(3) The provisions of section (1) do not apply to transmission lines or natural gas pipelines routed within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kilovolts or higher or containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 psig.

*What This Standard Accomplishes*

This standard protects against building energy facilities in protected areas, including national and state parks, national monuments, and other areas deemed by the Council to have special scenic, natural or environmental value. It also ensures that energy facilities will have no significant adverse impact if sited near protected areas. The standard protects these areas by prohibiting facilities in them, or by providing exceptions for special cases (primarily transmission lines or pipelines) where there is no better alternative.

*What the Council Looks For in Determining Compliance*

No energy facility can be sited in a protected area. For facilities outside protected areas, the Council looks for evidence that the proposed facility would have no significant adverse impact, either because the facility is inherently low in impact or because the applicant proposes mitigation. The applicant should address not just direct impacts but also downstream impacts such as air and water quality. If exceptionally high air and water quality are essential to the protected area, the Council may require detailed information about the facility's potential impacts, even if the facility will have Air Contaminant Discharge or NPDES permits. The information needed to show compliance with this standard should be located in Exhibit L of the ASC.

*New in 2002*

The Council clarified in 2002 that energy facilities that are outside protected areas, but that have related and supporting facilities located in protected area, can be sited if the applicant considered alternate locations and found them to have greater impacts.

5. Retirement and Financial Assurance

**OAR 345-022-0050** To issue a site certificate, the Council must find that:

(1) The site, taking into account mitigation, can be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the facility.

(2) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition.

*What this Standard Accomplishes*

This standard ensures that the applicant will restore the site at the end of the facility's useful life. It also protects against the risk that a large construction project will stop in a partially completed state, leaving an abandoned construction site and no funds for site restoration. The standard makes the site certificate holder responsible for clean-up of any hazardous material generated by the facility and for restoration of the site to a useful condition.

Based on this standard, the Council imposes mandatory conditions on the site certificate requiring a bond or letter of credit to provide for site restoration before construction begins.

OAR 345-027-0020(8). The applicant does *not* have to show adequate funding to complete the facility, but needs only show that it can obtain a bond or letter of credit in an amount sufficient to restore the site.

*What the Council Looks for in Determining Compliance*

The applicant must explain how it proposes to restore the site. The Council will decide whether the proposed restoration would leave the site in a useful, non-hazardous condition. The applicant must estimate site restoration costs and must explain how it estimated those costs and why they are reasonable. The cost estimate must address the case where the facility operates until the end of it useful life, and it must also address the case where construction or operation ends prematurely. The Council will review the cost estimates to determine if they are reasonable, and it will use these estimates to set the amount of the bond or letter of credit required under the mandatory conditions at OAR 345-027-0020(8). Finally, the applicant must provide evidence that it can obtain the required bond or letter of credit before starting construction.

The Council can find compliance with section (2) of the standard in a number of ways, including the financial strength of the applicant or ratings by major rating services such as Moody's. The information needed to show compliance with this standard should be located in Exhibit M of the application.

*New for 2002:*

In 2002 the Council combined the old Financial Assurance and Retirement standards into one unified standard. The Council has also made significant changes to the mandatory conditions in OAR 345 Division 27 that require the financial assurance for site restoration. Under previous rules, the Council accepted other forms of financial assurance such as corporate guarantees. However, the Council in 2001 changed its policy and now will accept only a bond or letter of credit.

6. Fish and Wildlife Habitat Standard

> **345-022-0060** To issue a site certificate, the Council must find that the design, construction, operation and retirement of the facility, taking into account mitigation, are consistent with the fish and wildlife habitat mitigation goals and standards of OAR 635-415-0025 in effect as of September 1, 2000.

*What this Standard Accomplishes*

This standard applies the Oregon Department of Fish and Wildlife (ODFW) Habitat Mitigation Policy to the proposed facility. The policy defines six habitat categories and establishes mitigation goals and standards within each category. Category 1 habitat is essential and irreplaceable, and an applicant would have to show that there would be essentially no impact at all. If a proposed site includes category 1 habitat, the applicant should contact OOE and ODFW as soon as possible, preferably before submitting the application. Category 6 habitat is already highly disturbed, so that mitigation is flexible. The other habitat categories are in-between in terms of value and mitigation requirements. The complete text of the ODFW mitigation goals is quite long, but applicants can find it at OAR 635-415-0025

*What the Council Looks for in Determining Compliance*

The Council must determine whether the applicant has done appropriate site-specific studies to characterize the fish and wildlife habitat at the site and vicinity. If impacts cannot be avoided,

the applicant must provide a habitat mitigation plan. The ODFW mitigation standards require "reliable in-kind or out-of-kind, in-proximity or off-proximity" habitat mitigation measures, depending on the habitat category affected by the proposed facility. The plan may require setting aside and improving other land for fish and wildlife habitat to make up for the habitat removed by the facility. For category 1 habitat, the Council may require avoidance.

The Council reviews this part of the application in consultation with ODFW and gives high weight to ODFW's comments and recommendations. Applicants are encouraged to consult with ODFW and need not wait until they submit their application to provide relevant biological surveys. If the site is known to include areas of important habitat value, OOE and ODFW will request one or more site inspections, preferably as early as the NOI phase. The information needed to show compliance with this standard should be located in Exhibits P and J of the application.

7. Threatened and Endangered Species Standard

> **345-022-0070** To issue a site certificate, the Council, after consultation with appropriate state agencies, must find that:
>
> (1) For plant species that the Oregon Department of Agriculture has listed as threatened or endangered under ORS 564.105(2), the design, construction, operation and retirement of the proposed facility, taking into account mitigation:
>
> (a) Are consistent with the protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3); or
>
> (b) If the Oregon Department of Agriculture has not adopted a protection and conservation program, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species; and
>
> (2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as threatened or endangered under ORS 496.172(2), the design, construction, operation and retirement of the proposed facility, taking into account mitigation, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species.

*What this Standard Accomplishes*

Through this standard, the Council seeks to avoid harmful impacts to plant and animal species identified as threatened or endangered by other responsible state agencies.

*What the Council Looks for in Determining Compliance*

The Council must decide whether appropriate studies of the proposed site have been done to identify threatened or endangered species that the proposed facility could affect. If the proposed project may adversely affect either a state or federally-listed threatened or endangered species, the applicant should contact OOE and ODFW as soon as possible. For plant species, the applicant should contact 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 take appropriate mitigation measures. The information needed to show compliance with this standard should be located in Exhibit Q of the application. The Council did not make substantive changes to this standard in 2002.

8. Scenic and Aesthetic Values Standard

**345-022-0080** (1) Except for facilities described in sections (2), to issue a site certificate, the Council must find that the design, construction, operation and retirement of the facility, taking into account mitigation, are not likely to result in significant adverse impact to scenic and aesthetic values identified as significant or important in applicable federal land management plans or in local land use plans in the analysis area described in the project order.

(2) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

*What This Standard Accomplishes*

This standard protects scenic values that the local land use planning authority has identified as important.

*What the Council Looks for in Determining Compliance*

Ideally, the proposed site will have no impact on important scenic values, either because of distance or because the facility is inherently low in visual impact. Failing that, the Council looks for evidence that the applicant will mitigate scenic impacts, using any mitigation methods the applicant might propose. Because scenic values are subjective, the Council would give high weight to input from the local community or the Special Advisory Group. The information needed to show compliance with this standard should be located in Exhibit R of the application.

*New in 2002:*

Under new laws passed by the 2001 legislature, the Council may issue a site certificate to certain natural gas fired power plants that meet "special criteria" under ORS 469.373 without finding compliance with this standard. However, the Council can still impose site certificate conditions based on this standard.

9. Historic, Cultural and Archaeological Resource Standard

**345-022-0090** (1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction, operation and retirement of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to:

(a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;

(b) For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c); and

(c) For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c).

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

*What this Standard Accomplishes*

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

*What the Council Looks for in Determining Compliance*

The Council reviews the application to see whether appropriate surveys have been done at the proposed site to identify and avoid places of historic, cultural or archaeological significance. Typically a site certificate requires as a condition that if previously unidentified sites are discovered during construction, the certificate holder must stop site disturbing activities until a qualified archaeologist can examine the site. This site certificate condition is consistent with statutory requirements at ORS 358.920. If the proposed project may adversely affect an historic, cultural or archaeological site or resource, the applicant should contact OOE and the State Historic Preservation Officer (SHPO) as soon as possible. If the project involves construction on an archaeological site, then the applicant may need a permit from the SHPO in addition to the Site Certificate. The information needed to show compliance with this standard should be located in Exhibit S of the application.

*New in 2002:*

Under new laws passed by the 2001 legislature, the Council may issue a site certificate to wind, solar, geothermal and certain natural gas fired power plants that meet "special criteria" under ORS 469.373 without finding compliance with this standard. However, the Council can still impose site certificate conditions based on this standard.

10. Recreation Standard

**345-022-0100** (1) Except for facilities described in section (2), to issue a site certificate, the Council must find that the design, construction and operation of a facility, taking into account mitigation, are not likely to result in a significant adverse impact to important recreational opportunities in the analysis area as described in the project order. The Council shall consider the following factors in judging the importance of a recreational opportunity:

(a) Any special designation or management of the location;

(b) The degree of demand;

(c) Outstanding or unusual qualities;

(d) Availability or rareness;

(e) Irreplaceability or irretrievability of the opportunity.

(2) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

*What this Standard Accomplishes*

This standard protects against adverse impacts to significant recreational opportunities on land affected by the proposed facility.

*What the Council Looks for in Determining Compliance*

The Council, considering the factors listed in the standard, 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 in the area. The applicant must describe the impact the facility could have on those recreational activities. If the impact is significant, then the Council may impose conditions avoiding or reducing the impact. Or, a site certificate condition might require the certificate holder to develop alternate recreational opportunities in the area. In considering the importance of a recreational opportunity, the Council will also consider comments from the local land use authority. The information needed to show compliance with this standard should be located in Exhibit T of the application.

*New in 2002:*

Under new laws passed by the 2001 legislature, the Council may issue a site certificate to certain natural gas fired power plants that meet "special criteria" under ORS 469.373 without finding compliance with this standard. However, the Council can still impose site certificate conditions based on this standard.

11. Public Services (formerly Socio Economic) Standard

> **345-022-0110** (1) Except for facilities described in section (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to the ability of public and private service providers within the analysis area described in the project order to provide sewers and sewage treatment, water, stormwater drainage, solid waste management, housing, traffic safety, police and fire protection, health care and schools.
>
> (2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate for such a facility.
>
> (3) The council may issue a site certificate for special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate for such a facility.

*What this Standard Accomplishes*

This standard seeks to prevent adverse impacts on the local community's ability to deliver critical services. The standard is limited to the facility's impact on those services identified in the standard.

*What the Council Looks for in Determining Compliance*

The Council looks for an assessment of the proposed facility's needs for water and for disposal of wastewater, stormwater and solid waste. The applicant should evaluate the expected population increases in local communities resulting from construction and operation of the facility. The

applicant should address all permanent and temporary impacts on housing, traffic safety, police and fire protection, health care, and schools. If the impacts are significant, the applicant should propose mitigation. In considering the impacts, the Council will strongly consider any comments from affected local governments, fire or police departments, school districts and health care agencies. The information to show compliance with this standard should be located in Exhibit U of the application.

*New for 2002:*

The Council changed the name of this standard from "socio economic" to "public services" in order to differentiate this standard from the socio-economic studies often found in Environmental Impact Statements. Also, under new statutes at ORS 469.373, the Council may issue a site certificate for "special criteria" facilities without making findings of compliance with this standard. Wind, solar, and geothermal facilities are similarly exempt from the requirement to meet this standard, under ORS 469.504(1). However, the Council can still impose conditions based on this standard.

12. Waste Minimization Standard

> **345-022-0120** (1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that, to the extent reasonably practicable:
>
> (a) The applicant's solid waste and wastewater plans are likely to minimize generation of solid waste and wastewater in the construction, operation, and retirement of the facility, and when solid waste or wastewater is generated, to result in recycling and reuse of such wastes;
>
> (b) The applicant's plans to manage the accumulation, storage, disposal and transportation of waste generated by the construction and operation of the facility are likely to result in minimal adverse impact on surrounding and adjacent areas.
>
> (2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate for such a facility.
>
> (3) The council may issue a site certificate for special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate for such a facility.

*What this Standard Accomplishes*

This standard assures that the applicant applies measures to reduce solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires the certificate holder to recycle wastes, if possible, or otherwise dispose of wastes properly. The Council has applied this standard to encourage developers to use state of the art techniques to reduce their consumptive use of water, especially in Eastern Oregon.

*What the Council Looks for in Determining Compliance*

The Council looks for an evaluation of the types of waste products produced during construction and operation of the proposed facility and for an estimate of 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 both reduce the amount of waste generated and dispose of waste in a responsible manner. The information needed to show compliance with this standard should be located in Exhibits V and O of the application.

*New in 2002:*

Under the new statutes at ORS 469.373 and 469.501(4), the Council may issue a site certificate for wind, solar, geothermal, or "special criteria" electric generating facilities without finding compliance with this standard. However, the Council can still impose conditions based on this standard.

13. Retirement Standard

In 2002 the Council deleted this standard and moved its substantive requirements into the Financial Assurance standard. The new Financial Assurance standard now includes the substantive requirements for both retirement and financial assurance.

### *B. Need for Facility Standards*

The 1997 Legislature removed the Council's "need for facility" standard for electric generating plants. However, the Need for Facility standard, which is in OAR 345 Division 23, still applies to electric transmission lines, gas pipelines, and liquefied natural gas (LNG) storage facilities with capacity of 3 million gallons or more.

The Council must find that an applicant has demonstrated compliance with the Need standard if the proposed facility's capacity is identified in a Least Cost Plan acknowledged by the Oregon Public Utilities Commission (OPUC). If no OPUC acknowledged least cost plan applies to the proposed facility, EFSC will find that an applicant has demonstrated compliance with the Need standard if the proposed facility's capacity is identified in a short term action plan or energy resource plan adopted by a public utility district or other governmental body that makes or implements energy policy, provided the plan meets certain Council criteria. Those criteria are quite detailed and are not reproduced here in their entirety. They are listed in OAR 345-023-0020(1)(a) through (L).

If the proposed facility does not appear in an energy resource plan that meets these criteria, then the applicant must show need under the "System Reliability" rule for electric transmission lines or the "Economically Reasonable" rule for gas pipelines and LNG storage facilities. Both rules involve relatively detailed analyses of system reliability or supply and demand. An applicant who may need to meet these rules should consult with OOE before preparing an application.

### *C. Carbon Dioxide Standard*

In 1997, the Oregon legislature gave EFSC authority to set carbon dioxide ("$CO_2$") emissions standards for new energy facilities. Under the current rule, there are specific standards for base-load gas plants, non-base load (peaking) power plants and non-generating energy facilities that emit $CO_2$. For generating plants, the net emissions rate is 0.675 lb. $CO_2$ per kilowatt-hour and for nongenerating facilities it is 0.504 lb. $CO_2$ per horsepower-hour. The definitions for the facilities are in Division 1.

The standards for non-base load plants and non-generating facilities apply to all fuels. The standard for base-load gas plants applies only to natural gas-fired plants. The Council has not yet set $CO_2$ emissions standards for base-load power plants using other fossil fuels.

For facilities that use power augmentation technologies that increase both the capacity and heat rate of a base-load gas plant, such as duct burning, the Council treats the power augmentation as if it were a non-base load plant. The calculations incorporate both types of facilities and the site certificate contains conditions specific to the two types of operation.

The calculations for compliance with the standard account for the efficiency of the facility. Generating plants have the option of offsetting part or all of their excess $CO_2$ emissions through guaranteed cogeneration.

At their discretion, applicants can also propose $CO_2$ offset projects they or a third party will manage, or they can provide funds via the "monetary path" to The Climate Trust. (The Council recognizes The Climate Trust as qualified organization, as defined in statute.) The Climate Trust takes responsibility for obtaining offset when an applicant uses the "monetary path." Once a site certificate holder has provided adequate funds to The Climate Trust, it has met its obligations under the $CO_2$ standard. Information about The Climate Trust is available at www.climatetrust.org

The calculations to show the required offsets or offset funds are relatively detailed. The Office has spreadsheets that calculate carbon dioxide emissions for different plant configurations. Applicants who propose facilities that will emit carbon dioxide should consult directly with the Office before submitting an application and should indicate in the NOI the compliance paths they plan to take. The information needed to show compliance with this standard is located at Exhibit Y of the application.

### *D. Protecting the Public Health and Safety*

The statute authorizes the Council to have standards protecting the public health and safety and requires that each site certificate contain conditions for protecting public health and safety. There is no standard entitled "public health and safety", but public health and safety is inherent in several of the standards. The structural standard, soil standard, and the specific standards of Division 24 are primarily safety standards or have safety elements. The public services standard protects public health and safety by addressing police and fire protection and emergency medical services. And, the Council has statutory responsibility to monitor research on the safety of low frequency electric and magnetic fields.

Members of the local community can bring up any safety concerns that are not specifically addressed in standards, either by raising them at the public meetings or by commenting in writing. If public comments make a convincing case that a serious public safety concern is inadequately addressed by current standards, the Council can address the concern through conditions or a special rulemaking. In the past, the Council has used its public safety authority broadly to condition site certificates to address issues such as road icing (from cooling tower evaporation), proper storage of chemicals, electric and magnetic fields from transmission lines, and emergency planning (related to the Umatilla Army depot).

# II. Standards of Other Agencies

## *A. The General Standard of Review*

The General Standard of Review, OAR 345-022-0000, requires applicants to comply with all applicable Oregon statutes and rules, including those of agencies other than the Council. The rule requires the Council to consult with the other agencies in determining compliance with this rule. Permits administered by other agencies, such as the water rights normally administered by the Water Resources Department, are issued under a finding of compliance with this rule.

The Role of the Project Order

How does the Council determine what state statutes and rules are applicable? It relies, in part, on the other agencies. Except when a proposed facility is eligible for expedited review, the review process begins with an NOI, which describes the facility in very general terms. State agencies and affected local governments will review the NOI. Their review is not intended to determine compliance, but to identify applicable statutes and rules and necessary permits. They provide that list to OOE and the applicant. OOE then compiles this list of statutes, rules and permitting requirements into a key document called the Project Order. The Project Order becomes the basis for the application and for the Council's review.

If an applicable statute or rule is missing from the Project Order, it still applies. If the Council discovers that it has missed some applicable requirements, then it must amend the Project Order to include them.

## *B. How the Council Determines Compliance with Requirements of Other Agencies*

In reviewing applications against the requirements of other agencies, the Council relies partly on staff reports from those agencies. OOE will request that all affected agencies review the application and provide the Council with "Agency Reports." The Council will normally agree with the agency recommendations unless it has good reason not to.

Although the agencies review the application for compliance with their own rules, the EFSC process is still different from a decentralized one. Three chief differences are:

1. If there is a challenge from someone in the public, then the Council runs the contested case and makes the final decision.
2. Procedural matters such as public notice, hearings, and review schedule are all governed by EFSC rules rather than the rules of the various agencies. The timetable for Council review of energy facilities may be different from the timetable for other reviews.
3. Appeals for judicial review go directly to the Supreme Court.

## *C. Examples of Requirements of Other Agencies that are under Council Review*

Some permits and agency standards that the Council reviews in connection with siting projects include:

Noise – The Department of Environmental Quality has adopted noise standards in OAR Chapter 340. There is no DEQ noise permit, but the DEQ noise standards apply to all industrial facilities. The Council applies the DEQ noise standards in siting energy facilities and requires noise information in Exhibit X of the application.

Wetlands - Some facilities require a Removal/Fill permit from the Division of State Lands (DSL). For these facilities, the Council performs the review using DSL criteria. It does so in consultation with DSL staff and usually accepts DSL's recommendations. However, the Council makes the final determination.

Water Pollution Control Facility - This is a DEQ permit that is not federally delegated. The Council reviews WPCF permit information, using DEQ's criteria. Again, the Council does this review in consultation with DEQ, and usually accepts DEQ's recommendations.

Water Rights – If the facility will require a new water right, water right transfer, or a temporary water right, WRD will issue the water right based on a Council finding of compliance with WRD regulations.

These are not all the requirements of other agencies that could fall under Council jurisdiction, but they are the ones the Council has run into most frequently.

### *D. State Requirements that are outside Council Review*

Certain permits are outside Council jurisdiction. ORS 469.401(4). Permits that the federal government has delegated to a state agency other than the Council are outside the site certificate process. For example, the Air Contaminant Discharge and NPDES permits are federally delegated to the Department of Environmental Quality (DEQ). Local building permits are also outside the site certificate. The applicant must get these directly.

The siting process also excludes permits related to detailed design and operation specifications, such as building permits and special permits required by county road departments. ORS 469.401(4). This is practical, because most applicants cannot proceed with detailed design drawings until the siting decision has been made. For that reason, these agencies issue their permits separately from the Council.

These two classes of permits are separate from the Site Certificate, but ORS 469.505 and ORS 469.310 require coordination with other agencies. OOE continues to work informally with other permitting agencies, and the rules encourage the Council and DEQ to hold hearings jointly whenever practical.

### *E. Federal Permit Applications*

EFSC rules at OAR 345-021-0000 require the applicant to provide OOE with federal permit applications along the application for site certificate. This requirement applies even though EFSC does not have jurisdiction over federal permits. The requirement to submit federal permit applications, such as DEQ Air Quality applications, applies under expedited review. If the proposed facility is a "Special Criteria" facility that qualifies for expedited review under ORS 469.373 (described in Part 3 of these Guidelines), the applicant need not submit the application for an NPDES permit that will be obtained by a municipality, but that is the only exception. OOE has found that it often needs the information in federal permit applications to support findings of compliance with Council standards.

## III. A Special Case - Land Use

The Council's land use review is unlike the land use process for most non-energy facilities. The statute gives the applicant a choice of two Land Use processes, "Path A" or "Path B." The land use analysis is located at Exhibit K of the application.

The Standard

**345-022-0030**(1) To issue a site certificate, the Council must find that the facility complies with the statewide planning goals adopted by the Land Conservation and Development Commission.

(2) The Council shall find that a proposed facility complies with section (1) if:

(a) The applicant elects to obtain local land use approvals under ORS 469.504(1)(a) and the Council finds that the facility has received local land use approval under the acknowledged comprehensive plan and land use regulations of the affected local government; or

(b) The applicant elects to obtain a Council determination under ORS 469.504(1)(b) and the Council determines that:

(A) The proposed facility complies with applicable substantive criteria as described in section (3) and the facility complies with any Land Conservation and Development Commission administrative rules and goals and any land use statutes directly applicable to the facility under ORS 197.646(3);

(B) For a proposed facility that does not comply with one or more of the applicable substantive criteria as described in section (3), the facility otherwise complies with the statewide planning goals or an exception to any applicable statewide planning goal is justified under section (4); or

(C) For a proposed facility that the Council decides, under sections (3) or (6), to evaluate against the statewide planning goals, the proposed facility complies with the applicable statewide planning goals or that an exception to any applicable statewide planning goal is justified under section (4).

(3) As used in this rule, the "applicable substantive criteria" are criteria from the affected local government's acknowledged comprehensive plan and land use ordinances that are required by the statewide planning goals and that are in effect on the date the applicant submits the application. If the special advisory group recommends applicable substantive criteria, as described under OAR 345-021-0050, the Council shall apply them. If the special advisory group does not recommend applicable substantive criteria, the Council shall decide either to make its own determination of the applicable substantive criteria and apply them or to evaluate the proposed facility against the statewide planning goals.

(4) The Council may find goal compliance for a facility that does not otherwise comply with one or more statewide planning goals by taking an exception to the applicable goal. Notwithstanding the requirements of ORS 197.732, the statewide planning goal pertaining to the exception process or any rules of the Land Conservation and Development Commission pertaining to the exception process, the Council may take an exception to a goal if the Council finds:

(a) The land subject to the exception is physically developed to the extent that the land is no longer available for uses allowed by the applicable goal;

(b) The land subject to the exception is irrevocably committed as described by the rules of the Land Conservation and Development Commission to uses not allowed by the applicable goal because existing adjacent uses and other relevant factors make uses allowed by the applicable goal impracticable; or

(c) The following standards are met:

(A) Reasons justify why the state policy embodied in the applicable goal should not apply;

(B) The significant environmental, economic, social and energy consequences anticipated as a result of the proposed facility have been identified and adverse impacts will be mitigated in accordance with rules of the Council applicable to the siting of the proposed facility; and

(C) The proposed facility is compatible with other adjacent uses or will be made compatible through measures designed to reduce adverse impacts.

(5) If the Council finds that applicable substantive local criteria and applicable statutes and state administrative rules would impose conflicting requirements, the Council shall resolve the conflict consistent with the public interest. In resolving the conflict, the Council cannot waive any applicable state statute.

(6) If the special advisory group recommends applicable substantive criteria for an energy facility described in ORS 469.300(9)(a)(C) to (E) or for a related or supporting facility that does not pass through more than one local government jurisdiction or more than three zones in any one jurisdiction, the Council shall apply the criteria recommended by the special advisory group. If the special advisory group recommends applicable substantive criteria for an energy facility described in ORS 469.300(9)(a)(C) to (E) or a related or supporting facility that passes through more than one jurisdiction or more than three zones in any one jurisdiction, the Council shall review the recommended criteria and decide whether to evaluate the proposed facility against the applicable substantive criteria recommended by the special advisory group, against the statewide planning goals or against a combination of the applicable substantive criteria and statewide planning goals. In making the decision, the Council shall consult with the special advisory group, and shall consider:

(a) The number of jurisdictions and zones in question;

(b) The degree to which the applicable substantive criteria reflect local government consideration of energy facilities in the planning process; and

(c) The level of consistence of the applicable substantive criteria from the various zones and jurisdictions.

*What this Standard Accomplishes*

Although this standard is long and detailed, its purpose is simply to assure that the proposed facility will comply with the land use planning goals adopted by the Land Conservation and Development Commission (LCDC) in OAR Chapter 660, Division 15. Those goals carry out state land use statutes under the provisions of ORS 197.225 - .245.

Path A

Under Path A, the applicant must apply to the local land use authority. The local authority 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 issues the site certificate. If the proposed facility site includes more than one local land use jurisdiction, the applicant must obtain the necessary land use approvals from each jurisdiction. If the jurisdiction turns down the request, the applicant cannot apply for Council approval under Path B.

Path B

Under Path B, the Council makes the decision on compliance with the statewide planning goals. To carry out a Path B analysis, the Council must appoint a special advisory group. ORS 469.480(1) provides that the special advisory group is the governing body of any local government within whose jurisdiction the facility is proposed to be located (for example, a County Board of Commissioners). Normally the applicant will work with the local land use authorities to identify the applicable substantive criteria from the local comprehensive land use plan. The Council then considers those criteria in determining whether the proposed facility complies with the statewide planning goals. In other words, the special advisory group identifies the criteria the local land use authority would use in a "normal" land use decision, and the Council uses those criteria.

The Council reviews the site certificate application and applies the applicable substantive criteria to the proposed facility. The Council must decide whether the facility as proposed complies with each of the applicable substantive criteria. The Council must also decide whether the facility complies with any LCDC rules and goals and any land use statutes directly applicable to the facility under ORS 197.646(3). If the Council finds that the facility meets both these tests, then it may conclude that the facility complies with the statewide planning goals. Therefore, the Land Use standard is satisfied.

However, if the facility does not comply with one or more of the applicable substantive criteria, then further analysis is required. The Council must decide whether the facility complies directly with the statewide planning goals. If the facility complies with the statewide planning goals, then the Council may conclude that the facility meets the Land Use standard.

Some local comprehensive land use plans have not been updated and amended to conform to current LCDC regulations. In this case, the LCDC regulations apply directly to the facility under ORS 197.646.

If the facility as proposed 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 the criteria listed in section (4) of the standard. Section 4 provides three alternate bases on which the Council may justify an exception. If the Council finds an exception is justified, then it may conclude that the facility complies with the statewide planning goals and that the Land Use standard is satisfied.

Section 5 of the 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. The resolution cannot override any state statute.

Finally, Section 6 of the standard provides for the special case of pipelines, transmission lines or solar collecting facilities that involve more than one local government jurisdiction or more than three zones in any one jurisdiction. For such facilities, the Council may choose not to apply the applicable substantive criteria recommended by the local authorities. The Council has the

option, in that case, to 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 Section 6 of the standard.

*What the Council Looks for in Determining Compliance*

The application must state whether the applicant chooses "Path A" or "Path B". Once made, the choice is not reversible. If the applicant chooses Path B, the application must include a detailed analysis of the facility's compliance with each applicable zoning ordinance in each jurisdiction. Applicants should consult with the local land use authority to confirm that the zoning ordinance conforms to the acknowledged Comprehensive Plan. If the zoning ordinance does not conform to the acknowledged Comprehensive Plan, then the application must show compliance with the elements of the Comprehensive Plan. If the Comprehensive Plan does not comply with current LCDC regulations, then the LCDC regulations apply directly to the facility, and the application must show compliance with each applicable LCDC regulation. If the applicant requests Council findings of compliance with statewide planning goals, then the application must list each applicable goal and show why the facility complies.

Local land use plans often require that proposed uses be consistent with the primary land use in the affected zone, and that proposed uses have minimal impact on the primary use. A simple assertion of minimal impact may not be sufficient. The analysis should describe the existing uses and the proposed facility's likely impact, and provide facts that show why the proposed use is acceptable.

*What if the Local Ordinances Change?*

Under path "B," the applicable land use criteria are those in effect on the date the Application is submitted. ORS 469.504(1)(b)(A). Under path "A," the applicant must comply with the requirements of the affected local government.

## PART 3 – THE SITING PROCESS

The Council's review process is described in detail in OAR 345 Divisions 15, 20 and 21. Division 15 describes the steps in the process taken by OOE. Division 20 describes the requirements for an NOI and the steps in the NOI process that are the applicant's responsibility. Division 21 describes the requirements for an Application for Site Certificate (ASC) and the steps in the ASC process that are the applicant's responsibility.

### I. Notice of Intent (NOI)

ORS 469.330 requires applicants to submit a Notice of Intent (NOI), which provides preliminary information about the facility, the proposed site, and potential impacts of the facility. OAR 345-020-0006. This requirement does not apply to facilities that are eligible for expedited review. The NOI enables OOE and other state agencies to identify the issues and decide if they need additional staff or special consultants, and enables OOE to gather public comment. The early public and agency comments alert the applicant to issues that the applicant can address early in the process.

Applicants should begin informal discussions with OOE before submitting an NOI. These early discussions allow time for planning and identification of issues. Applicants should also begin discussions with local land use agencies and agencies such as DEQ whose permits are outside Council jurisdiction.

*Baseline Studies*

Some permits may require baseline data that are not available from existing studies. The applicant must gather these baseline data in advance, over a sufficient period to take into account seasonal and other fluctuations. For instance, a DEQ air quality permit application will typically require 12 months of baseline air quality data. Similarly, water quality in surface or ground waters that undergo seasonal changes would require seasonal data. An isolated body of water, such as in a confined underground aquifer, might be characterized in less time if the water quality is fairly constant over time. Studies for threatened and endangered species and wildlife habitat typically must be done at specific times of year.

## *A. NOI Submittal*

Requirements

OAR 345-020-0011 describes the required content of a Notice of Intent. The NOI must describe, in general terms, the proposed site, project and possible impacts of development in enough detail for OOE and other agencies to identify the applicable statutes and local ordinances. Proposed routes for linear facilities, such as gas pipelines or electric transmission lines, should be shown in enough detail for local governments to identify the applicable local land use criteria. The NOI must also state whether the applicant intends to demonstrate compliance with statewide planning goals via path A or path B. OAR 345-020-0011(1)(f).

The format of an NOI closely tracks the format for an ASC, and many of the information requirements are the same. OOE does not expect that applicants will have all that information in the same level of detail needed for an ASC. The NOI need only contain the information to the extent known at the time.

The applicant must submit six copies of the NOI to OOE, and must also distribute the NOI to appropriate state and local agencies for their review and comment. OAR 345-020-0040. If the NOI does not provide enough detail for state agencies to identify their applicable requirements, OOE may request supplemental information in writing.

The NOI must include a list of permits that the applicant believes are applicable. The applicant should consult with state and local agencies to identify these requirements. The NOI also must include a list of affected property owners described in OAR 345-020-0011(1)(f). If the facility includes pipelines or transmission lines then this list must include property owners along each corridor analyzed. OOE will use this list to issue notice of the NOI. Shortly after that OOE will hold at least one public information meeting in the general proximity of the proposed facility.

Corridor Selection for Linear Facilities

If the proposed facility, or a related or supporting facility, is a transmission line or gas pipeline as defined in ORS 469.300, the NOI must identify at least two alternative corridors, or explain why only a single corridor can meet the applicant's needs and satisfy the Council's standards. The

NOI must provide all required information on each alternative corridor as if it might be the final choice.

During the NOI review, OOE must take comment on corridor selection from the public and interested agencies and local governments. The public can provide these comments either in writing or at the public information meeting for the NOI. If the corridors are in different locations, OOE may hold separate public information meetings near the different corridors. The applicant must consider the public comments when making its final corridor assessment for the application.

If the transmission line or gas pipeline will cross land zoned for exclusive farm use (EFU), then an alternatives analysis may be required under ORS 215.213 or 215.283 to demonstrate that the facility is necessary for public service. In 1999, the legislature adopted specific criteria that a facility must meet to be found necessary for public service. Those criteria are at ORS 215.275. That analysis is required for Land Use compliance regardless of whether the applicant chooses path A or path B, and is in addition to the corridor selection analysis required by EFSC.

### *B. Project Order*

OOE and other agencies will use the NOI to identify applicable statutes and rules, and to identify any special information needed for the application. OOE compiles this into a document called the Project Order. OAR 345-015-0160(1). The Project Order also defines the areas over which the applicant must assess the facility's potential impacts in detail in the application. OOE will determine these areas, called the "analysis areas," based on the specific facility and its location. OAR 345-001-0010(2). The analysis areas vary for different types of impacts.

Council rules require OOE to issue a Project Order within 140 days of receiving the NOI, if that is practical. An applicant cannot submit the application for site certificate until OOE has issued the project order, unless the proposed facility is eligible for expedited review. However, applicants can provide draft information to OOE in advance of the project order if they wish. OAR 345-021-0000(2).

### *C. Expedited Review*

For certain types of facilities, the legislature has created expedited review processes that do not require an NOI. For power plants that have an "average electric generating capacity" of less than 100 megawatts the applicant can request expedited review. If the Council grants the request, no NOI is required. ORS 469.370(10) and OAR 345-015-0300. In this case, OOE will issue a project order based on the application for site certificate as initially submitted, before finding the application complete.

## II. Application for Site Certificate (ASC)

### *A. ASC Submittal*

OAR 345-021-0010 describes the required content of an ASC, subject to the analysis areas and other requirements listed in the project order. The ASC must describe, in detailed terms, the proposed site, the project and anticipated impacts, and how the proposed facility complies with the applicable standards. An ASC must also state which path will be used to demonstrate compliance with the statewide planning goals. ORS 469.504(4) and OAR 345-021-0010(1)(k).

The ASC also includes a list of property owners that meet the criteria in OAR 345-021-0010(1)(f). This list is similar to the property owners list in the NOI, but it must be updated to reflect the latest property tax roll, normally available from the county.

In addition to the printed application, the applicant must provide copies on CD with the complete text, appendices and graphic information to the extent practical.

The purpose of the ASC is to give the Council the information needed to determine compliance with the standards. In writing OAR 345 Division 21, OOE and the Council made every effort to list the information that will show whether the facility meets the standards. But applicants must bear the standards in mind when preparing the ASC. If certain information is important to the demonstration of compliance with a standard, that information should appear in the ASC, whether or not it is listed in OAR 345 Division 21 or the project order.

For pipelines and transmission lines, the applicant selects the corridor when it submits the ASC. The site certificate can include more than one corridor. The ASC does not merely identify the final corridors; it must document a detailed corridor selection assessment using criteria set forth in OAR 345-021-0010(1)(b)(D), including consideration of the comments from the public and interested agencies and local governments. An inadequate selection assessment can delay a finding that the ASC is complete.

Environmental Impact Statements (EIS)

Some applicants will already have prepared an EIS for the proposed facility, under the National Environmental Policy Act. To avoid duplication, applicants can quote the EIS or include cross-references to the relevant sections of the EIS in the appropriate exhibits of the ASC. However, the ASC must still include the information required by OAR 345 Division 21 and the project order. OAR 345-021-0010(3).

### *B. Completeness Review*

OOE will first review an application to determine if it is "complete." The application is complete if it contains the information required in OAR 345 Division 21, any special information identified in the project order, and enough information to determine if the facility meets the applicable standards. If the application is not complete, OOE will request additional information in writing. Usually there will be changes or additions to the application, either in response to questions or as the result of changes in the applicant's plans. The application is considered "filed" when OOE determines it is complete. ORS 469.370(9) prescribes time limits for ASC review. These time limits begin when the application is complete, not when it is submitted.

When the application is complete, the applicant must provide OOE and the other reviewing agencies with either a revised application or a supplement that contains the additions and changes from the "completeness" review. OOE will notify the public that a complete application has been filed. OOE will also notify the news media, including news media serving the affected area. OOE will consult with the other reviewing agencies and local governments and request their comments in writing.

### *C. Draft Proposed Order and Public Hearings*

OOE's review culminates in a document called the draft proposed order. ORS 469.370. The draft proposed order will recommend findings regarding compliance with all applicable

standards and will recommend Site Certificate conditions for construction, operation and retirement. It will reflect the recommendations of OOE staff and comments from other state and local agencies as well as the public. If the draft proposed order recommends approval, it will typically include conditions of approval. If a proposed facility cannot meet the Council standards, it is likely that the applicant would withdraw the application before the draft proposed order is issued.

After issuing the draft proposed order, OOE holds a public hearing to establish the concerns of any interested person. The Council will then review OOE's draft proposed order and consider the public comments at a meeting that is open to the public. This is not an opportunity for new public comment, but an opportunity for the Council to ask questions of the staff and applicant and make its own concerns noted. OAR 345-015-0220. Based on the Council's input and comments from the public hearing, OOE will issue a proposed order and notice of contested case.

Contested Case Hearing

The contested case hearing required in this phase of the siting process is a contested case hearing under the Administrative Procedures Act. OAR 345-015-0001.

The Council will appoint an independent hearings officer to conduct the proceedings. This appointment may include specific instructions for the conduct of the proceedings. The hearings officer is subject to the *ex parte* (contacts with a decision maker outside of the formal process) restrictions of the Oregon Administrative Procedures Act. Council members are subject to *ex parte* restrictions as well.

The hearings officer may hold one or more prehearing conferences to review procedural matters important to the contested case, the rights of parties to the proceeding and establishment of the scope of the contested case. These include, but are not limited to:

- agreement on those issues to be the subject of testimony beyond the application;
- scheduling of filing direct and rebuttal testimony;
- clarification of issues to be subject to submission of testimony and cross examination;
- conduct of the proceedings;
- the rights of parties; and
- identification of additional information needed for the review.

Only the applicant and those who have raised concerns in the public hearing and have been admitted as parties (interveners) under the Council's procedural rules may participate. The process includes presentation of evidence, rebuttal, cross-examination, rights to discovery, and appeal. Once the contested case process begins, there may be no further comment by the general public in the contested case record.

Following the hearing, the hearings officer will provide a written order to the Council. The Council will consider the hearings officer's order and parties' exceptions to the order and decide whether or not to issue a Site Certificate and what conditions will be in the Site Certificate if it is issued. The Council must approve a Site Certificate by an affirmative vote of at least four members. ORS 469.370(7).

Reconsideration and Appeal

Following the decision and Final Order, any party to the contested case has 30 days following the date of service to apply for a rehearing. In addition, a petition for judicial review may be filed within 60 days from the date of service of the Council's final order or within 30 days after the date a petition for rehearing is denied. Judicial review of the Council's decision is directly and exclusively by the Oregon Supreme Court. ORS 469.403(3).

## III. Expedited Review under OAR 345-015-0300

Generating facilities with an *average* capacity of less than 100 megawatts qualify for expedited review under ORS 469.370(10). The average capacity is defined as the facility's nominal capacity, adjusted by a factor defined in statute. For different types of electric generating facilities, the factors are as follows:

- for gas-fired facilities, the factor is 1.0 (average and nominal capacity are the same)
- for wind facilities, the factor is 3.0 (a wind facility with nominal capacity of 300 megawatts qualifies for expedited review)
- for geothermal facilities, the factor is 1.11 (geothermal facilities with nominal capacity of 111 megawatts qualify)

In addition to the capacity criteria above, the facility must not include a gas pipeline or electric transmission line that, by itself, would be under Council jurisdiction.

The rules for expedited review appear at OAR 345-015-0300. An applicant for expedited review must submit a request for expedited review to the Office of Energy. The request must include all of the information listed in OAR 345-015-0300(2).

If the Council grants expedited review, then no NOI is required. The applicant can submit an Application for Site Certificate anytime after expedited review is granted. The Office will issue a project order based on the Application for Site Certificate.

Applicants should realize that, with no NOI, the Office cannot determine the analysis areas until it has received the application. The Office may need to modify the analysis areas. Applicants can make sure that their ASC is based on appropriate analysis areas by discussing the project informally with the Office of Energy and other state agencies before performing the required studies. This is especially true for the biological studies needed to show compliance with the Fish and Wildlife Habitat and Endangered Species standards.

As with the normal review process, the Office will review the application and determine if it is complete. The Office will not consider the application complete until it has all the information necessary to determine whether or not the proposed facility meets the standards. Once the application is complete, the statute requires the Council to reach a decision within six months of the date that the application was complete.

In all other respects, the review process is the same for expedited review as for review under the normal process.

# IV. Expedited Review under OAR 345-015-0310: "Special Criteria" Facilities

The 2001 legislature created a new expedited review process for certain types of gas-fired generating plants. The legislation is codified at ORS 469.373.

## *A. Standards and Criteria for Special Criteria Facilities*

Gas-fired generating plants may qualify for expedited review if they meet certain special criteria found at ORS 469.373. These criteria include:

- Location in an industrial zone, near existing industrial facilities.
- No more than 3 miles of new powerline or gas pipeline outside existing right of way
- No new water right or water right transfer
- No new NPDES permit unless it will be obtained by a municipal facility
- Compliance with EFSC's Carbon Dioxide standard via monetary path.

If a proposed facility meets these criteria, then the applicant can request expedited review.

To request expedited review, applicants must provide written evidence that the proposed project meets the ORS 469.373 criteria. If OOE concurs, then it will recommend expedited review on a *preliminary and non-binding basis.* These facilities are called "special criteria" facilities, and EFSC reviews them under an expedited process created by the 2001 legislature at ORS 469.373. For "special criteria" facilities, there is no size criterion.

The full description of the review process for special criteria facilities appears OAR 345-015-0310. Briefly, it differs from the normal review process in the following ways:

- No NOI is required. The Office will issue a project order based on the ASC.
- OOE must notify the applicant whether the ASC is complete within 30 days of receiving it. If the ASC is not complete, OOE will not file it until the applicant has submitted all the information necessary to determine if the project meets the standards.
- The Council must determine compliance with land use laws, pursuant to ORS 469.5041(b).
- OOE must issue a Draft Proposed Order within 90 days after the date that the ASC is complete and filed.
- Council will hold a public hearing after OOE issues the Proposed Order.
- The applicant can request an additional 14 days to supplement the evidentiary record if new issues are raised at the public hearing.
- The applicant can request a contested case; there is no contested case unless the applicant requests one.
- If, on further review, the Council decides that the project did not qualify for expedited review, then the project reverts to the normal process.

For special criteria facilities, the Council can issue a site certificate without making a finding of compliance with certain standards. These standards are:

- Structural Standard – OAR 345-022-0020

- Scenic and Aesthetic Standard - OAR 345-022-0080
- Historic, Cultural and Archeological Standard – OAR 345-022-0090
- Recreation Standard – OAR 345-022-0100
- Public Services Standard – OAR 345-022-0110
- Waste Minimization Standard – OAR 345-022-0120

The Council may not deny a site certificate based on failure to meet these standards. However, the Council can impose conditions based on these standards, as if they applied.

Also, the applicant must request Council findings of compliance with applicable Land Use criteria (in other words, the applicant *must* choose Land Use Path B).

### *B. Steps in the Expedited Review Process*

1. Request for Expedited Review

Applicants must request expedited review from the Office of Energy. The request for expedited review must describe the proposed facility, give the applicant's name and address, state when the applicant expects to submit an ASC, and list applicable statutes and rules (to the extent known at the time). Most important, the request must show that the facility meets the special criteria of ORS 469.373(1).

Because there is no Notice of Intent, the applicant should provide as much information as possible, either informally or in the request for expedited review. The earlier the state agencies have information about the facility, the more expedited the review will be.

The applicant should already have contacted other state and local agencies if the project has the potential to require:

- wetland delineation,
- mitigation for high quality fish and wildlife habitat,
- endangered species review,
- conditional land use permits, or
- any other state permits.

Within 14 days of receiving a request for expedited review, the Office will determine whether the facility qualifies as a "special criteria" facility. The determination is preliminary and non-binding. The Council may later decide, after reviewing the full Application for Site Certificate, that the project did not qualify as a special criteria facility. In that case, the review reverts back to the normal process.

2. Application for Site Certificate

If the facility qualifies for expedited review, the applicant can submit an ASC at any time. The Office will give the applicant a list of state and local agencies, tribes and other persons who should receive a copy of the application. The Office will require at least ten copies. The Office will also require copies on CD with the complete text, appendices and graphic information to the extent practical.

The Application for Site Certificate for special criteria facilities is the same as a regular application. For certain standards listed above, the Council need not determine compliance, and it cannot deny a site certificate based on those standards. However, the Council may still impose conditions based on them. The applicant must still describe the impacts and mitigation for those standards, in order for the Council to adopt the appropriate conditions.

Within 30 days of receiving an application the Office will determine if it is complete. The Office will not deem the application complete until it has all the information needed to determine whether the facility meets the standards, and what conditions are necessary.

Within 30 days of receiving the application, the Office will also issue the Project Order. All Project Orders are subject to revision at any time. But for expedited review, Project Order revisions are especially likely, because there is no NOI.

- **Note:** With no NOI, OOE cannot recommend analysis areas until after it receives the application. The applicant must use the "study area" defined in OAR 345 Division 1 as a default area. Applicants should realize that OOE, after consulting with ODFW or other agencies, might need to expand the analysis areas after doing a preliminary review of the application. That is why early information exchange, even informal, is important.

3. Completeness and Draft Proposed Order

Once the application is complete, OOE will notify the public, invite public comments, and hold a public meeting. The meeting is informational only.

The Office will then prepare a Draft Proposed Order, with recommended findings and conclusions. Unlike the traditional review process, the Office must issue the Draft Proposed Order within 90 days after deeming the application complete. The Council will review the Draft Proposed Order at a regularly scheduled Council meeting. After that, the Office will issue a Proposed Order.

4. Hearing on the Proposed Order

Shortly after issuing the Proposed Order, the Office will hold a hearing in the vicinity of the proposed facility. The hearing is not a contested case, but it is the evidentiary hearing for the project. A Hearing Officer will preside, and OOE will record public testimony for the record. The evidentiary record for the project will close at the end of the hearing, with one exception: if someone raises a new issue at the hearing, the applicant has 14 days to respond on the record. Under the statute, this 14-day extension is only available to the applicant. However, the hearing officer can "continue" the hearing for a period not exceeding 7 days to allow for further public comment. The 14-day period to leave the record open at the request of the applicant runs from the adjournment of the hearing; that is, it is in addition to any period of continuance.

The applicant can request a contested case. But there is no contested case unless the applicant requests one. Normally, after the hearing (and the 14 day extension if one is granted), the Office will prepare a Final Order for the Council's decision.

In all, the statute requires a Council decision within 6 months after the Office deems the application complete.

## APPENDIX A -Time Required for the Regular Siting Process

Many applicants want to know how long the entire siting process will take. That time varies, depending on the issues involved, quality of the application, and the amount of public concern. For the normal (non-expedited) process, time has historically ranged from as little as 18 months to more than 2½years. The Office of Energy has prepared the following breakdown of the process to assist applicants in planning. These estimates are based on typical applications to date, and they do not represent any particular project. The steps in the siting process include:

1) the Notice of Intent (NOI) phase
2) the Pre-ASC phase
3) the completeness review
4) the ASC review phase and contested case proceeding (CCP)
5) the Council decision phase

**NOTE**: the timelines in this Appendix are based on the normal review process.

*NOI Phase*

The NOI phase begins when the applicant submits an NOI and ends when OOE issues a project order. The NOI review will do the following:

- inform the public and state, federal and local agencies about the proposed project and the EFSC review process
- give an opportunity for the public and agencies to ask questions, get information and raise concerns, including public meetings in different communities along the alternative routes
- give the applicant a sense of the public and agency concerns and what the big issues will be
- determine what statutes, state rules and local government requirements apply to the project
- identify key issues and information that the application must address
- prepare and issue a project order that identifies the statutes, state rules, local ordinances, application requirements and study requirements that must be considered in the Council's review.

Past history indicates the NOI phase will take between four and six months, or more if the NOI must describe alternative routes for pipelines or transmission lines.

*Pre-ASC Phase*

The Pre ASC phase begins when OOE issues the project order and ends when the applicant submits its ASC. The time needed to prepare an ASC has varied greatly. Some applicants have submitted the ASC within a few weeks of receiving the Project Order; other applicants have waited over a year to do so. The applicant cannot submit the ASC until the Office of Energy issues the project order, but applicants can gain some time here by preparing as much of the ASC as possible in advance and by inviting informal involvement by reviewing agencies during this phase (for example, field inspections).

### *ASC Completeness Phase*

The ASC review phase begins with submittal of the ASC and ends when OOE finds the ASC complete. When OOE receives the ASC it will do the following:

- Circulate the ASC to affected agencies and local governments and ask for their comments on its completeness, and any issues that it raises
- Conduct public meetings/workshops on the ASC (at OOE's discretion);
- Request more information, if needed. Typically there is at least one written request for information.

The completeness review has typically taken at least four months, depending on the quality of the ASC. OOE will "file" the ASC when it is found complete.

### *Review of Completed ASC*

ORS 469.370(9) and ORS 469.373 set forth the following times for the review of a completed ASC:

| | |
|---|---|
| Combustion turbine, geothermal plant, or underground natural gas storage facility | 9 months |
| Other types of power plants greater than 200 MW, or for nuclear installations | 24 months |
| Energy facilities at the site of an existing industrial facility | 6 months |
| Expanding an existing energy facility to reach a capacity between 25 and 50 MW | 6 months |
| Adding capacity to an existing underground gas storage facility | 6 months |
| Generating plants that the Council has granted expedited review** | 6 months |
| Any other type of energy facility | 12 months |

** (Or 9 months if a contested case is required and if there are interveners in the contested case.)

These times begin when OOE finds the application complete and end with the Council decision, including the time for the contested case. If the Council does not reach a decision within these times, it does not result in automatic approval or denial. The Council will continue its review until it can reach a decision.

When the application is complete, OOE must do the following steps:

- Notify the public, state and federal agencies, and local governments that the ASC is complete
- Prepare a draft proposed order, taking into account comments from other agencies, tribes, local governments and the public
- Conduct a least one public hearing on the draft proposed order (after a minimum 20 day wait period)
- Brief the Council on the public comments and review the draft proposed order at the next Council meeting after the public hearing
- Revise the draft proposed order based on public comments and Council member comments and issue a proposed order and a notice for a contested case proceeding

OOE makes every effort to complete these steps as fast as possible to allow time for the contested case and Council decision within the deadlines listed above. But historically, the time from the date of filing the completed ASC to the beginning of the contested case has varied greatly, depending again on the quality of the ASC, the issues involved, and the concerns raised in public comment.

Contested Case Phase (CCP)

The contested case begins when OOE issues its proposed order and notice of a contested case proceeding and ends when the hearing officer (HO) issues his or her order for the Council's consideration. The CCP will be under the control of an independent HO, and each CCP is different. However, based on past applications, the CCP will very likely include the following:

- a process to identify the parties to the CCP, and to agree on the overall schedule and procedures
- the determination, by the HO, of the issues that will be considered in the CCP. The HO must evaluate the public comments and decide which are to be considered in the CCP. This can be a significant, time consuming and contentious milestone.
- a process and period for discovery
- parties will present their testimony and rebut each others' testimony (this is customarily done in written form)
- parties will cross-examine one another (this is customarily done orally, may require several days, and may be hard to schedule)
- parties will file opening briefs and reply to each others' briefs
- the HO will consider all evidence and prepare an order

Applicants should expect about five months for the CCP. A contentious CCP could take longer. The only CCP's actually completed in less than five months were those in which there were no opponents, or in which the applicant and the parties reached a settlement.

***The Council Decision Phase***

The Council's decision phase begins when it receives the HO's order and ends when the Council makes its decision to approve or deny the application and issues a final order. This phase includes the following:

- parties submit to the Council their exceptions to the HO's order and their replies to each others' exceptions
- OOE prepares and submits to the Council a summary of the contested issues, the HO recommendations on each issue, and the positions of each of the parties on each issue
- OOE prepares and submits to the Council a proposed final order that incorporates the HO's order and the OOE proposed order into a single document
- enough time for the Council to review the information prior to the decision meeting

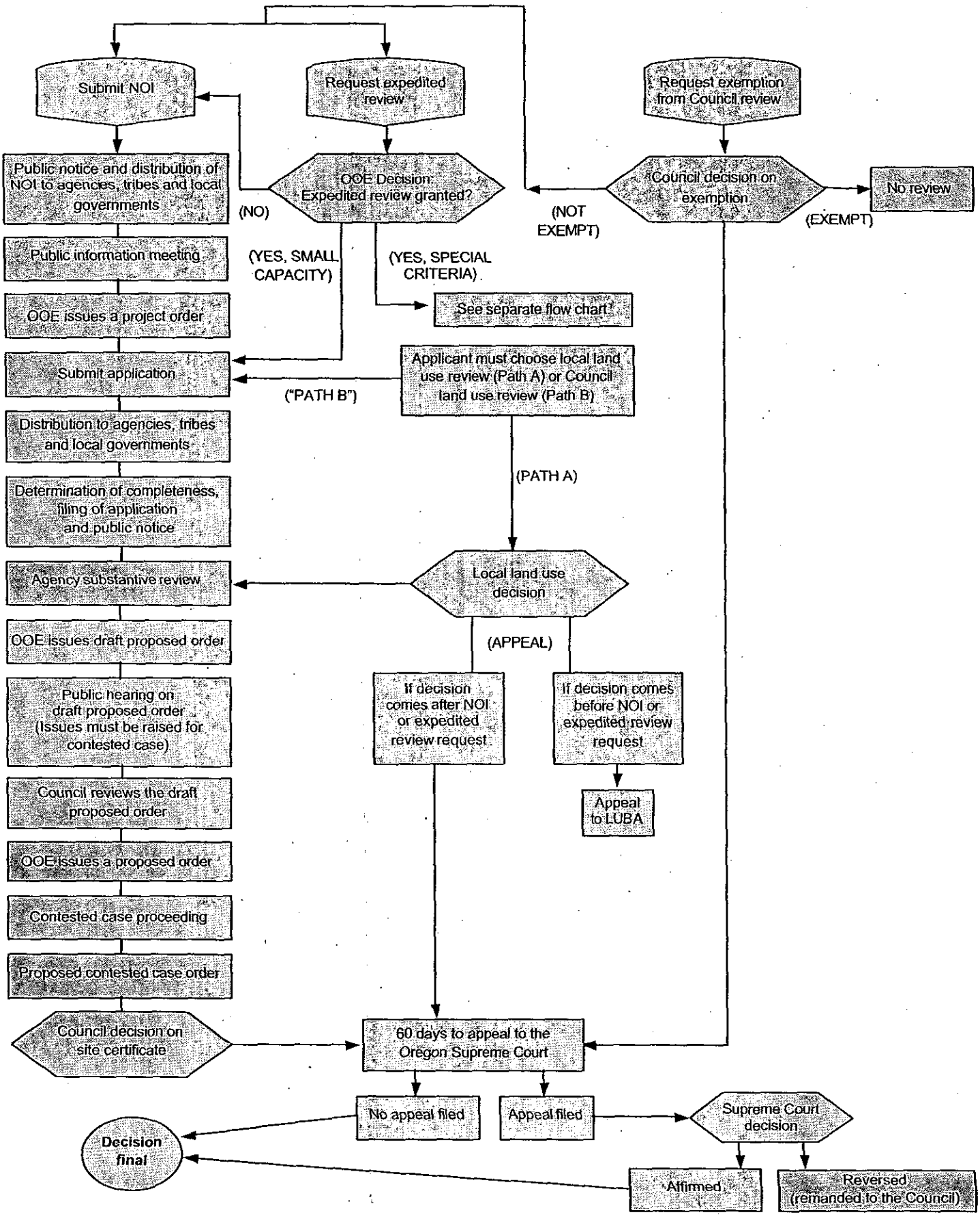
This phase should take about 45 days, but it could take longer if there are very complex issues.

**APPENDIX A**

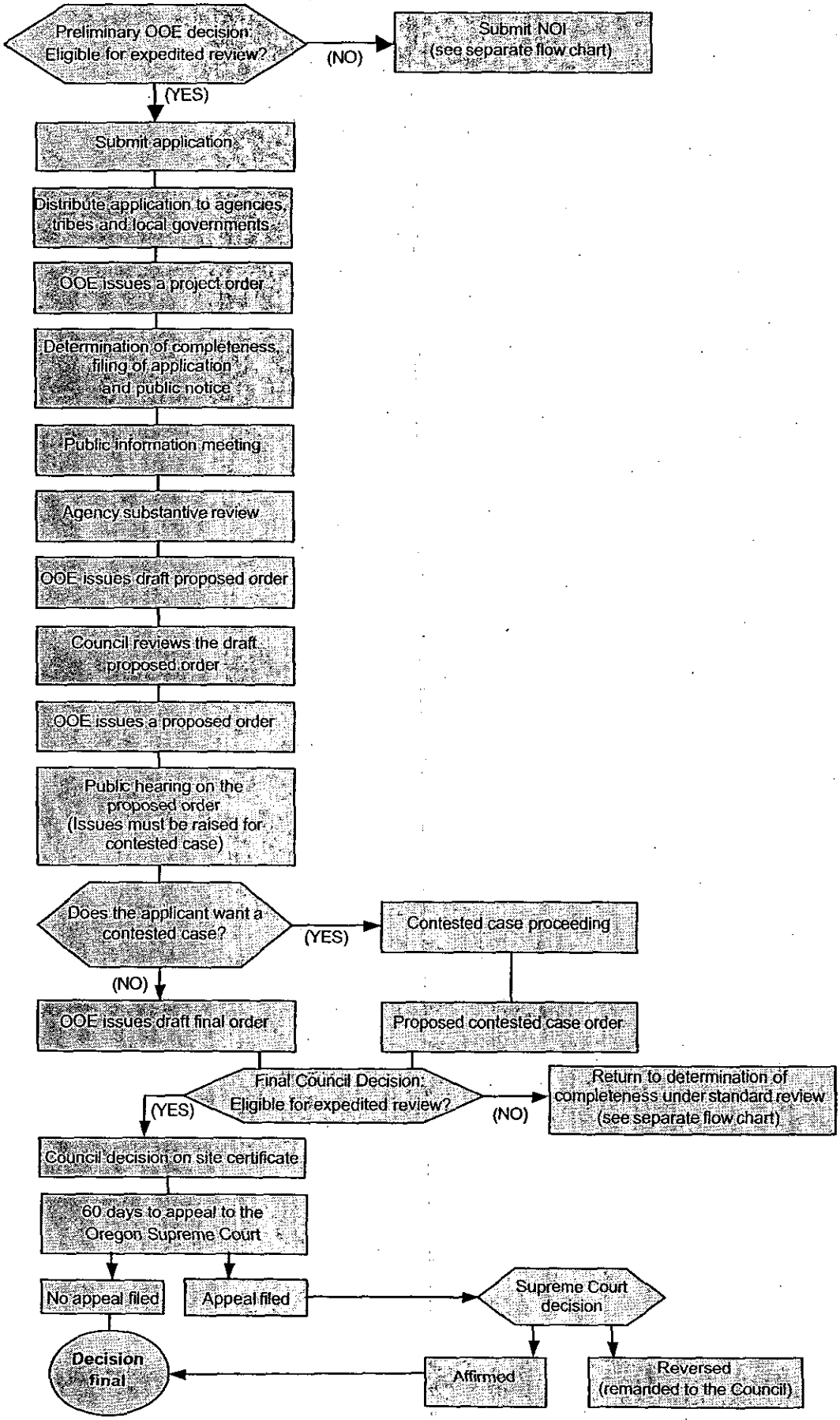
***Summary***

An "average" time for the complete process would have little meaning, because the actual time has varied so greatly among different projects that the Council has sited. The most important variables are the quality of the ASC, the amount of early information available, and the amount of public concern. Note that there is also the possibility of judicial review. In conclusion, applicants are urged to work with OOE and other agencies as early as possible to ensure a timely review.

# APPENDIX B: Flowchart of the Oregon Energy Facility Siting Process



# APPENDIX C: Flowchart of the Expedited Process for Special Criteria Facilities



# REPORT OF THE

# OREGON ENERGY FACILITY SITING

# TASK FORCE

**October 21, 1996**

## MEMBERS OF THE OREGON ENERGY FACILITY SITING TASK FORCE

**Mike Katz, Chairman, Professor of Economics, Portland State University**

**Senator Ron Cease, Professor of Political Science and Public Administration, Portland State University**

**Tamra J. Mabbott, Morrow County Planning Director**

**Bob Shiprack, Executive Secretary, Oregon Building Trades Council**

**Anne W. Squier, J.D., Policy Coordinator, National Marine Fisheries Service**

**Representative Jim Welsh**

**Duncan Wyse, President, Oregon Business Council**

## INDEPENDENT CONTRACTOR

**John F. Larson, Project Manager**
**Pacific Energy Systems, Inc.**
**1600 SW Fourth Avenue, Suite 770**
**Portland, Oregon 97201**

**TRANSMITTAL LETTER** **October 28, 1996**

**To the Governor of Oregon and the 69th Legislative Assembly:**

Attached is the Final Report of the Oregon Energy Facility Siting Task Force.

The Task Force was established by the last session of the Oregon Legislature to review the public interest in the siting of energy facilities and to make recommendations to you.

The scope of the Task Force's review was very broad. At one extreme, we could recommend that Oregon's energy facility siting laws, first enacted in the early 1970s, be repealed and the Energy Facility Siting Council abolished. At the other extreme, we could recommend no change at all. Anywhere along the spectrum in between, we could recommend that Oregon's energy facility siting laws be tweaked, a lot or a little, to accommodate changes in the energy environment since the 1970s.

The Task Force recommends that the laws be tweaked -- a little.

We recommend elimination of the "need-for-power" standard for proposed electric generating facilities. We deem it anachronistic in today's competitive environment for power production.

Coupled with that recommendation, we urge adoption of a statutory climate change standard, expressed in terms of reduced carbon dioxide emissions, for natural gas fired powerplants, the generation technology of choice at the present time. The standard would require that $CO_2$ emissions be significantly less than those from the most efficient and least polluting fossil fueled powerplant operating in the U. S. today and could be made even more stringent after 2 years upon a finding that there is a more efficient new powerplant in operation anywhere in the U. S.

In addition to modest changes designed to conform other laws to elimination of the need standard, we urge (a) development of a model energy facility siting ordinance for local governments, and (b) evaluation of existing statutory findings with a view to adopting more contemporary state energy policies.

That's it in a nutshell.

The seven Task Force members comprise a broad range of backgrounds and interests. One, a state senator and professor of political science, was appointed by the President of the Senate. Another, a state representative and businessman, was appointed by the Speaker of the House. The others --- a professor of economics and former PUC chairman; an eastern Oregon county planning director; a labor union official and former state representative; a state environmental policy coordinator currently detailed to a federal natural resource agency who is also a former law school professor; and a business council president and former state official --- were appointed by the Governor.

The issues considered by the Task Force are contentious, to put it mildly. Parties at interest include utilities, environmentalists, powerplant developers, consumer representatives, the Oregon Office of Energy, and the Energy Facility Siting Council. Although the Task Force had pretty well made up its collective mind towards the end of its deliberations, we endorsed creation of a work group of competing interests to hammer out, if they could, some of the details (in which, as everyone knows, the Devil dwells).

After intense negotiations, the work group crafted a statutory climate-change standard. If enacted, it will focus greater attention on, and provide significantly greater internalization of, putative environmental climate-change impacts of fossil fueled powerplants than is the case anywhere in America, well ahead of whoever is in second place. It will not be cheap.

As expected, none of the participants was overjoyed. Industry representatives thought it went too far. Environmentalists and some members of the Energy Facility Siting Council thought it did not go far enough. Nevertheless, the hammered-out proposal was adopted by the work group by "complete consensus." Each participant has agreed unqualifiedly to support the recommendation in the 1997 legislative session.

The parties deserve congratulations for their hard work and willingness to compromise, in the best sense of that word, in order to reach consensus.

Throughout the Task Force's deliberations, many of the participating publics, in particular staff of the Oregon Office of Energy, worked hard to provide useful testimony, position papers, and comments on drafts of the Task Force's final report. They have our gratitude.

I want to compliment John Larson, the project manager representing the independent contractor providing staff support for the Task Force. In addition to being well informed, Mr. Larson was exceedingly conscientious and, considering the contentious nature of the study and the range of viewpoints of the interested publics and the Task Force members, evenhanded and honorable. He was ably assisted by Mary Beth Buffum.

Some of the Task Force members would have wanted its recommendations to be more sweeping. Others may feel they are excessive. I want to express my sincere appreciation to all of the members whose diligence, patience, respect for the views of the public, and civility towards one another, made it all possible.

Here is something notable: The Task Force's recommendations are unanimous.

Sincerely,

Mike Katz
Chairman

# CONTENTS



# APPENDICES

# I. INTRODUCTION

Section 3(1) of Senate Bill 951, enacted in 1995, provides as follows:

> The Legislative Assembly finds that the energy industry has become increasingly competitive since the adoption of the state energy policy and since energy facility siting statutes were enacted in 1975, and that significant changes also have occurred in energy industry regulation and energy planning. In recognition of these changes, a Task Force is created to review the public's interest in the siting of energy facilities. The Task Force shall consist of seven members. Five members of the Task Force shall be appointed by the Governor, one shall be a member of the Senate appointed by the President of the Senate and one shall be a member of the House of Representatives appointed by the Speaker of the House of Representatives. The Task Force shall develop and present recommendations to the Governor and the Sixty-ninth Legislative Assembly addressing the appropriate public interest in the siting of energy facilities.

Section 3(2) of the bill provided that "[t]he Department of Energy shall enter into an agreement with an independent contractor to provide staff support necessary to the performance of the functions of the task force."

Prior to appointment of the members of the Task Force, the Oregon Office of Energy formed a selection committee for the purpose of seeking proposals from qualified independent contractors. As a consequence of that competitive process, Pacific Energy Systems, Inc., a Portland-based firm providing engineering and project management services to the energy industry, was selected to provide staff support to the task force. The firms of Cogan Owens Cogan, specialists in land use issues, and Landrey & Hunt, specialists in public involvement and public process issues, were enlisted by Pacific Energy Systems as subconsultants to assist with matters within their particular areas of expertise.

In early 1996, Governor Kitzhaber appointed Mike Katz, Tamra Mabbott, Bob Shiprack, Anne Squier, and Duncan Wyse, the President of the Senate appointed Senator Ron Cease, and the Speaker of the House of Representatives appointed Representative Jim Welsh, to serve as members of the Energy Facility Siting Task Force.

At its first meeting on March 5, 1996, Roy Hemmingway, the Governor's advisor for Salmon and Energy, presented the members of the Task Force with the following charge from Governor Kitzhaber, the complete text of which is included in this report as Appendix A:

> Protecting Oregon's environment has been a long-standing commitment for Oregonians. I believe a strong state role in siting energy facilities is an essential piece of that protection. However, the state's siting statutes were enacted in 1975 and significant changes in both the

electricity and natural gas industries have occurred since then. It is time to take a fresh look at the issue and clarify what it is the state seeks to achieve from its energy facility siting process.

Both the 1993 and 1995 Legislatures made some revisions to the siting statutes, but some basic tenets of the law remain in question. Accordingly, SB 951 calls for a Task Force to more fully review the issues and make recommendations to me and the 1997 Legislature. The scope of the review can be as broad or as narrow as the Task Force sees fit. At a minimum, however, the review should consider the following questions:

1. **What is the appropriate scope of state siting authority?** What energy facilities should be subject to state review? Should state siting decisions pre-empt or bind state agencies and/or local governments? If so, under what circumstances should that occur?

2. **How should the decision to permit new facilities be made?** If using a set of standards is reaffirmed as the most appropriate approach, are the current standards the ones to use? Should the siting body have the authority to adopt new standards or waive old standards as circumstances change?

3. **Should a determination of need be required before a facility can be built?** If so, how should the determination be made? Should the determination be made before approving a facility or before its construction begins?

4. **What should be the process to approve or deny requests to build new energy facilities?** At what point and to what degree should the public participate? Should there be a deadline by which a decision must be made? Should the process use a contested case, mediation or some other means of reaching a decision? Who should be able to appeal the decision?

At that same meeting, the members of the Task Force elected Mike Katz to serve as chairman.

At its second meeting, the Task Force heard presentations from certain interested publics, including sponsors of Senate Bill 951, the Office of Energy, the Energy Facility Siting Council, and persons representing certain public interests. (These presentations appear in Appendices B through F.)

Early in its proceedings, the Task Force invited "anyone wishing to express a position with respect to energy facility siting issues to prepare and deliver to the Task Force a position paper expressing his or her views on the issues." In response to this invitation, the Task Force received thirteen papers covering a wide range of issues and addressing the subject of energy facility siting from various perspectives. Papers were prepared and delivered by: CE Exploration Company; the Energy Facility Siting Council; Hermiston Power Project; the League of Oregon Cities; Northwest Environmental Advocates; the Oregon

Public Utility Commission; the Oregon Office of Energy; PacifiCorp and U. S. Generating Company, jointly; Portland General Electric Company; Oregon Chapter of the Sierra Club; Sifford Energy Services; the City of Umatilla; and Jason J. Zeller. (These position papers appear in Appendices G through S.)

During the proceedings, the firm of Cogan Owens Cogan, represented by Arnold Cogan and Linda Davis, was asked by the independent contractor to prepare a comprehensive land use analysis which would: (1) provide the Task Force with "background information concerning current processes and issues in the land use aspects of the siting process"; (2) "examine the concept of supersiting and how energy facility siting compares with other supersiting in Oregon"; and (3) "identify possible options for land use decisions related to energy facilities". The Cogan Owens Cogan *Report on Land Use Issues* is included in this report as Appendix T.

The Task Force also concluded there would be value in examining how our neighboring states address the issue of energy facility siting. Davi-Smith, Administrator of the Energy Resources Division, Oregon Office of Energy, volunteered to prepare a comparative analysis of energy facility siting processes in the states of Oregon, Washington, Montana and California. (Idaho has no specific energy facility siting process.) That comparison is included in this report as Appendix U.

The Task Force invited state agencies affected by the energy facility siting process to comment on the existing process and make recommendations on how it might be improved. Responses were received from Building Codes Division, Oregon Department of Consumer and Business Services; Oregon Department of Environmental Quality ("ODEQ"); Oregon Department of Fish and Wildlife; Oregon Department of Land Conservation and Development; Oregon Division of State Lands; and Oregon Public Utility Commission. The Oregon Office of Energy also forwarded to the Task Force a copy of a letter from William C. Walters, Deputy Field Director, National Park Service, U. S. Department of the Interior, expressing support for the existing process. (These responses appear in Appendices V through CC.)

To facilitate decision-making in the course of its proceedings, the Task Force produced a series of matrix worksheets designed to stimulate thinking and discussion among the members of the Task Force and interested members of the public about issues key to the development of recommendations on Oregon's energy facility siting processes. The first of those worksheets focused on the many facets of the "Need for Facility" standard; the second focused on "Types of Facilities"; and the third focused on "Standards". (These worksheets appear in Appendices DD through FF.) The Task Force believes the use of these worksheets, coupled with the opportunity for broad participation by interested publics, was useful in the development of recommendations addressing the appropriate public interest in the siting of energy facilities.

Late in its proceedings, the Task Force received a thoughtful suggestion from the Association of Oregon County Planning

Directors (see Appendix HH). While supporting the existing energy facility siting process, the Association requested that the Task Force include as one of its recommendations the development of a model energy facility siting ordinance for use by local governments. Because it believes that even smaller facilities not subject to EFSC jurisdiction may entail complex issues requiring specialized expertise, the Task Force concurs and has included such a recommendation.

On October 3, 1996, the Task Force assembled for what was intended to be its final meeting. At that time, the Task Force had concluded that elimination of the need standard for electric generating facilities should be coupled with adoption of a statutory climate change standard designed to produce results comparable to those expected to be achieved by the Klamath Cogeneration Project as winner of the 500 MW Exemption described in greater detail in Appendix GG. However, in the course of this meeting, the Task Force also concluded that its recommendations to the Governor and the Legislature should define of that standard. A working group comprising environmentalists, industry representatives, and Office of Energy staff was charged with the task of trying to reach agreement on that measure and reporting its findings to the Task Force prior to the final meeting on October 21, 1996. Invitations to participate in the working group were extended to other interested publics. The report of that working group is included in this report as Exhibit I.

Over the course of nearly eight months, the Task Force has held seventeen public meetings, conducted site visits at major energy facilities in Eastern Oregon, and heard public comment on a wide range of issues affecting, and affected by, the siting of energy facilities.

The purpose of this report is to summarize the findings and conclusions of the Energy Facility Siting Task Force and to present the recommendations of the Task Force to the Governor and the Sixty-Ninth Legislative Assembly, convening in January 1997.

# II. DIRECT RESPONSE OF THE TASK FORCE TO THE GOVERNOR'S CHARGE

In his charge to the Task Force, without limiting the scope of its undertaking, Governor Kitzhaber posed a series of questions to be addressed, as a minimum, in the course of its review. The Task Force has addressed each of those questions, and more, as summarized below. Citations are to page numbers in this report.

**Pages**

1. **What is the appropriate scope of state siting authority?** The Task Force concludes the scope of authority of the Energy Facility Siting Council ("EFSC") should remain substantially unchanged. In addition, the Task Force concludes the Legislature should require and fund development of a model energy facility siting ordinance for use by local governments. This function should be coordinated by EFSC, involving other appropriate state agencies as well as city and county representatives ..... 18, 46

   a. **What energy facilities should be subject to state review?** The Task Force concludes those energy facilities currently subject to EFSC jurisdiction should remain unchanged. ..... 44

   b. **Should state siting decisions pre-empt or bind state agencies and/or local governments?** The Task Force concludes that EFSC's siting decisions should continue to pre-empt and bind state agencies and local governments. ..... 18, 46

   c. **If so, under what circumstances should that occur?** The Task Force concludes the existing process providing for close coordination with other state agencies and local governments and disposition by EFSC, in a one-stop permitting process, of the regulations and ordinances otherwise enforced by state agencies or local governments remains appropriate. ..... 46

2. **How should the decision to permit new facilities be made?** The Task Force concludes that the process for review and approval of site certificate applications remains appropriate, though the requirement that at least 80% of the output from a proposed thermal generating facility be under contract prior to commencement of construction should be eliminated. ..... 17, 58

   a. **If using a set of standards is reaffirmed as the most appropriate approach, are the current standards the ones to use?** The Task Force concludes, with

two exceptions, use of standards set forth in the energy facility siting law and elsewhere in the statutes, such as noise standards within the jurisdiction of the Department of Environmental Quality and wetlands standards within the jurisdiction of the Division of State Lands, remains appropriate. The Task Force concludes that a statutory climate change standard should be adopted coupled with elimination of the standard requiring applicants to demonstrate need for electric generating facilities. EFSC has and should continue to have authority to adopt standards, as necessary, to accommodate other purposes formerly served by the need standard, including but not limited to system reliability or stability and protection of the public resources. .....15, 37, 39

b. **Should the siting body have the authority to adopt new standards or waive old standards as circumstances change?** The Task Force concludes that EFSC should retain authority to adopt new standards or waive old standards, consistent with Oregon energy policy, in adapting to changing circumstances. .....39

3. **Should a determination of need be required before a facility can be built?** The Task Force concludes that coupled with adoption of a statutory climate change standard, the need standard should be eliminated with respect to electric generating facilities. With respect to energy facilities other than electric generating facilities, the determination of need should be made as provided in the existing energy facility siting law. .....15, 37, 53

   a. **If so, how should the determination be made?** The Task Force concludes that the need standard should be eliminated with respect to electric generating facilities. With respect to other energy facilities, the determination of need should be made as provided in the existing energy facility siting law. .....15, 37

   b. **Should the determination be made before approving a facility or before construction begins?** With respect to energy facilities other than electric generating facilities, the determination of need should be made before approving a facility, as provided in the existing energy facility siting law .....15, 37

4. **What should be the process to approve or deny requests to build new energy facilities?** The Task Force concludes the existing process to approve or deny requests to build new energy facilities is appropriate. .....53

   a. **At what point and to what degree should the public participate?** The Task Force concludes the existing process provides for the appropriate timing and

# III. RECOMMENDATIONS

**Based on the findings and conclusions contained in this report, the Oregon Energy Facility Siting Task Force submits the following recommendations to the Governor and the 69th Legislative Assembly, scheduled to convene in January 1997:**

## *Recommendation No. 1*

Coupled with amendment of the existing energy facility siting law to adopt a statutory climate change standard, amend the existing energy facility siting law to eliminate the standard relating to need for proposed electric generating facilities, while retaining the need standard for all other types of energy facilities.

## *Recommendation No. 2*

Coupled with amendment of the existing energy facility siting law to eliminate the need standard for proposed electric generating facilities, amend the existing energy facility siting law to adopt a statutory climate change standard to be applied in siting natural gas fired generating facilities[1] intended for base load use expressed as a reduction of $CO_2$ emissions of 17% below the emissions of the most efficient, combined cycle, combustion turbine, gas fired plant commercially demonstrated and operating in the United States (currently 7200 BTUs per kWh[2], new and clean). The percentage and the initial standard (0.70 net pounds of $CO_2$ per kWh at an assumed 100% capacity factor) would be established in the statute. The statute would provide that the Energy Facility Siting Council ("EFSC") could not change the reduction of $CO_2$ emissions percentage to be applied. EFSC could change the net $CO_2$ per kWh standard after two years by finding that there is a new, more efficient plant in commercial use in the United States. Furthermore, EFSC should develop standards for other types of fossil fuel plants using the principles set forth below as a foundation for setting those standards.

**Ways to Meet the Standard**

1. The standard can be met by any combination of efficiency, cogeneration or offsets from offsite mitigation that reduce emissions to the allowable standard.

2. Offsets may be demonstrated either through a "Performance Path" or through a "Monetary Path."

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[1] "A natural gas fired facility means a facility that is intended to be fueled by natural gas except for infrequent periods when the natural gas supply is interrupted." [OAR 345-23-000(7) July 1994]

[2] The calculations assume that there are 117 pounds of $CO_2$ per million Btu of natural gas fuel.

A. Performance Path

Under this path, the applicant would propose certain mitigation projects and would have to demonstrate the reduction in emissions it would produce. The site certificate condition would require implementation of the offset projects, but would not require actual achievement of the emission reduction. If EFSC finds in the siting process that the proposed offset projects are inadequate to meet the standard, the applicant may fall back on the monetary path.

B. Monetary Path

Under the monetary path, the applicant would pay into a fund an amount of money deemed to pay for the offsets it needs to meet the standard. The statute would set the interim rate of $0.57 per ton of $CO_2$ for purchasing offsets through this Monetary Path. EFSC would have authority to adjust the monetary offset rate up or down after three years based on empirical evidence of the cost of $CO_2$ offsets from projects and a finding that the standard will be economically achievable. Following the initial three year period, EFSC may adjust the rate up or down no more than 50% in any two year period.

Once the applicant's site certificate is approved based on the monetary path, the applicant's payment would not be adjusted based on the actual performance of the projects funded with the money. The offset projects may reduce emissions beyond what was required for the plant to meet the standard or may not achieve the reduction in emissions needed to meet the standard. Either way, the applicant is not affected.

The details of the administrative management of the fund and of the process for allocating the moneys to projects should be determined by statute and administrative rule guided by the principles set forth below. The applicant should be allowed to participate in that process.

**Principles to be met by the Climate Change Standard For New Fossil Fuel Generating Facilities**

1. Promote plant fuel efficiency.
2. Promote efficiency in the resource mix.
3. Reduce net $CO_2$ emissions.
4. Promote cogeneration that results in $CO_2$ offsets.
5. Provide an incentive for innovative technologies and creative approaches to mitigating, reducing and avoiding $CO_2$ emissions.
6. Minimize transaction costs, making it easy to do either path.
7. Monetary offset rate under the monetary path should be set at a rate reflective of what could reasonably be expected to be achieved by available third party mitigation offsets.
8. Provide certainty on what mitigation is actually being implemented.

9. Provide a point of certainty for issuing the site certificate, allowing construction of the plant to go forward, while the mitigation measures are being obligated/implemented.
    a. Review of mitigation actions under either path should not jeopardize the validity of the site certificate.
    b. A decision against the applicant on a performance path appeal would, at worst, kick the applicant into the monetary path.
    c. Create a wall between the review of the mitigation under the monetary path and the siting process; provide a mechanism for public interests to review what is being accomplished in the mitigation.
10. Allow either the applicant or third parties to implement the mitigation.
11. The process for changing or updating the standard must be specifically spelled out in the statute, with boundaries and criteria for the change. Allow EFSC to update the standard in a specific way that is bounded by statutory criteria based on how the initial number was created and evaluated.
12. There should be no change sooner than two years after the statute is enacted.
13. This standard is not intended to block/stop power generating plants from building in Oregon. The standard should be attainable and economically achievable.
14. Mitigation project proposals should have an accountable public review and input at various stages. The public review process of mitigation project proposals should not unreasonably lengthen the time of the implementation of the mitigation projects.
15. Implementation of the mitigation projects must correspond in some way with the emissions from the plant.
16. Provide for monitoring and evaluation of mitigation program performance.

## *Recommendation No. 3*

Coupled with adoption of a statutory climate change standard and elimination of the need standard for proposed electric generating facilities, amend the existing energy facility siting law to eliminate the requirement that at least 80% of the output from a proposed thermal generating facility be under contract prior to commencement of construction.

## *Recommendation No. 4*

Coupled with adoption of a statutory climate change standard and elimination of the need standard for proposed electric generating facilities, amend the existing energy facility siting law to clarify that economic need for new electric generating facilities should be shown by reliance on competition in the market and not by consideration of cost-effectiveness. This amendment should be accomplished in a manner that ensures state energy policy and the definition of cost-effectiveness continue to apply to decision-making other than the siting of electric generating facilities. Furthermore, this recommendation is not intended to alter the role of the Oregon Public

Utility Commission in promoting least-cost planning with respect to facilities within its jurisdiction.

## *Recommendation No. 5*

Require and fund development of a model energy facility siting ordinance for use by local governments in siting energy facilities. This function should be coordinated by EFSC, involving other appropriate state agencies as well as city and county representatives.

## *Recommendation No. 6*

Evaluate ORS 469.010 with a view to adopting more contemporary legislative findings that reflect changes that have occurred and are occurring in the energy industry since enactment of Oregon's energy facility siting law and resulting from implementation of recommendations contained in this report, particularly in light of EFSC's broad charter which requires it to conduct its business and render its decisions consistent with Oregon's energy policy. The foundation of that policy, which extends to other state agencies as well, is stewardship for present and future generations, promotion of efficient use of energy resources, and development of permanently sustainable resources. The Task Force believes Oregon's future energy policy should build on that foundation and take into account the following objectives (as discussed more fully at pages 30-32), as well as other aspects of the existing statute:

- Deliver benefits of competition to our citizens in a way that continues to respect our environment and our quality of life
- Promote reasonable and equitable access to energy and foster affordable prices, including all Oregonians
- Address energy uncertainty
- Provide accurate energy information for consumers and producers
- Ensure that consumers are afforded a free choice among alternative energy sources, together with the opportunity to be fully informed about the environmental, social, and economic costs and benefits of such choices
- Ensure honest dealings in energy products
- Mitigate or eliminate imperfections in the marketplace, including externalities
- Encourage cost-effectiveness in state agency decision-making relating to energy sources, facilities or conservation
- Encourage development and deployment of cost-effective conservation
- Encourage development and deployment of cost-effective renewable resources
- Improve energy system efficiency

# IV. GENERAL

## A. General: Background

***History.*** Oregon's energy facility siting law originated with formation of the Nuclear and Thermal Energy Council ("NTEC") in 1971. The role of NTEC was defined to include regulation of the siting of nuclear and coal-fired generating plants with capacity of at least 200 megawatts. NTEC applied several standards in the course of reviewing a proposed energy facility. Among those standards was a "prudency" standard for judging whether there was sufficient demand for the output from a proposed facility to justify site certification.

In 1975, as the electric utilities serving the Pacific Northwest were predicting the need for extraordinary and rapid development of new generating facilities, Oregon revised its energy facility siting laws extensively. Those revisions included creation of the Energy Facility Siting Council ("EFSC") to replace NTEC and establishment of the Oregon Department of Energy ("ODOE"). Among other things, ODOE was formed to encourage conservation and renewables and to provide staff support to EFSC. The role of EFSC was defined to include regulation of the siting of electric generating facilities producing 25 megawatts or more, as well as the siting of high voltage transmission lines, gas pipelines, and radioactive waste disposal sites. Initially, as with NTEC, in addition to numerous other standards, EFSC applied a "prudency" standard in determining whether there was a need for a proposed facility.

In 1979, in response to a proposal by ODOE, EFSC used its discretionary authority to substitute a "need" standard for the "prudency" standard. The "need" standard gave weight to ODOE's energy forecasts and cost analyses and stressed conservation and utilization of renewable resources.

Despite the earlier rapid load-growth predictions of the electric utilities, with the exceptions of the Trojan Nuclear Plant, the canceled Pebble Springs Nuclear Plants, the Boardman Coal Plant, and the EWEB cogeneration facility in Springfield, very little actual or proposed electric generating facility siting activity took place in Oregon during the 1970s and 1980s. Other types of energy facilities sited during that period included the Mist Gas Storage facility, the South Mist Feeder gas pipeline, and the Eugene-Medford 500-kV transmission line.

In anticipation of an increase in siting activity, in 1989 ODOE proposed that EFSC undertake an extensive revision of the energy facility siting rules consistent with the council's broad statutory mandate. This rulemaking effort continued between 1989 and 1993. With enactment of Senate Bill 1016 during the 1993 legislative session, many of the specific concepts, or "standards", reflected in the resulting rules were adopted by statute.

During the 1995 legislative session, Senate Bill 951 was introduced at the request of some industry representatives. As proposed, SB 951 would have eliminated the "need-

for-facility" standard and narrowed EFSC's discretionary authority. When it appeared the governor would not sign the bill as proposed, the "need-for-facility" standard was restored (though a one-time only, non-recurring, 500 Megawatt Exemption from the requirement to show need was added), EFSC's authority to adopt standards not specifically addressed in the law was curtailed during the interim, and this Task Force was created to examine in depth the appropriate public interest in the siting of energy facilities and make recommendations to the governor and the next session of the legislature based on its findings. During the same 1995 session, HB 3455 transformed ODOE into the Office of Energy ("OOE") within the Department of Consumer and Business Services, though its functions and role as staff to EFSC remain essentially unchanged.

***The Changing Environment.*** In 1969, Pacific Northwest utilities proposed a "Hydro-Thermal Power Program" which contemplated 20 nuclear power plants, each with a nameplate rating of 1,000 megawatts, sprinkled about the Pacific Northwest by early 1990. Load forecasts indicated that if additional generating capacity was not added quickly, demand for electric energy would rapidly outstrip supply.

Two years later, in addition to Trojan with capacity of 1,100 MW and the Centralia coal plant with two 700-MW units, a revised Hydro-Thermal Power Program scheduled six additional thermal power plants of 1,100 MW each by 1982, another three plants of 1,200 MW each by 1986, and seven more plants of 1,500 MW each by January 1992. Land use impacts would have been significant. Each plant would have employed hundreds of workers. Since some of the plants contemplated were coal plants, other safety and environmental impacts, given the technology of the time, would have been significant. The safety of nuclear plants and disposition of radioactive waste was a concern.

This was the setting in which Oregon's energy facility siting law was formulated.

Only one of the huge plants contemplated was built. Today in the Northwest, there is only one nuclear power plant operating, WNP 2 at the Hanford Reservation with a 1,200-MW capacity. It is often shut down for economy reasons when abundant cheaper power is available to the Northwest. Centralia continues to operate, as does Boardman in eastern Oregon with capacity of 560 MW, when they, too, are not shut down for economy reasons.

It is obvious that the energy industry has undergone considerable change since Oregon's energy facility siting law was first enacted. To some extent, that change has been reflected in amendments to the law. However, the effect of change is currently being felt to a far greater extent than was true at the time those amendments were enacted. For example, independent power producers ("IPPs"), not only regulated utilities, are building and operating electric generating plants. In addition, the power plants being proposed for construction are smaller, capable of being built with much shorter lead time, and, on a kilowatt-hour basis, more dependable, less expensive, less polluting, and less intrusive than was true just 5 years ago. (For examples, see Table 1,

Marginal Resource Comparison: Draft Plan Compared to 1991 Power Plan prepared by the Northwest Power Planning Council for inclusion in *Northwest Power in Transition: Opportunities and Risks,* adopted March 13, 1996, and Table 2, Selected Characteristics/Impacts of Oregon State-of-the-Art Thermal Power Plants, prepared by the Oregon Energy Facility Siting Task Force, April 24, 1996.)

Furthermore, as a consequence of federal legislation and the actions of the Federal Energy Regulatory Commission ("FERC"), the regulated electric utilities are positioning themselves to disaggregate their vertically integrated systems, i.e., to separate, at least functionally, transmission from their generation and distribution systems and, perhaps, to go on to the next step and separate generation and distribution. Electric consumers may one day, perhaps soon, be served by a single regulated common-carrier distribution line but have choice as to their supplier of electricity from among alternative retail vendors. Such competition may have the effect of making electricity competitively available to consumers at the lowest price and reduce or eliminate the need for traditional utility rate regulation.

Changes mandated by the Federal Energy Regulatory Commission ("FERC") in its 1996 Order 888, adopted pursuant to the Energy Policy Act of 1992, will affect the development of new transmission to accommodate this less structured utility environment. For instance, owners of transmission must grant open access on a non-discriminatory basis to anyone wishing to use their lines, charging the same as they would charge themselves. If an independent power producer requires transmission access it must be granted at non-discriminatory rates. If there is insufficient capacity, the transmission owner must build additional transmission capacity at the applicant's expense.

System reliability may become an issue of considerable concern as the relatively stable regulated utility environment is affected by the emergence of numerous new players, mostly in the form of IPPs providing new sources of generation. As the new marketplace takes shape, it appears that one or more independent grid operators will provide monopoly transmission services for the purpose of moving power from numerous unaffiliated generating sources to numerous unaffiliated local vendors and distributors. In the past, the investor-owned utilities performed the generation, transmission and distribution functions on a fully vertically integrated basis.

As restructuring of the traditional utilities begins, the concept of least-cost planning is expected to be addressed both by economic regulation and by competitive market forces, though the least-cost planning function of the OPUC remains important so long as there is no true competitive marketplace. Care may be needed to ensure that both short-term and long-term costs and benefits to society are adequately addressed by appropriate social regulations to which competitive firms are bound.

***Rate Base Economics.*** Oregon's energy facility siting law was enacted, in part, to reflect the reality that the investor-owned electric utilities, which serve about 75% of electric customers in Oregon, were vertically integrated, i.e., they generated the electricity,

# TABLE 1

**Marginal Resource Comparison: 1996 Draft Plan Compared to 1991 Power Plan**

| Resource Characteristics | 1991 Plan Gasified Coal | 1996 Draft Plan Gas-Fired Turbine | Change |
|---|---|---|---|
| Size (MW Capacity of Typical Plant) | 420 | 228 | 46% Smaller |
| Lead Time (Years) | 7 | 4 | 43% Shorter |
| Capital Cost ($/kW) | $2,520 | $684 | 73% Lower |
| Availability (%) | 80 | 92 | 15% Greater |
| Efficiency (%) | 36 | 47 | 30% Greater |
| Levelized Cost (cents/kWh) | 6 | 3 | 50% Lower |
| Particulates (T/GWh) | 0.07 | 0.03 | 57% Less |
| $SO_2$ (T/GWh) | 0.04 | 0.02 | 50% Less |
| $No_x$ (T/GWh) | 0.50 | 0.07 | 85% Less |
| CO (T/GWh) | 0.02 | 0.02 | Similar |
| $CO_2$ (T/GWh) | 985 | 497 | 50% Less |

Legend:
MW = Megawatt
kW = Kilowatt
kWh = Kilowatt-hour
Gwh =Gigawatt-hour (1 million kWh)
T =Ton
$SO_2$ = Sulfur dioxide
$NO_x$ = Nitrogen oxides
CO = Carbon monoxide
$CO_2$ = Carbon dioxide

Source: *Northwest Power in Transition: Opportunities and Risks,* Northwest Power Planning Council Draft Plan, March 13, 1996

# TABLE 2

## OREGON ENERGY FACILITY SITING TASK FORCE
### Selected Characteristics/Impacts of Oregon State-of-the-Art Thermal Power Plants

| Characteristics/Impacts | Boardman Coal | Coyote Springs CCCT | Hermiston Generating Plant CCCT |
|---|---|---|---|
| Generating Units | 1 | 1 (d) | 2 |
| Nameplate Rating | 560 MW | 266 MW | 474 MW |
| January Peak Capacity | 507 MW | 241 MW | 429 MW |
| Annual Energy | 385 MWa | 219 MWa | 390 MWa |
| Heat Rate (Btu/kWh)<br>Efficiency (Btu output/input) | 10,035<br>34% | 7,200<br>47% | 7,200<br>47% |
| Commercial Operation Date | July 1980 | November 1995 | July 1996 |
| Land requirements | 270 acres plus 1,500 acres reservoir (b) | ≈22 acres | ≈17 acres |
| Land zoning | Agricultural/Industrial | Port Indust. (Powerplant) | Industrial |
| Power line to main grid | 17 miles | 1.5 miles | ≈11 miles |
| Building height | 290 feet | ≈100 feet | ≈100 feet |
| Stack height | 656 feet (c) | 185 feet | 215 feet |
| Makeup water for cooling | Willow Creek; 17 miles buried pipe | City of Boardman | Port of Umatilla |
| Fuel | Wyoming coal; 110-car unit train 4-5 times weekly on 16-mile spur from UP mainline | Canadian gas; 15-mile buried pipe from PGT pipeline | Canadian gas; 4.9 -mile buried pipe from Cascade pipeline |
| Employment (operating) | 115 | 26 | 26 |
| Variable cost | 14 mills/kWh | 11 mills/kWh | ≈11 mills/kWh |
| Total cost | ≈37 mills/kWh | ≈27 mills/kWh | ≈24 mills/kWh |
| Most serious environmental problem (a) | Air emissions | Anhydrous ammonia | Aqueous ammonia |
| $CO_2$ per million Btu (lbs.)<br>$CO_2$ per net kWh (lbs.) | 212<br>2.11 | 116<br>0.83 | 106<br>0.76 |

(a) According to plant managers; Office of Energy staff.
(b) A more costly cooling tower requiring ≈5 acres could substitute for the Boardman reservoir requiring 1,500 acres.
(c) The Boardman stack is the tallest self-supporting structure in Oregon; exceeding in height 1st Interstate and U.S. Bank towers in Portland, Oregon.
(d) Coyote Springs CT is planned as a two-unit facility, the second twin unit occupying no additional site land.

Sources: Northwest Regional Forecast of Power Loads and Resources, Pacific Northwest Utility Conference Committee, March 1996; plant managers and staff

they transmitted the electricity at high voltage to substations near the point of use, and they distributed the electricity to ultimate consumers. Because such vertical integration conferred special monopoly powers upon the electric utilities, Oregon enacted laws for economic regulation to protect the consumer from the kinds of abuse likely to arise in the presence of a natural monopoly. The Oregon Public Utility Commission ("OPUC") was formed to regulate pricing, promote system reliability and universal access to service, and to protect the public health and safety. Investor-owned electric utilities were granted exclusive service territories, the right of eminent domain to condemn property for utility purposes, and a guaranteed opportunity to earn a reasonable return on investment in exchange for their obligation to serve and to abide by regulatory orders of the OPUC, most particularly with respect to rates.

Though the investor-owned electric utilities serving in Oregon remain vertically integrated, still have exclusive service territories, and continue to be subject to OPUC regulation, significant change appears on the horizon. For example, with the exception of the Coyote Springs combined-cycle combustion turbine ("CCCT") plant brought into service by Portland General Electric in 1994, new generating facilities are being built by unregulated IPPs that sell their output to the utilities, directly to large industrial customers, or to a combination of utility and industrial customers. (It should be noted, in addition to contracting for its entire output, PacifiCorp has acquired a fifty-percent ownership interest in the Hermiston Generating Project, which is partially owned by a subsidiary of Pacific Gas & Electric Company; an affiliate of PacifiCorp has announced it will acquire a substantial interest in the proposed Klamath Cogeneration Project; and, an affiliate of Idaho Power Company holds a substantial interest in the proposed Hermiston Power Project. All of these projects are CCCTs.) Furthermore, sales from IPPs may be by long-term contract, through the wholesale market, or a combination of the two. Soon, it may no longer be true in every instance that the electric utilities that sell electricity to our homes and businesses will also generate and transmit that electricity.

Not all electric utilities are vertically integrated. Some, since their formation, have been distribution companies only. This condition is true of most peoples utility districts, cooperatives and municipal systems in Oregon. These entities take delivery of electricity generated and transmitted by others and distribute that electricity to their customers within designated service territories. Generally, these systems are customer-owned or publicly-owned and not subject to rate regulation by the OPUC. The way the investor-owned retail electricity vendors will operate in the future may resemble in some respects the way non-vertically integrated cooperatives and publicly-owned utilities have operated in the past.

***Characteristics of the Energy Facility Siting Law.*** The existing energy facility siting law has many features:

- It confers upon EFSC exclusive authority to approve or disapprove the development of central station generating facilities, high voltage transmission lines, gas pipelines,

nuclear waste storage facilities, and other defined energy facilities.

- It facilitates **one-stop permitting** by empowering EFSC to apply, in a single proceeding, the land use standards of affected local governments and the permitting standards of any state agency that would normally issue a permit for the facility (with the exception of permits issued by ODEQ under federally delegated programs). In addition to meeting the standards that any other similar industrial facility would have to meet, energy facilities must also meet the EFSC siting standards which are designed to address impacts of energy facilities that are not addressed by the standards of other state agencies or local governments.

- It enables applicants to elect whether to obtain land use approvals directly from the affected local government (Path A, as discussed more fully in the Report on Land Use Approvals, Appendix T) or to have EFSC conduct the land use review as part of the one-stop permitting process by applying the local standards (Path B, as discussed more fully in the Report on Land Use Issues, Appendix T). As with any other land use application, applicants may seek exceptions or variances from both local and applicable state standards. If an applicant elects to have EFSC determine compliance with local land use standards, local governments nevertheless have a defined role in the EFSC process. First, they have a formal role in determining what local standards ("applicable substantive land use criteria") apply to the proposal. Second, they make a formal recommendation to EFSC as to whether the proposal meets the applicable substantive land use criteria.

- It provides that for multiple jurisdictions or more than three land use zones within a single jurisdiction, EFSC may evaluate the land use impacts of a proposed facility under the statewide planning goals rather than under local land use standards.

- It provides that if local standards conflict with the rules of a state agency, EFSC may resolve the conflict consistent with the public interest.

- It gives EFSC power to act where local land use standards of one jurisdiction conflict with standards of another jurisdiction or state agency or where local standards were not designed in anticipation of energy facilities.

- In some cases, it allows for the application of more rigorous standards than would be required under regulations enforced by other state agencies.

- It empowers EFSC to "consider the costs of emission from energy facilities of gases that contribute to global warming" in determining whether there is a need for the proposed facility (a standard which is

currently not applied to other types of industrial facilities).

**B. General: Findings.** With respect to general issues affecting energy facility siting, the Task Force finds:

- Oregon's existing energy facility siting law was first enacted in the early 1970's and has been amended from time to time to address changing conditions.

- The energy industry is undergoing substantial change, in large part as a consequence of deregulation of much of the natural gas industry and the anticipated deregulation of the electric power industry.

- Large coal-fired and nuclear generating facilities are now rarely built.

- New generating facilities are generally smaller, cleaner, cheaper, more efficient, higher availability, shorter lead-time, combined-cycle gas turbine power plants.

- The extensive hydroelectric system which provides a large percentage of Northwest capacity now faces issues which may limit production at existing hydroelectric facilities and impede or prevent development of new hydroelectric facilities. Virtually all of the economically feasible and environmentally acceptable hydroelectric potential for generation of energy has been developed. New sources of electric energy may be required to supplement existing hydroelectric capacity.

- When Oregon's existing energy facility siting law was first enacted, there was emphasis on development of renewable energy as a means of addressing a perceived immediate shortage of nonrenewable resources and recognizing the importance of reducing reliance on ultimately finite resources. Conservation was emphasized to defer development of more costly new generation as well as to reduce waste and promote energy independence. Despite changes in the energy picture, the fundamental policy reasons for the state to continue promoting conservation and renewables still has merit. Currently, there is diminished use of these resources because of the low cost and perceived abundance of conventional energy resources. The cost effectiveness of conventional energy sources has improved as fuel costs have dropped and technology advanced, making conservation and renewables somewhat less attractive economically despite their own continued cost improvement.

- When the existing energy facility siting law was enacted, high-cost coal-fired and nuclear generating plants were the norm, and the use of natural gas for the generation of electricity was prohibited by the federal Fuel Use Act of 1978, subsequently repealed. The removal of that prohibition, coupled with increased gas availability, decreased gas cost and improved gas turbine efficiency, has

made gas-fired thermal generation attractive. (About the same time the Fuel Use Act of 1978 was enacted, the OPUC issued an order prohibiting new hookups for natural gas.)

- One-stop permitting provides a benefit for those wishing to site energy facilities in Oregon. The process requires compliance with all of the standards that would apply in the absence of one-stop permitting as well as the standards adopted by EFSC to apply specifically to energy facilities. One-stop permitting places the decision as to whether all of these standards have been met with a single agency, namely EFSC, thereby reducing the potential for conflicting application of standards and requirements. While one-stop permitting necessarily involves transferring decision-making to a single agency, local governments and state agencies provide advice and recommendations to EFSC. Spokespersons for EFSC state that EFSC has rarely, if ever, made a decision contrary to the advice of a local government or other state agency.

- When the existing energy facility siting law was first enacted, the world scientific community placed less emphasis on the climate altering potential of carbon dioxide emissions. Though scientists have not reached total agreement on the subject, there is growing concern that human activities may contribute to climate change and that the emission of carbon dioxide may be a significant contributor to that change. While Oregon's ability to influence this global issue may be limited, Oregon should do its share.

- Given the actions of Congress, the views of the Administration, in general, and the Federal Energy Regulatory Commission, in particular, and movement in other states, including our neighboring states, we might expect increasing reliance on competition and the marketplace to determine what energy facilities are built with correspondingly reduced reliance on economic regulation.

**C. General: Conclusions.** With respect to general issues affecting energy facility siting, the Task Force concludes:

- The energy industry is undergoing substantial change which is stimulating competition among energy suppliers.

- If the electric energy industry restructures itself along lines currently anticipated, it is likely that a single transmission system under an independent grid operator will remain subject to economic common-carrier monopoly regulation and that local distribution companies may be broken up into two components: regulated common-carrier monopoly distribution lines and unregulated competitive commodity vendors. It is unlikely that electric generation companies will remain subject to economic regulation in the future

when distribution and transmission have been separated from generation.

- Even if the electric energy industry does not restructure itself along the lines currently anticipated, the consuming public should benefit from competition among electric generation companies, provided adequate safeguards are in place to protect consumers, particularly residential consumers, from lack of competition and from unfair allocation of utilities' stranded investments.

- Oregon's existing energy facility siting laws were enacted when investor-owned utilities were vertically integrated and subject to pervasive regulation, these same utilities were predicting rapid growth in the need for new electric generating facilities, and the only viable options for significant generating plants were larger nuclear and coal-fired plants. While the investor-owned utilities remain vertically integrated and subject to pervasive regulation (though change seems imminent), growth in the demand for new generating facilities has not increased at anywhere near the rate originally expected, and cleaner, smaller, cheaper, more efficient, lower environmental-impact, shorter lead-time, higher availability, combined-cycle gas turbine generators now predominate as the new electric generating plant of choice. While the cost of fuel may increase or decrease, the efficiency can only improve. On the other hand, regulation to reduce or tax the emission of gases that contribute to climate change could reduce the economic advantages of gas-fired turbines, *vis-a-vis* non-fossil-fuel alternatives.

- Oregon's energy facility siting laws require limited modification to accommodate the changing environment and ensure that consumers realize the benefits likely to accrue from competition among electric generation companies while continuing the protections currently afforded through EFSC.

- Generally speaking, affected constituencies believe the existing energy facility siting laws require only minor modifications to accommodate changing conditions in the energy industry.

# V. POLICY

## A. Policy: Background

***Original Legislative Findings.*** Oregon's existing energy policy is predicated on legislative findings dating back to 1975. Those findings read as follows:

> ORS 469.010 **LEGISLATIVE FINDINGS.** The Legislative Assembly finds and declares that:
>
> (1) Continued growth in demand for nonrenewable energy forms poses a serious and immediate, as well as future, problem. It is essential that future generations not be left a legacy of vanished or depleted resources, resulting in massive environmental, social and financial impact.
>
> (2) It is the goal of Oregon to promote the efficient use of energy resources and to develop permanently sustainable energy resources. The need exists for comprehensive state leadership in energy production, distribution and utilization. It is, therefore, the policy of Oregon:
>
> (a) That development and use of a diverse array of permanently sustainable energy resources be encouraged utilizing to the highest degree possible the private sector of our free enterprise system.
>
> (b) That through state government example and other effective communications, energy conservation and elimination of wasteful and uneconomical uses of energy and materials be promoted. This conservation must include, but not be limited to, resource recovery and materials recycling.
>
> (c) That the basic human needs of every citizen, present and future, shall be given priority in the allocation of energy resources, commensurate with perpetuation of a free and productive economy with special attention to the preservation and enhancement of environmental quality.
>
> (d) That state government assist every citizen and industry in adjusting to a diminished availability of energy.
>
> (e) That energy-efficient modes of transportation for people and goods shall be encouraged, while energy-inefficient modes of transportation shall be discouraged.
>
> (f) That cost-effectiveness be considered in state agency decision-making relating to energy sources, facilities or conservation, and that cost-effectiveness be considered in all agency decision-making relating to energy facilities.
>
> (g) That state government shall provide a source of impartial and objective information in order that this energy policy may be enhanced.

***Oregon Energy Policy Statement.*** The energy policy statement incorporated in the statute reads as follows:

> ORS 469.310 **ENERGY POLICY.** In the interests of the public health and the welfare of the people of this state, it is the declared public policy of this state that the siting, construction and operation of energy facilities shall be accomplished in a manner consistent with the protection of the public health and safety and in compliance with the energy policy and air, water, solid waste, land use and other environmental protection policies of this state. It is, therefore, the purpose of ORS 469.300 to 469.570, 469.590 to 469.619, 469.930 and 469.992 to exercise the jurisdiction of the State of Oregon to the maximum extent permitted by the United States Constitution and to establish in cooperation with the Federal Government a comprehensive system for the siting, monitoring and regulating of the location, construction and operation of all energy facilities in this state.

**B. Policy: Findings.** With respect to policy issues affecting energy facility siting, the Task Force finds:

- The legislative findings and energy policies set forth in the existing law may have been appropriate for conditions at the time of enactment but, in some respects, would benefit from updating.
- Oregon energy policy currently requires that "cost-effectiveness" be considered in all agency decision-making relating to energy facilities.
- Under the existing energy facility siting law, EFSC is directed to conduct its business and render its decisions consistent with Oregon's energy policy, as are other state agencies.

**C. Policy: Conclusions.** With respect to policy issues affecting energy facility siting, the Task Force concludes:

- Energy policy choice will often involve tradeoffs among goals. It will be impossible, for example, to achieve lowest possible energy prices, improved environmental quality, and limited government intervention, all at the same time.
- Consideration of cost-effectiveness in EFSC decision-making relating to electric generating facilities would be inappropriate if the need standard is eliminated and the marketplace becomes a substitute for economic regulation. However, the role of the Oregon Public Utility Commission in promoting least-cost planning should not be modified with respect to facilities within its jurisdiction.
- Oregon's energy policy should be revised to reflect changes that have occurred and are occurring in the energy industry since enactment of Oregon's energy facility siting law. EFSC's broad charter requires it to conduct its business and render its decisions consistent with Oregon's energy policy. The foundation of that policy, which extends to other state agencies as well, is stewardship for present and future generations,

promotion of efficient use of energy resources, and development of permanently sustainable energy resources. These goals remain worthwhile. The Task Force believes that Oregon's energy policy should take into account the following objectives:

- **Deliver benefits of competition to our citizens in a way that continues to respect our environment and our quality of life.** To the extent practicable, the state should promote the transition to competitive energy markets. At the same time, the state should set and enforce environmental standards.

- **Promote reasonable and equitable access to energy and foster affordable prices, including all Oregonians.** The goal of universal access to energy products should be encouraged.

- **Address energy uncertainty.** A surprise-free energy future is unlikely. The state can play a role in reducing energy risks by coordinating contingency planning among utilities and other energy providers, and fostering a reasonable level of diversity of new energy resources.

- **Provide accurate energy information for consumers and producers.** Perfect competition assumes fully informed buyers and sellers. The state is uniquely qualified to provide reliable and convincing information on energy production and consumption, and energy efficiency savings. Acquiring energy data, inventorying resources, tracking trends, compiling costs, distributing information, etc., are appropriate government functions.

- **Ensure that consumers are afforded a free choice among energy sources, together with the opportunity to be fully informed about the environmental, social, and economic costs and benefits of such choices.** Consumers, with opportunities to be fully informed about material facts, should not be restricted in their choice of fuels or, to the extent feasible, in their choice of vendors.

- **Ensure honest dealings in energy products.** Trustworthy weights and measures are essential for the market to flourish. For example, the state should inspect and enforce accurate meter reading at the gasoline pump, the electricity meter and the gas meter, and otherwise protect against consumer fraud.

- **Mitigate or eliminate imperfections in the marketplace, including externalities.** Cost-effective conservation requires up-front capitalization and is handicapped because, unlike energy suppliers,

consumers face very high costs of capital. Although there has been progress in internalizing environmental costs, externalities (e.g., $CO_2$ and residual $SO_2$, $NO_X$ and particulates) persist. Additionally, to the extent feasible, the state has a role in internalizing externalities and developing mechanisms to deploy cost-effective conservation.

- **Encourage cost-effectiveness in state agency decision-making relating to energy sources, facilities or conservation.** With few exceptions, sound economics suggests that the acquisition of cost-effective energy resources be encouraged and that costs include social as well as private costs.

- **Encourage development and deployment of cost-effective conservation.**

- **Encourage development and deployment of cost-effective renewable resources.**

- **Improve energy system efficiency.**

**D. Policy: Recommendations.** With respect to policy issues affecting energy facility siting, the Task Force recommends:

**(1) Evaluate ORS 469.010 with a view to adopting more contemporary legislative findings that reflect changes that have occurred and are occurring in the energy industry since enactment of Oregon's energy facility siting law and resulting from implementation of recommendations contained in this report, particularly in light of EFSC's broad charter which requires it to conduct its business and render its decisions consistent with Oregon's energy policy. The foundation of that policy, which extends to other state agencies as well, is stewardship for present and future generations, promotion of efficient use of energy resources, and development of permanently sustainable resources. The Task Force believes Oregon's future energy policy should build on that foundation and take into account the following objectives, as well as other aspects of the existing statute:**

- **Deliver benefits of competition to our citizens in a way that continues to respect our environment and our quality of life**
- **Promote reasonable and equitable access to energy and foster affordable prices, including all Oregonians**
- **Address energy uncertainty**
- **Provide accurate energy information for consumers and producers**
- **Ensure that consumers are afforded a free choice among alternative energy sources, together with the opportunity to be fully informed about the environmental, social, and economic costs and benefits of such choices**
- **Ensure honest dealings in energy products**

- **Mitigate or eliminate imperfections in the marketplace, including externalities**
- **Encourage cost-effectiveness in state agency decision-making relating to energy sources, facilities or conservation**
- **Encourage development and deployment of cost-effective conservation**
- **Encourage development and deployment of cost-effective renewable resources**
- **Improve energy system efficiency**

**(2) Coupled with adoption of an interim statutory climate change standard and elimination of the need standard for proposed electric generating facilities, amend the existing energy facility siting law to clarify that economic need for new electric generating facilities should be shown by reliance on competition in the market and not by consideration of cost-effectiveness. This amendment should be accomplished in a manner that ensures state energy policy and the definition of cost-effectiveness continue to apply to decision-making other than the siting of electric generating facilities. Furthermore, this recommendation is not intended to alter the role of the Oregon Public Utility Commission in promoting least-cost planning with respect to facilities within its jurisdiction.**

# VI. NEED

## A. Need: Background

***Purpose.*** Among the many current standards adopted by EFSC, "need for the proposed facility" is the one standard subject to the greatest controversy. Initially, the need standard was intended to defer the construction of an energy facility until it could be shown that the output from the proposed facility was truly required, i.e., energy demand was threatening to exceed local energy supply. This standard appears to have served multiple purposes:

- The need standard served to ensure that proposed energy facilities were likely to be timely and cost-effective compared to other available alternatives. Historically, extremely costly investments in new energy facilities, such as the five large Washington Public Power Supply System nuclear projects in the State of Washington, have proven to be mistakes. EFSC's need standard was originated in part to protect against the recurrence of such mistakes for which the economic costs fall on society broadly.

- When the standard was adopted, power generating facilities were being built by investor-owned electric utilities which charged rates grounded in "rate base economics", i.e., what a utility could charge for a kilowatt-hour of electricity was a function of what that utility had prudently invested in its plant and equipment (the "rate base"). As a consequence, whenever a utility's cost of capital was lower than its authorized rate of return, the utility was motivated to invest as much as possible in plant and equipment. It was the job of the Oregon Public Utility Commission ("OPUC") to ensure that the utility's investments were prudent in light of its obligation to serve the customers in its allocated service territory, though OPUC normally made this determination in rate cases after construction of a facility. The EFSC need standard served as yet another check on the utility's natural tendency to add plant and equipment, thereby enlarging the rate base upon which its allowed returns were measured. But unlike OPUC, EFSC applied its standard before plant construction thereby preventing unnecessary development, the costs of which would be borne either by utility shareholders, or, to the extent the investments were found prudent, by ratepayers.

- Despite impressive improvements and best efforts to mitigate impacts, electric generating facilities adversely affect the natural environment. The development of generating facilities uses free but finite public resources (the commons), e.g., clean air, clean water, wildlife, and aesthetics, to the exclusion of other competing uses or to the detriment of other public values. The need standard served the

purpose of preventing construction of unnecessary electric generating facilities.

- Pursuant to statute, in adopting a need standard EFSC must "consider all of the costs of the emission from energy facilities of gases that contribute to global warming". Consequently, the need standard serves as a mechanism for controlling or offsetting the emission from energy facilities of greenhouse gases. However, EFSC is not required to adopt a need standard.

- When utilities were the only developers of new power supply, it was possible for the need standard to discourage new utility fossil fuel generation if cheaper conservation and renewable resources were available to meet end user demands. By requiring that new facilities be cost-effective compared to alternatives of conservation and renewable resources, among others, the need standard has indirectly "promoted" conservation and renewable resources.

- The need standard has served, albeit indirectly, as a way to encourage conservation and development of renewable resources where EFSC found a need for those kinds of resources. Developers of nuclear and fossil fuel-fired generating facilities would be required to satisfy the need standard while developers of geothermal, wind energy, solar energy, and biomass facilities, within certain limits, were relieved of the requirement to show need.

***The 500-Megawatt Exemption.*** As mentioned earlier, Senate Bill 951, in 1995, provided for a one-time-only, non-recurring, 500 Megawatt Exemption from the need standard for natural gas-fired facilities whose applications were deemed complete on or before July 1, 1997. By rulemaking, EFSC chose to award this exemption to an applicant (or applicants, in the event the winning applicant proposed a facility with capacity of less than 251 megawatts) proposing the facility (or facilities) causing the least environmental impact in a proceeding commonly referred to as the "Best-of-Batch" contested case (as discussed more fully in Appendix GG).

**B. Need: Findings.** With respect to need issues affecting energy facility siting, the Task Force finds:

- Oregon's energy facility siting law enables, though does not require, EFSC to adopt a standard with respect to the need for proposed energy facilities.

- Under EFSC's existing energy facility siting regulations, an applicant for a site certificate must show need for the power from an electric generating facility as a precondition to site certification. With limited exceptions (pertaining primarily to certain renewable energy facilities, high efficiency cogeneration facilities, and facilities proposing to sell their output to the Bonneville Power Administration), need for an electric generating facility

must be demonstrated by reference to an investor-owned utility's least-cost plan (or to a comparable demonstration for non-regulated publicly owned or customer-owned utilities). Satisfaction of this precondition to site certification is dependent, among other things, on a clear showing that energy demand threatens to overtake energy supply.

- In an open and competitive market, it is unlikely developers would continue for long to build excessive electric generating facilities for which there is no market. Developers of excessive capacity should suffer the same harsh economic consequences that await any business producing a good or service that cannot be sold. The state should continue to protect the interests of the public through standards that limit how long such facilities can tie up air, land, water, and other resources and that ensure restoration of sites that are no longer used or useful. In addition, the state should control enforcement of environmental standards and economic regulation of monopoly components of the energy business. It should not attempt to shield developers from their right to guess wrong and suffer the financial consequences.

- We have not yet transitioned to an open and competitive market.

- Under the current energy facility siting law, it is in adoption of the need standard that EFSC must "consider all of the costs of the emission from energy facilities of gases that contribute to global warming".

- Competition among energy suppliers, particularly development of "merchant" plants supplying the wholesale market, is impeded so long as the development of new generating facilities is conditioned on a showing of need for the facilities.

- The Oregon Public Utility Commission, which has primary responsibility for consumer protection and system reliability, has concluded that the need standard no longer serves a useful purpose. In a letter to the Task Force dated June 6, 1996 (the full text of which appears at Appendix L), the three commissioners reached many of the same conclusions the Task Force has reached with respect to the changing energy environment. The following excerpts from that letter are illuminating:

  > ". . . the bulk power supply market has transformed itself considerably. No longer are utilities constructing large central station generating facilites. Smaller units, for the most part developed by third parties, are being deployed. With shorter lead times, utilities are able to remain more flexible in their planning for new power supplies to serve customers. If supply contracts are structured appropriately, the financial risk associated with potentially

unnecessary power supply facilities is lessened.

" . . . the tendency now is for market forces to heavily influence decisions regarding new power supply facilities. These market forces have come about primarily through the persistence of low natural gas costs, enabling independent parties to construct and operate new generation facilities at relatively low prices. Therefore, utility avoidance of large-scale central generation facilities, the financial risk of uneconomic decisions, the Commission's own planning review activities and market forces all lead to a process that will bring on new power supplies as they are 'needed.' In concert, these factors will adequately protect customers of Oregon electric utilities from any negative effects of excess power supplies. Therefore, we no longer see a purpose for a 'need for power' standard."

**C. Need: Conclusions.** With respect to need issues affecting energy facility siting, the Task Force concludes:

- Among the many standards EFSC may adopt, the standard which requires applicants for site certificates to demonstrate the proposed energy facility should be built because demand for energy threatens to exceed supply is the one standard which is no longer entirely appropriate. If Oregon's energy consumers are to derive benefits from price competition among energy suppliers, the need standard, as it applies to the development of electric generating facilities, should be eliminated, and the economic costs and risks of energy facility development should be placed upon investors through market mechanisms, as is the case with other industries.

- EFSC has and should continue to have authority to adopt standards, as necessary, to accommodate other purposes formerly served by the need standard, including but not limited to system reliability or stability and protection of the public resources.

- Elimination of the need standard as it relates to electric generating facilities should not have the effect of modifying OPUC's role in promoting least-cost planning with respect to facilities within its jurisdiction.

**D. Need: Recommendations.** With respect to need issues affecting energy facility siting, the Task Force recommends:

**Coupled with amendment of the existing energy facility siting law to adopt an interim statutory climate change standard, amend the existing energy facility siting law to eliminate the standard relating to need for proposed electric generating facilities, while retaining the need standard for all other types of energy facilities.**

# VII. CLIMATE CHANGE AND OTHER STANDARDS

## A. Climate Change and Other Standards: Background

***Existing Standards.*** The statute requires EFSC to adopt standards applicable to the siting of energy facilities. Those standards may address, but need not be limited to, the following subjects:

- Organization, managerial, and technical expertise of the applicant
- Seismic hazards
- Protected areas, including monuments, wilderness areas, wildlife refuges, and scenic waterways
- Financial ability and qualifications of the applicant
- Fish and wildlife, including threatened and endangered fish, wildlife or plant species
- Historic, cultural or archaeological resources
- Public health and safety
- Nuclear waste accumulation, storage, disposal and transportation
- Recreation, scenic, and aesthetic values
- Suitability of local infrastructure
- Need for the proposed facility
- Compliance with statewide planning goals adopted by LCDC
- Soil protection

Despite language granting EFSC latitude to adopt standards in addition to or in lieu of those expressly set forth in the statute, SB 951 prohibits EFSC from adopting any standard on any subject not expressly set forth in the statute until adjournment of the 1997 Legislature.

***Climate Change.*** Under the existing statute, it is in discretionary adoption of a need standard that EFSC must "consider all of the costs of emission from energy facilities of gases that contribute to global warming".

## B. Climate Change and Other Standards: Findings.

With respect to climate change and other standards issues, the Task Force finds:

- The existing energy facility siting law addresses comprehensive standards applicable to the siting of energy facilities in the public interest.

- There is reasonable scientific basis for concern that emissions of $CO_2$ are contributing to global climate change and that fossil fuel electric generation is a significant source of $CO_2$ emissions. Oregon currently relies in some measure on older fossil fuel electric generation in other states with relatively low levels of efficiency and correspondingly high levels of $CO_2$ emissions. Recognizing that effects from fossil fuels on climate change is a global and national issue, Oregon can nevertheless use the process of siting electric generating facilities to encourage the use of non-fossil fuel generation technologies and efficient fossil fuel generation technologies to stabilize or reduce the impact our

energy use may have on global climate change. This objective can be advanced by adopting a climate change standard expressed as a limit on $CO_2$ emissions from new generating facilities.

- The 500 MW Exemption competition was an illuminating exercise which produced considerable evidence with respect to useful measures for controlling, offsetting, sequestering, or compensating for $CO_2$ emissions from electric generating facilities.

- The Klamath Cogeneration Project was winner of the 500 MW Exemption competition on showing to EFSC's satisfaction that by implementation of a series of $CO_2$ offsets and mitigation measures, it would emit less $CO_2$ per kilowatt hour generated than the other projects competing for the exemption.

- If the law is amended to eliminate the need standard, then the requirement that in discretionarily adopting a need standard EFSC "consider all of the costs of the emission from an energy facility of gases that contribute to global warming" should be addressed in some other form. If effects of carbon dioxide emissions on climate change are to be considered, it may be necessary to provide for the statutory adoption of a specific standard with respect to carbon dioxide emissions. EFSC may also need to develop additional standards to address policy issues previously addressed through the need standard, such as system reliability, system stability, and protection of public resources.

**C. Climate Change and Other Standards: Conclusions.** With respect to climate change and other standards issues, the Task Force concludes:

- With the exception of the need standard, the standards set forth in the existing energy facility siting law should continue to apply to all applicants for site certificates and EFSC has and should continue to have authority to adopt new standards as conditions warrant.

- In addition to the standards set forth in the existing energy facility siting law, the statute should be amended to adopt a new standard addressing emissions from electric generating facilities of gases that may contribute to climate change. Such a standard should be no less demanding than the standard which applied to the Klamath Cogeneration Project, winner of the 500 MW Exemption proceeding, and should be expressed as a limit on allowable emissions of $CO_2$ per unit of energy generated, adjusted to account for supplemental non-combustion generation, supplemental biomass generation, $CO_2$ sequestration, $CO_2$ offsets, conservation, use of wasted energy sources, and energy efficiency enhancements, including cogeneration, peaking, and hydro-firming.

- Oregon should seek to ensure that the environmental costs and risks of energy facility development are properly borne by energy producers and their customers and that proper price signals are transmitted to ultimate consumers. Although climate change is a global issue of national and worldwide concern, and will be overwhelmed by what happens elsewhere on the planet rather than in Oregon, it is appropriate that emissions that may contribute to climate change be addressed through adoption of a specific state standard, if for no other reason than to signal to the world that Oregon is prepared to do its fair share.

## D. Climate Change and Other Standards: Recommendation.

With respect to climate change and other standards issues, the Task Force recommends:

**Coupled with amendment of the existing energy facility siting law to eliminate the need standard for proposed electric generating facilities, amend the existing energy facility siting law to adopt a statutory climate change standard to be applied in siting natural gas fired generating facilities[3] expressed as a reduction of $CO_2$ emissions of 17% below the emissions of the most efficient, combined cycle, combustion turbine, gas fired plant commercially demonstrated and operating in the United States (currently 7200 BTUs per kWh, new and clean). The percentage and the initial standard (0.70 net pounds of $CO_2$ per kWh[4] at an assumed 100% capacity factor) would be established in the statute. The statute would provide that the Energy Facility Siting Council ("EFSC") could not change the reduction of $CO_2$ emissions percentage to be applied. EFSC could change the net $CO_2$ per kWh standard after two years by finding that there is a new, more efficient plant in commercial use in the United States. Furthermore, EFSC should develop standards for other types of fossil fuel plants using the principles set forth below as a foundation for setting those standards.**

Ways to Meet the Standard

1. **The standard can be met by any combination of efficiency, cogeneration or offsets from offsite mitigation that reduce emissions to the allowable standard.**

2. **Offsets may be demonstrated either through a "Performance Path" or through a "Monetary Path."**

   A. Performance Path
   **Under this path, the applicant would propose certain**

[1] "A natural gas fired facility means a facility that is intended to be fueled by natural gas except for infrequent periods when the natural gas supply is interrupted. [OAR 345-23-000(7) July 1994]

[2] The calculations assume that there are 117 pounds of $CO_2$ per million Btu of natural gas fuel.

**mitigation projects and would have to demonstrate the reduction in emissions it would produce. The site certificate condition would require implementation of the offset projects, but would not require actual achievement of the emission reduction. If EFSC finds in the siting process that the offset projects are inadequate to meet the standard, the applicant may fall back on the monetary path.**

**B. Monetary Path**

**Under the monetary path, the applicant would pay into a fund an amount of money deemed to pay for the offsets it needs to meet the standard. The statute would set the interim rate of $0.57 per ton of $CO_2$ for purchasing offsets through this Monetary Path. EFSC would have authority to adjust the monetary offset rate up or down after three years based on empirical evidence of the cost of $CO_2$ offsets from projects and a finding that the standard will be economically achievable. Following the initial three year period, EFSC may adjust the rate up or down no more than 50% in any two- year period.**

**Once the applicant's site certificate is approved based on the monetary path, the applicant's payment would not be adjusted based on the actual performance of the projects funded with the money. The offset projects may reduce emissions beyond what was required for the plant to meet the standard or may not achieve the reduction in emissions needed to meet the standard. Either way, the applicant is not affected.**

**The details of the administrative management of the fund and of the process for allocating the moneys to projects should be determined by statute and administrative rule guided by the principles set forth below. The applicant should be allowed to participate in the process.**

**Principles to be met by the Climate Change Standard For New Fossil Fuel Generating Facilities**

1. **Promote plant fuel efficiency.**
2. **Promote efficiency in the resource mix.**
3. **Reduce net $CO_2$ emissions.**
4. **Promote cogeneration that results in $CO_2$ offsets.**
5. **Provide an incentive for innovative technologies and creative approaches to mitigating, reducing and avoiding $CO_2$ emissions.**
6. **Minimize transaction costs, making it easy to do either path.**
7. **Monetary offset rate under the monetary path should be set at a rate reflective of what could**

**reasonably be expected to be achieved by available third party mitigation offsets.**

8. **Provide certainty on what mitigation is actually being implemented.**
9. **Provide a point of certainty for issuing the site certificate, allowing construction of the plant to go forward, while the mitigation measures are being obligated/implemented.**
    a. **Review of mitigation actions under either path should not jeopardize the validity of the site certificate.**
    b. **A decision against the applicant on a performance path appeal would, at worst, kick the applicant into the monetary path.**
    c. **Create a wall between the review of the mitigation under the monetary path and the siting process; provide a mechanism for public interests to review what is being accomplished in the mitigation.**
10. **Allow either the applicant or third parties to implement the mitigation.**
11. **The process for changing or updating the standard must be specifically spelled out in the statute, with boundaries and criteria for the change. Allow EFSC to update the standard in a specific way that is bounded by statutory criteria based on how the initial number was created and evaluated.**
12. **There should be no change sooner than two years after the statute is enacted.**
13. **This standard is not intended to block/stop power generating plants from building in Oregon. The standard should be attainable and economically achievable.**
14. **Mitigation project proposals should have an accountable public review and input at various stages. The public review process of mitigation project proposals should not unreasonably lengthen the time of the implementation of the mitigation projects.**
15. **Implementation of the mitigation projects must correspond in some way with the emissions from the plant.**
16. **Provide for monitoring and evaluation of mitigation program performance.**

# VIII. TYPES OF FACILITIES

## A. Types of Facilities: Background

***Types of Facilities Subject to EFSC Jurisdiction.*** Oregon's energy facility siting process consolidates within EFSC exclusive authority to issue a site certificate upon review and approval of an application for the siting of an energy facility as defined in ORS 469.300. The site certificate is the grant of a conditional right to site, construct, operate, and retire an energy facility, and no energy facility not specifically exempted from the requirement to obtain a site certificate may be constructed or expanded in Oregon without having first obtained a site certificate. Energy facilities include:

- Electric generating plants ≥25 megawatts
- Electric transmission lines ≥230 kilovolts and ≥10 miles in length
- Natural gas pipelines ≥16 inches in diameter and ≥5 miles in length
- Petroleum pipelines ≥6 inches in diameter and ≥5 miles in length
- Radioactive waste disposal sites
- Surface facilities related to underground natural gas storage facilities
- Large synthetic fuel production facilities (including refineries)
- Liquified natural gas storage facilities

## B. Types of Facilities: Findings.

With respect to types of facilities issues affecting energy facility siting, the Task Force finds:

- Any **electric generating** facility that would produce 25 megawatts or more (with the exception of a high efficiency cogeneration facility) is subject to site certification. In California and Montana, the comparable threshold is 50 megawatts. In Washington, the threshold is 250 megawatts. While Oregon's threshold may be low in comparison to its neighbors, it is arguable that exempting high efficiency cogeneration facilities from the site certification requirement could have the salutary effect of promoting development of energy efficient facilities. Furthermore, generating facilities between 25 and 50, 100, or even 250 megawatts that do not meet the high efficiency criteria are likely to have significant impacts and therefore should require EFSC review.

- Any **solar collecting** facility that would occupy 100 acres or more is and should be subject to site certification.

- Any **transmission line** that would be more than 10 miles in length with a capacity of 230 kilovolts or more to be constructed in more than one city or county is and should be subject to site certification.

- Any **natural gas pipeline** that would be at least 16 inches in diameter and 5 or more miles in length, whether or

not it is to be constructed in more than one city or county, is and should be subject to site certification.

- Any **crude petroleum, liquified natural gas, or liquid geothermal energy pipeline** that would be at least 6 inches in diameter and 5 or more miles in length, whether or not it is to be constructed in more than one political subdivision, is and should be subject to site certification.

- What distinguishes energy facilities from other industrial facilities not subject to state level siting regulation is not so much that they cause greater, lesser or different impacts but that they will be interconnected with a complex system the reliability and efficiency of which must be maintained for the public benefit and may be built in more environmentally sensitive areas.

## C. Types of Facilities: Conclusions.

With respect to types of facilities issues affecting energy facility siting, the Task Force concludes:

- The types of facilities subject to EFSC jurisdiction under the existing energy facility siting law should remain unchanged.

# IX. SCOPE OF AUTHORITY

## A. Scope of Authority: Background

***Supersiting Authority and Coordination With Local Government and Other State Agencies.*** The existing energy facility siting law confers upon EFSC broad authority to regulate the siting of defined energy facilities. Concurrent with that authority is the requirement that EFSC apply the standards and regulations of state and local agencies that would normally apply to such facilities in the absence of one-stop permitting. The one-stop permitting process changes who makes the ultimate decision as to whether these standards and regulations are met. It does not alter the substantive requirements except where linear facilities pass through more than one jurisdiction or more than three land use zones in any one jurisdiction. In that circumstance, EFSC may choose not to apply local land use laws and instead apply statewide planning goals.

***One-Stop Permitting.*** The existing energy facility siting law makes available to applicants a "one-stop" permitting forum. In considering an application for a site certificate, EFSC evaluates the applicant's ability to comply with permitting requirements of other state agencies and local governments. EFSC's determinations with respect to such compliance then become binding on the affected state agencies or local governments, as provided at ORS 469.401(3).

**B. Scope of Authority: Findings.** With respect to scope of authority issues affecting energy facility siting, the Task Force finds:

- EFSC provides a one-stop permitting forum for applicants seeking to site energy facilities. In evaluating applications for site certificates, it is EFSC that determines whether an applicant has demonstrated compliance with permitting requirements normally administered by local governments and other state agencies. While EFSC consults with such local governments and other agencies during evaluation of the application, its final decision is binding on all affected agencies and localities. [NOTE: This authority does not extend to air quality and water quality permits normally issued by ODEQ under federally delegated programs because federal law delegates those responsibilities to designated state agencies other than EFSC.]

- While there may be some dispute about the appropriateness of EFSC's "supersiting" authority which preempts or binds cities, counties and state agencies, there is no dispute whatever that EFSC should have such authority with respect to two matters: (1) linear energy facilities, such as pipelines and transmission lines, traversing two or more cities or counties, and (2) radioactive waste for which no other state agency or local jurisdiction exercises authority.

The argument that such authority should also extend to energy facilities whose impacts are indistinguishable from other industrial facilities may be less compelling but has been rationalized on the basis that some energy facilities will be interconnected with a complex system the reliability, stability and efficiency of which must be maintained for the benefit of all users. (See Table 3, Land Use Comparison, prepared by Cogan Owens Cogan for inclusion in the *Energy Facilities Siting Task Force: Report on Land Use Issues,* for a depiction of the relative impacts of various types of industrial and commercial facilities, including a modern 500-megawatt thermal generating facility.)

- Some local jurisdictions may not possess the expertise to review and approve certain types of energy facilities, particularly wind energy facilities regardless of size. The Association of County Planning Directors has suggested the Office of Energy could help alleviate this problem by developing a model energy facility siting ordinance for use by local governments.

## B. Scope of Authority: Conclusions

With respect to scope of authority issues affecting energy facility siting, the Task Force concludes:

- EFSC should continue to provide for developers of energy facilities under its jurisdiction a one-stop permitting forum, taking into account the concerns of all affected local governments and other state agencies. Furthermore, developers should retain the option to elect Path A (land use decision at the local level) or Path B (land use decision by EFSC on application of substantive land use criteria of the local government). Oregon's land use planning process has reached a level of maturity not present when EFSC was created. Current statutes define a unique relationship between EFSC authority and local government planning responsibilities. When an applicant elects Path B and an application for Site Certificate is submitted to EFSC, the affected local jurisdictions submit to EFSC their "applicable substantive criteria". This allows the local jurisdictions to have significant control over land use while allowing the centralized siting process to include local substantive land use criteria. This appears to the Task Force to be a good compromise between the importance of local land use criteria and the state's desire for a comprehensive expedited review. It also signals to local jurisdictions that if they wish to optimize their impact on the siting process, they should focus on ensuring that their local land use plans accurately reflect local interests and priorities. EFSC should retain the authority to override local land use laws and instead apply statewide planning goals with respect to energy facilities.

- Because some local jurisdictions may not possess the expertise to review and approve certain types of energy

facilities, the legislature should require and fund development of a model energy facility siting ordinance for use by local governments in sitingenergy facilities. This function should be coordinated by EFSC, involving appropriate state agencies as well as city and county representatives.

## D. Scope of Authority:

**Recommendation.** With respect to scope of authority issues affecting energy facility siting, the Task Force recommends:

**Require and fund development of a model energy facility siting ordinance for use by local governments in siting energy facilities. This function should be coordinated by EFSC, involving other appropriate state agencies as well as city and county representatives.**

## TABLE 3

### Land Use Comparison
### Oregon Department of Energy State Energy Facility Siting Task Force

| Facility | Size | Cost | Zoning | Number of Employees | Typical Impacts | State/Federal Coordination | Local Land Use Approval |
|---|---|---|---|---|---|---|---|
| Electronics Manufacturing Plant<br>Example: Sony Optical Systems Plant, Springfield | 334,000 sq. feet 38.64 acres | $51 million | Campus Industrial - allowed use | 400 | Parking (800 spaces required); impervious surface impacts; point source and non-point source emissions | Lane Regional Air Pollution Authority; OEDD (grants); utilities | Permitted outright; site plan review |
| Paper/Pulp Plant<br>Example: Port Townsend Paper, St. Helens (applied for permit but did not locate) - estimates | 10 - 40 acres | $200 - $800 million | Heavy Industrial | 400 - 800 | Traffic; water quality; air quality; hazardous materials impacts; other potential off-site impacts as identified | Water and air pollution permits (DEQ); federal permits through DEQ | Conditional use permit required for facilities requiring state permits; site design review |
| Regional Shopping Center<br>Example: Washington Square | 50 - 60 acres 1.2 million sq. feet | $100 + million * | General Commercial | 1,200 - 2,000 (seasonal changes) | Traffic: 8.5 million cars per year | Potential effects on air quality in a non-attainment area | Permitted outright; site plan review |
| Sanitary Landfill<br>Example: Deschutes County proposed new landfill | 80 - 150 acre footprint on 350 acre site | $6 million - first cell; built-out could exceed $50 M. | Best potential sites located in Surface Mining Zone (SM) | 7 - 8 | Potential impacts to sensitive wildlife species; air and water quality effects; traffic a non-issue due to isolated location | DEQ water quality, operating permits required | Requires conditional use permit in EFU or zone exception in SM zone |
| Food Processing Plant<br>Example: Specialty Foods, Morrow Co. | 30,000 sq. feet; 12 acres | $1 - 1.5 million | Industrial - allowed use | 12 - 80 (depending on season) | Traffic impacts on high-speed road - required turning lane; water availability; odor | None | Permitted outright |

* if built today

Source: *Report on Land Use Issues*, Cogan Owens Cogan, June 20, 1996

## TABLE 3 (cont.)

| Facility | Size | Cost | Zoning | Number of Employees | Typical Impacts | State/Federal Coordination | Local Land Use Approval |
|---|---|---|---|---|---|---|---|
| Sewage Treatment Plant<br>Example: City of McMinnville | 14 acres | $33.6 million | Yamhill County Exclusive Farm Use (EFU 40) | 14 - 20 | Clean Water Act requirements on impacts to wetlands, groundwater and sensitive species | Permitted through DEQ and required to reduce phosphorous discharges into Yamhill River, met federal guidelines | Conditional use with county Planning Director approval; hearing upon request - none requested |
| 500 Mw Thermal Generating Facility<br>Example: Hermiston Generating | 17 acres | $300 (±) million (est.) | Industrial | 26 | Air quality, aesthetic impacts | Federal clean air act through DEQ permit requirements | Conditional use permit |

Information Sources:

1. Electronics Manufacturing Plant: City of Springfield Economic Development Planning staff
2. Paper Plant: No paper or pulp mills have been sited or constructed in Oregon during the last ten years. Information is based on proposed Port Townsend paper and existing Boise Cascade pulp plants, obtained from DEQ and City of St. Helens planning personnel.
3. Regional Shopping Center: Washington Square General Manager.
4. Sanitary Landfill: Deschutes County Solid Waste Department.
5. Food Processing Plant: Port of Morrow.
6. Sewage Treatment Plant: City of McMinnville planning and engineering staff.
7. Thermal Generating Facility: Pacific Energy Systems

Source: *Report on Land Use Issues,*
Cogan Owens Cogan, June 20, 1996

# X. PROCESS FOR REVIEW AND APPROVAL

## A. Process for Review and Approval: Background

***Notice of Intent.*** Generally, an applicant for a site certificate must first file with EFSC a **notice of intent** to file an application for site certificate. The notice of intent must contain sufficient detail to enable EFSC to issue a public notice describing the proposed site and facility and to enable OOE to prepare a **project order** establishing the statutes, administrative rules, EFSC standards, local ordinances, application requirements and study requirements to be addressed in the site certificate application. After filing of the notice of intent, publication of the public notice, and receipt of comments in response to the public notice, but prior to issuance of the project order, OOE may hold a pre-application conference with state agencies and local governments that have regulatory or advisory authority respecting the proposed facility. The project order is then issued as a means of providing the applicant with specific guidance on the required contents of the application for site certificate.

***Application for Site Certificate.*** After issuance of the project order by OOE, **application** to EFSC for a site certificate may be made. Copies of the notice of intent and application are forwarded, accompanied by a deadline for comments and recommendations, to the following:

- Department of Environmental Quality
- Water Resources Commission
- State Fish and Wildlife Commission
- Water Resources Director
- State Geologist
- State Forestry Department
- Public Utility Commission
- State Department of Agriculture
- Department of Land Conservation and Development
- Any other state agency that has regulatory or advisory authority with respect to the proposed facility
- Any city or county affected by the application

After consideration by all affected state agencies, cities and counties within the specified deadlines, and after completion of its own review, OOE determines whether the **application is complete** and notifies the applicant of that determination. If OOE determines that the application is complete, OOE notifies the applicant and issues a public notice announcing its determination of completeness. That is when a clock starts ticking on the time within which EFSC must approve or reject an application (see *Deadlines* below).

***OOE Issuance of Draft Proposed Order and Public Hearing.*** Based on its review of the application for site certificate and comments and recommendations received from state agencies, cities and counties, OOE will issue a **draft proposed order** on the application. EFSC will then schedule one or more **public hearings** on the application in the affected area and elsewhere, as it determines necessary, and issue a public notice describing the date, time and location of the

hearings, describing the proposed facility and its anticipated effects, including other housekeeping details, and notifying the public that "failure to raise an issue in person or in writing prior to the close of the record of the public hearing with sufficient specificity to afford the decision maker an opportunity to respond to the issue precludes consideration of the issue in a contested case." ORS 469.370(2)(e). In other words, any person, other than the applicant, wishing to participate as a party in the contested case with respect to the application for site certificate must raise the pertinent issue and make that issue a matter of public record during the public hearing(s) on the application.

***OOE Issuance of Proposed Order and Contested Case Hearing.*** After its review of the application, the draft proposed order, and any testimony given at the public hearing(s), and after consulting with other affected agencies,al or rejection of the application. OOE will then issue a public notice of the proposed order and **contested case** hearing. That notice will set a date for the prehearing conference and specify a deadline for requests to participate as a party [though that invitation will extend only to persons who raised pertinent issues prior to close of the record for the public hearing(s)]). If no person requests party status to challenge OOE's proposed order, that proposed order will be forwarded to EFSC and the contested case hearing will be concluded. If any person who raised an issue during the public hearing(s) requests party status, EFSC will conduct a contested case hearing on the application. Pursuant to ORS 469.370(5), issues that may be the basis for a contested case hearing are limited to those raised on the record of the public hearing(s), unless:

- OOE failed to perform its duties with respect to issuance of public notice and notification to prospective parties of requirements pertaining to achieving party status as set forth in ORS 469.370(2) and 469.370(3).

- The action recommended in OOE's proposed order, including any recommended conditions of the approval, differs materially from the action recommended in OOE's draft proposed order, in which case only new issues related to such differences may be raised.

After conclusion of the contested case, EFSC will issue a **final order** approving or rejecting the application based on its own standards, and any other statutes, rules, or local ordinances determined to be applicable to the proposed facility in the project order. Approval results in issuance of a **site certificate**. EFSC may also amend or reject the proposed order, provided it gives public notice of its hearing to adopt a final order and provides to the applicant and any party an opportunity to comment on material changes to the proposed order or material changes to conditions of approval resulting from EFSC's review. EFSC's order approving or rejecting the application is a final order for purposes of appeal.

***Deadlines.*** EFSC must approve or reject an application for site certificate within the following periods following the date on which the application is filed (the date on which OOE notifies the applicant its application has been found complete):

- 24 months for a nuclear installation or thermal power plant (other than a combustion turbine power plant or geothermal-fueled power plant) with a name plate rating greater than 200 megawatts
- 9 months for a combustion turbine power plant, geothermal-fueled power plant, or underground storage facility for natural gas
- 6 months for expansion of an existing industrial facility to include an energy facility, expansion of an existing energy facility to achieve a nominal electric generating capacity of between 25 and 50 megawatts, or addition of injection or withdrawal capacity to an existing underground storage facility for natural gas
- 12 months for any other energy facility

EFSC must provide expedited processing of an application for site certificate for an electric energy facility with a generating capacity of less than 100 megawatts at the request of the applicant. In such a case, the applicant does not file a notice of intent but instead files a request for **expedited review**. Upon approval of that request, OOE will issue a project order, and, if there are no persons requesting party status in the contested case, EFSC will approve or reject the application with 6 months after it is filed. If there are persons requesting party status, EFSC will approve or reject the application within 9 months after filing.

EFSC's failure to comply with these deadlines "shall *not* result in the automatic issuance or denial of a site certificate". ORS 469.370(11)

EFSC is required to specify in the site certificate the date by which construction of the proposed facility must begin. Furthermore, before construction of a thermal power plant may begin, the applicant must show evidence of a sales contract with an energy supplier or suppliers for at least 80-percent of the output from the proposed energy facility (above and beyond that portion of the output to be used by the applicant). ORS 469.370(12)

The statute also provides that if the proposed energy facility has been or will be reviewed by a federal agency under the National Environmental Policy Act, EFSC will conduct its site certificate review, to the maximum extent feasible, in such a way as to be consistent with and not to duplicate the federal agency review. ORS 469.370(13).

**B. Process for Review and Approval: Findings.** With respect to process for review and approval issues affecting energy facility siting, the Task Force finds:

- The process for review of a site certificate application is initiated upon issuance by OOE of a project order in response to the applicant's notice of intent to file an application or the applicant's request for an expedited review. The project order is intended to identify all of the standards and applicable local and state ordinances and regulations, together with the agencies ordinarily responsible for administration of those ordinances and regulations, to be addressed in the application for site certificate.

- The statutory deadlines for processing an application for site certificate do not become operative until OOE finds the applicant has responded to all state and local regulations identified as applicable to the proposed facility in the project order. Some industry representatives have taken the position that this "determination of completeness" may take longer than necessary. This complaint may stem from inconsistencies between the standards and the guidelines communicated to applicants under OAR 345, Division 21, Contents of Application. The clock starts ticking with OOE's determination of completeness, and a premature determination could result in inadequate information in the record on which to base findings sufficient for approval of an application. Alternatively, by taking longer to determine completeness, and preventing the start of the clock ticking, applicants may feel pressured to make concessions they would otherwise not make to avoid further delay in site certification.
- The existing energy facility siting law imposes upon EFSC certain guidelines and deadlines with respect to review and approval or rejection of an application for site certificate. The statute is silent however on the effect of EFSC's failure to act within the allotted time (other than to set forth explicitly that such failure "shall not result in automatic issuance or denial of a site certificate".
- ORS 469.370 requires that 80% of the output from a proposed thermal generating facility be under contract prior to commencement of construction.

**C. Process for Review and Approval: Conclusions**. With respect to process for review and approval issues affecting energy facility siting, the Task Force concludes:

- Some industry representatives have complained that OOE may hold up the processing of an application for site certificate by its failure to find the application complete in a timely fashion. However, imposing upon OOE some deadline within which it must find completeness may only place applicants in the position of finding their applications must be denied because they contain inadequate information on which to base necessary findings. The Task Force concludes this complaint stems more from a lack of clarity and precision in what the applicant understands to be required in order to file an application, a possible deficiency in the regulations set forth in OAR 345, Division 21, Contents of Application. Furthermore, it should be noted there will always be tension between applicants and staff in arriving at a completeness decision. Therefore, this matter may be best addressed by encouraging EFSC to amend the guidelines in Division 21 to ensure that applicants are provided with clear and precise guidance as to the content of an acceptable application for site certificate.

- In the absence of a need standard, the requirement that 80% of the output from a proposed thermal generating facility be under contract prior to commencement of construction should be eliminated.

**D. Process for Review and Approval: Recommendation.** With respect to process for review and approval issues affecting energy facility siting, the Task Force recommends:

**Coupled with adoption of an interim statutory climate change standard and elimination of the need standard for proposed electric generating facilities, amend the existing energy facility siting law to eliminate the requirement that at least 80% of the output from a proposed thermal generating facility be under contract prior to commencement of construction.**

# EXHIBIT I

# CONCEPTUAL FRAMEWORK AND RECOMMENDATIONS FOR A CLIMATE CHANGE STANDARD TO BE APPLIED IN SITING NATURAL GAS FIRED GENERATING FACILITIES INTENDED FOR BASE LOAD USE

# MEMORANDUM

October 18, 1996

TO: **OREGON ENERGY FACILITY SITING TASK FORCE**

FROM: **Statutory Climate Change Standard Working Group Members**

Oregon Office of Energy
- Philip Carver
- Mike Grainey
- Sam Sadler
- David Stewart-Smith

PacifiCorp - Bill Edmonds
Stoel, Rives, for PacificCorp - Margaret Kirkpatrick

NW Environmental Advocates - Eugene Rosalie
Portland General Electric - Robert Hall
Renewable Northwest Projects - Peter West
U.S. Generating Co. - Peter Evans
Ball, Janik, for U.S. Generating Co. - Richard Whitman

**Observers:**

Northwest Power Planning Council
- Ken Corum
- Jeffrey King

Northwest Natural Gas Co. - Michael Hayward
EFSC - Steven Schell
Pacific Energy Systems - John Larson

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The above named members, who participated in this Working Group, are pleased to submit to you the following recommendation for a statutory climate change standard. This recommendation was adopted by a complete consensus of the working group listed above.

**Conceptual Framework And Recommendation For A Climate Change Standard to Be Applied in Siting Natural Gas Fired Generating Facilities[5] Intended for Base Load Use**

*The EFSC should develop standards for other types of fossil fuel plants using the principles cited in this report as a foundation for setting those standards.*

**The Standard to Meet**

1. Amend the existing energy facility siting law to adopt a statutory climate change standard expressed as a reduction of $CO_2$ emissions of 17% below the emissions of the most efficient, combined cycle, combustion turbine, gas fired plant commercially demonstrated and operating in the United States (currently 7200 BTUs per kWh, new and clean). The percentage and the initial standard (0.70 net pounds of $CO_2$ per kWh[6] at an assumed 100% capacity factor) would be established in the statute. The statute would provide that the Energy Facility Siting Council (EFSC) could not change the percentage to be applied. The EFSC could change the net $CO_2$ per kWh standard after two years by finding that there is a new, more efficient plant in commercial use in the United States.

**Ways to Meet the Standard**

2. The standard can be met by any combination of efficiency, cogeneration or offsets from offsite mitigation that reduce emissions to the allowable standard.

3. Offsets may be demonstrated either through a "Performance Path" or through a "Monetary Path."

   A. Performance Path

   Under this path, the applicant would propose certain mitigation projects and would have to demonstrate the reduction in emissions they would produce. The site certificate condition would require implementation of the offset projects, but would not require actual achievement of the emission reduction. If EFSC finds in the siting process that the offset projects are inadequate to meet the standard, the applicant may fall back on the monetary path.

   B. Monetary Path

   Under the monetary path, the applicant would pay into a fund an amount of money deemed to pay for the offsets it needs to meet the standard. The statute would set the interim rate of $0.57 per ton of $CO_2$ for purchasing offsets through this Monetary Path. The EFSC would have authority to adjust the monetary offset rate up or down after three years based on empirical evidence of the cost of $CO_2$ offsets from projects and a finding that the standard will be economically achievable. Following the initial three

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1 "A natural gas fired facility means a facility that is intended to be fueled by natural gas except for infrequent periods when the natural gas supply is interrupted." (OAR 345-23-000(7) July 1994).

2 The calculations assume that there are 117 pounds of $CO_2$ per million BTU of natural gas fuel.

year period, EFSC may adjust the rate up or down no more than 50% in any two year period.

Once the applicant's site certificate is approved based on the monetary path, the applicant's payment would not be adjusted based on the actual performance of the projects funded with the money. The offset projects may reduce emissions beyond what was required for the plant to meet the standard or may not achieve the reduction in emissions needed to meet the standard. Either way, the applicant is not affected.

The details of the administrative management of the fund and of the process for allocating the moneys to projects will be worked out. The applicant should be allowed to participate in the selection process.

**Principles to be Met by the Climate Change Standard For New Fossil Fuel Generating Facilities**

1. Promote plant fuel efficiency.

2. Promote efficiency in the resource mix.

3. Reduce net $CO_2$ emissions.

4. Promote cogeneration that results in $CO_2$ offsets.

5. Provide an incentive for innovative technologies and creative approaches to mitigation/reducing and avoiding $CO_2$ emissions.

6. Minimize transaction costs, making it easy to do either path.

7. Monetary offset rate under the monetary path should be set at a rate reflective of what could reasonably be expected to be achieved by available third party mitigation offsets.

8. Provide certainty on what mitigation is actually being implemented.

9. Provide a point of certainty for issuing the site certificate, allowing construction of the plant to go forward, while the mitigation measures are being obligated/implemented.

    a. Review of mitigation actions under either path should not jeopardize the validity of the site certificate.

    b. A decision against the applicant on a performance path appeal would, at worst, kick the applicant into the monetary path.

c. Create a wall between the review of the mitigation under the monetary path and the siting process; provide a mechanism for public interests to review what is being accomplished in the mitigation.

10. Allow either the applicant or third parties to implement the mitigation.

11. The process for changing or updating the standard must be specifically spelled out in the statute, with boundaries and criteria for the change. Allow EFSC to update the standard in a specific way that is bounded by statutory criteria based on how the initial number was created and evaluated.

12. There should be no change sooner than two years after the statute is enacted.

13. This standard is not intended to block/stop power generating plants from building in Oregon. The standard should be attainable and economically achievable.

14. Mitigation project proposals should have an accountable public review and input at various stages. The public review process of mitigation project proposals should not unreasonably lengthen the time of the implementation of the mitigation projects.

15. Implementation of the mitigation projects must correspond in some way with the emissions from the plant.

16. Provide for monitoring and evaluation of mitigation program performance.

# A MODEL ORDINANCE FOR ENERGY PROJECTS

A Guide for Oregon Cities and Counties on Siting:

- Wind, Solar, Biomass, Geothermal and Cogeneration Projects
- Electric Power Transmission and Distribution Lines
- Natural Gas and Petroleum Pipelines
- Biofuel Production Plants

[VERSION 2: JULY 2005]

OREGON
DEPARTMENT OF
ENERGY

## Table of Contents

## I. INTRODUCTION

Over the years, local government planners have occasionally asked the Oregon Department of Energy for guidance in planning for energy project development within their jurisdictions. This guide is a response to those requests, and we hope it will prove helpful to local governments in planning for energy projects. Because of space and location requirements, most new locally regulated electric generation projects will likely be located in farm, forest or other county-controlled rural zones. In contrast, for more urban areas, this guide may be most helpful in the siting of locally regulated power lines, pipelines and industrial cogeneration projects.

In general, cities and counties have siting authority over energy projects that are below a certain size or generating capacity. The Oregon Energy Facility Siting Council ("Siting Council") regulates larger energy facilities.[1] The thresholds for Siting Council jurisdiction are determined by the Legislature and are defined in Oregon Revised Statutes (ORS) 469.300. The Siting Council does not regulate hydroelectric development. Instead, the Oregon Water Resources Commission has the authority to appropriate water and issue licenses for hydroelectric development.

Though the Siting Council regulates large energy facilities, it would be misleading to say that local energy project planning is limited to energy projects that have little land use impact. Even "small" energy projects could cause significant impacts for a city or county. For example, counties may receive land use applications for wind energy projects that have a generating capacity of up to 105 megawatts. A 105-megawatt wind energy project would consist of many large wind turbines spread over many acres of land.

Cities and counties may face planning decisions for the following types of energy projects:

- Thermal power or combustion turbine electric generation projects having a nominal electric generating capacity of less than 25 megawatts.
- Electric generation projects having a nominal electric generating capacity greater than 25 megawatts but found to be exempt from Siting Council jurisdiction under ORS 469.320(2).
- Wind or solar electric generating projects having a peak generating capacity of less than 105 megawatts.
- Geothermal electric generating projects with a peak generating capacity of less than 38.8 megawatts.
- Electric transmission and distribution lines carrying less than 230 kilovolts.
- Electric transmission and distribution lines less than 10 miles in length.
- Natural gas or petroleum pipelines less than 16 inches in diameter.
- Natural gas or petroleum pipelines less than 5 miles in length.
- Petroleum product pipelines less than 6 inches in diameter.

[1] Because Oregon law defines the terms "energy facility" and "facility" for statutes relating to the Siting Council's jurisdiction (ORS 469.300), we use those terms when talking about development under the Siting Council's authority and the term "energy project" when talking about development under a local government's authority.

- Petroleum product pipelines less than 5 miles in length.
- Biofuel production facilities, if the fuel produced is capable of being burned to produce the equivalent of less than six billion Btu of heat a day or if the facility is otherwise exempt from Siting Council jurisdiction under ORS 469.320(2).
- Wind measurement devices that are not related to energy facilities under Siting Council jurisdiction.

In addition, a local government may decide to take a broader view of what constitutes an "energy resource." For example, energy resources might include not only sources of energy, such as wind and solar resources, but also energy-related projects or structures such as industrial thermal loads, transmission line and pipeline corridors and existing small power plants used in cogeneration or other on-site electricity generation. Local knowledge plays an essential role in determining the specific energy resources that might be addressed by a local energy ordinance.

The centerpiece of this guide is Section II, the model ordinance for siting energy projects. What is important in the model ordinance is not the particular language but rather the set of concepts that the model addresses. Local governments and their planning agencies can adapt the model ordinance language to the style and format of their existing local land use ordinances. They can use the concepts presented in this guide as a framework for discussion of public policies that suit local circumstances and address local energy resources.

By adopting energy ordinances, local governments have the ability to affect energy siting decisions on facilities that have an impact on their city or county but that are outside of local regulatory authority. For example, both the Siting Council and the Water Resources Commission may apply local land use ordinances when they make permitting decisions for energy facilities under their statutory authority. Thus, through the adoption of a land use ordinance that addresses energy development, cities and counties have an opportunity to establish local public policy that will apply not just to locally-regulated projects, but also to all energy facilities within the local area. *See Section V for further discussion of the Siting Council's use of local land use ordinances.*

In sum, the Oregon Department of Energy hopes this guide will:

- Increase understanding and stimulate consideration of energy project siting needs and issues common to Oregon cities and counties.
- Increase local regulatory options and local influence in the siting of large energy facilities through the Siting Council and Water Resources Commission.
- Increase understanding of federal and state laws and their relationships to local land use planning.
- Help cities and counties coordinate with federal and state agencies in the development of energy projects or facilities.
- Promote city and county energy resource planning.
- Increase the effectiveness of local land use regulations applicable to the siting of energy projects or facilities.

*A Model Ordinance for Energy Projects* is a work-in-progress. The Department welcomes comments and suggestions from local planning departments to make future versions more useful.

Please send comments to: John G. White, Oregon Department of Energy, 625 Marion Street NE, Salem, Oregon, 97301-3737 (e-mail: john.white@state.or.us).

## II. MODEL ORDINANCE

In this section, we present a model ordinance for siting energy projects. The concepts expressed in the model ordinance would likely fit into the conditional use or special use provisions of a city or county development code. Broad policy statements might belong more appropriately in the local government's comprehensive plan. Matters of writing style, formatting and whether a concept "belongs" in the ordinance or in the comprehensive plan are for the local government to decide.

Generally applicable provisions of the local government's development code (for example, procedures for applying for and granting variances) should be made applicable to energy projects by appropriate cross-references in the energy project siting provisions. In addition, the local government may wish to define certain terms contained within the siting provisions, such as "significant adverse impact," or compare their use to terms already defined within the local code.

Our purpose is to engender discussion of the issues that may arise for local governments in planning the development of energy projects. The model ordinance provides a framework of topics for local governments to think about when drafting local regulations for siting energy projects.

In the pages that follow in this section, we present the text of the model ordinance in a column on the left-hand side of the page. On the right-hand side, we provide a "commentary" that describes the intent and rationale of the model ordinance text, notes policy issues and describes options.

## Model Ordinance

### Section ##

### ENERGY PROJECT SITING REQUIREMENTS

**##.01 Energy Policy**

**##.01.01. Planning for Energy Projects**

(1) The [county/city] recognizes that new electric power generation facilities, electric transmission lines and pipelines for natural gas or petroleum will be needed to support the people and the economy of the [county/city].

(2) The [county/city] shall plan for the development of energy resource sites so that development occurs in a timely and orderly manner, with mitigation of any adverse environmental impacts that cannot be avoided.

(3) The [county/city] shall coordinate planning for energy projects with public and privately-owned electric utility companies, with independent developers and with state and federal agencies, including the Oregon Department of Energy, the Oregon Water Resources Department, the Northwest Power Planning Council, Bonneville Power Administration, the Bureau of Land Management and the USDA Forest Service.

**##.01.02. Protecting Energy Resource Sites**

(1) Energy resource sites are sites within the [county/city] where energy sources could be developed. "Energy sources" are among the natural resources protected under Statewide Planning Goal 5. "Energy sources" include naturally occurring locations, accumulations or deposits of one or more of the following resources used for the generation of energy: natural gas, surface water (i.e., dam sites), geothermal, solar and wind areas. The [county/city] shall evaluate energy sources within the [county/city] and shall identify significant energy resource sites.

(2) The [county/city] shall maintain an inventory of energy resource sites as a reference for comprehensive plan amendments, zone

## Commentary

### 1. Energy Policies

A city or county may choose to adopt policy statements as official expressions of intent concerning resource conservation and energy project development. If adopted, policy statements provide context for the more specific provisions of the planning code. As well, energy resource policies provide guidance to state and federal authorities in the interpretation of the jurisdiction's energy ordinances.

The definition of "energy sources" (##.01.02) is found in OAR 660-023-0190. Statewide Planning Goal 5 encourages local governments to maintain an inventory of energy resources. The administrative rules implementing Goal 5 include a process for developing an inventory and identifying "significant resource sites" (OAR 660-023-0030). *See further discussion at page 32.*

## Model Ordinance

changes, conditional use permitting, partitioning and subdividing.

(3) The [county/city] shall conserve and protect significant energy resource sites.

### ##.01.03. Siting Energy Projects

(1) The [county/city] shall require land use siting review for proposed electric generating projects that have a nameplate generating capacity of [50] kilowatts or more and for proposed electric transmission lines and pipelines for natural gas or petroleum, except when land use review is under the jurisdiction of the Oregon Energy Facility Siting Council as described in ORS 469.504 or is pre-empted by a federal agency.

(2) The [county/city] shall avoid duplicating the siting work of other governmental agencies to the extent the [county/city] standards or equivalent standards have been addressed by those agencies. During review of a proposed energy project, the [county/city] may adopt the reports and findings of other government agencies.

(3) The [county/city] shall be the lead coordinating agency in siting energy projects located in the [county/city], except for energy facilities that are under the jurisdiction of the Oregon Energy Facility Siting Council, the Water Resources Commission or the federal government.

(4) The [county/city] shall apply its energy project siting standards through zoning and land development ordinances without conflicting with the applicable standards of other government agencies.

### ##.02 Purpose

The intent of the standards in this section is to ensure timely and orderly development of energy projects to meet energy and economic needs while protecting the environment. These standards allow the [county/city] to protect the public health, safety and general welfare of its citizens. These standards comply with the comprehensive land use plan and with the Statewide Planning

## Commentary

The "[50] kilowatts or more" threshold in paragraph (1) is a placeholder to be replaced with whatever limit the local government determines appropriate. This limit is the threshold for applying the siting standards. Generators smaller than the threshold level would be exempt.

### 2. Purpose

This ordinance section describes the need for standards relating to the siting of energy projects. It may refer to compliance with the local comprehensive plan and the Statewide Planning Goals.

## Model Ordinance

Goals.

**##.03 Exempt Energy Projects**

The following types of energy projects have minimal impact on land, air, water, wildlife, community services and cultural resources and are therefore exempt from the standards and conditions in this Section:

(1) Electric generation equipment intended primarily for residential or agricultural use that has a generating capacity of less than [50] kilowatts.

(2) Wind turbines intended primarily for residential or agricultural use that have a generating capacity of less than [50] kilowatts and that are less than 200 feet in height. A single tax parcel may have more than one exempt wind turbine.

(3) A wind measurement device that is less than 200 feet in height, if it is for temporary use for a period not to exceed [24] months.

(4) Photovoltaic panels mounted on residential, commercial or industrial structures that generate power for that structure.

(5) Photovoltaic panels mounted on poles or the ground that do not exceed [400] square feet in area and that generate power for an adjacent residential, commercial or industrial use.

## Commentary

### 3. Exempt Energy Projects

Some energy projects or equipment may be small enough and have such minimal impact that they should be exempt from the detailed standards and additional review steps required by the ordinance. The model ordinance proposes to exempt smaller electric generation projects designed for individual property-owner, agricultural or business use rather than for commercial power generation.

A higher capacity limit on exempt projects may be appropriate depending on the desires of the county or city; the "[50] kilowatts" threshold in paragraphs (1) and (2) is a placeholder to be replaced with whatever limit the local government determines appropriate. In specifying a limit, the local government should consider the generating capacity of commercially-available small-scale wind turbines.

The 200-foot height restriction in paragraphs (2) and (3) reflect the aviation safety requirements for warning lights on structures 200-feet-tall or greater.

The "[24] months" threshold in paragraph (3) is illustrative. Local governments should select an appropriate threshold to define a temporary facility, considering the duration of wind data a developer will need to obtain financing.

The 400-square-foot photovoltaic panel size restriction in paragraph (5) is a placeholder. A larger or smaller area restriction may be appropriate depending on the typical panel sizes of commercially-available photovoltaic equipment.

Customer-owned, small energy generation projects that are

## Model Ordinance

**##.04 Energy Projects Subject to Sections ##.05 through ##.07**

(1)The standards and procedures in Sections ##.05 through ##.07 apply to the following types of power generation, transmission and pipeline projects, except projects that are exempt under Section ##.03:

(a) Thermal power or combustion turbine electric generation projects with a nominal electric generating capacity of less than 25 megawatts.

(b) Electric generation projects having a nominal electric generating capacity greater than 25 megawatts found to be exempt from Oregon Energy Facility Siting Council jurisdiction under ORS 469.320(2).

(c) Wind generation projects with a nominal electric generating capacity of less than 105 megawatts.

(d) Wind measurement devices more than 200 feet in height or intended to be used for more than [24] months.

(e) Solar energy projects with a nominal electric generating capacity of less than 105 megawatts.

(f) Geothermal energy projects with a nominal electric

## Commentary

eligible for "net metering" would be exempt, although the local utility company distributes some of the output to other users. Oregon's net metering law (ORS 757.300) applies to solar, wind, hydroelectric and fuel cell systems that have a generating capacity of 25 kilowatts or smaller. Net metering allows electricity to flow through a single meter to and from customers who generate their own power, which allows an offset of the electricity the customer uses. The utility company credits the customer at the end of the billing period for the offsets at the full retail rate or, if the utility installs a second meter to measure generator output, at the avoided cost rate.

### 4. Covered Energy Projects

The model ordinance lists the types and sizes of energy projects that are subject to local development standards and permitting. The projects paragraph (1) describes are outside the jurisdiction of the Oregon Energy Facility Siting Council ("Siting Council"). ORS 469.300(11) establishes the jurisdictional thresholds of the Siting Council by defining "energy facility."

The Oregon Legislature can change Siting Council jurisdiction and has done so in the past. To conform to future statutory changes, a local government should periodically review the energy ordinance and revise as necessary.

Hydroelectric projects are not included because the Oregon Water Resources Department and Water Resources Commission have essentially complete review and approval authority over hydroelectric projects at the state level.

Permanent wind measurement devices may be constructed as part of a wind generation project, and these structures would be subject to the ordinance. Temporary wind measurement devices are