

Position Paper of the Oregon
Department of Energy

Submitted to the Interim Task Force
on Energy Facility Siting

May 31, 1996

Introduction

The strong role the state has played in energy issues was shaped by the events that occurred in the 1970s. With rising energy prices, gasoline shortages, and the specter of idle nuclear power plants dotting the landscape, Oregon's energy future looked dim.

For natural gas and oil, whose markets are national or international in scope, the state's ability to influence price and supply is small, and its response was limited. But for electricity, where power resource decisions are made within the state and region, Oregon's response was more sweeping. Many felt that power resource planning was biased toward overbuilding, and that Oregon's economic well-being and environmental quality were at stake. Oregon — whether represented by the Legislature, state agencies, or citizens directly — chose to intervene in a process that had been the purview of the BPA and the region's utilities and exert more influence over power resource decisions.

In 1975, the Oregon Legislature adopted an energy policy that states:

"Continued growth and demand for non-renewable energy forms pose 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 impacts. It is the goal of Oregon to promote the efficient use of energy resources and to develop permanently sustainable energy resources."

As part of that policy, the Legislature created the Energy Facility Siting Council (EFSC) to ensure that any new power plants built in Oregon would be needed, financially prudent, safe and would not unduly harm the environment, and, further, that the public could participate in its deliberations.

Also in 1975, the Legislature created the Department of Energy. One of the department's goals was to ensure that conservation and renewable resources would become integral to Oregon's energy resource mix — particularly for electricity. Another was to provide an independent check on the forecasts of electricity demand and supply prepared by the utilities which provided the justification for building new plants.

Efforts to guard against poor power resource decisions and their consequences have continued. In 1980, the Northwest Power Planning Act created the four-state Northwest Power Planning Council to develop a regionwide plan for the development of cost-effective power resources. In 1981, Oregon voters, in an initiative, decided that no more nuclear power plants would be a part of the state's power resource supply unless a permanent repository for the radioactive waste was established. In 1985, the Legislature passed a bill that effectively ended the era of hydropower by prohibiting the construction of dams that could, in any way, harm salmon or steelhead. In 1989, the Oregon Public Utility Commission required that the regulated utilities prepare long-term resource plans to ensure that they developed resources at the lowest cost and least environmental harm. In several sessions, the legislature established state programs and requirements to encourage conservation and renewable resources.

Today, the energy issues facing Oregon (as well as other states) revolve around the profound structural changes occurring in the electric industry. The challenge to the state is to adopt policies and modify institutions so that Oregon reaps the benefits of competition without compromising Oregon's environment. The four Northwest governors have named a committee to comprehensively review the Northwest power market system and recommend reforms. The Oregon Public Utility Commission will be sponsoring a series of workshops to examine the issue of retail wheeling. Utilities and state agencies are working to develop a Western-state transmission expansion plan. A collaborative of Oregon utilities, state agencies, and consumer and environmental advocates is looking specifically at the issue of future funding for electric-efficiency. Ultimately, a number of the issues will be addressed in legislation by state legislatures and Congress.

The State Role in Siting

The two guiding principles that spurred the creation of EFSC were:

1. If a power plant, power line, or other energy facility is proposed that would cause significant harm to some important "Oregon" resource, pose health and safety risks, or impose unnecessary costs on Oregonians, that facility should not be built.
2. If a power plant, power line, or other energy facility is proposed that meets state standards as well as all other regulatory requirements, that facility should be built even if the local community in which it would be sited objects.

In today's environment, are those principles still relevant in guiding state siting policy?

The first principle centers on the state's role of guarding against poor resource decisions. Is that role still necessary? Is it possible that, without an EFSC, an energy facility would be built that irrevocably damaged some valued Oregon resource? Threatened public health and safety? Or imposed significant financial costs on Oregonians?

We don't know for certain. But we believe we should err on the side of caution because our ability to anticipate the long-term harm from energy facilities has been dismal. It is 50-plus years after their construction that we recognize the devastating effect dams have had on our fish runs. The federal government committed to completing a nuclear waste repository in 1989. Now, the earliest possible opening of a permanent repository is 2012, and that date is not likely. Meanwhile, the radioactive waste from more than 100 nuclear plants throughout the nation continues to accumulate.

Until we are confident that the restructuring of the electric industry precludes the possibility that new power plants or power lines will cause undue harm to a valued Oregon resource, the public health and safety of citizens or to the Oregon economy, then the state

should continue to play a strong central role in preventing unnecessary power plants and power lines from being built.

At some time, it may prove to be the case that certain types of power plants are unlikely to cause significant environmental or financial harm. Then, the appropriate response would be not to disband EFSC but to remove that type of power plant from EFSC's jurisdiction.

The second principle stems from the importance of providing for an adequate, reliable, low-cost electricity supply for Oregonians. The "need" standard was developed to reflect the weighing of the benefit of providing electricity with the cost of providing it. That is, if a plant was not needed, it should not be built. Why impose costs, whether financial or environmental, on Oregon when there was no need for the power from that plant? On the other hand, if there are significant state benefits from the building of a power plant or line that should take precedence over local objection to the facility, then a need determination of some kind is still essential. EFSC, or some central body, must make that determination.

As we have seen in other industries, the transition an industry makes from regulation to open competition is not a smooth one. At what point regulatory controls should be loosened or suspended is a matter of judgment. Therefore, the most fruitful approach for the Task Force may be to view its recommendations as interim measures that will be modified as it becomes clearer exactly how the market transformation will occur and how it will affect the state role in energy facility siting.

Scope of State Siting

In 1971, state energy siting authority extended to coal and nuclear power plants with generating capacities greater than 200 megawatts. In 1975, when EFSC was created, the Oregon Legislature gave it broader authority and added to its jurisdiction smaller-sized power plants, large power lines and pipelines, and synthetic fuel plants. Since then, facilities periodically have been added to EFSC jurisdiction and others removed.

With a number of facility-specific exceptions, EFSC's scope of authority covers the following:

- Power plants with capacities of 25 megawatts or more.
- Power lines of 230 kilovolts or more that are more than 10 miles long.
- Natural gas pipelines that are 16 inches or more in diameter and more than 5 miles long.
- Oil pipelines 6 inches or more in diameter and at least 5 miles long.
- Surface structures associated with underground natural gas storage facilities.
- Oil refineries.
- Liquefied natural gas storage facilities.
- Synthetic fuel plants.

EFSC also has regulatory responsibilities aimed at ensuring the safe cleanup, storage, and transport of radioactive wastes.

The questions to determine whether there should be a central state siting role also apply to what facilities should be under EFSC jurisdiction. Could the siting of a given type of facility cause harm to state resources or impose economic costs that affect a large group of Oregonians? Is there a compelling state benefit that such facilities are built? If yes, then that facility should fall under state siting authority.

It is difficult to precisely determine what facilities meet those criteria and what don't. Many of the impacts of facilities are site-specific, so size of facility is not necessarily a good criteria. A 300-megawatt power plant in an industrial park could pose significantly less impacts than a 30-megawatt plant sited near an environmentally-fragile area. The uncertainty in defining scope is reflected by the differing thresholds states set. For example, Washington state jurisdiction includes power plants of 250 megawatts or more while California and Montana state jurisdiction includes power plants of 50 megawatts or more. Oregon's threshold for power lines is 230 kilovolts while Montana's is 69 kilovolts.

We did not evaluate every type of facility currently under EFSC jurisdiction against these criteria. We do believe, however, that the current scope of EFSC authority for power plants, power lines, and pipelines is appropriate and should be kept.

Federal Lands. An issue that has been raised is whether state siting authority should apply when a proposed facility is on federal land. EFSC is required "to the maximum extent possible" to avoid undue duplication of the state and federal review but maintain a say over the decision to site or not. We believe that EFSC's current authority should be kept. Let us cite one example of why we believe state say is necessary. In 1988, the BLM approved permits for exploratory geothermal drilling just outside the Crater Lake National Park. Then-Governor Goldschmidt successfully intervened to oppose any development at the site.

Local Government. If a state siting authority exists, then it should have the ability to "override" a local decision if there is a compelling state reason demonstrated. In reality, the local land-use decision-making process is an integral part of the state's consolidated siting process.

Developers must show that a proposed facility complies with the statewide planning goals. There are two ways developers can make that determination.

One, they can choose to get that approval directly from the local government. In two recent siting applications for power plants, the developers chose that route. When a developer chooses to seek approval from the local government, the EFSC abides by the decision made by the local government.

Two, developers can ask that the EFSC directly make the determination: EFSC either can apply the local government land use criteria to make that decision or, if one or more of those criteria can't be met, make direct findings based on their interpretation of whether the proposed facility meets state planning goals. In all recent applications in which the developer chose to seek land use approval directly from EFSC, the EFSC has worked jointly with the local land use agencies to apply and interpret their land use standards.

Although state and local interests can conflict, Oregon's siting process is a good example of how to weld local and state interests into one consolidated decision.

State Siting Standards

Since its beginning, EFSC has used a set of performance standards, in addition to the permits and approvals of state agencies and local governments, to judge whether energy facilities should be sited. The standards have, for the most part, proven effective and workable. (The need standard has been the most controversial, and it is addressed in the next section.)

EFSC has adopted 14 general performance standards it applies when siting all non-nuclear energy facilities. In addition, EFSC has adopted a need standard which it applies to power plants, power lines, and natural gas pipelines. Finally, some facilities have specific standards written expressly to address concerns which are unique for that type of facility. For example, there is a noise control standard that applies to wind energy facilities. And there are specific public safety standards that apply only to underground gas storage facilities.

In essence, the 14 standards ensure that:

1. The applicant has the experience and know-how to build and operate the facility.
2. The facility will not pose a danger to human safety as a result of a seismic hazard.
3. The building and operation of the facility will not cause significant adverse impact to soils.
4. The facility complies with statewide land-use planning goals adopted by the Land Conservation and Development Commission.
5. The facility will not cause significant adverse impact to "protected areas" deemed to have special scenic, recreation or natural values such as national parks, monuments, wild or scenic rivers, recreation and scenic areas; federally designated wilderness areas; national and state wildlife refuges and fish hatcheries; state parks and scenic waterways; and similar kinds of areas.

6. The applicant has sufficient financial resources to restore the site if the facility is never finished or shuts down early, and when its useful life is over.
7. Important fish and wildlife habitat are protected.
8. Plant and animal species that the state has listed as threatened or endangered are protected.
9. Important scenic and aesthetic values are protected.
10. Historic, cultural and archaeological resources are not harmed.
11. Important recreation opportunities are not diminished.
12. The ability of local communities to provide important governmental services such as sewage treatment, water, traffic safety and schools is not jeopardized.
13. The generation of solid waste and wastewater is kept to a minimum during construction and operation of the facility and are recycled or reused to the extent possible.
14. The site can be adequately restored to a useful, non-hazardous condition after the facility is retired.

Simply put, if a proposed facility is found to meet all the EFSC standards (and all other applicable Oregon statutes and rules), it is issued a site certificate, and construction can proceed. If a proposed facility fails any of the state requirements, it is denied a certificate and cannot be built. In practice, the process is not so cut and dry. Whether or not a standard is met requires some judgment regarding the significance of impacts, effectiveness of mitigation, and the likelihood of future outcomes. When EFSC staff find that a proposal would likely not meet one of its standards, the developer is informed and usually modifies the proposal so it will meet the standard. In addition, many decisions result in project-specific conditions that must be met during construction, operation and retirement. Further since legislation in 1993, EFSC has had the ability to waive its own standards if the overall public benefits of the facility outweigh the damage to resources protected by the standards. To date, EFSC has not exercised this authority.

Until the moratorium imposed under SB 951, EFSC also had the authority to develop new standards or scrap old ones so that it could make its siting decisions based on timely criteria. If new and persuasive information became available on a harmful impact from any energy facility, EFSC wrote a new standard to guard against that impact. For example, in 1992, EFSC adopted a seismic standard after information became available that Oregon was more vulnerable to earthquakes, tsunamis, and other seismic hazards than previously had been thought. On the other hand, in 1990, after extensive study and testimony from experts, EFSC

concluded that there was not sufficient evidence of hazard to warrant a standard on magnetic fields from transmission lines. Other subjects EFSC has addressed through standards include radioactive waste disposal, Trojan decommissioning, and protected areas.

Recommendation

As long as the state has a role in energy facility siting, the standards approach in evaluating applications for energy facilities should be retained. Standards translate state policies into a clear set of criteria on which the plants will be judged. If the standards are retained, so too should EFSC's ability to modify its standards, set new standards and abandon old ones. Otherwise, as time goes on, the standards become less and less relevant to the issues important to the state and its citizens. The authority to add standards, however, should be based upon a clear showing that significant negative impacts to the environment, public health and safety, or the economy would occur without the standards.

The "Need for Facility" Standard

Over the past five years, Oregon's need standard has been at the center of the controversy over the role of state energy facility siting.

The need standard has aimed to achieve two goals: (1) to safeguard the state from the environmental and economic costs of building energy facilities that were not needed, and (2) to ensure that those energy facilities that were needed and cost-effective were built.

EFSC has relied on long-term demand and supply plans to judge if and when a new power plant was needed to meet demand at lowest cost. Those plans — whether developed for a utility, the state, or the region — evaluate alternatives, including conservation and renewable resources, for meeting customer demand and identify what resources should be acquired and by when. If the developer of a proposed facility showed that the proposed facility was consistent with the appropriate plan, then need was demonstrated.

While controversial, EFSC's first need standard for power plants was relatively straightforward: Firm demand was compared with firm resources for the utility designated as the buyer of the power. If demand exceeded resources within five years of the on-line date of the proposed power plant, then need was demonstrated. The debate was on which forecast — the state's or the utility's — was "correct" and which resources were appropriate to meet new demand. But the environment was simpler then. For the most part, utilities built their own plants to serve their own customers.

As changes have occurred — the advent of least-cost planning, the emergence of more open and competitive bulk power markets throughout the Western states, and the entry of non-utility power suppliers into the marketplace, among others — EFSC has sought to keep the

need standard relevant. But, as the need standard has become more reflective of those changes, it has become less straightforward.

EFSC's need standard for power plants has the following features:

- It relies on the long-term supply plans developed by utilities to demonstrate need. If a proposed power plant is identified for acquisition in a utilities least-cost plan, it is needed under the standard.
- It allows EFSC to exempt power plants from a showing of need if the plant furthers other state energy policy goals. For example, to encourage the pilot-scale development of renewable resources, limited amounts of wind, geothermal, or biomass power plants are exempted from the standard.
- It allows developers to build facilities that are shown to be cheaper than existing power supply, regardless of the demand and supply situation. For example, if a customer-owned utility that purchases power from the Bonneville Power Administration, shows that the cost of power from a proposed plant is cheaper over the long run than Bonneville power, a need for that plant is demonstrated.
- It allows intervenors to challenge the need for a proposed facility by showing that there are cheaper and viable alternatives or no resource deficit.
- It takes a broad and long-term look at costs when making comparisons by including estimated costs for specified pollutants.

In addition to the need standard protecting against over- and underbuilding, EFSC has sought to build in other safeguards as well. For example, a power plant developer must have a power sales contract with a buyer or buyers for at least 80 percent of the proposed facility's output before construction can begin. This further demonstrates there is a market, and hence need, for the facility. Under the financial standard, EFSC requires the developer to establish a retirement fund to restore a site if a facility is abandoned. This safeguards against leaving the cleanup costs with Oregonians. And, by setting dates by which construction must begin and end, EFSC assures that natural resources are not withheld from use by others.

The continuing controversy revolves around two issues. One, in today's market, is it necessary for the state to determine need? Two, even if it is, is it possible to develop a need standard that is workable?

We believe that today's market will lessen, but not eliminate, the possibility that unneeded or too-costly power plants will be built. Therefore, some safeguards are still required — at least for the transition period. We also believe that there should be a showing of state benefit in terms of lower cost or ensured reliability or adequacy of supply if the state is to have the authority to approve the building of an energy facility over local opposition. Today, this

may be particularly true for power lines and pipelines or generation facilities that require large new powerlines.

Recommendations

1. As demonstrations of need for power plants:
 - Use the requirement that a power sales contract be signed before construction of a power plant can begin. In a more competitive market, this is a fairly stringent, but workable, demonstration of need and cost-effectiveness.
 - Use a consistency test with the long-term supply plans of Oregon utilities for power plants built to serve their customers. Those least-cost plans have been the foundation for what resources are developed to meet Oregon's needs. There should be synchrony between the state's policies for facility siting and resource planning.
2. It is essential that a need for power lines and pipelines be demonstrated. EFSC has standards for both, but they may need to be refined given the changes occurring in the marketplace.
3. For potentially harmful consequences of sited energy facilities, specific standards should be written to address them. For example, the retirement standard ensures that developers restore sites should their facilities not be needed after construction begins. One of the current concerns is that an overbuilding of power plants in a particular geographic area may require a major power line that would not have had to be built if the power plants had been built elsewhere. A location standard may be a more appropriate way to protect against that occurrence than including it in a need standard.

The State Siting Process

EFSC's siting process changes over time as it seeks to strike an appropriate balance between conducting a review that is sufficiently thorough and complete to reach a good decision, that is timely enough to accommodate the needs of the utilities and developers, and that is open enough to allow the views of the public to be heard.

The past five years have seen extensive revisions in the process. Most of the specific reforms to improve the process, whether accomplished through EFSC rules or through legislation, were agreed to by all the parties.

The distinguishing features of the state siting process include a coordinated review, public participation, consolidated appeal, and requirements for a timely decision.

A coordinated review. All necessary state and local licenses, permits and approvals that are relevant to the siting decision are decided by EFSC within the siting process. In concert with the appropriate state agencies, it decides whether a wastewater permit, a water right, a fill-and-removal permit, and any other binding permits shall be granted. EFSC also determines whether a proposed facility complies with the local comprehensive land-use plan or state planning goals. Depending on the number of state agencies and local governments involved, this can be a complex undertaking. But, it allows every aspect of a proposal to be considered in one forum, avoids duplication and reduces the chances of inconsistent multiple-agency decisions. EFSC also conducts its review, to the greatest extent possible, in a way that is consistent with and does not duplicate a federal agency's review, where there is such a federal review.

Public participation. The current EFSC review process seeks to allow meaningful public participation while protecting against undue delay in reaching a final decision. At least one public hearing is held, and if there is only one, it is held near the site of the proposed facility to enable people from the community to express their concerns. Once the hearing is concluded, the Department of Energy issues a proposed order which recommends the proposal be either approved or denied. After public notice, EFSC automatically holds a contested case hearing on the proposed order. Regardless of the number of challenges or the type of license or permit in dispute, all are considered in the single EFSC contested case. Only those persons who raised a specific issue at the public hearing may participate in the contested case. And only those issues raised during the public hearing process may be considered in the contested case. This attempts to provide reasonable opportunity for public intervention but prevent unnecessary delays in reaching a final decision.

Consolidated appeal. Only one appeal can be made of EFSC's decision, and that appeal goes directly to the state Supreme Court. Only those persons who participated in the contested case may appeal the decision.

Timing. All elements of EFSC's review are subject to timelines. The deadlines for reviewing completed applications vary from six months to expand an existing industrial facility to include an energy facility, to nine months for a new gas-fired power plant (combustion turbine), geothermal power plant, or underground gas storage facility, to 12 months for a pipeline or transmission line.

Several of Oregon's most recent siting decisions were delayed well beyond the statutory deadlines. Siting decisions, however, often are controversial. We believe that EFSC has a good process for fairly and expeditiously weighing competing concerns.