To: Energy Facility Siting Council  
From: Duane Kilsdonk, Compliance Officer  
Date: January 14, 2022  
Subject: Agenda Item F (Information Item)  
Biglow Canyon Wind Farm - Transformer Failure Overview for the January 28, 2022 EFSC Meeting  
Attachment: Biglow Canyon Wind Farm Expert Report From DEQ

OVERVIEW

The Oregon Department of Energy (Department) provides annual compliance updates to the Energy Facility Siting Council (Council) at a regularly scheduled Council meeting. The 2021 annual compliance update occurred at the October 22, 2021 Council meeting. As result of the 2021 annual compliance update on the Biglow Canyon Wind Farm, Council requested that additional information be presented by the Department and certificate holder related to transformer failures at the facility.

The Biglow Canyon Wind Farm is an operational 450 megawatt (MW) wind energy facility; the certificate holder is Portland General Electric (PGE). The facility is located in Sherman County, approximately 2.5 miles NE of the town of Wasco. The facility was constructed in three phases from 2007-2010 and placed into commercial operation in late December 2007. Since 2007, the certificate holder has reported 9 transformer oil spills. The total amount of non-polychlorinated biphenyls (PCB) mineral oil spilled and cleaned-up is approximately 3,222 gallons with an average of 358 gallons per spill in 15 years of operation.

Within the Third Amended Site Certificate, issued on October 31, 2008, PGE has reporting obligations to the Department as indicated below:

Public Health and Safety Standards for Wind Energy Facilities, OAR 345-024-0010 – Condition 37  
_During construction, operation or retirement of the facility, the certificate holder shall notify the Department within 72 hours of any accidents that may result in public health and safety concerns, including mechanical failures on the site associated with construction or operation of the facility._
Waste Minimization, OAR-022-0120 - Condition 81

If a spill or release of hazardous materials occurs during construction or operation of the facility, the certificate holder shall notify the Department within 72 hours and shall clean up the spill or release and dispose of any contaminated soil or other materials according to applicable regulations. The certificate holder shall ensure that spill kits containing items such as absorbent pads are located on equipment and storage facilities to respond to accidental spills and shall instruct employees handling hazardous materials in the proper handling, storage and cleanup of these materials.

In all 9 instances of transformer failure at the facility, the certificate holder has complied with both of these conditions, including providing the Department a copy of the full incident report that has been shared with the Oregon Department of Environmental Quality (DEQ). Attachment 1 is a report generated by DEQ on November 3, 2021, listing all spills reported for the Biglow Canyon facility since November 2007.

ATTACHMENT:

Attachment 1: Biglow Canyon Wind Farm Expert Report From DEQ