



# Oregon

Kate Brown, Governor



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June 8, 2018

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RE: Wheatridge Wind Energy Facility Site Certificate, Request for Amendment 2 Amendment  
Determination Request: Oregon Department of Energy Amendment Determination

Dear Mr. Marshall,

On May 18, 2018, the Oregon Department of Energy (ODOE or the Department) received an amendment determination request (ADR) submitted pursuant to OAR 345-027-0057(2) from NextEra Energy Resources, LLC's (NextEra or certificate holder) for proposed facility modifications to the Wheatridge Wind Energy Facility (facility) site certificate. Specifically, the certificate holder requests approval to construct and operate larger wind turbines and two battery storage systems as related or supporting facilities to the previously approved, but not yet constructed, wind energy generation facility.

Under OAR 345-027-0057(2), a certificate holder may submit an ADR in writing to the Department for a determination regarding whether a proposed facility modification requires a site certificate amendment or whether the proposed facility modification is exempt from an amendment under OAR 345-027-0053. The rule requires that the ADR include a description of the proposed modification, maps representing the effects, and/or location of the proposed modification.

As presented in Attachment 1, ODOE Evaluation and Determination, the Department concludes the following: 1) the proposed facility modifications would not be exempt under OAR 345-027-0053(1); 2) the proposed facility modifications could result in a significant adverse impact that the Council has not addressed in an earlier order and the impact affects a resource or interest protected by a Council standard; 3) the proposed facility modifications could impair the certificate holder's ability to comply

with a site certificate condition; and 4) the proposed facility modifications could require a new or change to a condition in the site certificate.

Additionally, OAR 345-027-0057(6) allows that, at the request of the certificate holder or an Energy Facility Siting Council (EFSC or Council) member, the Department's determination must be referred to the Council for concurrence, modification, or rejection. In compliance with this rule, on June 8, 2018 the Department provided its determination and informed the Council of its rights under the rule. Should NextEra or a Council member request staff's determination to be reviewed by the Council, the determination would go before EFSC at the next available Council meeting. Please inform the Department no later than close of business on Tuesday June 12, 2018 if NextEra requests to refer the Department's amendment determination to Council.

If you have any questions, please do not hesitate to contact me.

Sincerely,



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**Attachment: ODOE Evaluation and Determination**

**cc (via e-mail distribution)**

Todd Cornett, Oregon Department of Energy  
Maxwell Woods, Oregon Department of Energy  
Jesse Ratcliffe, Oregon Department of Justice  
Patrick Rowe, Oregon Department of Justice

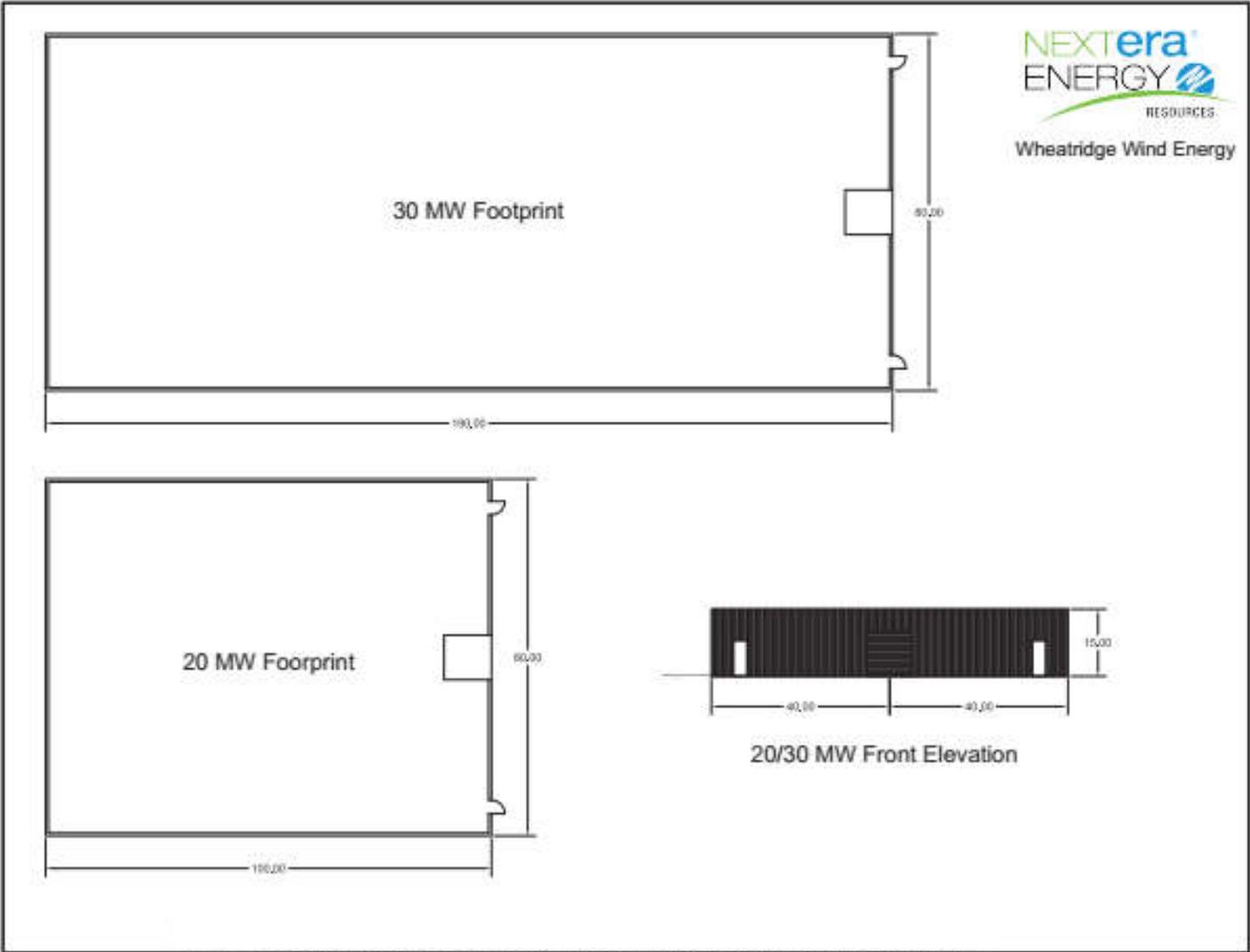
**Attachment 1: ODOE Evaluation and Determination**

## **Description of Proposed Facility Modifications**

The certificate holder requests approval to construct and operate larger wind turbines and two battery storage systems (20 and 30 megawatt (MW) systems) as related or supporting facilities to the energy facility (referred to as “proposed facility modifications”). The proposed larger wind turbines would change the previously approved turbine dimensions including: increase turbine hub height (278 to 291.3 feet), increase maximum blade tip height (476 to 499.7 feet), increase maximum blade length (197 to 204.1 feet), lower the minimum ground clearance (83 to 70.5 feet), and increase rotor diameter (393 to 416.7 feet).

The proposed battery storage systems would consist of lithium-ion batteries contained in a building or series of modular containers and would include approximately 18 inverters and associated step-up transformers, as well as interconnecting facilities (control house, protective device and power transformer). The proposed battery storage systems may include ground-level cooling equipment, power conditioning systems, distribution and auxiliary transformers. The proposed battery storage systems would be located adjacent to the previously approved substation and operation and maintenance building sites and would each result in up to 5 acres of new permanent disturbance. As presented in Figure 1 below, the battery storage container dimensions for the 20 MW system would be approximately 80-feet in length by 100-feet in width by 15-feet in height; and the 30 MW system would be approximately 190-feet in length by 100-feet in width by 15-feet in height.

Figure 1: Proposed Battery Storage System Footprint and Elevation



## Evaluation of Amendment Exemption (OAR 345-027-0053)

Changes exempt from requiring a site certificate amendment are specified in Oregon Administrative Rule (OAR) 345-027-0053. Specifically, OAR 345-027-0053(1) states,

*“An amendment to a site certificate is not required if the proposed change in the design, construction or operation of a facility is in substantial compliance with the terms and conditions of the site certificate, and is a change:*

- 1) To an electrical generation facility that would increase the electrical generating capacity and would not increase the number of electric generators at the site, change fuel type, increase fuel consumption by more than 10 percent or enlarge the facility site;...”*

In the amendment determination request (ADR), the certificate holder expresses a belief that the proposed facility modifications would be in substantial compliance with the terms of the site certificate, would not increase the number of electrical generators, would not change fuel type or fuel consumption, and would not enlarge the facility site; and requests that the Oregon Department of Energy (ODOE or Department) determine an amendment not be required for the proposed facility modifications based on the OAR 345-027-0053(1) exemption.

Based upon the evaluation of OAR 345-027-0050(4), as presented below, the Department concludes that: 1) the proposed facility modifications could result in a significant adverse impact that the Council has not addressed in an earlier order and the impact affects a resource or interest protected by a Council standard; 2) the proposed facility modifications could impair the certificate holder’s ability to comply with a site certificate condition; and 3) the proposed facility modifications could require a new or change to a condition in the site certificate. For these reasons, based upon the analysis provided herein, the Department disagrees that the proposed facility modifications would satisfy the OAR 345-027-0053 preamble requirement that the design, construction and operation of the proposed facility modification be in substantial compliance with the terms and conditions of the site certificate.

Furthermore, the OAR 345-027-0053(1) exemption criteria applies to an energy facility proposing to increase its electrical generating capacity, where specific limitations can be demonstrated. The Department disagrees with the certificate holder’s inverse argument of the applicability of OAR 345-027-0053(1) suggesting that because the proposed facility modifications would not increase the number of electric generators at the site, change fuel type, increase fuel consumption by more than 10 percent, or enlarge the site, that the proposed facility modifications, which would also not increase the electrical generating capacity, would therefore satisfy the exemption criteria. OAR 345-027-0053(1) applies specifically to “a change to an electrical generation facility that would increase the electrical generating capacity;” this exemption would not apply to the proposed facility modifications. Additionally, the OAR 345-027-0053 preamble requirement and sub(1) must both be satisfied in order to meet the exemption criteria, which the Department does not consider to have been demonstrated.

## Evaluation of Amendment Determination Request and Applicable Council Standards

OAR 345-027-0050(4) contains the criteria used by the Department and the Energy Facility Siting Council (EFSC or Council) to determine when a proposed modification requires a site certificate amendment. The certificate holder's May 18, 2018 ADR includes an assessment of each criteria contained in the rule. The rule states:

*OAR 345-027-0050(4): ...[T]he certificate holder must submit a request to amend the site certificate to design, construct or operate a facility in a manner different from the description in the site certificate if the proposed change:*

- (a) Could result in a significant adverse impact that the Council has not addressed in an earlier order and the impact affects a resource protected by Council standards;*
- (b) Could impair the certificate holder's ability to comply with a site certificate condition; or*
- (c) Could require a new condition or a change to a condition in the site certificate*

An ADR affirming any of the above criteria would result in a determination that a site certificate amendment is required. If the Department's review of the ADR affirms that none of the above criteria would be met, the proposed modifications could be completed without an amendment of the site certificate.

In order to evaluate whether a site certificate amendment was required, the certificate holder provided a compliance evaluation of the proposed facility modifications for all standards within a preliminary request for amendment (pRFA). The Department notes the challenge of evaluating a pRFA in conjunction with an ADR and underscores the importance of evaluating the adequacy of information necessary for the Council to make findings or to impose conditions necessary to satisfy the requirements of an applicable law or Council standard, as required for the "completeness" review, within the amendment process. While the certificate holder presumes that the information included in the preliminary request for amendment 2 (pRFA2) resolves the OAR 345-027-0050(4) questions of whether the proposed facility modifications "would" result in impacts, the Department bases its review of whether an amendment is required on the likelihood that the proposed facility modifications "could" result in impacts. If the Department makes this affirmative decision that a proposed facility modification "could" result in impacts, the impact assessment would be conducted as part of the amendment review process, and not as part of the ADR review.

### ***Evaluation Under OAR 345-027-0050(4)(a)***

#### *Proposed Battery Storage Systems*

**General Standard of Review (OAR 345-022-0000):** The Council's General Standard of Review requires the Council to find that a preponderance of evidence on the record supports the conclusion that the proposed facility modifications comply with the requirements of EFSC statutes and the siting standards adopted by the Council and that the proposed facility modifications comply with all other Oregon statutes and administrative rules applicable to the issuance of an amended site certificate for the facility. In pRFA2, the certificate holder refers to requirements and regulations, and provides general

references to county building codes and 2014 Oregon Structural Specialty Code. The Department is uncertain of the local and state regulatory requirements applicable to the transport, use and disposal of the hazardous materials associated with the proposed battery storage systems. Because the lithium-ion batteries associated with the proposed battery storage systems represent a new source and quantity of hazardous material and waste not previously evaluated in the application for site certificate (ASC), the Department concludes that the proposed battery storage systems could result in a significant adverse impact that the Council has not addressed in an earlier order under the General Standard of Review.

**Organizational Expertise (OAR 345-022-0010):** The Council's Organizational Expertise standard requires the Council to find that the certificate holder can design, construct, operate and retire the facility in compliance with applicable site certificate conditions, Council standards, and in a manner that protects public health and safety. The certificate holder did not identify any previous experience in constructing, operating, or retiring battery storage systems or similar facilities. Additionally, based upon the general discussion included in pRFA2 regarding development of an Emergency Action Plan and adherence to requirements and regulations (including personnel training, safe interim storage, and segregation from other potential waste streams) to minimize the potential for safety hazards, the Department considers that the proposed battery storage systems could result in a significant adverse impact to public health and safety that the Council has not addressed in an earlier order under the Organizational Expertise standard.

**Retirement and Financial Assurance (OAR 345-022-0050):** The Council's Retirement and Financial Assurance standard requires the Council to find that the facility site can be restored to a useful, non-hazardous condition at the end of the facility's useful life, should either the certificate holder stop construction or should the facility cease to operate. In addition, it requires a demonstration that the applicant (certificate holder) can obtain a bond or letter of credit in an amount satisfactory the Council to restore the site to a useful, non-hazardous condition. The certificate holder identifies that the proposed battery storage systems would result in transport, use and disposal of a new source of hazardous waste, not previously considered in the ASC. Because the operation of proposed battery storage system could result in site contamination in the event of an emergency and because retirement of battery storage systems was not previously evaluated in the ASC, the Department considers that the proposed battery storage systems could result in a significant adverse impact that the Council has not addressed in an earlier order under the Council's Retirement and Financial Assurance standard.

**Public Services (OAR 345-022-0120):** The Council's Public Services standard requires the Council to identify likely significant adverse impacts on the ability of public and private service providers to supply sewer and sewage treatment, water, stormwater drainage, solid waste management, housing, traffic safety, police and fire protection, health care, and schools. The certificate holder identifies that operation and maintenance activities associated with the proposed battery storage systems would result in disposal of spent or non-operational lithium-ion batteries, representing a new source of hazardous waste, not previously considered in the ASC. The Department acknowledges the certificate holder's representation that "licensed third-party battery suppliers will be responsible for transporting batteries to and from the Project in accordance with applicable regulations.."; however, regardless of the licensed entity intended to transport the batteries, because the hazardous materials and associated hazardous waste would be generated during operation of the facility, and these hazardous materials could impact the ability of solid waste management facilities to provide public services, the Department considers that the proposed battery storage systems could result in a significant adverse impact that the Council has not addressed in an earlier order under the Public Services standard.

**Waste Minimization (OAR 345-022-0120):** The Waste Minimization standard requires the Council to find that the certificate holder will minimize the generation of solid waste and wastewater, and that the waste generated will be managed to result in minimal adverse impacts on surrounding and adjacent areas. The certificate holder identifies that operation and maintenance activities associated with the proposed battery storage systems would result in onsite management of a new source of hazardous waste not previously evaluated in the ASC, from spent or non-operational lithium-ion batteries. The Department acknowledges the certificate holder's general reference to adherence to requirements and regulations, safe interim storage and segregation from other potential waste streams. However, because the proposed battery storage systems represent a new source and quantity of hazardous materials not previously evaluated in the ASC, the Department considers that the proposed battery storage systems could result in a significant adverse impact from onsite generation and storage of hazardous waste that the Council has not addressed in an earlier order under the Waste Minimization standard and the impact could adversely impact surrounding and adjacent areas.

#### Proposed Larger Wind Turbines

**Organizational Expertise (OAR 345-022-0010):** The Council's Organizational Expertise standard requires the Council to find that the certificate holder can design, construct, operate and retire the facility in compliance with applicable site certificate conditions, Council standards, and in a manner that protects public health and safety. The proposed larger turbines would increase the hub height from 278 to 291.3 feet. The proposed increase in hub height could impact the certificate holder's ability to operate the facility in a manner that protects public health and safety related to worker safety and high-angle/tower rescue. Therefore, the Department considers that the proposed larger turbines could result in a significant adverse public health and safety impact that the Council has not addressed in an earlier order under the Organizational Expertise standard.

**Public Health and Safety Standards for Wind Energy Facilities (OAR 345-024-0010):** The Public Health and Safety Standard for Wind Energy Facilities requires the Council to evaluate the certificate holder's proposed measures to exclude members of the public from close proximity to the turbine blades and electrical equipment, and their ability to design, construct, and operate the facility to prevent structural failure of the tower or blades and to provide sufficient safety devices to warn of failure. The proposed larger wind turbines would: lower the minimum blade tip clearance from 83 to 70.5-feet; increase the maximum blade tip height from 476 to 499.7-feet; and, increase the maximum rotor diameter from 393 to 416.7-feet. The referenced changes in turbine specifications could impact the certificate holder's ability to design, construct and operate the turbines to exclude members of the public, including aircraft and farm equipment operators within the surrounding area, from close proximity to the turbine blades. Therefore, the Department considers that the proposed larger turbines could result in a significant adverse impact to public health and safety that the Council has not addressed in an earlier order under the Public Health and Safety Standards for Wind Energy Facilities standard.

***Evaluation Under OAR 345-027-0050(4)(b) and (c)***

The second and third factors under OAR 345-027-0050(4) would require a site certificate amendment if the proposed change “could impair the certificate holder’s ability to comply with a site certificate condition” or “could require a new condition or a change to a condition in the site certificate.” Based on the Department’s evaluation of OAR 345-027-0050(4)(b) and (c), construction and operation of the proposed larger turbines and battery storage systems could impact the certificate holder’s ability to comply with or could require a change of existing site certificate conditions GEN-GS-03, PRO-SP-01, and OPR-PS-03. The Department’s evaluation of OAR 345-027-0050(4)(b)-(c) is summarized below. It is noted that this is an initial list, not an exhaustive list, of conditions that may need to be amended. Additionally, during its review of the pRFA, it may be determined by the Department or Council that new site certificate conditions are required to maintain compliance with the applicable standards and rules.

**Condition GEN-GS-03**

Condition GEN-GS-03 contains the OAR 345-025-0006 mandatory condition language and states,

*The certificate holder shall design, construct, operate and retire the facility:*

- (a) Substantially as described in the site certificate;*
- (b) In compliance with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances in effect at the time the site certificate is issued; and*
- (c) In compliance with all applicable permit requirements of other state agencies.*

**Proposed Larger Turbines**

Condition GEN-GS-03(a) requires the certificate holder to design, construct, operate and retire the facility substantially as described in the site certificate. The Department considers the facility description within the site certificate and the evaluation under OAR 345-027-0050(4) to establish whether the proposed changes would result in a substantial deviation from the design, construction and operation as described in the ASC and represented in the site certificate.

As represented in pRFA2, in the red-line version of the draft amended site certificate, the certificate holder requests to modify the turbine specifications identified within Section 3.0 *Facility Description* of the site certificate including the specifications for blade length, hub height, rotor diameter, and total tower height. This change requires a site certificate amendment. The Department agrees with the certificate holder’s representation that the ASC evaluated turbines with a maximum total turbine tower height of 525-feet, specifically related to its potential visual impacts reviewed under the Council’s Protected Areas, Recreation, and Scenic Resources standards. Because Section 3.0 *Facility Description* of the site certificate includes specific turbine dimensions and because the potential impacts of those dimensions, not solely limited to visual impacts from total turbine tower height, should necessarily be evaluated under the Council’s Fish and Wildlife Habitat, Public Health and Safety Standards for Wind Energy Facilities, and Public Services standards, the Department considers that the proposed larger turbines could result in a substantial deviation in the design, construction and operation of the facility and therefore could impair the certificate holder’s ability to comply with Condition GEN-GS-03(a).

Proposed Battery Storage Systems

Condition GEN-GS-03(b) requires the certificate holder to design, construct, operate and retire the facility in compliance with applicable permit and regulatory requirements. Based on review of pRFA2, the Department is uncertain of the applicable state and local laws, and rules and ordinances that would apply to the proposed battery storage systems and how the certificate holder intends to demonstrate compliance. The Department acknowledges that pRFA2 includes general references to Morrow and Umatilla County building codes, the 2014 Oregon Structural Specialty Code, and federal requirements; but, pRFA2 does not present applicable state and local requirements, based on legal citation, nor provide the certificate holder's specific compliance demonstration. Therefore, the Department concludes that the proposed battery storage systems could impair the certificate holder's ability to comply with Condition GEN-GS-03(b).

**Condition PRO-SP-01 and Condition OPR-PS-03**Proposed Battery Storage Systems

Condition PRO-SP-01 states,

*"Prior to beginning facility operation, the certificate holder shall provide the department a copy of a DEQ-approved operational SPCC plan, if determined to be required by DEQ. If an SPCC plan is not required by DEQ, the certificate holder shall prepare and submit to the department for review and approval an operational Spill Prevention and Management plan. The Spill Prevention and Management Plan shall include at a minimum the following procedures and BMPs:*

- *Procedures for oil and hazardous material emergency response consistent with OAR 340, Division 142*
- *Procedures demonstrating compliance with all applicable local, state, and federal environmental laws and regulations for handling hazardous materials used onsite in a manner that protects public health, safety, and the environment*
- *Current inventory (type and quantity) of all hazardous materials stored onsite, specifying the amounts at each O&M building*
- *Restriction limiting onsite storage of diesel fuel or gasoline*
- *Requirement to store lubricating and dielectric oils in quantities equal to or greater than 55-gallons in qualified oil-filled equipment*
- *Preventative measures and procedures to avoid spills*
  - o *Procedures for chemical storage*
  - o *Procedures for chemical transfer*
  - o *Procedures for chemical transportation*
  - o *Procedures for fueling and maintenance of equipment and vehicles*
  - o *Employee training and education*
- *Clean-up and response procedures, in case of an accidental spill or release*
- *Proper storage procedures*
- *Reporting procedures in case of an accidental spill or release"*

Condition PRO-SP-01 requires the certificate holder to develop an operational spill prevention countermeasure and control plan, or spill prevention and management plan. Because the proposed

battery storage systems represent a new source and quantity of hazardous material and waste not previously evaluated in the ASC, the Department considers that the proposed battery storage systems could impair the certificate holder's ability to comply with Condition PRO-SP-01, or could require a new or amended condition.

Condition OPR-PS-03 states,

*"During operation, the certificate holder shall implement a waste management plan that includes but is not limited to the following measures:*

- a. Training employees to minimize and recycle solid waste.*
- b. Recycling paper products, metals, glass, and plastics.*
- c. Recycling used oil and hydraulic fluid.*
- d. Collecting non-recyclable waste for transport to a local landfill by a licensed waste hauler or by using facility equipment and personnel to haul the waste. Waste hauling by facility personnel within Morrow County shall be performed in compliance with the Morrow County Solid Waste Management Ordinance, which requires that all loads be covered and secured.*
- e. Segregating all hazardous and universal, non-recyclable wastes such as used oil, oily rags and oil-absorbent materials, mercury-containing lights and lead-acid and nickel-cadmium batteries for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous and universal wastes."*

Condition OPR-PS-03 requires the certificate holder to develop an operational waste management plan. Because the proposed battery storage systems represent a new source and quantity of hazardous material and waste not previously evaluated in the ASC, the Department considers that the proposed battery storage systems could impair the certificate holder's ability to comply with Condition OPR-PS-03, or could require a new or amended condition.

### **Determination**

The Department disagrees with the certificate holder's evaluation under OAR 345-027-0053(1)(a) and OAR 345-027-0050(4) and finds that the proposed facility modifications would require a site certificate amendment. The Department concludes that: 1) the proposed facility modifications could result in a significant adverse impact that the Council has not addressed in an earlier order and the impact affects a resource or interest protected by a Council standard; 2) the proposed facility modifications could impair the certificate holder's ability to comply with a site certificate condition; and 3) the proposed facility modifications could require a new or change to a condition in the site certificate.