

# SITING OF ENERGY FACILITIES IN OREGON

## EFSC Standards in Oregon Administrative Rule

### Background

The Energy Facility Siting Council reviews applications for large energy facilities by using a set of standards designed to protect natural resources and ensure public health and safety. In general, the standards require the Council to ask three fundamental questions:

- Does the applicant have the necessary ability to build the energy facility?
- Is the proposed site suitable for construction of a facility?
- What impacts would the facility have on the environment and the community?

The Council encourages public comment during the review of an application. However, the Council has the authority to consider only those public comments on a proposed facility that address the Council's standards. For example, the Council – or the Oregon Department of Energy, which serves as staff to the Council – sometimes receives comments about how a proposed facility may affect property values or the views from someone's home. The Council does not have any standard that addresses property values or homeowner views; therefore it cannot consider these comments when it reviews the application because these issues are outside of the Council's jurisdiction.

The Council encourages commenters to be specific enough about their issues so that ODOE staff and the Council can effectively respond. Commenters should be explicit about how their issue(s) relate to a Council standard(s). For example, a comment that a proposed facility may have a negative impact on the environment is not specific enough to allow the Council to evaluate the concern and respond. Instead, comments should describe the commenter's specific environmental concern and how that concern relates to a Council standard.

This fact sheet addresses all of the siting standards under the Council's jurisdiction, although not all standards apply to every facility. For example, the carbon dioxide standard applies only to those facilities that emit carbon dioxide from fossil fuels (such as coal or natural gas plants), and some standards apply only to wind-powered facilities. Each of the standards is described below, with the citation from the related Oregon Administrative Rule (OAR).

### General Standard of Review

#### OAR 345-022-0000

The General Standard of Review requires a proposed energy facility to comply with all applicable Oregon standards, statutes and rules, including those of agencies other than the Energy Facility Siting Council. The Council consults with other agencies to determine compliance with this standard.

Other agency permits and standards that the Council frequently reviews under the general standard include:

**Noise:** The Oregon Department of Environmental Quality (DEQ) has adopted noise standards. There is no DEQ noise permit, but the Council applies DEQ noise standards to all energy facilities.

**Wetlands:** Some facilities require a Removal/Fill Permit from the Oregon Department of State Lands (DSL). For these facilities, the Council reviews the permit request using DSL's criteria.

**Water Pollution Control Facility:** DEQ has adopted criteria for approval of Water Pollution Control Facility (WCPF) permits. The Council reviews WCPF permit applications based on those criteria.



Water Rights: If the facility will require a new water right, a water right transfer or a temporary water right, the Council will determine whether the water right request complies with the Oregon Water Resources Department's regulations.

Requirements of other agencies could fall under Council jurisdiction, depending on the specific application request.

Some permits are outside Council jurisdiction. Permits that the federal government has delegated to a state agency other than the Council are outside the Council's jurisdiction. For example, air emissions permits and some wastewater permits are federally delegated to the DEQ. Likewise, permits related to detailed design and operation specifications, such as local building permits, are outside Council jurisdiction.

## **Organizational Expertise**

### **OAR 345-022-0010**

This standard requires the Council to determine whether the applicant has the abilities and resources to build, operate and retire the facility. In determining compliance with this standard, the Council considers the applicant's past experience with similar projects, any regulatory citations, and other evidence of technical, managerial and organizational expertise.

In addition, under this standard the Council must ensure that "third-party permits" will be available when they are needed. Some applicants do not directly request all the permits needed for the proposed facility. Instead, they arrange to use permits that third parties will obtain or they enter into agreements to use permits already held by third parties. Common third-party permits include permits for water use and wastewater disposal.

## **Structural Standard**

### **OAR 345-022-0020**

The structural standard requires the Council to evaluate the proposed facility to ensure it complies with regulations related to seismic hazards and other events that may cause site instability. The Council consults with the Oregon Department of Geology and Mineral Industries to determine compliance with this standard.

For some applications, this standard requires only that the applicant comply with all applicable building codes and building permits. However, for some types of facilities, the site's specific geological features or seismic hazards require the applicant to identify potential faults or other hazards and to assess the extent of the hazard. In addition to evaluating the seismic hazards, the applicant must study the site for hazards such as landslide potential.

Under this standard, the Council must evaluate whether the applicant has adequately characterized the site in terms of stability. If there are unstable or erosion-prone soils, the Council looks for evidence that the applicant will use proper engineering techniques to avoid hazards.

## **Soil Protection**

### **OAR 345-022-0022**

This standard requires the Council to determine whether the applicant has fully evaluated issues of erosion and drainage as a result of facility construction that could affect land in the surrounding area. The applicant must also consider potential impacts on soils from the facility's operation, such as cooling tower drift and other forms of chemical deposition. If the proposed facility will have a significant impact on soils that cannot be prevented, the Council must include in the site certificate conditions that require mitigation of those impacts.

## **Land Use**

### **OAR 345-022-0030**

Under the land use standard, the Council must ensure that the proposed facility will comply with Oregon's land use planning goals adopted by the Land Conservation and Development Commission. The applicant must first choose whether to seek land use approval from the local jurisdiction or to have the Council make the land use determination.



If the applicant chooses to seek local approval, the local governing body of the county or city in which the proposed facility is located determines compliance with the local government's acknowledged comprehensive plan and land use regulations, independent of the Council. The applicant must complete the local land use process before the Council can issue a site certificate.

If the applicant chooses Council determination of land use compliance, the Council appoints the governing body of the local government(s) in the location of the proposed facility as a "special advisory group." The Council considers applicable substantive criteria identified by the special advisory group(s) to determine whether the proposed facility complies with the statewide planning goals, as implemented through those applicable local criteria. If the proposed facility does not comply with one or more of the applicable substantive criteria, then the Council must decide whether the facility complies directly with the statewide planning goals.

If the proposed facility does not comply with a statewide planning goal, then the Council may find that the facility qualifies for an exception to that goal based on criteria listed in its land use rule, OAR 345-022-0030(4).

The land use standard also addresses conflicts between the applicable substantive criteria recommended by the special advisory group and state statutes or administrative rules. The Council must resolve any conflicts consistent with the public interest and state statutes.

## **Protected Areas**

### **OAR 345-022-0040**

Under this standard, the Council must prohibit the siting of energy facilities in protected areas, except for special cases (primarily transmission lines or pipelines) where there is no reasonable alternative. Protected areas include national and state parks, national monuments and other areas identified in the Council's rules as having special scenic, natural or environmental value.

For proposed facilities located near protected areas, the standard requires the Council to determine that the facility would have no significant direct or indirect adverse impact to the nearby protected area. The Council may find there is no significant adverse impact, either because the facility will have little or no impact or because the applicant proposes to mitigate the impacts it has identified.

## **Retirement and Financial Assurance**

### **OAR 345-022-0050**

The Council recognizes the risk that construction of an energy facility project could stop before it is completed, leaving the community with an abandoned construction site and no funds for site restoration. The Council also recognizes that a power plant owner might shut down its plant without restoring the site to a useful, non-hazardous condition. To address these risks, the Council first reviews the applicant's estimate of site restoration costs to determine if they are reasonable. The Council must then find that the applicant has, or has the ability to obtain, adequate funds to pay for site restoration. The applicant does not have to show adequate funding to complete the construction of the facility, only that it has adequate funding to restore the site, regardless of when construction or operation ends.

The Council includes a condition in every site certificate that requires a bond or letter of credit, for the amount established by the Council, to be in place before construction begins to provide funds for site restoration. The bond or letter of credit must be maintained for the life of the facility, and is adjusted annually to account for inflation and other factors.

## **Fish and Wildlife Habitat**

### **OAR 345-022-0060**

This standard relies on the Oregon Department of Fish and Wildlife's (ODFW) habitat mitigation goals and standards. The ODFW rules define six categories of habitat in order of their value to wildlife. The rules also establish mitigation goals and implementation standards for each habitat category. For more information about the ODFW habitat categories, see OAR 635-415-0025.



Under this standard, the Council must determine whether the applicant has done appropriate site-specific studies to characterize the fish and wildlife habitat at the site and nearby. If impacts cannot be avoided, the applicant must provide a habitat mitigation plan. The plan must provide for adequate mitigation measures for each category of habitat affected by the proposed facility. The plan may require conserving or improving other land for fish and wildlife habitat to make up for the habitat removed or degraded by the facility.

## **Threatened and Endangered Species**

### **OAR 345-022-0070**

Through this standard, the Council must seek to avoid harmful impacts to plant and animal species identified as threatened or endangered under state law. The applicant must provide appropriate studies of the site to identify threatened or endangered species that might be affected by the proposed facility. If the facility might adversely affect a state-listed threatened or endangered wildlife species, the applicant must consult with ODFW. For plant species, the applicant must consult with the Oregon Department of Agriculture. Under this standard, if there is a potential risk to the survival or recovery of a threatened or endangered species, the Council must require the applicant to redesign or relocate the facility to avoid that risk or propose appropriate mitigation measures.

## **Scenic Resources**

### **OAR 345-022-0080**

This standard is intended to protect scenic resources and values that local land use plans, or state, federal, or tribal land management plans, identify as significant or important. Under this standard, the Council must evaluate whether the proposed facility site would have an adverse impact on identified scenic resources. If the proposed facility would affect a scenic resource, and those impacts cannot be avoided, the Council must require the applicant to implement appropriate measures to reduce the impacts.

## **Historic, Cultural and Archaeological Resources**

### **OAR 345-022-0090**

This standard is intended to protect the public interest in preserving historic, cultural or archaeological resources, including sites listed on, or eligible for listing on, the National Register of Historic Places.

To comply with this standard, the Council must find that the applicant has conducted appropriate surveys at the proposed site to identify historic, cultural or archaeological resources. If the project involves construction that would affect an archaeological site, then the applicant may need a permit from the State Historic Preservation Office in addition to the site certificate.

If previously unidentified sites or archaeological objects are discovered during construction of an energy facility, site certificate conditions typically require an immediate halt to site-disturbing activities until a qualified archaeologist can examine the site to ensure significant historic, cultural or archaeological resources are protected.

## **Recreation**

### **OAR 345-022-0100**

Under this standard, the Council must decide whether construction or operation of the proposed facility would adversely affect important recreational opportunities at the site or in the surrounding area. The applicant uses a list of factors in Council rules to identify important recreational opportunities and then must describe the potential impacts of the facility's construction and operation. The Council also reviews and considers comments from the local community, management agencies, and local land use authorities when evaluating the importance of a recreational opportunity. If the Council finds that significant adverse impact is likely, the Council may impose site certificate conditions to avoid or reduce the impact or require the certificate holder to develop alternate recreational opportunities in the area.



## Public Services

### OR 345-022-0110

This standard ensures that the proposed facility will not affect the ability of service providers in local communities to provide public services, such as fire protection or education. The applicant must assess the proposed facility's need for water and for disposal of wastewater, storm water and solid waste. The applicant must also evaluate the expected population increases in local communities resulting from construction and operation of the facility; and must address all permanent and temporary impacts of the facility on housing, traffic safety, police and fire protection, health care and schools. The Council must determine whether the applicant has identified potential adverse impacts to service providers and proposed adequate mitigation to ensure that there will be no significant adverse effect on the ability of a service provider to provide services. In considering the impacts, the Council solicits comments from affected local governments, fire or police departments, school districts and health care agencies.

## Wildfire Prevention and Risk Mitigation

### OR 345-022-0115

This standard is intended to ensure that the applicant takes adequate measures to reduce the risk of wildfires. The applicant must first identify in the analysis area the baseline wildfire risk as well as the seasonal wildfire risk. The applicant must also identify areas subject to a heightened risk of wildfire and all high-fire consequence areas, such as areas containing critical infrastructure, recreation opportunities, timber and agricultural resources, and fire sensitive wildlife habitat.

The applicant must then create a Council approved Wildfire Mitigation Plan. The Wildfire Mitigation Plan needs to describe, at a minimum: schedules and procedures for inspecting facility components and managing vegetation in the area, preventative actions to minimize the risk of a facility caused wildfire, and all efforts by the applicant to reduce the risk to public health and safety from any wildfire at the facility site, regardless of the ignition source.

## Waste Minimization

### OR 345-022-0120

This standard requires the Council to evaluate the applicant's proposal to minimize solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires recycling of wastes, if feasible, or proper waste disposal if recycling is not feasible.

The applicant must evaluate the types of waste products that would be produced during construction and operation of the proposed facility and estimate the amounts or volume of waste products. The applicant must propose appropriate methods to handle the waste through collection, storage and disposal. Compliance with the standard assures that the applicant will reduce the amount of waste generated and dispose of waste in a responsible manner.

## Need for a Facility

### OR 345-023-0005

This standard requires the applicant for non-generating energy facilities (such as electric transmission lines) to demonstrate the need for the proposed facility. The Council's rules allow an applicant to demonstrate need for a non-generating facility through one of several methods, including the "Least-Cost Plan Rule" (OR 345-023-0020) or the "System Reliability Rule for Electric Transmission Lines" (OR 345-023-0030). Under the Least-Cost Plan Rule, the applicant meets this standard if the proposed transmission line was included in an Integrated Resource Plan that has been acknowledged by the Oregon Public Utilities Commission (OPUC). More information about the OPUC and the Integrated Resource Plan acknowledgement process can be found at [www.puc.state.or.us](http://www.puc.state.or.us).

## Specific Standards for Wind Facilities

### OR 345-024-0010 and 345-024-0015

This standard requires the Council to evaluate applications for wind energy facilities to ensure that applicants can design, con-



struct and operate the facility so that that the public is not endangered by moving turbine blades or electrical equipment, and that the applicant can design, construct and operate wind turbines to prevent structural failure that could endanger public safety. Siting standards for wind facilities also require the applicant to reduce cumulative adverse environmental effects in the vicinity by using existing roads, if possible, placing collection lines underground, designing the facility to avoid impacts to vulnerable wildlife in the area (especially birds and bats), and designing the facility to minimize adverse visual features, including using the minimum amount of lighting necessary to meet the requirements of the Federal Aviation Administration for protecting aircraft.

## **Specific Standards for Transmission Lines**

### **OAR 345-024-0090**

This standard requires that the Council evaluate transmission lines under Council jurisdiction to ensure they are designed, constructed and operated to limit the strength of electromagnetic fields in areas where those lines are accessible to the public.

## **Carbon Dioxide Standard**

### **OAR 345-024-0500**

This standard sets carbon dioxide emissions levels for new energy facilities and includes specific standards for base load gas-fueled power plants, non-base load (peaking) power plants and non-generating energy facilities that emit carbon dioxide. Most plants will have an obligation to offset their carbon dioxide emissions. The standard for base load gas plants applies only to natural gas-fired plants. The standards for non-base load plants and non-generating facilities apply to all fuels.

The calculations for compliance with the standard consider the efficiency of the facility. Generating plants have the option of offsetting part or all of their excess carbon dioxide emissions through guaranteed cogeneration. At their discretion, applicants can propose carbon dioxide offset projects that they or a third party will manage, or they can provide funds via the “monetary path” to a qualified organization. Once a Site Certificate holder has provided adequate funds to the qualified organization, it has met its obligations under the carbon dioxide standard.

## **For More Information**

A more detailed explanation of the Energy Facility Siting Council’s standards, along with links to the standards themselves, can be found on the Department of Energy’s website at:

[www.oregon.gov/energy/facilities-safety/facilities/Pages/Siting-Standards](http://www.oregon.gov/energy/facilities-safety/facilities/Pages/Siting-Standards)

