

ENERGY FACILITY SITING COUNCIL SITING ENERGY FACILITIES IN OREGON

June 2010



Council Standards

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. Requiring a facility to comply with the standards helps protect against adverse environmental impacts. In general, the standards together ask three fundamental questions:

- Does the applicant have the appropriate abilities to build the energy facility?
- Is the proposed site suitable for construction of a facility?
- Would the proposed facility have adverse impacts on the environment and the community?

The Energy Facility Siting Council encourages public comment during the review of an application. However, the Council can consider only those public comments on a proposed facility that address issues within the Council's jurisdiction. For example, people sometimes comment to the Council or to the Oregon Department of Energy, the state agency that serves as staff to the Council, about how a proposed facility may affect their property values or the views from their homes. However, the Council does not have any standard that addresses property values or homeowner views. It cannot respond to such comments because these issues are outside of the Council's jurisdiction.

The Council also encourages members of the public to be specific enough about their issues so that the Department and the Council can respond. Commenters should be explicit about how their issues relate to a Council standard. For example, a comment that a proposed facility may have a negative impact on the environment is not specific

enough. A more specific comment would be one that pinpoints just what environmental concern a person may have and how that concern may be addressed by a council standard.

The standards described in this fact sheet apply to all energy facilities 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 in determining compliance with this standard.

Permits and agency standards that the Council reviews under the general standard include:

Noise: The 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 Division of State Lands. For these facilities, the Council performs a review using Division of State Lands criteria.

Water Pollution Control Facility: The Council reviews Water Pollution Control Facility permit information using the criteria in the rules of the DEQ.

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 regulations of the Water Resources Department.

Other requirements of other agencies could fall under Council jurisdiction, but these are the ones the Council has applied most frequently.

Some permits are outside Council jurisdiction. Permits that the federal government has delegated to a state agency other than the Council are outside the site certificate process. 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 helps ensure that the applicant has the abilities and resources to build, operate and retire the facility successfully. 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, this standard ensures that "third party permits" will be available when they are needed. Some applicants do not apply directly for 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 protects public health and safety from seismic hazards. The Council consults with the Oregon Department of Geology and Mineral Industries (DOGAMI) in determining compliance with the standard. In many cases, the applicant's commitment to secure all needed building permits and follow the Oregon Building Code is all that is required.

However, for some types of facilities, there is no building code, and some sites may have specific geological features or seismic hazards that go beyond the seismic zones in the Oregon Building Code. For this reason, the structural standard is largely an adequate design standard. Before the Council finds that the site is suitable, the applicant must do enough site-specific work to identify potential faults or other hazards and to assess the extent of the hazard. In addition to characterizing the seismic hazards, the applicant must study the site for hazards that do not require an earthquake as an initiating event, such as landslide potential.

The Council looks for evidence that 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 to public safety.

Soil Protection

OAR 345-022-0022

This standard requires the applicant to consider problems 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. This standard is particularly relevant when farmland is involved. The soil protection standard requires the applicant to describe the site in detail. The applicant must plan to prevent or mitigate the impacts on soils or show evidence that the impacts are insignificant.

Land Use

OAR 345-022-0030

The land use standard ensures that the proposed facility will comply with Oregon's land use planning goals adopted by the Land Conservation and Development Commission (LCDC). To show compliance with the standard, 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 local approval, the land use authority in the location of the proposed facility determines compliance with the local government's acknowledged comprehensive plan and land use regulations, independently of the Council. The applicant must complete the local land use process before the Council can issue a site certificate. For some "linear" energy facilities, such as long pipelines or transmission lines, the location of the proposed facility lies in more than one land use jurisdiction. In that case, the applicant often prefers to have the Council make the land use determination to avoid having to obtain land use approval from each jurisdiction along the proposed route.

If the applicant chooses Council determination of land use compliance, the Council appoints the governing body of the local government or

governments 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) in determining whether the proposed facility complies with the statewide planning goals. 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. In deciding if such an exception is justified, the Council applies criteria listed in its land use rule, OAR 345-022-0030(4).

The land use standard addresses conflicts between the applicable substantive criteria recommended by the special advisory group and state statutes or administrative rules. The Council must resolve such conflicts consistent with the public interest, and it cannot override any state statute.

The standard provides for the special case of linear facilities that cross multiple land use zones or local government jurisdictions. For such facilities, the Council may choose not to apply the applicable substantive criteria recommended by the special advisory groups and instead evaluate the proposed facility against the statewide planning goals or against a combination of the applicable substantive criteria and statewide planning goals. The Council must consult with the special advisory group and consider the factors listed in OAR 345-022-0030(6).

Protected Areas

OAR 345-022-0040

This standard prohibits energy facilities in protected areas, except for special cases (primarily transmission lines or pipelines) where there is no better 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 near protected areas, the standard requires that the facility would have no significant adverse impact. The applicant must address both direct and indirect impacts to protected areas, such as air and water quality. The Council might find there is no significant adverse impact, either because the facility is inherently low in 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 sooner than expected. This standard protects against those risks by requiring the owner to show 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 in case of early termination of the project.

The Council includes a mandatory condition in every site certificate that requires a bond or letter of credit to be in place before construction begins to provide funds for site restoration. The Council reviews the applicant's estimate of site restoration costs to

determine if they are reasonable. The applicant must explain how it proposes to restore the site.

Fish and Wildlife Habitat

OAR 345-022-0060

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

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. Depending on the habitat categories affected by the proposed facility, the plan must provide for adequate mitigation measures. The plan may require setting aside and 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 seeks 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 consults with the Oregon Department of Fish and Wildlife. For plant species, the applicant contacts the Oregon Department of Agriculture. If a potential risk to the survival or recovery of

a threatened or endangered species exists, the applicant must redesign or relocate the facility to avoid that risk or propose appropriate mitigation measures.

Scenic Resources

OAR 345-022-0080

This standard protects scenic resources that local or federal land management plans identify in their land use documents as important. The preferred site is one where an energy facility would have no adverse impact on identified scenic resources, either because of distance or because the facility is inherently low in visual impact. If the proposed facility would affect scenic resources identified as important or significant, the applicant must propose appropriate measures to reduce the impacts.

Historic, Cultural and Archaeological Resources

OAR 345-022-0090

This standard protects the public interest in preserving places that have historic, cultural or archeological significance, including sites of historic or religious importance to Native American tribes. The standard preserves historic and cultural artifacts and prevents permanent loss of the archaeological record unique to particular sites in the state.

The applicant must conduct appropriate surveys at the proposed site to identify places of historic, cultural or archaeological significance. If the project involves construction that would affect an archaeological site, then the applicant may need a permit from the State Historic Preservation Officer in addition to the site certificate.

If previously unidentified sites 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.

Recreation

OAR 345-022-0100

Under this standard, the Council must decide whether construction or operation of the proposed facility would adversely affect recreational opportunities at the site or in the surrounding area. The applicant must identify the recreational opportunities and describe the potential impact of the facility. 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. In evaluating the significance of a recreational opportunity, the Council will solicit comments from the local community and the local land use authorities.

Public Services

OAR 345-022-0110

This standard protects the ability of providers in local communities to deliver government services. The applicant must assess the proposed facility's need for water and for disposal of wastewater, storm water and solid waste. The applicant must evaluate the expected population increases in local communities resulting from construction and operation of the facility. The applicant must address all permanent and temporary impacts on housing, traffic safety, police and fire protection, health care and schools. The Council reviews the application to ensure that the applicant has addressed potential adverse impacts. In considering the impacts, the Council will solicit comments from affected local governments, fire or police departments, school districts and health care agencies.

Waste Minimization

OAR 345-022-0120

This standard requires the applicant to minimize solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires recycling of wastes, if possible, or proper waste disposal if recycling is not feasible. The Council has applied this standard to encourage developers to use state-of-the-art techniques to reduce their consumptive use of water.

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

OAR 345-023-0005

This standard requires the applicant to demonstrate the need for a facility, but it applies only to nongenerating energy facilities, such as liquefied natural gas storage facilities or electric transmission line. The Council's rules allow an applicant to demonstrate need for a nongenerating facility through one of several methods, including the "Least-Cost Plan Rule" (OAR 345-023-0020) or the "System Reliability Rule for Electric Transmission Lines" (OAR 345-023-0030). For example, under the Least-Cost Plan Rule, the applicant meets the Council's need 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.

Specific Standards for Wind Facilities

OAR 345-024-0010 and 345-024-0015

The Council's rules include public health and safety standards for wind energy facilities to ensure that the applicant can design, construct, and operate a facility in such a way that the public is not endangered by moving turbine blades or electrical equipment (such as by properly fencing and controlling access to the site). The standard also requires the applicant to design, construct, and operate wind turbines to prevent structural failure that could endanger public safety. Siting standards for wind facilities also require the applicants 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 a transmission line under Council jurisdiction be designed, constructed, and operated to limit the strength of electromagnetic fields in the vicinity of a high-voltage transmission line in areas that are accessible to the public.

Carbon Dioxide Standard

OAR 345-024-0500

This standard sets carbon dioxide emissions levels for new energy facilities. There are 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 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.

Special Criteria Facilities

The Council reviews applications for “special criteria facilities” under an expedited review process. Under that process, applicants do not have to prove compliance with six of the standards the Council uses in its review: Structural; Scenic Resources; Historic, Cultural and Archaeological Resources; Recreation; Public Services; and Waste Minimization. The Council may not deny a site certificate based on these standards. However, the public still has the opportunity to recommend site certificate conditions related to these standards. More information about the special criteria facilities process can be found at: www.oregon.gov/ENERGY/SITING/process.shtml#Expedited.

For More Information

A more detailed version of the Energy Facility Siting Council’s standards can be found on the Department of Energy’s web site at:

www.oregon.gov/ENERGY/SITING/standards.shtml

The Department has prepared a document titled “Guidelines for Applicants for Energy Facility Site Certificates” that goes into more detail about the Council’s standards, the siting process, and the information to include in a site certificate application to provide the evidence that the applicant can comply with a specific standard. It can be found in Adobe Acrobat file format on the Department of Energy’s web site at:

www.oregon.gov/ENERGY/SITING/docs/2008Guidelines.PDF