10% of emission standard for Relative Accuracy Test Audits • The calibration error as defined in 40 CFR 75, Appendix A, Section 7.2.1 shall not exceed 5%
CO	• Relative accuracy $\leq$ 20% of reference method or 10% of emission standard for Relative Accuracy Test Audits • Relative accuracy of cylinder gas audit ±15 percent of the average audit value or 0.5 ppm, whichever is greater
NH_3	• Relative accuracy of cylinder gas audit ±15 percent of the average audit value or 1.0 ppm, whichever is greater

EFSEC/95-02 Amendment 2 identified the "requirements contained in 40 CFR, Part 60, Appendix B..." for the CO CEMS. The most relevant performance standard in Appendix B is Performance Specification 4A, therefore the requirements of Performance Specification 4A were specifically identified in this monitoring requirement.

EFSEC/95-02 Amendment 2 identified the "requirements contained in 40 CFR, Part 60, Appendix B..." for the NH_3 CEMS. The most relevant performance standard in Appendix B is Performance Specification 2, therefore the requirements of Performance Specification 2 were specifically identified in this monitoring requirement.

Condition 16 of EFSEC/95-02 Amendment 2 requires the permittee to report "CEMS and process data" to EFSEC and EPA Region X. To be reported, this information must be collected by the permittee. The specific CEMS and process data elements were not identified, but must at a minimum, consist of all data necessary to determine compliance with the permitted emission limits. Collection of the relevant CEMS data for NO_X, CO, and NH_3 were required (in units and averaging times consistent with the emission limits), as well as fuel flow data to calculate emissions of all other pollutants. Turbine generator electrical output was required as a quality assurance check on the fuel flow data since turbine heat rates should remain relatively constant at any specific load.

M6. SO_2 General Standard Monitoring

This monitoring requirement is used to provide a reasonable assurance of compliance with the applicable requirements drawn from 40 CFR 60 Subpart GG, 40 CFR 75, and EFSEC/95-02 Amendment 2. 40 CFR 60 Subpart GG limits fuel sulfur content to 0.8% by weight. 40 CFR 60 Subpart GG requires proof that gaseous fuel meet the definition of natural gas, and requires a regime of fuel sulfur content monitoring for liquid fuels (oil). All of the sulfur content monitoring requirements of 40 CFR 60 Subpart GG are satisfied by complying with the sulfur content monitoring requirements of 40 CFR 75 Appendix D.

Pipeline natural gas as defined in 40 CFR 72.2 contains less than 0.5 grains total sulfur per 100 scf. Natural gas as defined in 40 CFR 72.2 contains less than 20 grains total sulfur per

100 scf. In the past, the gas delivered to this facility has met the definition of natural gas, but not pipeline natural gas because the sulfur content was greater than 0.5 grains per 100 scf.

M7. Auxiliary Boiler Monitoring

This monitoring requirement comes directly from 40 CFR 60.48c and EFSEC/2009-01 Conditions 4 & 5. 40 CFR 60.48c and EFSEC/2009-01 Condition 4 both require monthly logging of natural gas consumption. This data will be used to calculate annual emissions.

M8. Auxiliary Boiler Source Emissions Testing and Performance Monitoring

The requirements cited in this monitoring requirement and Appendices B & C of the Permit come directly from EFSEC/2009-01 and provide a reasonable assurance of compliance with the NO_X and CO emission limits of EFSEC/2009-01. In addition, if the CO emission limit is being achieved, PM emissions are likely well below the permitted emission limits.

Performance monitoring of the Auxiliary Boiler with a combustion analyzer or equivalent is required at least annually. It is unlikely that emissions will degrade rapidly enough that more frequent monitoring is necessary to maintain proper operation. In addition, more comprehensive source emissions testing of the Auxiliary Boiler is required initially and at least once every 60 months following the initial source emissions test to provide a reasonable assurance of on-going compliance with the permitted emission limits

VII. EXPLANATION OF RECORDKEEPING REQUIREMENTS

K1. Basic Recordkeeping

This recordkeeping section lists how the recordkeeping requirements of WAC 173-401-615(2) apply to inspections and certifications, complaints, upsets, and sampling and emissions testing. Basic Recordkeeping requirements were separated into Sections (a) through (d) to organize the requirements.

K1(d) "Sampling and Emission Testing" applies to source testing and RATA reports.

K2. Continuous Emissions and Process Data Recordkeeping Requirements

This recordkeeping section is taken from 40 CFR 75.57 - 75.59 and supplemented by the recordkeeping provisions of WAC 173-401-615(2).

The Acid Rain Program requires that pertinent records be maintained for at least three years from the date of the record. However, the recordkeeping provisions of the Air Operating Permit regulations, WAC 173-401-615(2)(c), require retention of records for a period of five years.

The requirement to maintain records of the CEMS and DAHS data from monitoring requirement M5 (data elements "a" through "j" of K2) is mandated by the provisions of WAC 173-401-615(2).

VIII. EXPLANATION OF REPORTING REQUIREMENTS

R1. Deviations from Permit Conditions

This reporting section is taken directly from WAC 173-400-107, WAC 173-401-615(3), and Condition 18 of EFSEC/95-02 Amendment 2. The permittee is required to report all permit deviations no later than 30 days following the end of the month during which the deviation is discovered in accordance with WAC 173-401-615(3). In accordance with WAC 173-400-107, the permittee must report permit deviations due to excess emissions as soon as possible if the permittee wishes the deviation to be considered unavoidable. EFSEC may request a full report of any deviation if determined necessary. These deviations are also reported in each semi-annual report.

R2. Complaint Reports

The permittee is required to report all complaints to EFSEC within three business days of receipt to ensure prompt complaint response. This reporting section is based on WAC 173-401-615(3).

R3. Quarterly Reports

Condition 16 of EFSEC/95-02 Amendment 2 requires the permittee to submit reports monthly unless a different testing and reporting schedule has been approved by EFSEC. With issuance of this Title V permit, EFSEC authorizes the use of a quarterly reporting schedule rather than a monthly reporting schedule for the duration of the permit. In addition, with issuance of this Title V permit, EFSEC authorizes the permittee to submit quarterly reports in an electronic format approved by EFSEC. The current practice of submitting quarterly reports in Excel format is approved as of the date of issuance of this permit. The permittee must receive pre-approval from EFSEC to submit the quarterly report in other electronic formats.

As required by EFSEC/95-02 Amendment 2, all CEMS and process data shall be reported to both EFSEC and EPA Region X. The specific CEMS and process data elements were not identified, but must at a minimum, consist of all data necessary to determine compliance with the permitted emission limits. The relevant CEMS data for NO_X, CO, and NH_3 was required (in the units and averaging times of the emission limits), as well as fuel flow data to calculate emissions of all other pollutants. Turbine generator electrical output was required

as a quality assurance check on the fuel flow data since turbine heat rates should remain relatively constant at a specific load.

R4. Semi-annual Reports

The permittee is required to provide a report on the status of all required monitoring requirements and provide a certification of all reports on a semi-annual basis. Semi-annual reporting and certification of monitoring records is required by WAC 173-401-615(3). A responsible official must certify all reports required by the Title V permit.

The semi-annual report provides information on the status of all required monitoring. The actual results (e.g. CEM data, opacity readings, etc.) do not need to be submitted unless specifically required by the permit.

No report dates are specified in WAC 173-401-615(3), but a report date must be specified to assure timely reporting and make the requirement enforceable. Report dates of April 15th and October 15th were chosen (~3.5 months after the end of the reporting period) so that the semi-annual report for the last six months of the calendar year is due at the same time as the annual compliance certification and the annual emissions inventory report.

R5. Annual Compliance Certifications

Annual Compliance Certification: The permittee is required to report and certify compliance with all permit terms and conditions on an annual basis. Annual compliance certification is required by WAC 173-401-630(5). 40 CFR 60.11(g) requires the permittee to consider credible evidence when submitting compliance certifications for NSPS affected units (EU-1, EU-2, & EU-3). Any deviations from permit conditions or certifications of intermittent compliance need to be accompanied by an explanation.

WAC 173-401 does not provide a deadline date for submission of the annual compliance certification, but a deadline date is necessary to make the requirement enforceable. The April 15th date was chosen because it is the date by which the annual emissions inventory report must be submitted in accordance with WAC 173-400-105.

R6. Emission Inventory Reports

The permittee is required to report an inventory of emissions from the source, and certify compliance with all permit terms and conditions on an annual basis. A complete emissions inventory includes quantifiable emissions from all EUs and IEUs. It is not expected that emissions from the IEUs identified in Section III will be quantifiable.

R7. Source Test Reports

Condition 17.5 of EFSEC/95-02 Amendment 2 requires submittal of the results of combustion turbine compliance tests as an element of the data that must be submitted along the timeline specified in Condition 16. Consistent with Condition 16, compliance source test reports for the combustion turbines must be submitted no later than 30 days after the end of the calendar quarter during which the testing was conducted. Source test reports for

RATAs conducted pursuant to 40 CFR 75 may be required at an earlier date if requested by EPA Region X or EFSEC.

In accordance with Condition 12 of EFSEC/2009-01, the results of all source emissions testing of the Auxiliary Boiler shall be reported to EFSEC within 45 days of test completion.

IX. APPENDICES

Appendix A contains the method by which visible emissions from the permittee's operations are to be evaluated when performing required monitoring. The federal requirements mandate the use of EPA Method 9. For EPA Method 9, the data reduction procedures detailed in EPA Method 9 must be used, not the procedures listed in Section 3 or Ecology Method 9A.

X. PERMIT ACTIONS

Air Operating Permit **EFSEC/06-01-AOP**

1.	Renewal Permit Application Submitted:	May 12, 2004
2.	Permit Application Deemed Complete:	May 25, 2004
3.	Permit Application Sent to EPA:	May 25, 2004
4.	Draft Permit Issued:	April 10, 2006
5.	Proposed Permit Issued:	July 11, 2006
6.	Final Permit Issued:	October 10, 2006

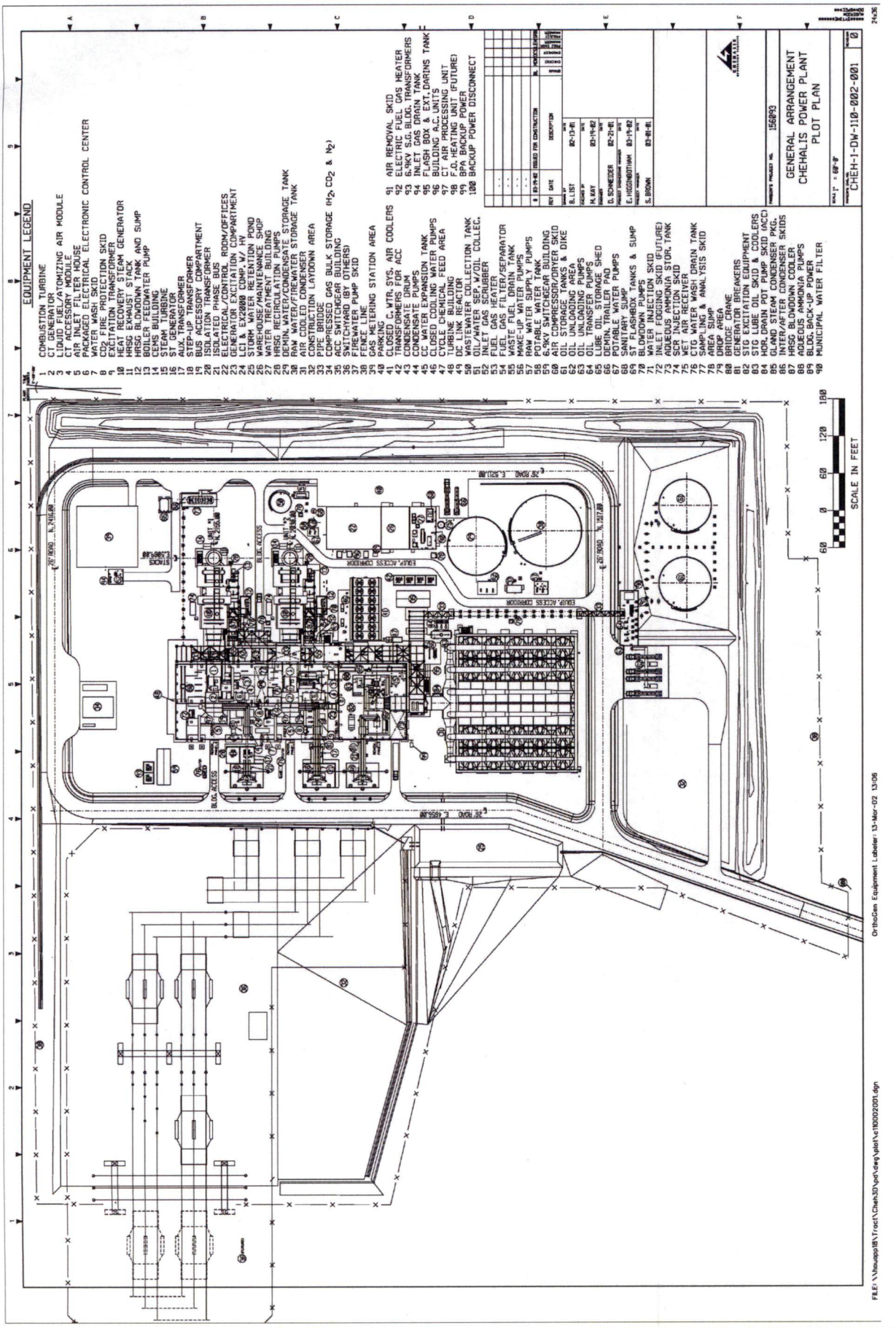
Air Operating Permit **EFSEC/06-01-AOP Rev. 1**

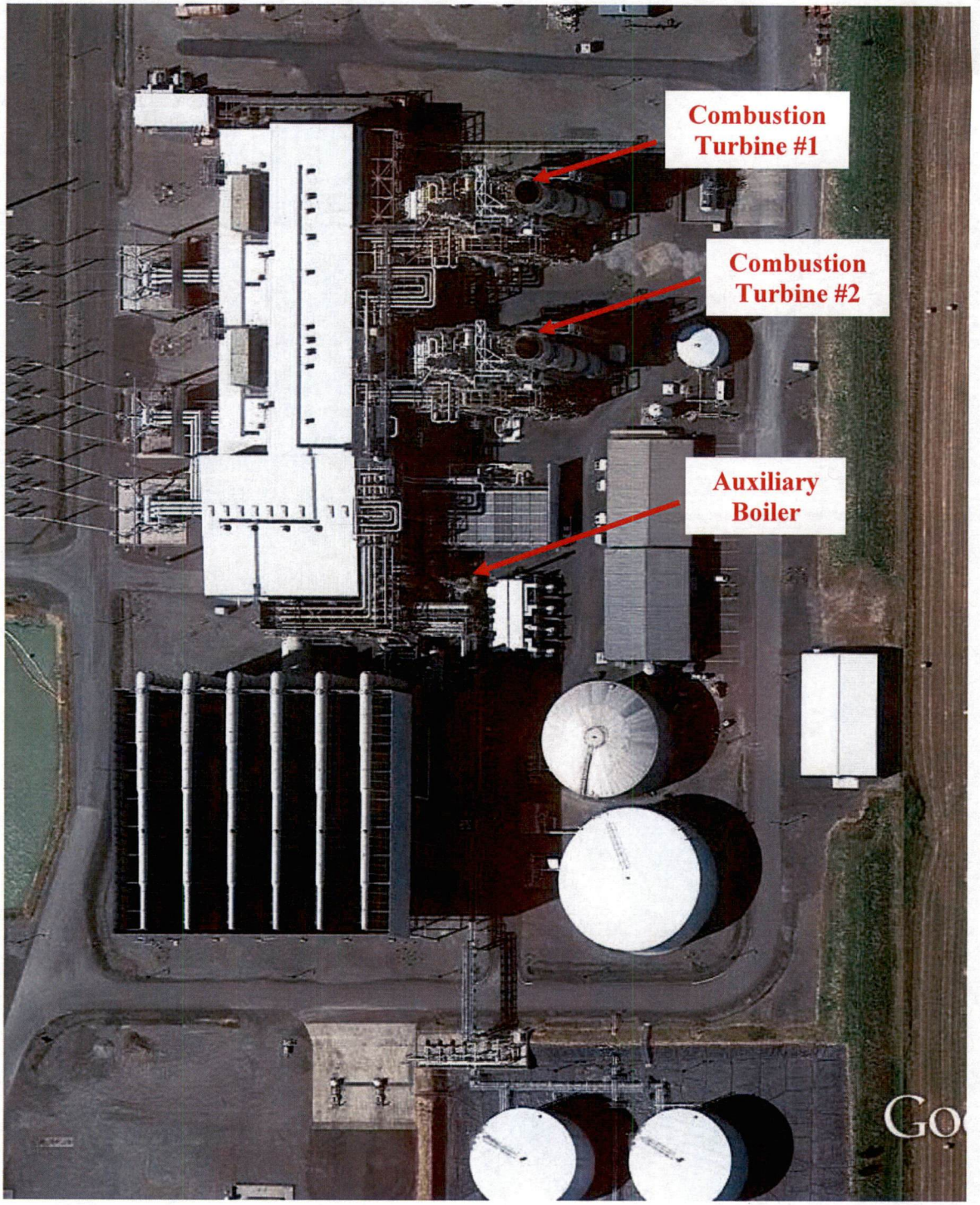
1.	Renewal Permit Application Submitted:	December 15, 2010
2.	Permit Application Deemed Complete:	March 3, 2011
3.	Permit Application Sent to EPA:	March 4, 2011
4.	Draft Permit Issued:	June 24, 2011
5.	Proposed Permit Issued:	August 19, 2011
6.	Final Permit Issued:	October 10, 2011

Air Operating Permit **EFSEC/06-01-AOP Rev. 2**

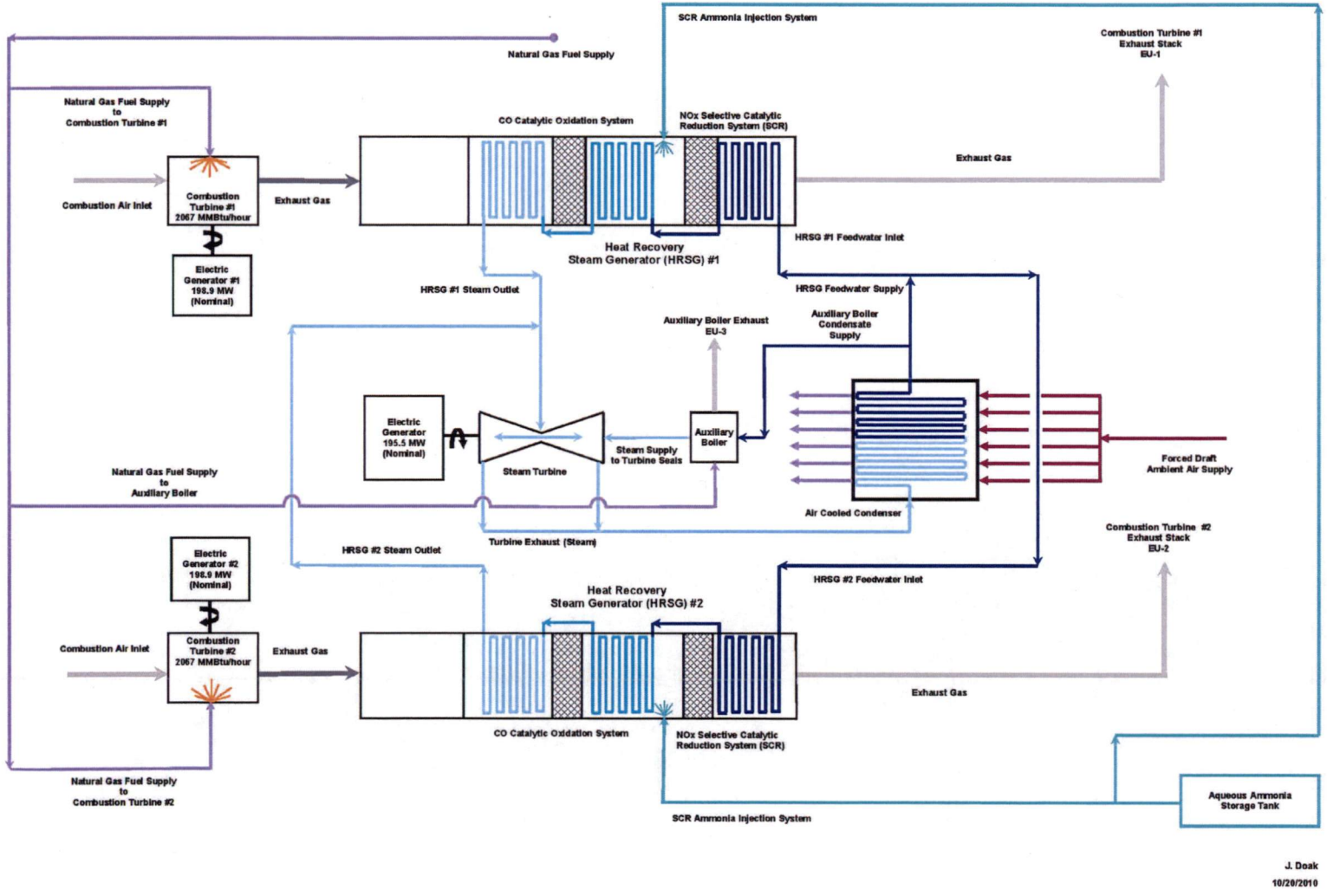
1.	Renewal Permit Application Submitted:	October 6, 2015
2.	Permit Application Deemed Complete:	May 20, 2016
3.	Permit Application Sent to EPA:	July 29, 2016
4.	Draft Permit Issued:	August 25, 2016
5.	Proposed Permit Issued:	To be determined
6.	Final Permit Issued:	To be determined

XI. Drawings


EQUIPMENT LEGEND
1 COMBUSTION TURBINE
2 CT GENERATOR
3 LIQUID FUEL/ATOMIZING AIR MODULE
4 CT ACCESSORY MODULE
5 AIR INLET FILTER HOUSE
6 PACKAGED ELECTRICAL ELECTRONIC CONTROL CENTER
7 WATER WASH SKID
8 CO2 FIRE PROTECTION SKID
9 EXCITATION TRANSFORMER
10 HEAT RECOVERY STEAM GENERATOR
11 HRSG EXHAUST STACK
12 HRSG BLOWDOWN TANK AND SUMP
13 BOILER FEEDWATER PUMP
14 DEAERATOR BUILDING
15 STEAM TURBINE
16 ST GENERATOR
17 AUX. TRANSFORMER
18 STEP-UP TRANSFORMER
19 BUS ACCESSORY COMPARTMENT
20 ISOLATION PHASE BUS DUCT
21 ELECTRICAL/CONTROL ROOM/OFFICES
22 GENERATOR EXCITATION COMPARTMENT
23 LCI & EX2000 COMP. W/ HV
24 STORM WATER RETENTION POND
25 WAREHOUSE/MAINTENANCE SHOP
26 HRSG RECIRCULATION PUMPS
27 DEMIN. WATER/CONDENSATE STORAGE TANK
28 RAW WATER/FIREWATER STORAGE TANK
29 AIR COOLED CONDENSER
30 CONSTRUCTION LAYDOWN AREA
31 PIPE BRIDGE
32 COMPRESSED GAS BULK STORAGE (H_2, CO_2 & N_2)
33 ACC SWITCHGEAR BUILDING
34 SWITCHYARD (BY OTHERS)
35 FIREWATER PUMP SKID
36 FENCE LINE
37 GAS METERING STATION AREA
38 CHEMICAL STORAGE
39 CLOSED C.WTR.SYS. AIR COOLERS
40 TRANSFORMERS FOR ACC
41 CONDENSATE DRUM
42 CONDENSATE PUMPS
43 CC WATER EXPANSION TANK
44 CLOSED COOLING WATER PUMPS
45 TURBINE BUILDING
46 DC LINK REACTOR
47 WASTEWATER COLLECTION TANK
48 OIL/WATER SEP. W/OIL COLLEC.
49 INLET GAS SCRUBBER
50 FUEL GAS HEATER
51 FUEL GAS FILTER/SEPARATOR
52 WASTE FUEL DRAIN TANK
53 MAKE-UP WATER PUMPS
54 RAW WATER SUPPLY PUMPS
55 POTABLE WATER TANK
56 6.9KV SWITCHGEAR BUILDING
57 AIR COMPRESSOR/DRYER SKID
58 OIL STORAGE TANKS & DIKE
59 OIL UNLOADING AREA
60 OIL UNLOADING PUMPS
61 OIL TRANSFER PUMPS
62 LUBE OIL STORAGE SHED
63 DEMIN. TRAILER PAD
64 POTABLE WATER PUMPS
65 SANITARY SEWAGE
66 ST FLASHBOX TANKS & SUMP
67 BLOWDOWN PUMPS
68 WATER INJECTION SKID
69 INLET FOGGING SKID (FUTURE)
70 AQUEOUS AMMONIA STOR. TANK
71 AQUEOUS AMMONIA SKID
72 WET AIR RECEIVER
73 CTG WATER WASH DRAIN TANK
74 SAMPLING & ANALYSIS SKID
75 AREA SUMP
76 DROP AREA
77 BRIDGE CRANE
78 GENERATOR BREAKERS
79 STG EXCITATION EQUIPMENT
80 STG LUBE OIL SKID & COOLERS
81 HOR. DRAIN POT PUMP SKID (ACC)
82 GLAND STEAM CONDENSER PKG.
83 INTER/AFTER CONDENSER SKIDS
84 HRSG BLOWDOWN COOLER
85 AQUEOUS AMMONIA PUMPS
86 BLDG. BACK-UP POWER
87 MUNICIPAL WATER FILTER
91 AIR REMOVAL SKID
92 ELECTRIC FUEL GAS HEATER
93 6.9KV S.G. BLDG. TRANSFORMERS
94 INLET GAS DRAIN TANK
95 FLASH BOX & EXT. DARINS TANK
96 BUILDING A.C. UNITS
97 CT AIR PROCESSING UNIT
98 F.O. HEATING UNIT (FUTURE)
99 BPA BACKUP POWER
100 BACKUP POWER DISCONNECT
GENERAL ARRANGEMENT
CHEHALIS POWER PLANT
PLOT PLAN
CHEH-1-DW-110-002-001
SCALE IN FEET
OrthoGen Equipment Labeler: 13-Mar-02 13:06


Combustion Turbine #1
Combustion Turbine #2
Auxiliary Boiler

Chehalis Generating Facility - Process Flow Diagram



Response to Comments Regarding
Draft Air Operating Permit EFSEC/06-01-AOP Rev. 2
Chehalis Generation Facility

Background. The Energy Facility Site Evaluation Council issued draft Air Operating Permit EFSEC/06-01-AOP Rev. 2 for the Chehalis Generation Facility on August 25, 2016. The draft Air Operating Permit was issued in response to a Title V renewal application submitted by Pacificorp in accordance with the deadline contained in Air Operating Permit EFSEC/06-01-AOP Rev. 1.

During the public comment period one comment letter was received from Mr. Geoffrey Glass of EPA Region 10 via electronic mail. Mr. Glass's message is reproduced below with EFSEC's comment responses interspersed within the message in *red italics*.

From: Glass, Geoffrey [mailto:GLASS.GEOFFREY@EPA.GOV]
Sent: Thursday, September 22, 2016 9:12 AM
To: EFSEC (UTC) <EFSEC@utc.wa.gov>; LaSpina, Jim (UTC) <jlaspina@utc.wa.gov>
Cc: Hardesty, Doug <Hardesty.Doug@epa.gov>; Dossett, Donald <Dossett.Donald@epa.gov>
Subject: Comments on Chehalis Generation Facility AOP

Jim:

Thank you for emailing the draft version of the AOP for the Chehalis Generating Facility to Region 10 for review. This has advantages for you and for us because we can work more collaboratively on draft permits than we can on proposed permits. I would like to take this opportunity to make a few comments on the draft permit.

Feel free to contact me directly if you would like to discuss any of these (or other) issues informally before drafting your responses or if you would like to set up a call with me and Doug, who has recently been promoted to Air Permit Program Lead.

1. On page 29 of the AOP, the permit states that the emission limits for NO_x and CO that apply to the turbines are exempt from CAM because "40 CFR 64.2(b)(iv) exempts these emission limitations from the requirements of Part 64 because the permittee is already required to utilize CEMS to measure concentrations and emission rates of these pollutants."

   The correct citation should be 40 CFR 64.2(b)(vi), which states that CAM does not apply to "emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1." A continuous compliance determination method is defined as a method "which is used to determine compliance with an emission limitation or standard on a continuous basis, consistent with the averaging period established for the emission limitation or standard; and provides data either in units of the standard or correlated directly with the compliance limit."

Although the permit does require CEMS, the discussion of CAM applicability on page 29 does not explain how these systems meet the definition of a continuous compliance determination method.

Please demonstrate how the CEMS and DAS required by the permit can be used to demonstrate compliance with all the NO_x and CO limits that apply to the turbines on a continuous basis, consistent with the averaging periods established by the limits and provide data either in the units of or correlated directly with the compliance limit. The demonstration must assure the validity of all data measured to determine compliance with each standard and shall explain how the DAS accounts for hours with missing data.

Response: As you noted, the citation should be 40 CFR 64.2(b)(vi) rather than 40 CFR 64.2(b)(iv). However, in light of your comments/questions regarding how the CEMS meet the design criteria of 40 CFR 64, this reference will be replaced with the more detailed discussion below:

"The NO_X and CO CEMS meet the monitoring design criteria of 40 CFR 64.3(d). NO_X emission limits for the turbines are expressed in ppmvd @ 15% O_2 (1-hour average), lb/day and tons per 12-month period. CO emission limits for the turbines are expressed in ppmvd @ 15% O_2 (1-hour average) and lb/hr. The required CEMS provide CO, NO_X, and O_2 concentrations continuously (which is defined as at least one cycle of measurement every 15 minutes), which allows calculation of the hourly average NO_X and CO concentrations for each hour. In addition, the permittee is required to continuously monitor fuel consumption in accordance with 40 CFR 75 to allow the calculation of pollutant mass emission rates. In accordance with requirement M5, the permittee is required to collect NO_X and CO emission data in the units of the emissions standards. In accordance with requirement K2, the permittee is required to keep records of NO_X and CO emission data in units of the emission limitations. In accordance with requirement R3, the permittee is required to report NO_X and CO emissions in units of the emission limitations.

Missing data substitution is not used for evaluating compliance with the short term NO_X and CO limits and there are no long-term CO emission limits. In accordance with requirement M5, procedures from 40 CFR 75 apply to the NO_X CEMS, and procedures from 40 CFR 60 apply to the CO CEMS. In accordance with 40 CFR 75, data substitution is used for determining compliance with the long-term NO_X limit unless there is other credible evidence (see Permit Provision P1) indicating compliance."

In addition, your comment has revealed that the additional CEMS requirements of WAC 173-400-105(7) were not included in the Air Operating Permit. This rule became applicable to the CO and NH_3 CEMS at this facility when EFSEC adopted the rule effective August 27, 2015 and requires 95% data availability. The requirements from WAC 173-400-105(7) have been incorporated into the proposed Air Operating Permit in response to your comment.

If such a demonstration is not possible, a CAM analysis is required, pursuant to part 64.

2. According to 40 CFR 70.6(b)(2) and WAC 173-401-625(2), the permitting authority may include permit terms that are not federally enforceable provided that they are specifically designated as not federally enforceable (or as "State only") conditions. This can assist the permittee by including all requirements, including state and local requirements in a single document. There are several conditions in the permit based on State regulations that are not in the SIP and, therefore, not federally enforceable. For example: Permit Condition G15, Reporting of Emissions of Greenhouse Gases, is not federally enforceable, but is not identified as such in the permit. In the next table, starting on page 4, some underlying requirements are labeled as being "State Only"; some are identified as "SIP Only"; and some are unlabeled. It appears that some of the labeling, or lack thereof, is incorrect. For example: Req-4, which requires good practices to reduce odors, is not a SIP requirement, but it is not labeled as "State Only."

   Response: You are correct, conditions Req-4 and M15 should be labeled "State Only". This oversight will be corrected. As described in P6 of the permit, only those requirements designated as "state only" or "local only" are not federally enforceable.

   The label "SIP Only" is unclear. A requirement that is in the SIP can be enforced by the State, the federal government, or any citizen. Furthermore, part 70 and Chapter 401 require the permitting authority to specifically designate those *permit terms and conditions* that are not federally enforceable, not the *underlying requirements* that are not federally enforceable, though this is allowed. Furthermore, any permit term or condition that streamlines or inextricably combines multiple underlying requirements is federally enforceable if at least one of the underlying requirements is federally enforceable.

   Response: "SIP Only" refers to a regulation that only resides in the SIP-approved version of a rules. Most often this occurs due to renumbering of a regulation. To assure that that the reader can cross-reference all legal authorities for the requirement, both the "SIP-Only" and "State Only" regulation citations were provided. As you noted, any requirement which has a "SIP Only" regulatory basis is federally enforceable.

   Please review the terms and conditions of the permit and ensure that federally enforceable and non-federally enforceable conditions are properly identified and labeled.

   Response: A review of the permit revealed additional underlying requirements in the "General Terms and Conditions" section that must be labeled "State Only". These underlying requirements were found in "General Terms and Conditions" G10, G11, G12, and G13.

3. According to the Statement of Basis, subparts Dc and GG and the General Provisions of 40 CFR part 60 apply to the source. However, it is not clear that all the applicable requirements from part 60 have been incorporated into the permit. For example, there is no monitoring or testing condition associated with the NO_x limit that applies to the combustion turbines that cites subpart GG as its basis; there are no recordkeeping or reporting conditions that cite part 60 as a basis for the requirement; and there are very few permit conditions that cite the General Provisions of part 60.

   Response: To the agency's knowledge, all applicable requirements from Subpart Dc and GG have been included in the permit. With respect to 40 CFR 60 Subpart GG NO_X monitoring, the only NO_X monitoring requirement in Subpart GG applicable to the turbines at this facility is an initial performance test that was completed in August 2003. Completion of this one-time performance testing is documented in Section V "Explanation of Obsolete and Future Requirements" of the Basis Statement.

   The only initial requirements under Subpart Dc for the natural gas fired boiler are initial notifications completed in 2011. The notification dates have been added to Section " "Explanation of Obsolete and Future Requirements" of the Basis Statement for future reference.

   The only on-going requirement for natural gas fired boilers under Subpart Dc is monthly natural gas consumption logging found in 40 CFR 60.48c(d). This requirement is contained in Monitoring Requirement M7 of the Air Operating Permit.

   Please check to ensure that all applicable requirements from part 60 have been included in the permit and document their inclusion in the SoB. We recommend including tables in the SoB that cross-reference underlying applicable requirements in the CFR to conditions in the permit.

   Response: The agency agrees that creating a cross-referencing table or other tool for confirming that all applicable requirements are included in an Air Operating Permit can be useful. However, in this instance the regulations being reviewed were relatively straightforward and contain few requirements so no such review tool was created.

4. We appreciate that the SoB includes a section on permitting history. However, we recommend enhancing the discussion of PSD applicability in the SoB to specifically detail those emission units and pollutants that have undergone PSD review. Although this may be clear now, it will benefit future generations of permit writers to have a clear understanding of the types of changes that will require PSD applicability review.

   Response: The following PSD discussion will be added to the section V(1) where the permitting history is discussed:

   "Prevention of Significant Deterioration (PSD) review was conducted for initial installation of Combustion Turbines #1 and #2 resulting in issuance of EFSEC/95-02 on June 18, 1997. Nitrogen

oxides, carbon monoxide, sulfur dioxide, particulate matter with an aerodynamic diameter less than 10 micrometers, volatile organic compounds, and sulfuric acid mist underwent PSD review in this permitting action. No permitting action since that time has triggered PSD review."

Geoffrey L. Glass, MSChE
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Stationary Source Unit

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