



# Washington State Energy Facility Site Evaluation Council

## REVISED AGENDA

**MONTHLY MEETING**  
Tuesday October 15, 2019  
1:30 PM

3000 George Washington Way,  
Richland, WA 99354,  
Walkley Room  
Conference number: 1-844-621-3956 Pin: 802 502 225

- 1. Call to Order ..... Kathleen Drew, EFSEC Chair
- 2. Roll Call ..... Tammy Mastro, EFSEC Staff
- 3. Proposed Agenda ..... Kathleen Drew, EFSEC Chair
- 4. Minutes **Meeting Minutes**..... Kathleen Drew, EFSEC Chair
  - September 17, 2019
- 5. Projects
  - a. **Kittitas Valley Wind Project**
    - Operational Updates.....Eric Melbardis, EDP Renewables
  - b. **Wild Horse Wind Power Project**
    - Operational Updates.....Jennifer Diaz, Puget Sound Energy
  - c. **Chehalis Generation Facility**
    - Operational Updates.....Mark Miller, Chehalis Generation
  - d. **Desert Claim**
    - Project Updates.....Amy Moon, EFSEC Staff
  - e. **Grays Harbor Energy Center**
    - Project Updates.....Chris Sherin, Grays Harbor Energy
  - f. **WNP – 1/4**
    - Non-Operational Updates.....Mary Ramos, Energy Northwest
  - g. **Columbia Generating Station**
    - Operational Updates.....Mary Ramos, Energy Northwest
    - Presentation.....Mary Ramos, Energy Northwest
    - Presentation.....Ami Kidder, EFSEC Staff
    - Presentation.....Steve Williams, EMD
    - Presentation.....Lynn Albin, Department of Health
- 5. Other
  - a. **EFSEC Council**
    - 2<sup>nd</sup> Quarter Cost Allocation.....Sonia Bumpus, EFSEC Staff
- 6. Adjourn..... Kathleen Drew, EFSEC Chair

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

Verbatim Transcript of Monthly Council Meeting  
Washington State Energy Facility Site Evaluation  
Council

September 17, 2019



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6 WASHINGTON STATE  
7 ENERGY FACILITY SITE EVALUATION COUNCIL  
8 Olympia, Washington  
9 September 17, 2019

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14 MONTHLY COUNCIL MEETING  
15 Verbatim Transcript of Proceedings  
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19  
20 REPORTED BY: TAYLER GARLINGHOUSE, CCR 3358  
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1 APPEARANCES  
2 Councilmembers:  
3 KATHLEEN DREW, Chair  
4 CULLEN STEPHENSON, Department of Ecology  
5 MIKE LIVINGSTON, Fish & Wildlife  
6 STACEY BREWSTER, Utilities & Transportation Commission  
7 DAN SIEMANN, Department of Natural Resources (phone)  
8 Assistant Attorney General:  
9 JON THOMPSON  
10 Council Staff  
11 AMI KIDDER  
12 KYLE OVERTON  
13 TAMMY MASTRO  
14 JOAN AITKEN  
15 STEW HENDERSON  
16 AMY MOON  
17 In Attendance:  
18 ERIC MELBARDIS, Kittitas Valley (phone)  
19 JENNIFER DIAZ, Wild Horse (phone)  
20 CHRIS SHERIN, Grays Harbor Energy  
21 JEREMY SMITH, Chehalis Generation  
22 MARY RAMOS, Energy Northwest (phone)  
23 TIM MCMAHAN, Stoeel Rives (phone)  
24 KARA WARNER, Golder Associates (phone)  
25 HALEY OLSON, Wild Horse (phone)

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1 LACEY, WASHINGTON; SEPTEMBER 17, 2019  
2 1:30 P.M.  
3 --o0o--  
4  
5 P R O C E E D I N G S  
6  
7 CHAIR DREW: Good afternoon. This is  
8 Kathleen Drew, Chair of the Energy Facility Site  
9 Evaluation Council. I'm calling this meeting to order.  
10 Ms. Mastro, will you call the roll?  
11 MS. MASTRO: Department of Commerce?  
12 CHAIR DREW: Vacant.  
13 MS. MASTRO: Department of Ecology?  
14 MR. STEPHENSON: Cullen Stephenson, here.  
15 MS. MASTRO: Department of Fish & Wildlife?  
16 MR. LIVINGSTON: Mike Livingston, here.  
17 MS. MASTRO: Department of Natural  
18 Resources?  
19 Utilities and Transportation Commission?  
20 MS. BREWSTER: Stacy Brewster, here.  
21 MS. MASTRO: Chair, there is a quorum.  
22 CHAIR DREW: Thank you.  
23 Are there people who have joined us by phone  
24 who would like to introduce themselves?  
25 Joan, do we know that we have an open

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1 connection there?  
2 MS. AITKEN: I'm sorry?  
3 CHAIR DREW: I'm not hearing anyone on the  
4 phone, I am wondering if the line is up.  
5 MS. AITKEN: It is up. I can hear it  
6 through my phone. You guys can't hear it here?  
7 CHAIR DREW: No.  
8 MS. AITKEN: Okay.  
9 MR. HENDERSON: I heard something super  
10 faintly.  
11 CHAIR DREW: Yeah. We still don't have  
12 audio, so we will wait a couple minutes to see if we can  
13 get this fixed technically, since we do have a number of  
14 our reports via web link.  
15 Are there people who have joined us via  
16 phone who would like to introduce themselves at this  
17 point?  
18 MS. AITKEN: Working on it.  
19 CHAIR DREW: We're going to take a  
20 five-minute break while we get this adjusted. Thank  
21 you.  
22 (A break was taken from  
23 1:33 p.m. to 1:39 p.m.)  
24 CHAIR DREW: Calling us back to order now  
25 and asking -- let's hear from those who are on the phone

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<p>1 who would like to introduce themselves.</p> <p>2 MR. MCMAHAN: No sound coming to us from the</p> <p>3 Council.</p> <p>4 CHAIR DREW: Oh, probably because I forgot</p> <p>5 to turn my microphone on. Sorry about that. Okay. So</p> <p>6 please introduce yourselves.</p> <p>7 MR. MCMAHAN: Tim McMahan with Stoel Rives.</p> <p>8 CHAIR DREW: Thank you, Tim.</p> <p>9 MS. DIAZ: Jennifer Diaz with Puget Sound</p> <p>10 Energy.</p> <p>11 MS. OLSON: Haley Olson with Puget Sound</p> <p>12 Energy.</p> <p>13 MS. RAMOS: Mary Ramos --</p> <p>14 MS. WARNER: Kara Warner --</p> <p>15 (Simultaneous talking.)</p> <p>16 MS. WARNER: -- Golder Associates.</p> <p>17 Sorry, Mary.</p> <p>18 MS. RAMOS: That's okay.</p> <p>19 MR. SIEMANN: This is Dan Siemann with</p> <p>20 Washington DNR as the Councilmember.</p> <p>21 CHAIR DREW: Thank you, Dan.</p> <p>22 So we had two --</p> <p>23 MR. MELBARDIS: Eric Melbardis --</p> <p>24 CHAIR DREW: Go ahead.</p> <p>25 MR. MELBARDIS: Eric Melbardis, Kittitas</p>	<p>1 August 20th, 2019 minutes? If not, all those in favor</p> <p>2 of approving the minutes, please say "aye." Oh, wait,</p> <p>3 maybe I need a motion first.</p> <p>4 MR. LIVINGSTON: I'll move to accept the</p> <p>5 minutes as presented.</p> <p>6 MS. BREWSTER: I'll second that.</p> <p>7 CHAIR DREW: Thank you.</p> <p>8 All in favor, say "aye."</p> <p>9 COUNCILMEMBERS: Aye.</p> <p>10 CHAIR DREW: Thank you.</p> <p>11 Opposed? Minutes are adopted.</p> <p>12 Moving on to the project updates. Kittitas</p> <p>13 Valley Wind Project update, Mr. Melbardis.</p> <p>14 MR. MELBARDIS: Good afternoon, Chair Drew,</p> <p>15 EFSEC Council, and Staff. This is Eric Melbardis with</p> <p>16 EDP Renewables for the Kittitas Valley Wind Power</p> <p>17 Project. There was nothing nonroutine to report for the</p> <p>18 period operationally. We did conduct a site-wide rescue</p> <p>19 and heights training last week. We do that every couple</p> <p>20 of years with a refresher in between off years. Always</p> <p>21 good to get to work with our gear and get to climb up</p> <p>22 and repel out the side of the tower. Thought I would</p> <p>23 share that with the Council.</p> <p>24 CHAIR DREW: Thank you.</p> <p>25 Any questions?</p>
Page 6	Page 8
<p>1 Valley.</p> <p>2 CHAIR DREW: And I think I also heard Mary</p> <p>3 Ramos?</p> <p>4 MS. RAMOS: That's correct. Mary Ramos,</p> <p>5 Energy Northwest.</p> <p>6 CHAIR DREW: Thank you.</p> <p>7 With that, we have before us the proposed</p> <p>8 agenda. The one thing I'd like to share with the</p> <p>9 Council is that Sonia Bumpus is on leave today, so Ami</p> <p>10 Kidder will be actually speaking in the parts that are</p> <p>11 slated for Sonia Bumpus today.</p> <p>12 With that change, is there a motion to</p> <p>13 approve the agenda?</p> <p>14 MR. STEPHENSON: I will move to approve the</p> <p>15 agenda.</p> <p>16 CHAIR DREW: Thank you.</p> <p>17 MR. LIVINGSTON: I'll second that.</p> <p>18 CHAIR DREW: All those in favor, please say</p> <p>19 "aye."</p> <p>20 COUNCILMEMBERS: Aye.</p> <p>21 CHAIR DREW: Opposed? Agenda is adopted.</p> <p>22 The meeting minutes before us are</p> <p>23 August 20th, 2019. We had a subsequent version that was</p> <p>24 sent out, I believe, yesterday with one small</p> <p>25 correction. Are there any other corrections for the</p>	<p>1 Okay. Wild Horse Wind Power Project,</p> <p>2 Ms. Diaz.</p> <p>3 MS. DIAZ: Yes, thank you, Chair Drew, and</p> <p>4 Councilmembers. For the record, this is Jennifer Diaz</p> <p>5 with Puget Sound Energy at the Wild Horse Wind Facility.</p> <p>6 I do have a few nonroutine items to report for the month</p> <p>7 of August.</p> <p>8 In accordance with Article 6 of the Site</p> <p>9 Certification Agreement, the operation Spill Prevention,</p> <p>10 Control, and Countermeasures Plan, or SPCCP, was updated</p> <p>11 and submitted to EFSEC Staff on August 9th. And</p> <p>12 required annual training was completed by site staff on</p> <p>13 the SPCCP and the Stormwater Pollution Prevention Plan</p> <p>14 and the Wildlife Incident Reporting and Handling System.</p> <p>15 In accordance with the Operations Stormwater</p> <p>16 Pollution Prevention Plan, a site inspection was</p> <p>17 completed following a significant storm event on August</p> <p>18 10th that actually produced a funnel cloud. Most of the</p> <p>19 wind farm was not impacted by the storm, but a small</p> <p>20 area along the northern portion of the wind farm had</p> <p>21 some minor road erosion and some sedimentation in</p> <p>22 ditches and some check dams. Maintenance to the ditches</p> <p>23 and check dams was completed, and the roads will be</p> <p>24 regraded in the fall once we have adequate moisture for</p> <p>25 growing and compaction.</p>

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1 And I do have an update on the Eagle  
 2 Incidental Take Permit. The U.S. Fish and Wildlife  
 3 Service published the Environmental Assessment and Eagle  
 4 Conservation Plan on August 19th. It is available for  
 5 public review and comment through the end of today. And  
 6 it's available on the U.S. Fish and Wildlife Service  
 7 migratory bird website. PSE provided that web link to  
 8 the Technical Advisory Committee and informed them of  
 9 the public review and comment period. And following the  
 10 public review and comment period, the Service will make  
 11 a determination on whether to issue an Eagle Incidental  
 12 Take Permit for Wild Horse. And that's all I have.  
 13 CHAIR DREW: Thank you very much.  
 14 Are there any questions?  
 15 Yes, Mr. Stephenson.  
 16 MR. STEPHENSON: Thank you, Chair Drew.  
 17 For Staff, a plan was submitted, was it  
 18 okay?  
 19 MR. OVERTON: Let's see here, this is  
 20 Kyle --  
 21 MS. DIAZ: Is that a question for me or for  
 22 Staff?  
 23 CHAIR DREW: For Staff.  
 24 MS. DIAZ: Okay. Thank you. And that's for  
 25 the -- the Spill Prevention Plan, correct?

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1 MR. STEPHENSON: Yes. Thanks, Jennifer.  
 2 MS. DIAZ: Okay. Yep.  
 3 MR. OVERTON: Yeah, when we completed the  
 4 initial review of the Spill Prevention Plan, it was  
 5 largely similar to the previous plan with some updates  
 6 for the solar storage capacity they added for the Solar  
 7 Project. Contracted -- state -- state agency  
 8 contractors also reviewed it, and there was no major  
 9 issues.  
 10 MR. STEPHENSON: Thank you, Kyle.  
 11 CHAIR DREW: Anything else? Thank you.  
 12 Moving on to Chehalis Generation Facility.  
 13 MR. SMITH: Good afternoon, Chair Drew and  
 14 Council and Staff. I'm Jeremy Smith. I'm the  
 15 environmental analyst for Chehalis Generation. I have  
 16 no abnormal reports for the month of August.  
 17 CHAIR DREW: Okay. Thank you.  
 18 Grays Harbor Energy Center, Mr. Sherin.  
 19 MR. SHERIN: Good afternoon, Chair Drew and  
 20 Councilmembers. I'm Chris Sherin, the plant manager at  
 21 Grays Harbor Energy Center. The only nonroutine items  
 22 I'll report on for the month of August are the beginning  
 23 of August, Grays Harbor Energy Center scheduled an  
 24 outage to clean our fuel gas strainers, which were  
 25 showing signs of plugging off. We started observing

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1 high differential pressures in June and they continued  
 2 to increase through August when we reached the point we  
 3 were -- we were beginning to see low fuel gas pressures  
 4 nearing the minimum fuel gas pressures required to  
 5 operate our gas turbines.  
 6 The source of the fuel -- fuel quality issue  
 7 is still uncertain. One abnormality that occurred this  
 8 summer, which may have contributed to the situation, is  
 9 our fuel gas trunk line. So our supply source is in  
 10 null state, which means -- just means that just as much  
 11 gas is flowing from southern direction as the northern  
 12 direction and normally our gas flow is from the north.  
 13 Also during this period, there was also an  
 14 identified dithiazine issue in the supply system from  
 15 the gas sourced out of AECO or Nova Gas Trans -- let me  
 16 make sure I say that right -- Nova Gas Transmission  
 17 Limited's hub, which is in Alberta. And then I'm not  
 18 going to read the remainder of the extract from the  
 19 original email that I provided.  
 20 CHAIR DREW: Thank you.  
 21 MR. SHERIN: I'll just add also, I'll put  
 22 this in September's operational updates, that we did  
 23 send -- submit a sample to a lab. However, since then,  
 24 through the process with TC Energy and Nova Gas  
 25 Transmission, there was a meeting in September and they

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1 put out some information and a point of contact to TC  
 2 Energy. And we've reached out to them, and they  
 3 recommended that we send in further samples to a lab  
 4 they recommend that actually tests for dithiazine to see  
 5 if that's ac- -- what we actually have -- what -- that  
 6 the dithiazine is our actual problem, because at this  
 7 point, it's just still speculation.  
 8 CHAIR DREW: Okay. Thank you.  
 9 Are there questions about that? I know that  
 10 Mr. Sherin also added an additional -- the noncritical  
 11 notice from Nova Gas Transmission Limited in our packets  
 12 that explains in more detail what those issues are. So  
 13 is there anyone on the Council who has additional  
 14 questions?  
 15 I take it that this is something that, as  
 16 you get more information, you'll provide back to us?  
 17 MR. SHERIN: Yes.  
 18 CHAIR DREW: Okay. We would really  
 19 appreciate that. Thank you very much.  
 20 Columbia Generating Station, Ms. Ramos?  
 21 MS. RAMOS: Good afternoon, Chair Drew and  
 22 Councilmembers. This is Mary Ramos reporting for Energy  
 23 Northwest. I have two updates to report for Columbia  
 24 Generating Station for the month of August.  
 25 First is regarding our fire reinspection.

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1 So during the fire reinspection on June 24th, the  
 2 Washington State Patrol Fire Marshal requested an  
 3 inspection report from the contractors that performed  
 4 coating of two water storage tanks at Columbia. On  
 5 August 21st, Energy Northwest submitted the requested  
 6 information. Based on discussions with the fire marshal  
 7 and EFSEC Staff, Item 16 pertaining to water tank  
 8 inspections on the fire inspection report will be  
 9 closed.

10 And then my second update is regarding our  
 11 Radioactive Air Emissions License. On August 20th,  
 12 Energy Northwest responded to EFSEC's request for  
 13 additional information regarding our SEPA related to the  
 14 Columbia Generating Station Radioactive Air Emissions  
 15 License. And I have no updates to report for WNP-1/4.

16 CHAIR DREW: Thank you.

17 Ms. Moon, I understand you also have some  
 18 information for us?

19 MS. MOON: Yes. Thanks, Chair Drew.

20 For the record, this is Amy Moon, one of the  
 21 EFSEC Staff members, and wanted to give the Council an  
 22 update on the National Pollutant Discharge Elimination  
 23 System -- the acronym is NPDES -- Permit renewal at the  
 24 Columbia Generating Station. EFSEC issued a letter on  
 25 September 13th to administratively extend the current

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1 NPDES Permit, as the renewal permit will not be issued  
 2 by the expiration date on October 31st, 2019. Per RCW  
 3 34.05.422(3) and WAC 463-76-061(4), the terms and  
 4 conditions of the current permit remain in effect and  
 5 enforceable until the effective date of a new permit.  
 6 And EFSEC is in the process of working with the  
 7 Department of Ecology to renew the permit for a new  
 8 five-year period.

9 CHAIR DREW: Thank you. Do you have any  
 10 estimated time frames on that?

11 MS. MOON: Well, we're -- we requested some  
 12 additional information about groundwater, and that's  
 13 due, or anticipated, in November. And after that point,  
 14 we can really work in earnest on the permit and the  
 15 limits in the permit. But without that, we -- it would  
 16 be premature to move forward.

17 CHAIR DREW: Okay.

18 MS. MOON: So I'm going to say after  
 19 January.

20 CHAIR DREW: Okay. Thank you very much.

21 MS. MOON: You're welcome.

22 CHAIR DREW: Any other questions?

23 Okay. Desert Claim, you are up again,  
 24 Ms. Moon.

25 MS. MOON: Okay. So once again, this is Amy

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1 Moon, and I'm providing an update for the Desert Claim  
 2 Project. EFSEC Staff continue to coordinate with Desert  
 3 Claim; however, there are no updates on the project or  
 4 project schedule at this time.

5 CHAIR DREW: Okay. Thank you.

6 Moving on to Columbia Solar Project. As you  
 7 all saw and you know, we did have a motion from last  
 8 meeting for the Chair to work with the Staff to submit  
 9 an order regarding the suspension of the Columbia Solar  
 10 Project. And you all received that as it was completed  
 11 for updates. I'm going to ask Ms. Kidder to report.

12 MS. KIDDER: Thank you, Chair Drew. For the  
 13 record, my name is Ami Kidder. After the August 20th  
 14 Council meeting, Staff and the AG's office worked to  
 15 prepare Order 877, the order suspending site  
 16 certification agreements for the Columbia Solar Project.  
 17 Chair Drew has signed the order, and it became effective  
 18 on September 5th. A copy of the order as well as the  
 19 letter sent to the certificate holder is available in  
 20 your packets. Are there any -- are there any questions  
 21 about the letter or the order?

22 CHAIR DREW: Okay.

23 MS. KIDDER: Thank you.

24 CHAIR DREW: Thank you. Now, we are on  
 25 No. 5, "Other" on our agenda. And we have a revised

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1 first quarter cost allocation.

2 Ms. Kidder.

3 MS. KIDDER: Thank you. Due to the  
 4 suspension of the Columbia Solar Project, Staff has  
 5 removed the project from the cost allocation for the  
 6 remainder of first quarter of fiscal year 2020. The  
 7 initial cost allocation presented remains effective for  
 8 work completed from July 1st through September 4th. The  
 9 updated cost allocations for September 5th through  
 10 September 30th are as follows:

11 Kittitas Valley Wind Power Project, 11  
 12 percent; Wild Horse Wind Power Project, 11 percent;  
 13 Columbia Generating Station, 26 percent; WNP-1, 4  
 14 percent; Whistling Ridge Energy Project, 4 percent;  
 15 Grays Harbor 1 & 2, 16 percent; Chehalis Generation  
 16 Project, 14 percent; Desert Claim Wind Power Project, 10  
 17 percent; Grays Harbor Energy 3 & 4, 4 percent. Are  
 18 there any questions?

19 CHAIR DREW: Thank you.

20 And final item on our agenda is the Air Rule  
 21 update, Ms. Kidder.

22 MS. KIDDER: Thank you.

23 If you all recall the revisions to EFSEC's  
 24 Air Rule, Washington Administrative Code or WAC 463-78,  
 25 which adopts Ecology air regulations by reference, went

1 out for public comment from June 5th through July 20th.  
 2 No public comments were received. As no comments were  
 3 received, Chair Drew signed the form CR-103, which was  
 4 filed with the Code Reviser's Office July 26th. This  
 5 commenced a 30-day waiting period before the rule would  
 6 become effective. That period has ended and as of  
 7 August 26th, the updated WAC 463-78 is in effect,  
 8 bringing EFSEC into alignment with current Ecology Air  
 9 Rule. Are there any questions?

10 CHAIR DREW: Any questions?

11 Thank you.

12 As we have no other business before us,  
13 meeting is adjourned.

14 (Adjourned at 1:57 p.m.)

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1 CERTIFICATE

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3 STATE OF WASHINGTON  
4 COUNTY OF THURSTON

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

12 \_\_\_\_\_  
13 Tayler Garlinghouse, CCR 3358

# Kittitas Valley Wind Power Project

## Monthly Operations Report

September 2019

### Project Status Update

#### **Production Summary:**

Power generated: 21,482 MWh  
Wind speed: 5.7m/s  
Capacity Factor: 30.2%

#### **Safety:**

No incidents

#### **Compliance:**

Project is in compliance

#### **Sound:**

No complaints

#### **Shadow Flicker:**

No complaints

#### **Environmental:**

No incidents



# Wild Horse Wind Facility

## EFSEC – Monthly Compliance Report

### September 2019

#### **Safety**

No lost-time accidents or safety injuries/illnesses

#### **Compliance/Environmental**

Nothing to report

#### **Operations/Maintenance**

Nothing to report

#### **Wind Production**

September generation totaled 56,076 MWh for an average capacity factor of 28.57%

#### **Eagle Update**

Nothing to report



## **Chehalis Generation Facility----Monthly Plant Report – September 2019**

### **Washington Energy Facility Site Evaluation Council**

10.04.2019

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#### **Safety:**

- There were no recordable incidents this reporting period and the plant staff has achieved 1523 days without a Lost Time Accident.

#### **Environment:**

- There were no air emissions or stormwater deviations or spills during the month.
- Wastewater and Storm-water monitoring results complied with the permit limits for the month.

#### **Operations and Maintenance Activities:**

- The Plant generated 260,560 MW-hours in September for 2019 Year-To-Date generation equaling 1,626,239 MW-hours. The capacity factor for the month of August was 67.3% and the YTD is 50.8%.

#### **Regulatory/Compliance:**

- The US-EPA Region 10, Pretreatment/Biosolids Coordinator, conducted an inspection of the Chehalis plant during the month. EFSEC staff also accompanied the EPA during the inspection. The Chehalis staff provided documentation regarding consumption and discharges from the plant to the Publicly Owned Treatment Works (City of Chehalis) and an inspection report is expected in the coming weeks.

#### **Sound monitoring:**

- Nothing to report this period.

#### **Carbon Offset Mitigation:**

- Nothing to report this period.



Respectfully,

A handwritten signature in black ink, appearing to read "M. Miller", enclosed in a light pink rectangular box.

Mark A. Miller  
Manager, Gas Plant  
Chehalis Generation Facility

## EFSEC Monthly Operational Report Grays Harbor Energy Center

September 2019

### Safety and Training

- There were no accidents or injuries during the month and the plant staff has achieved 3924 days without a lost time incident.

### Environmental & Compliance

- There were no air emissions, outfall or storm water deviations, during the month.
- All routine reporting was completed for the month.
- The August 14 & 15<sup>th</sup> GHEC Relative Accuracy Test Audit results were submitted on it to EFSEC on September 26<sup>th</sup>.
- The annual inspection by the State Fire Marshal's Office was scheduled for October 8<sup>th</sup>.
- GHEC received the draft of the Title V Air Operating Permit for review. GHEC comments and questions were submitted to EFSEC staff on September 26<sup>th</sup>.

### Operations & Maintenance

- Grays Harbor Energy Center (GHEC) operated 30days during the month, with 1 starts on U1, and 0 start on U2.
- GHEC generated 404,584MWh during the month and 2,404,117MWh YTD.
- The plant capacity factor was 90.6% for the month and 59.2% YTD.
- Plant fuel gas lines
- GHEC is still investigating the fuel gas fouling issue. Currently there is no impact to generation, however we believe it will be a long-term maintenance issue which we plan to address during scheduled outage periods. During the last week of September, GHEC collected another sample of the black tar like substance that previously plugged of our Fuel Gas Inlet Strainer, suspected to be dithiazine, and sent to the lab recommended by TC Energy.

### Noise and/or Odor

- None.

### Site Visits

- None.

### Other

- None.

**Energy Northwest**  
**October 15, 2019 EFSEC Council Meeting**  
**Operations Reporting Period for September 2019**

**Washington Nuclear Project 1 and 4 (WNP-1/4)**

No updates to report.

**Columbia Generating Station (CGS)**

Oil and Hazardous Substances Spill Prevention, Control, and Counter-Measure Plan Revision

On September 27, 2019, Energy Northwest issued a revision to the Columbia Generating Station Oil and Hazardous Substances Spill Prevention, Control, and Counter-Measure Plan. The revision incorporates changes requested by EFSEC and requirements outlined under Conditions S3.E and S9.B.2 of NPDES Permit WA002515-1.

EFSEC Order No. 873 Annual Report

In accordance with annual reporting requirements in the EFSEC Order No. 873, Energy Northwest submitted monthly run times for the Columbia Generating Station emergency power diesel generators and monthly fuel consumption for the CGS auxiliary boiler. The report, which was submitted to EFSEC on September 26, 2019, covers the period from September 2018 through August 2019 and includes 12-month rolling totals.

Fire inspection update

On September 19, 2019, Energy Northwest submitted to the WSP Fire Marshal and EFSEC additional information regarding range hood ventilation (item 12 on the fire inspection report).

# Columbia Generation Station

Energy Facility Site Evaluation Council meeting  
October 15, 2019



# Energy Northwest



A not-for-profit  
Municipal Corporation

**Asotin County PUD**

**Benton County PUD**

**Chelan County PUD**

**City of Port Angeles**

**City of Richland**

**City of Centralia**

**Clallam County PUD 1**

**Clark Public Utilities**

**Ferry County PUD**

**Franklin County PUD**

**Grant County PUD**

**Grays Harbor County PUD**

**Jefferson County PUD**

**Kittitas County PUD**

**Klickitat County PUD**

**Lewis County PUD**

**Mason County PUD 1**

**Mason County PUD 3**

**Okanogan County PUD**

**Pacific County PUD**

**Pend Oreille County PUD**

**Seattle City Light**

**Skamania County PUD**

**Snohomish County PUD**

**Tacoma Public Utilities**

**Wahkiakum County PUD**

**Whatcom County PUD**



# Generation Projects

**2019**



**White Bluffs Solar Station  
(38 KWe)**



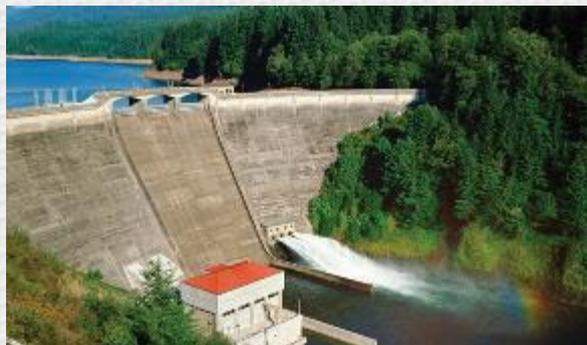
**Nine Canyon Wind Project  
(96 MWe)**



**Tieton Hydroelectric  
Project (15 MWe)**



**Packwood Lake Hydroelectric  
Project (27 MWe)**



**Portland Hydroelectric  
Project (37.5 MWe)**



**Columbia Generating  
Station (1,207 MWe)**

# Columbia Generating Station

Bonneville Power Administration  
Administrator Peter Johnson (left)  
& Plant Manager Jerry Martin  
dedication

# 1984



# Columbia Generating Station



- GE Boiling Water Reactor
- 10 miles north of Richland
- Online: 1984
- License renewed: 2012
- Licensed through: 2043
- Output: 1,207 MWe
- Capacity factor: 92%

**9,708,444**

Megawatt-hours in 2018

**9.6 million**

In 2016

**9.5 million**

In 2014

**8.4 million**

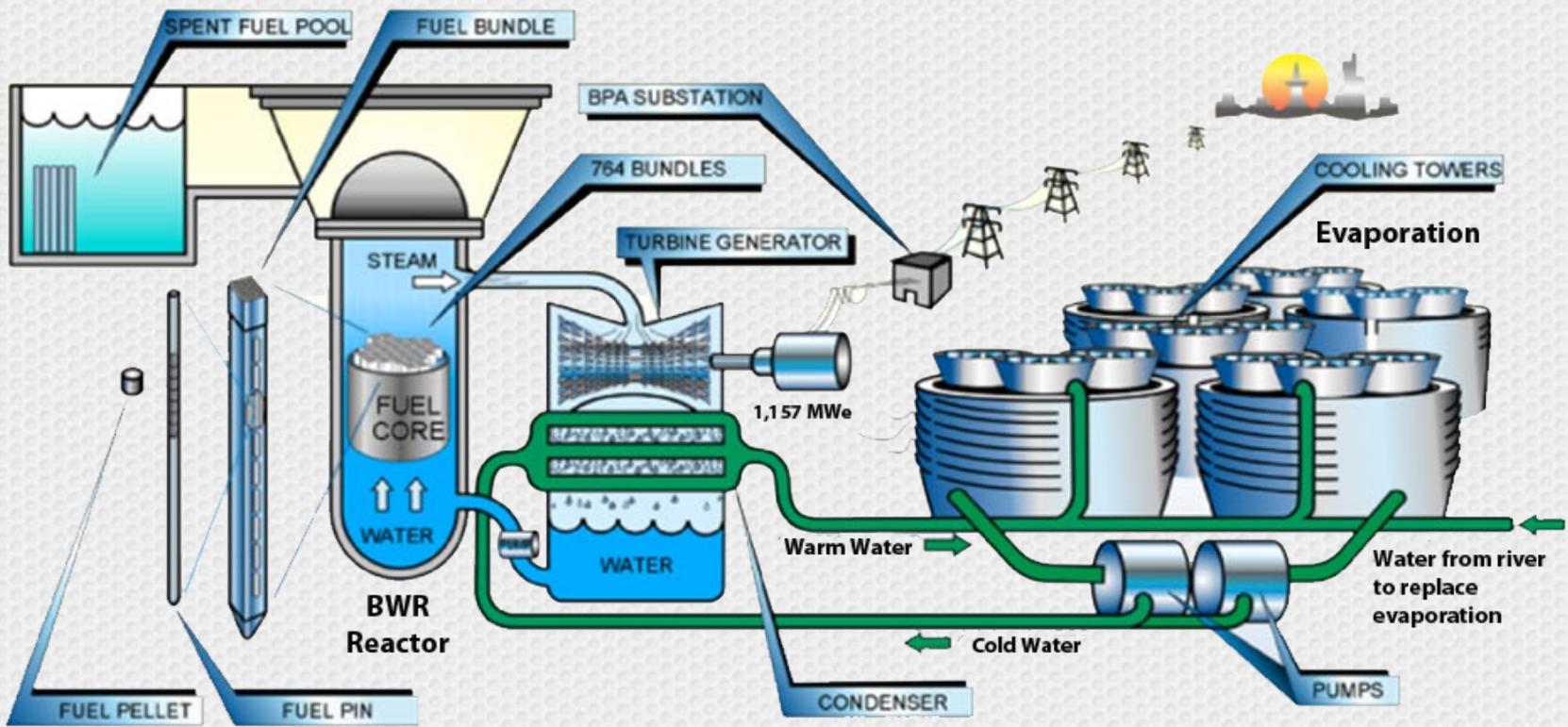
in 2013

(refueling year record)

**9.3 million**

in 2012

# Columbia Generating Station - Simplified



Primary Loop – Irradiated

Circulating Water Loop – Not Irradiated Loop

# The Fuel

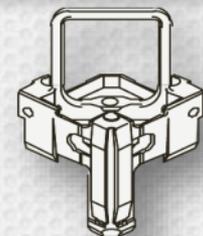
Fuel Pellet



Fuel Rod



Sub-Assembly  
(1of 4 per fuel assembly)



Handle



Channel

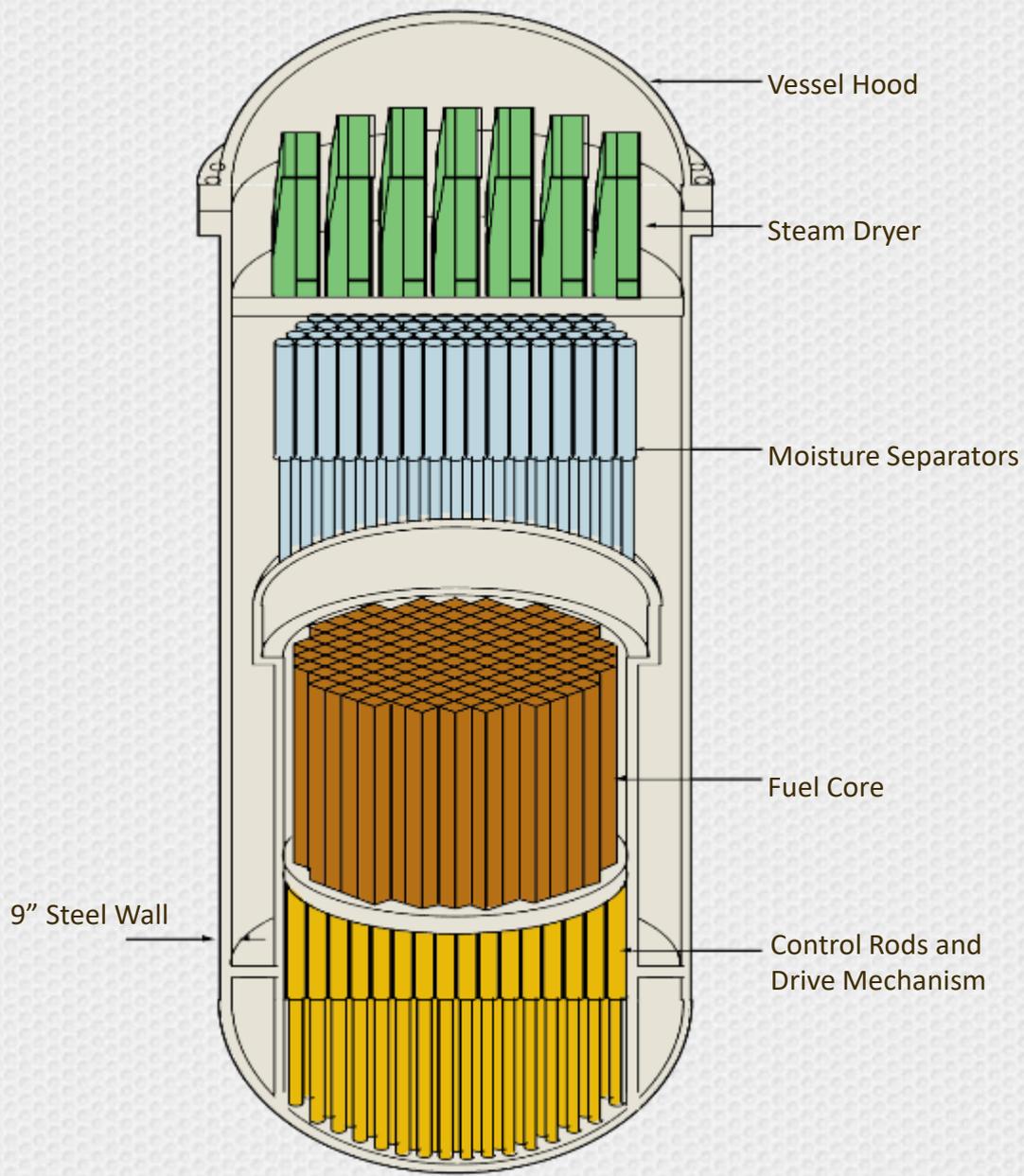


Nose Piece

Typical Fuel Assembly

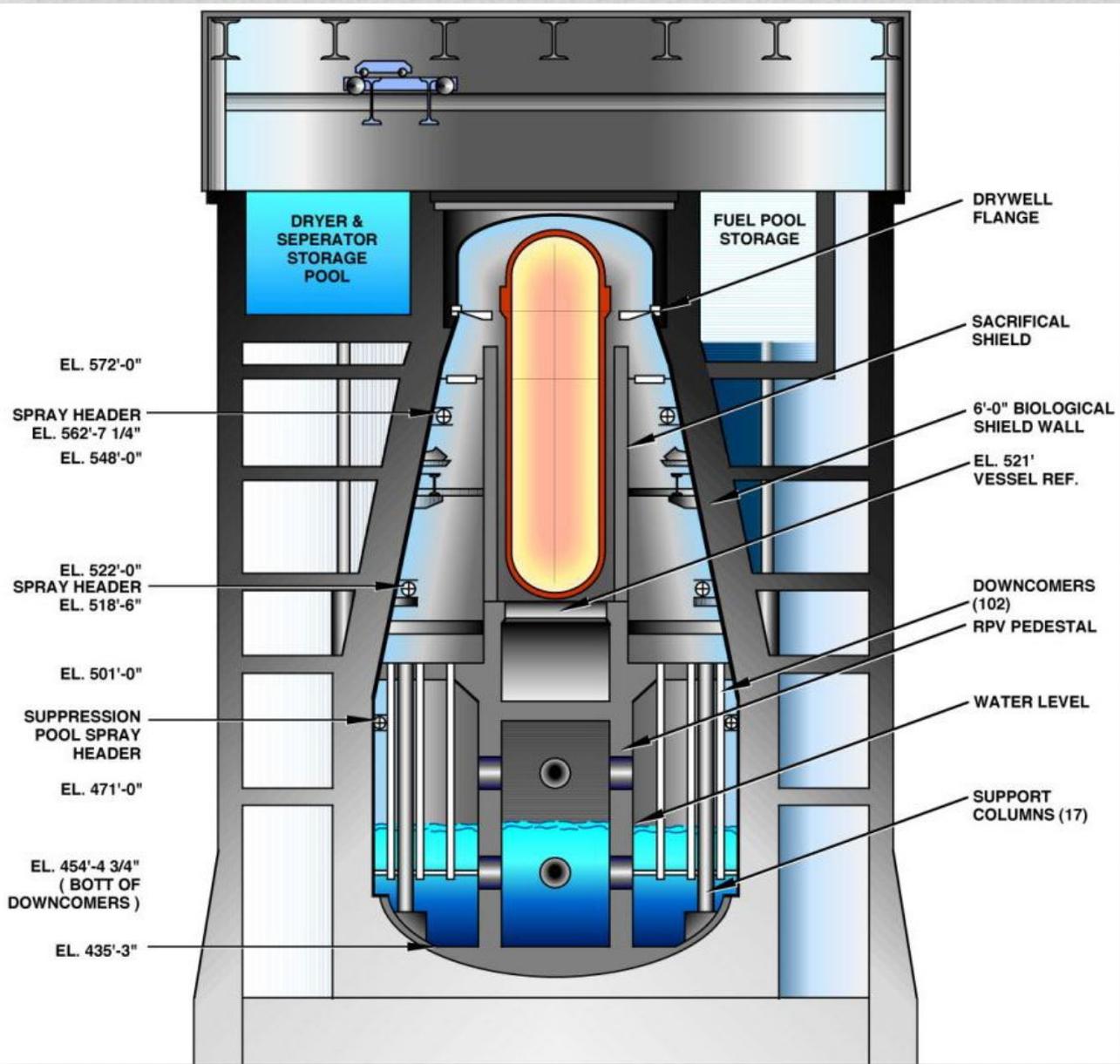


# Reactor Vessel



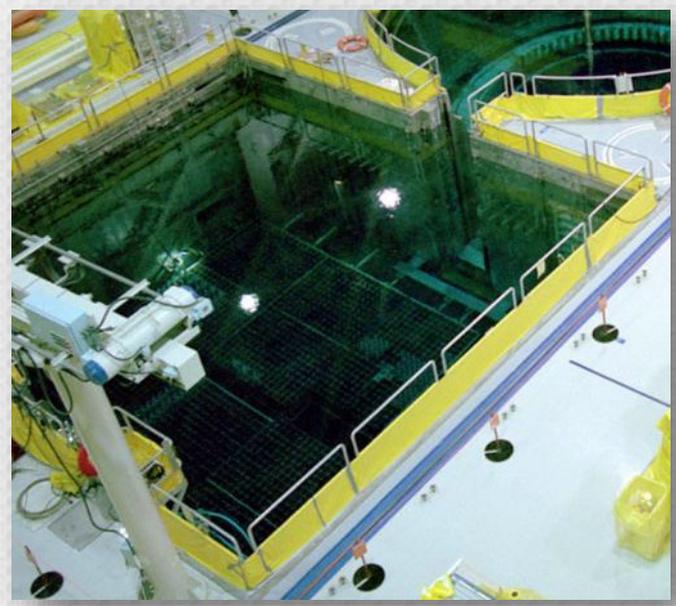
**Dimensions (approx.)**  
75 feet tall  
28 feet in diameter  
9-inch thick steel walls

# Primary & Secondary Containment



# Used Nuclear Fuel

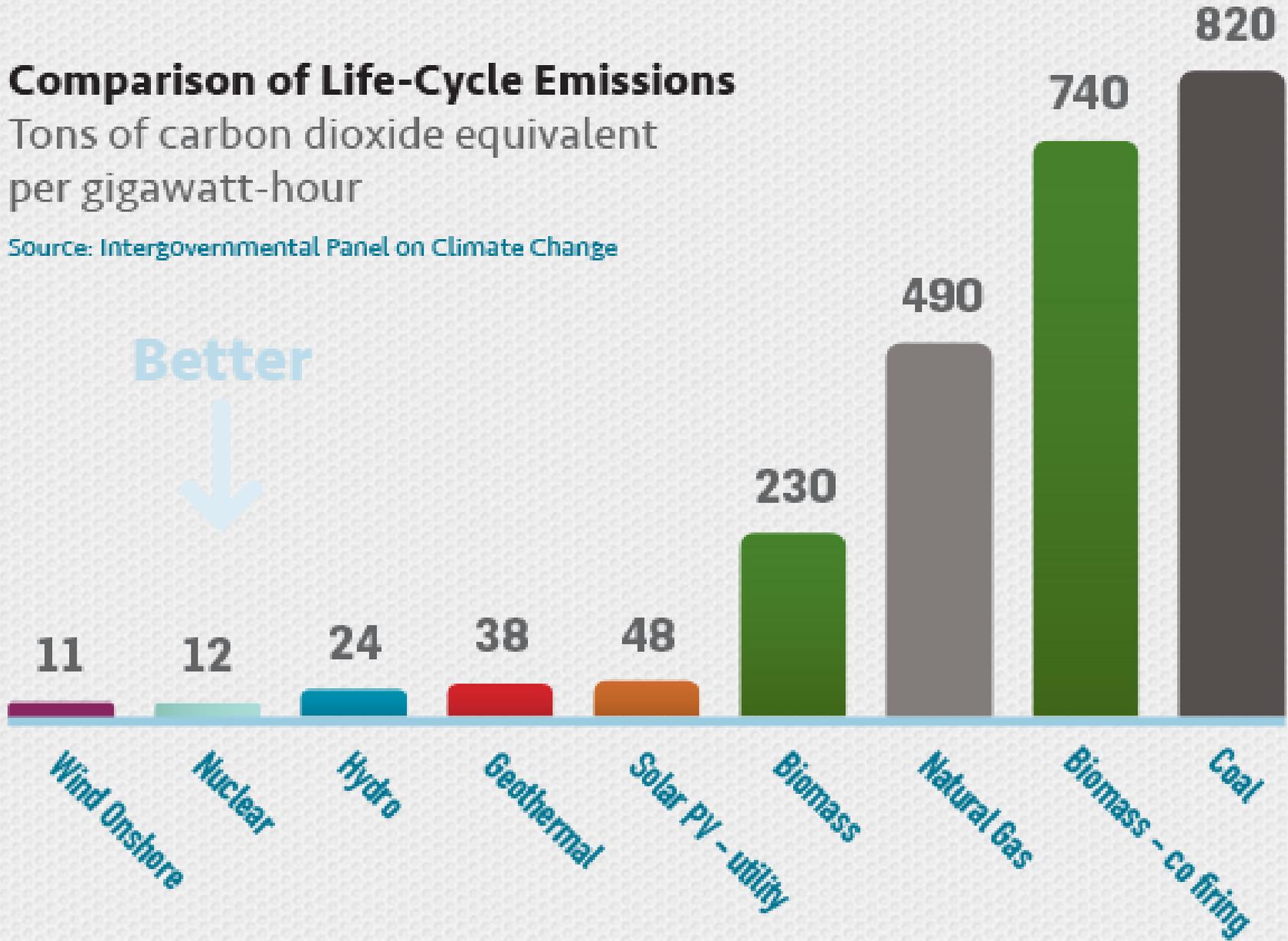
- Commercial used fuel is stored in water-filled pools and above ground dry storage casks
- Vastly different than Hanford's nuclear waste



### Comparison of Life-Cycle Emissions

Tons of carbon dioxide equivalent per gigawatt-hour

Source: Intergovernmental Panel on Climate Change



# Environmental Permits

Agency	Document Number	Issue Date	Activity Authorized
EFSEC	N/A	Issued: 5/17/1972	Construction and operation of CGS
	Resolution 288	Issued: 11/10/1997	Operation of inert waste landfill
	Resolution 299	Issued: 8/3/2001	Onsite disposal of cooling system sediment
	Resolution 300	Issued: 9/10/2001	Operation of sanitary waste treatment facility
	Order 837	Issued: 2/11/2009	Air emissions from painting and blasting
	Order 873	Issued: 10/08/2014	Air emissions from diesel-fired combustion units providing steam and emergency power
	Order 874	Issued: 1/21/2015	Radionuclide emissions from evaporation ponds
	Permit WA002515-1	Modified: 2/08/2016	Industrial wastewater discharge permit (National Pollutant Discharge Elimination System, NPDES)
U.S. Army Corps of Engineers	Permit 071-OYC-1-000221-75-9	Issued: 3/14/1975	Construction and maintenance of river intake and discharge structures
Washington Department of Natural Resources	Easement 51-076659	Issued: 4/02/2005	Use of aquatic lands (riverbed and shoreline) for construction of in-river structures

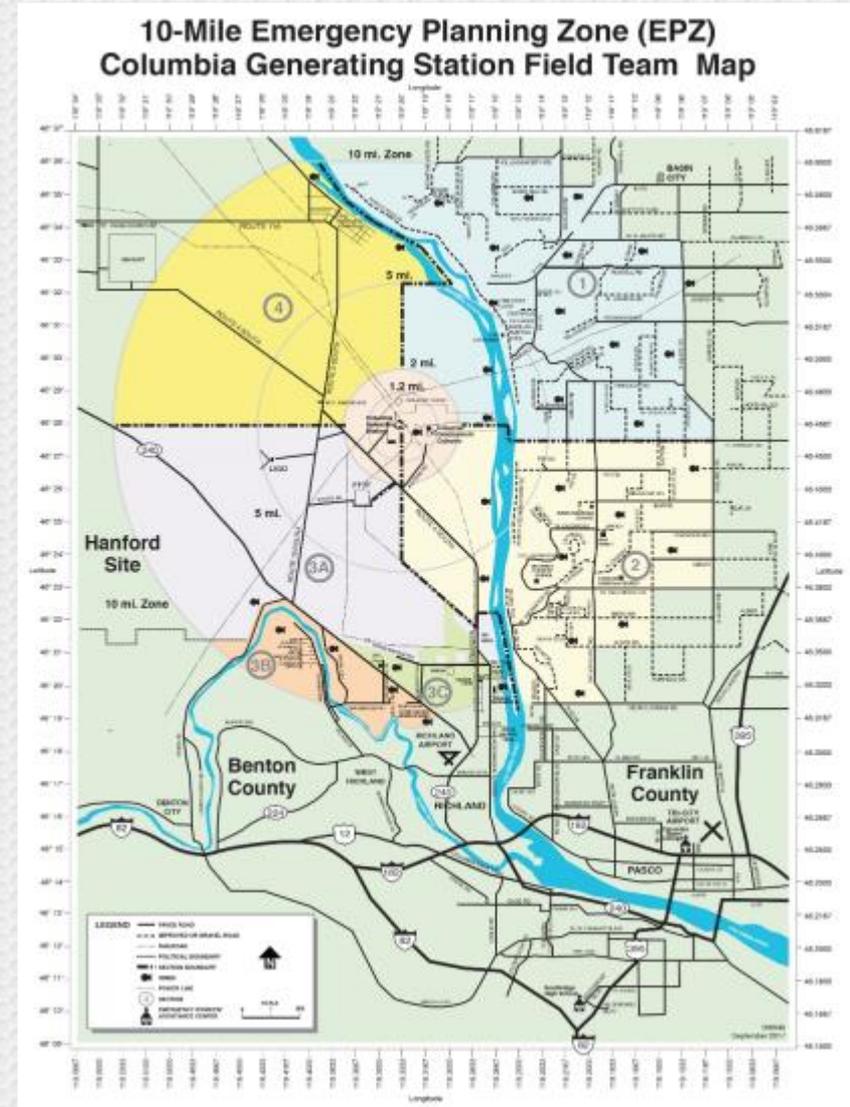
# Environmental Permits

Agency	Document Number	Issue Date	Activity Authorized
Washington Department of Ecology	Certificate S3-20141C	Issued: 2/04/1983	Withdrawal and consumption of surface water
	Certificate G3-20142C	Issued: 5/02/1979	Withdrawal and consumption of groundwater
	Permit G1018	Annual permit	Use of commercial low level radwaste disposal facility
Washington Department of Ecology (through Dept of Licensing)	Registration 034 003 333	Annual registration	Operation of underground storage tanks
Washington Department of Health	Permit 920240	Annual registration	Operation of public water system
U.S. NRC and National Marine Fisheries Service	License to Operate NPF-21	Issued: 3/10/2017	Final Biological Opinion and Incidental Take Statement

# Emergency Preparedness

## Protect public health & safety

- Preventing emergency events
- Identify, classify, mitigate events
- Notify offsite response organizations
- Recommend protective actions when needed





# **Emergency Preparedness**

## **Emergency Response Organization (ERO)**

- **1000 + employees**
- **4 teams and alternate**
- **5 primary emergency centers**
  - **Alternate emergency facilities**
- **Each ERO team drills at least annually**
- **Evaluated exercises conducted biennially**
- **Offsite response organization partners**

# Connect with us ... stay informed



**Energy Northwest**  
Published by CE Kaseberg [?] · August 15 ·

Your full-time, carbon-free electricity, brought to you by the power of hydro and nuclear and your public power friends in Washington. #DamProud #hydroflowwhere #nuclear #PublicPower

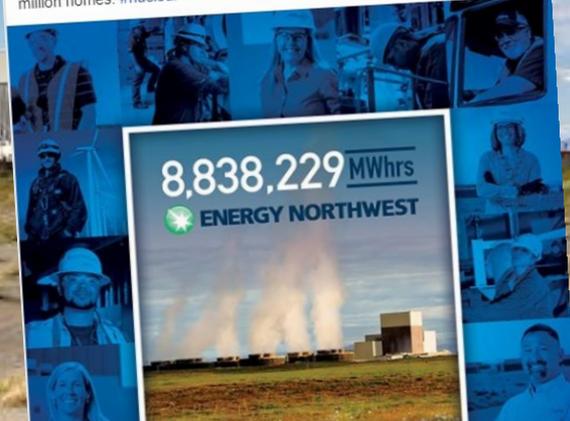
Your summer air conditioning, brought to you by hydro and nuclear power.



**Energy Northwest**  
Published by Hootsuite [?] · July 18 ·

Another performance record at Columbia Generating Station! Highest generation for a refueling outage year, fiscal year 2019, which closed June 30 – enough clean, cost-effective and reliable energy to power more than a million homes. #nuclear #cleanenergy #carbonfree

8,838,229 MWhrs  
ENERGY NORTHWEST



**Kelly Rae**

**Energy Northwest Public Affairs**

**[klrae@energy-northwest.com](mailto:klrae@energy-northwest.com)**



**Washington State**

# **Energy Facility Site Evaluation Council**

**Richland, WA**

**October 15, 2019**



*These Slides Are Intended for Illustrative Purposes Only and Do Not Represent the Official Position of EFSEC on Any Individual Project*



## History

- EFSEC formed in 1970 for thermal power plants
- “One stop permitting”
- State agency and local government members
- EFSEC recommendation to Governor for final decision
- Final decision preempts all other state and local governments



## Council Membership (RCW 80.50.30)

- Chair – Governor Appointee
  - Kathleen Drew
- Dept. of Ecology
  - Cullen Stephenson
- Dept. of Fish & Wildlife
  - Mike Livingston
- Dept. of Commerce
  - TBD
- Dept. of Natural Resources
  - Dan Siemann
- Utilities & Transportation Commission
  - Stacey Brewster
- Local Government (City and County)
  - for application review
- Port District – nonvoting
  - for application review
- Optional application review members:
  - Dept. of Agriculture
  - Dept. of Health
  - Dept. of Transportation
  - Military Dept.

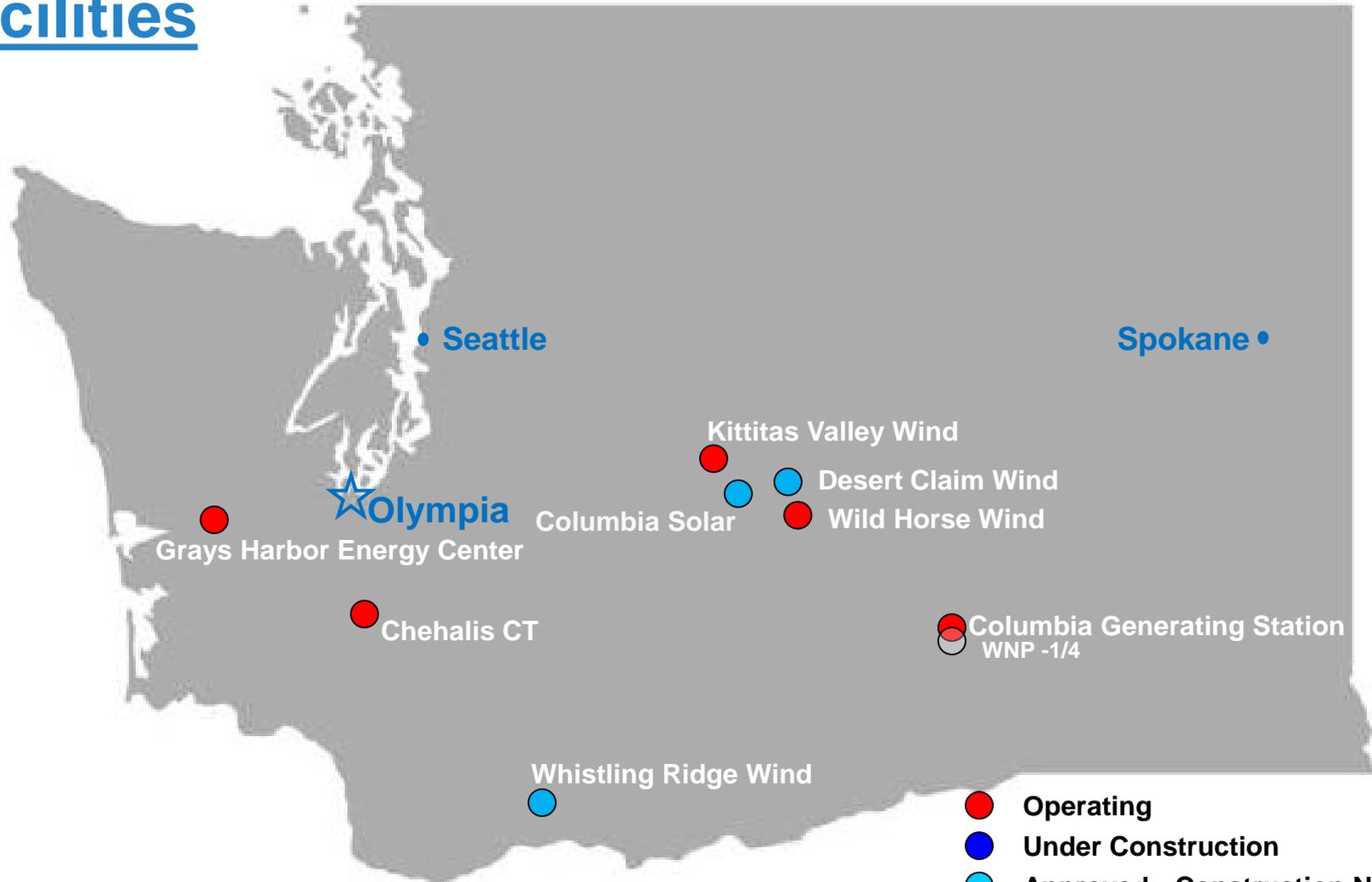


## Facilities

- Energy plants:
  - Any nuclear power facility where the primary purpose is to produce and sell electricity
  - Alternative energy resources (wind, solar, geothermal, wave/tidal, landfill gas, biomass, etc.) “any size may opt-in”
  - Non hydro, nonnuclear thermal power plants 350+ MW
- Transmission Lines 115+ kV may “opt-in”
- Pipelines
- Refineries and Storage Facilities



# Facilities



- Operating
- Under Construction
- Approved - Construction Not Started
- Decommissioning



# Columbia Generating Station Certification

- Application – January 1971
- Site Certification Agreement – May 1972
- Site Certification Amendment – September 1975
- Facility Online - 1984



## Regulatory Oversight

- Compliance monitoring and enforcement
  - EFSEC monitors approved projects for compliance with the Site Certification Agreement and Permits through contracts with State and local agencies
- Permits
  - NPDES
  - Air Emissions
  - Fugitive Radionuclides
- Coordination with NRC and other Federal agencies occurs as needed



# Regulatory Oversight and Coordination

- Dept. of Ecology
- Dept. of Health
- Office of the State Fire Marshall Washington State Patrol
- Department of Natural Resources
- Military Dept., Emergency Management Division



# Columbia Generating Station (CGS)

Offsite Emergency Preparedness in  
Washington State

October 15, 2019



# History

- 3-Mile Island - 1979
- Executive Order 12148
  - Transferred lead Fed role for Offsite EP to FEMA
- NRC and FEMA Joint publication
  - NUREG-0654/FEMA-REP-1
- FEMA publication for offsites
  - REP Program Manual (RPM)
- REP has evolved since 1983
  - Hostile Action Based scenarios
  - Back up Alert & Notification System



# REP Program in Washington

- Participating Organizations
- State
  - Emergency Management Division
  - Department of Health
  - Department of Agriculture
- Counties
  - Adams
  - Benton
  - Franklin
  - Grant
  - Walla Walla
  - Yakima



## REP Program in Washington

- Klickitat and Kittitas – non-participating
- Goal – Protect the health and safety of the public
  - Follow requirements of RPM
  - Requirements for all
    - Planning
    - Training
    - Exercising
  - County requirements vary based on EPZ
    - 10-mile – Benton, Franklin
    - 50-mile – Adams, Benton, Franklin, Grant, Walla Walla, Yakima.



# REP Program in Washington

- Planning
  - Required to develop plans, procedures, MOU/MOAs
  - Must be coordinated with counties/state agencies
  - EMD provides courtesy review
  - FEMA reviews/approves as adequate to meet REP program standards
- Training
  - Required to conduct initial and annual refresher
  - Training requirement for those responsible for planning effort.



# REP Program in Washington

- Exercises and Drills
  - Exercises
    - 8-year exercise cycle
    - All exercise criterion must be demonstrated at least once within the cycle. Most are demonstrated every 2 years.
    - Federally evaluated every 2 years
    - FEMA reviews/approves as adequate to meet REP program goals
  - Drills
    - Medical Services Drill
    - Emergency Worker/Assistance Center Drill
    - State Lab Drill



# REP Program in Washington

- Financial Support
  - Interlocal Agreements with EFSEC
    - EMD has agreement with EFSEC
      - EMD has sub-contracts with Counties
    - DOH and WSDA have separate agreements
  - Work is based on requirements in RPM
    - Includes some administrative and program management requirements
- Benefits of REP
  - Positive impacts to communities
    - Relationships established
    - Coordinated planning
    - Trained together
    - Exercised together



# REP Program in Washington

- Overall, REP Communities are better prepared
- Energy Northwest has been a good neighbor



# Questions?

Steven Williams,  
Radiological Preparedness Program Manager  
O: 509-545-2030  
M: 509-531-3911  
[steven.williams@mil.wa.gov](mailto:steven.williams@mil.wa.gov)



# COLUMBIA GENERATING STATION COMPLIANCE AUDITING PROGRAM



Office of Radiation Protection/Environmental Health Programs

# AGRICULTURE - A Cornerstone of Washington's Economy

Market Value of Crops and Livestock and Number of Farms by County from 2012 Census of Agriculture, USDA

## TOP 10 COMMODITIES: (MILLIONS OF DOLLARS)

- APPLES - \$2,189
- MILK - \$1,299
- WHEAT - \$1,014
- POTATOES - \$792
- CATTLE/CALVES - \$706
- HAY - \$675
- CHERRIES - \$385
- GRAPES - \$279
- PEARS - \$225
- HOPS - \$202

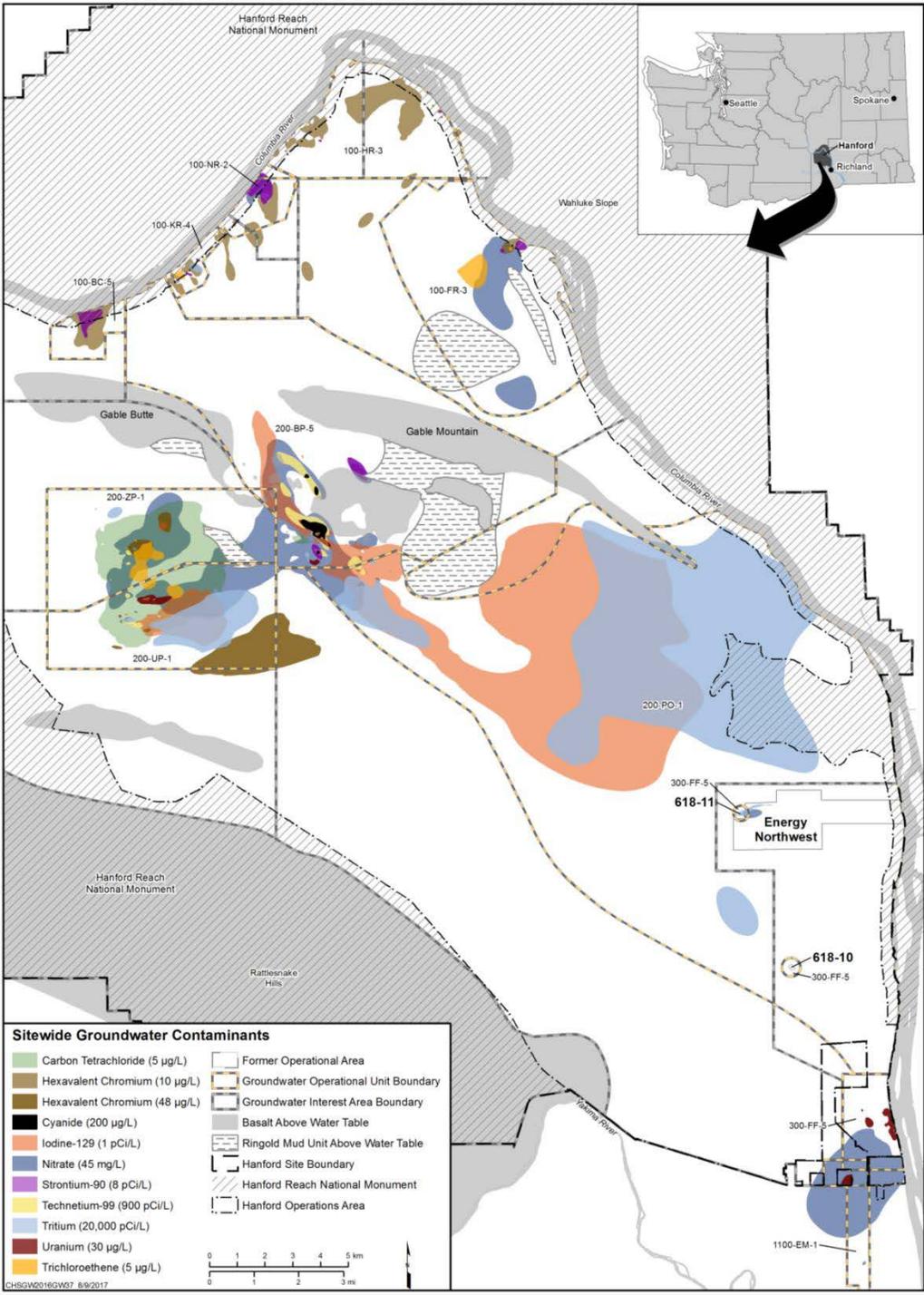
### KEY ECONOMIC FACTS ON WASHINGTON AGRICULTURE

- 37,249 farms
- 300 commodities grown
- \$51 billion overall value of food and agriculture industry
- \$10.16 billion market value of crops and livestock
- 12% of Washington's economy
- 160,000 employed in agriculture and food industry
- Ranks No. 1 in U.S. production in 11 commodities:
  - Red Raspberries
  - Hops
  - Spearment Oil
  - Winkled Seed Peas
  - Apples
  - Sweet Cherries
  - Pears
  - Grapes, Concord
  - Carrots, processing
  - Green peas, processing
  - Pigeonpeas
- \$15.1 billion in food and agriculture products exported through Washington ports in 2013, third largest total in U.S.



**LEGEND** Top 10 counties in market value are GREEN  
 Leading commodities listed for each county  
 Source: U.S. Dept of Agriculture 2012 Census of Agriculture  
 USDA National Agricultural Statistics Service, Olympia  
[www.nass.usda.gov/wa](http://www.nass.usda.gov/wa) (360) 709-2400





# Hanford Groundwater Contaminant Plumes

Source:DOE/RL-2016-67

# CGS COMPLIANCE AUDITING ROLES

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- Radioactive Air Emissions Regulatory Program
- Radiological Monitoring Program
- Emergency Plans and Procedures/Operating Document Review

# Rules

Rules/Regulations/Resolutions	Description
10CFR20; WAC 246	Radiation Levels
10 CFR 50, Appendix I	Dose, ALARA
40 CFR 190	Dose
40 CFR 141; WAC 248-54	Drinking water
WAC 173-200-40	Groundwater
WAC 173-201	Surface water
WAC 246-221	Dose
10 CFR 50 Appendix B; NRC Reg. Guide 4.15	Quality Assurance
Resolution 332 (SCA)	REMP
Resolution 157	Scientific Collections for Fish
Resolution 295; 10 CFR 72	ISFSI
Resolution 299	Cooling Systems Sediment
Resolution 300	Sanitary Waste Treatment Facility
WAC 246-247, WAC 173-480 (Order 874)	Radionuclides in Air (Evaporation Pond)

# Radioactive Air Emissions Program

---

- Radioactive Air Licensing
- Review Emissions Data
- Inspections, Surveillances

# Ambient Standard vs. MEI

---

- AMBIENT STANDARD: Emissions of radionuclides in the air shall not cause a maximum effective dose equivalent of more than 10mrem/year to the whole body of any member of the public (does not designate where a person lives).

vs.

- MEI – Maximally Exposed Individual: A hypothetical individual who, because of proximity, activity, or living habit, could receive the maximum possible dose of radiation
- ALARA (As Low as Reasonably Achievable)

# Radiological Monitoring Program

- Quality Assurance Assessment of CGS REMP Program
- Conduct Environmental Sampling and Investigations
- Provide Laboratory Support



## Media Sampled

### Air

- Particulate
- Iodine

### Water

- Drinking
- Surface
- Discharge

### Milk

### Soil/Sediment

### Food

### Fish

### Vegetation

### Ambient Gamma

# Emergency Preparedness Program

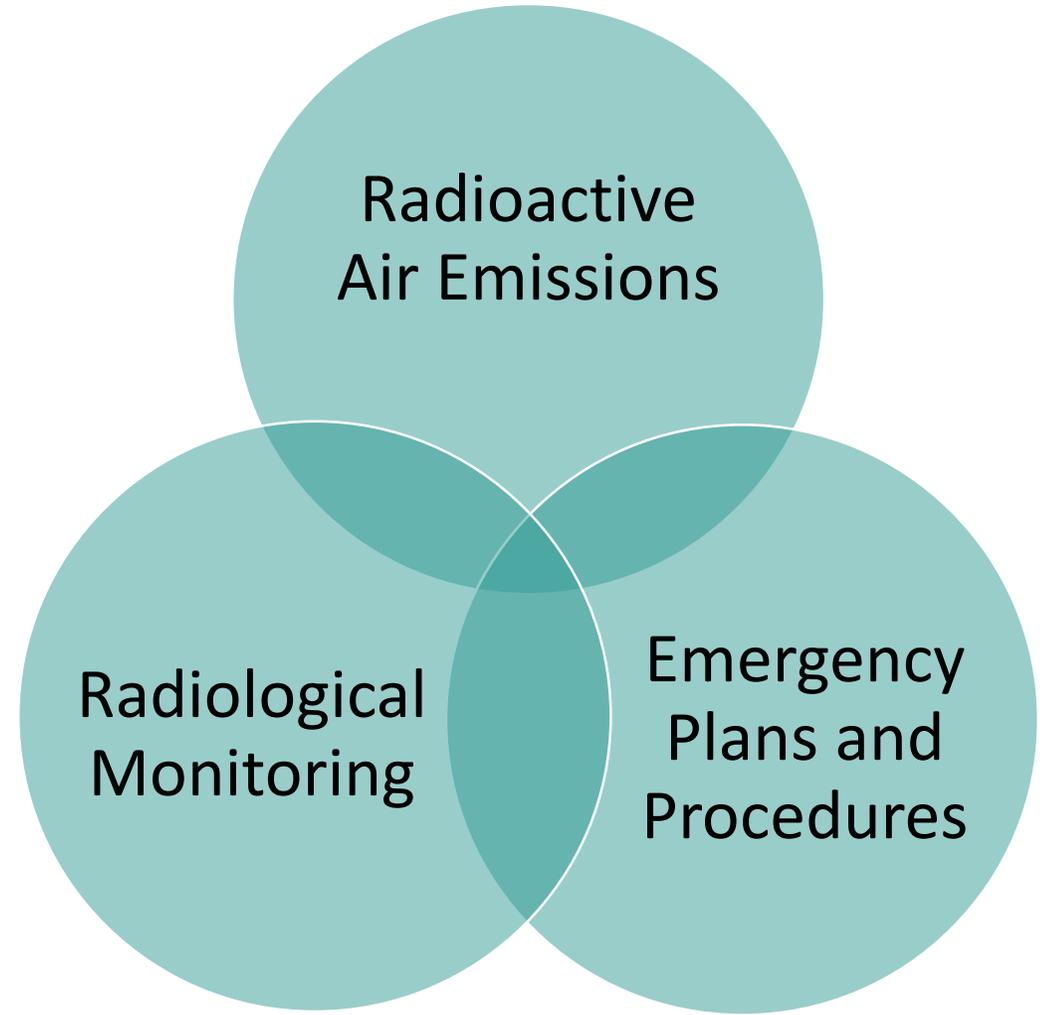
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- Review CGS Emergency Plans, Emergency Action Levels
- Participate in Drill/Exercise Critiques
- Review Operating License Amendment Requests, Inspections, Document Updates

# Integrated Audit Functions

Collectively these programs support the safe and lawful operations of Columbia Generating Station.

The State's independent audit role allows us to assess public and environmental health and confidently communicate our findings to the public, local health jurisdictions, agriculture, or interested persons from some distance away.



Questions?  


Lynn Albin

[lynn.albin@doh.wa.gov](mailto:lynn.albin@doh.wa.gov)  
360-236-3252



Washington State Department of Health is committed to providing customers with forms and publications in appropriate alternate formats. Requests can be made by calling 800-525-0127 or by email at [civil.rights@doh.wa.gov](mailto:civil.rights@doh.wa.gov). TTY users dial 711.

# Energy Facility Site Evaluation Council

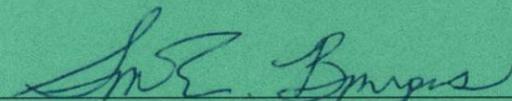
## Non Direct Cost Allocation for 2nd Quarter FY 2020

October 1, 2019 – December 30, 2019

The EFSEC Cost Allocation Plan (Plan) was approved by the Energy Facility Site Evaluation Council in September 2004. The Plan directed review of the past quarter's percentage of EFSEC technical staff's average FTE's, charged to EFSEC projects. This along with anticipated work for the quarter is used as the basis for determining the non-direct cost percentage charge, for each EFSEC project.

Using the procedures for developing cost allocation, and allowance for new projects, the following percentages shall be used to allocate EFSEC's non direct costs for the 1st quarter of FY 2020:

<b>Kittitas Valley Wind Power Project</b>	<b>11%</b>
<b>Wild Horse Wind Power Project</b>	<b>11%</b>
<b>Columbia Generating Station</b>	<b>24%</b>
<b>WNP-1</b>	<b>4%</b>
<b>Whistling Ridge Energy Project</b>	<b>4%</b>
<b>Grays Harbor 1&amp;2</b>	<b>17%</b>
<b>Chehalis Generation Project</b>	<b>15%</b>
<b>Desert Claim Wind Power Project</b>	<b>10%</b>
<b>Grays Harbor Energy 3&amp;4</b>	<b>4%</b>

  
\_\_\_\_\_  
Sonia E. Bumpus, EFSEC Manager

Date: 10/8/2019