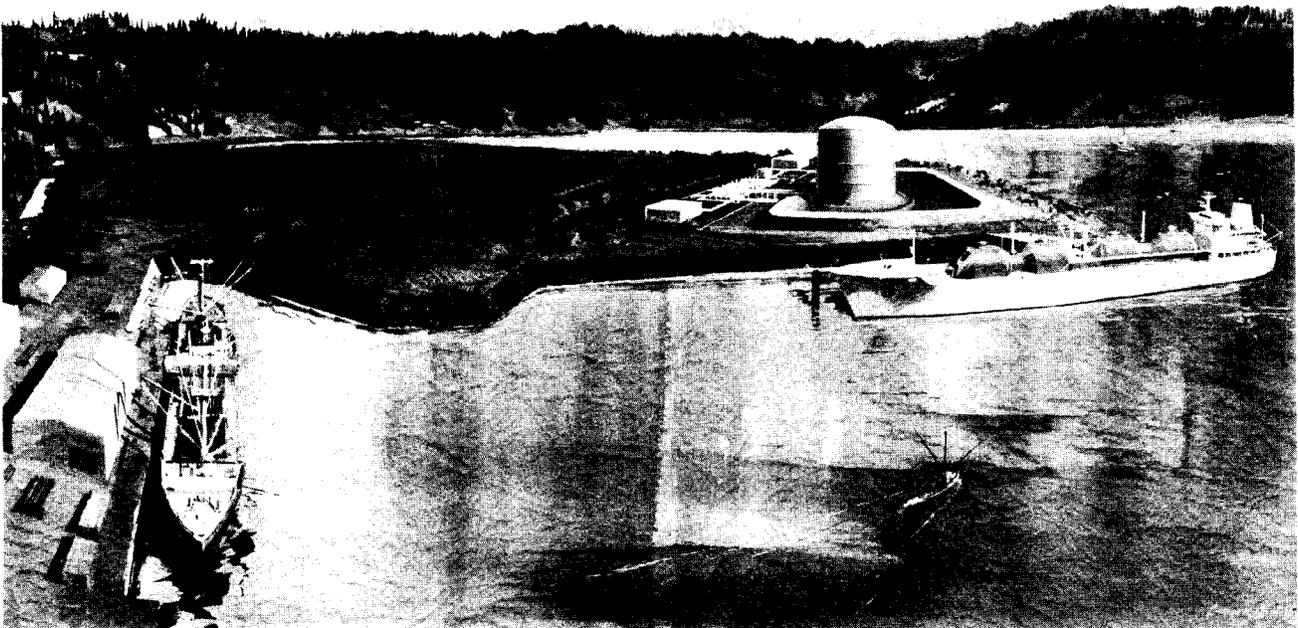


Energy Facilities In The Oregon Coastal Zone

**VOLUME I
THE PLANNING PROCESS**



TD
195
.E5
H65
1978
v.1



Oregon
Land
Conservation
And
Development
Commission

ENERGY FACILITIES
IN THE OREGON COASTAL ZONE

PART I
THE PLANNING PROCESS

Property of CSC Library

U. S. DEPARTMENT OF COMMERCE NOAA
COASTAL SERVICES CENTER
2234 SOUTH HOBSON AVENUE
CHARLESTON, SC 29405-2413

Principal Investigator
Edward A. Holt
Senior Resources Planner
Mathematical Sciences Northwest Inc.

This report was funded in part with financial assistance provided by the Coastal Zone Management Act of 1972, National Oceanic and Atmospheric Administration administered by the Oregon Department of Land Conservation and Development.

TD 195.E5 H165 1978 V.1
16737801

FEB 11 1987

ACKNOWLEDGEMENTS

This report was prepared by Edward A. Holt, Senior Resources Planner and Michael Harlow, Senior Environmental Scientist of Mathematical Sciences Northwest, Inc., Bellevue, Washington. Specific views and recommendations are those of the authors and not necessarily the views of the Department of Land Conservation and Development or persons who provided assistance or information.

Thanks are due to the following persons and organizations who provided assistance, information and/or critical reviews:

Jon Christenson and Neal Coenen, Department of Land Conservation and Development; Kelly Woods, Dave Philbrick, and Fred Miller, Oregon Department of Energy; Leonard Wilkerson, Division of State Lands; Paul Haugland, Intergovernmental Relations Division; Norm Behrans, Oregon Department of Fish and Wildlife; John Kowalczyk, Oregon Department of Environmental Quality; Dawn Dressler, Oregon Energy Facility Siting Council.

Nick Lewis, Washington Energy Facility Site Evaluation Council; Bill Waddell, Washington Public Power Supply System; Michael Hambrock, CEIP, Washington Department of Ecology.

Kathi Larson, U.S. Fish and Wildlife Service; U.S. Army Corps of Engineers, Portland Office; Dennis Maxwell, Bonneville Power Administration; U.S. Department of Energy, Region X, Seattle; Pacific OCS Office, Bureau of Land Management, Los Angeles; Mike Johnston, U.S. Environmental Protection Agency; Lt. Olenick, U.S. Coast Guard; Pacific N.W. River Basins Commission.

Arnold Cogan, Cogan and Associates, Portland; Glenn Odell, Seton Johnson and Odell, Portland; Wayne Rifer, and Linda Bullard, Natural Heritage Program, Oregon Nature Conservancy.

Tom Ashton, Pacific Power and Light Co.; Blachey-Lane Electric Cooperative; Consumer Power, Inc.; Howard Crinklaw Jr., Douglas Electric Cooperative; Bob Drake, Coos-Curry Electric Cooperative; William Gibbs, Northwest Natural Gas Co.; Hilary Heizenrader, Portland General Electric; Lee Johnson, RAIN Magazine; Chuck LaTansey and Jim McQueen, Chevron, U.S.A.; Jack Madison, Tillamook PUD; Bill Ubanks, Brown and Root; Richard Van Mell, GATX; Don Westland, Clatskanie PUD, and Brian Winters, Central Lincoln PUD.

Cover Photo: Proposed LNG Marine Terminal at Newport. Courtesy of Northwest Natural Gas.

PREFACE

Energy Facilities in the Oregon Coastal Zone is a report prepared by Mathematical Sciences Northwest, Inc. of Bellevue, Washington, under contract with the Oregon Department of Land Conservation and Development. Technical assistance was provided by the Oregon Department of Energy.

The 1976 amendments to the federal Coastal Zone Management Act requires that coastal states have an energy facility planning process. This requirement has resulted in the development of proposed amendments to Oregon's approved Coastal Management Program. As background to the program amendments, this report was developed to document the existing planning process and to identify energy facilities likely to locate in the coastal zone. Part I explains and evaluates the current planning process for energy facilities in Oregon. Part II is an analysis of energy facilities which are likely to locate in, or which may significantly affect the state's coastal zone.

Executive summaries of the report have been circulated to local officials, planning department, ports and industry. Copies of the executive summary are available from the Department of Land Conservation and Development.

September 1978

TABLE OF CONTENTS

	<u>PAGE</u>
Introduction	1
Policies	2
Procedures	5
Response to Federal Requirements	10
Recommendations	37

LIST OF TABLES

<u>TABLE</u>		<u>PAGE</u>
1	Likely Needed State Permits	11
2	Summary of Existing Energy Facilities in the Oregon Coastal Zone	15
3	Federal Regulatory Activities for Energy Facilities	33

LIST OF FIGURES

<u>FIGURE</u>		<u>PAGE</u>
1	The Oregon Energy Facility Planning Process	7

LIST OF MAPS

<u>MAP</u>		<u>PAGE</u>
1	BPA High Voltage Transmission Lines in the Oregon Coastal Zone	17
2	Area Served by Northwest Natural Gas Company	19
3	Interim Land Use Designations for Fossil Fuel	24
4	Interim Land Use Designations for Nuclear Thermal Power Plant	25

Introduction

Section 305(b)(8) of the Coastal Zone Management Act (CZMA) of 1972, as amended, requires states to develop "a planning process for energy facilities likely to be located in, or which may significantly affect, the coastal zone, including, but not limited to, a process for anticipating and managing the impacts from such facilities." Rules implementing this law have been published in 15 CFR 923.14. This discussion documents Oregon's energy facility planning process and concludes that present policies, laws, and administrative rules satisfactorily address the federal requirements. At the same time, this study has revealed areas of the planning process that could be strengthened, resulting in the inclusion of several recommendations.

In 1971, the State of Oregon, anticipating the need for electric power plants, and recognizing their substantial impacts and demands on public resources, established the Nuclear and Thermal Energy Council (NTEC) to implement a centralized one-stop permitting process. In 1975, NTEC was expanded to include certain additional energy facilities, and renamed the Energy Facility Siting Council (EFSC). In addition to EFSC, which is identified exclusively with energy facilities, several other state agencies have permitting authorities that address the impacts of development activities, including other energy facilities.

In 1973, Oregon officially recognized the importance of a comprehensive approach to land use planning by passing the Oregon Land Use Act. The Act requires that the Land Conservation and Development Commission (LCDC) establish statewide planning goals which are standards to be applied in developing local comprehensive plans. These local plans must then be approved by LCDC. Energy facilities, whether under the jurisdiction of EFSC or other agencies, must conform to the statewide planning goals and the acknowledged local plans.

The energy facility planning process in Oregon thus consists of three major components:

- Statewide planning goals adopted by LCDC
- Acknowledged comprehensive plans developed by local governments and approved by LCDC
- Specific statutory authorities of other state agencies

The Oregon Coastal Management Program (OCMP) describes these components at some length. The focus of the following discussion will be on those policies which affect the siting of energy facilities in the Oregon coastal zone. The report first summarizes Oregon policy concerning energy facility siting, followed by an overview of the energy facility siting procedures. The largest section documents how Oregon meets federal requirements for the planning process. The last section presents several recommendations for improving the process, with an emphasis on planning prior to the receipt of siting applications.

Policies

One of the legislative findings of the Land Use Planning Act is:

The promotion of coordinated state-wide land conservation and development requires the creation of a state-wide planning agency to prescribe planning goals and objectives to be applied by state agencies, cities, counties, and special districts throughout the state. (ORS 197.005)

In response to this mandate, LCDC has adopted 19 statewide planning goals. The last four of these were adopted on December 18, 1976 and address specifically the particular needs and problems of Oregon's coast. These goals are for Estuarine Resources, Coastal Shorelands, Beaches and Dunes, and Ocean Resources. However, while some goals are of more relevance to coastal development than others, all goals must be accorded equal importance in the development of local comprehensive plans and in judging conformance of actions which would permit land development. The goals are described in detail in Appendix 4 of the OCMP.

A key element in each of the goals is the balancing of conservation and development interests. Particular legislative recognition of the need to balance competing interests in the coastal zone is given in the legislation establishing the Oregon Coastal Conservation and Development Commission which operated between 1971 and 1975 prior to LCDC assuming its functions:

The Legislative Assembly finds and declares that:

1. The coastal zone in this state is an important and valuable part of the natural resources of this state and that because of its value there exists a need for its protection through the development and maintenance of a balance between conservation and development interests with respect to such natural resources.

2. There exists a conflict in the development and use of the natural resources of the coastal zone among industrial interests, commercial and residential development interests, recreational interests, power resource interests, transportation and other navigational interests, waste disposal interest and fish and other marine resource interests.
3. To further the policy of this state in the protection, preservation, development, and, where practicable, the restoration of the natural resources of the coastal zone, a commission should be established to develop and prepare a comprehensive plan for the conservation and development of the natural resources of the coastal zone that will provide the necessary balance between conflicting public and private interests in the coastal zone. (ORS 191.110)

Another key policy of the State of Oregon is the state's commitment to local, as opposed to state, control of land use planning. According to ORS 197.005, the Legislative Assembly finds that "cities and counties should remain as the agencies to consider, promote and manage the local aspects of land conservation and development for the best interests of the people within their jurisdictions." The State provides impetus to local planning and control in the following ways:

- State law requires that comprehensive plans must be prepared at the local level (ORS 197.010)
- State law requires that all public actions be consistent with the approved local plans (ORS 197.010 and Goal 2)
- Several administrative rules of various state agencies require that proposed projects be in conformance with local plans before any permits may be issued. These include:
 - OAR 345-75-025(5)(a) EFSC
 - OAR 141-85-205(5)(d) Division of State Lands
 - OAR 632-30-020(b), OAR 632-20-030(3), ORS 570.025(3a) Department of Geology and Mineral Industries

- State law requires that state agencies submit to LCDC programs for assuring that the planning effort of the agencies affecting land use are compatible with local comprehensive plans (ORS 197.180 and 197.040(2)(f))

Several requirements ensure that interests other than local in nature are not overlooked in the development of local comprehensive plans:

- Statewide goals and guidelines, approved by LCDC after public hearings, must be followed by local governments in developing their plans (ORS 197.175)
- State agencies provide information and technical assistance to local government in the development of local plans (ORS 197.180)
- Each local plan must be approved by LCDC (ORS 197.251)
- LCDC will conduct annual progress reviews of local plans to ensure that plans remain responsive to changing conditions (ORS 197.260)

Integration into the network of mechanisms for the consideration of the national interest is generally described in OCMP Chapter III. The national interest in the planning for and siting of energy facilities, as required by 15 CFR 923.52, is discussed below.

Coordination is another policy element of the land use planning process, including planning for energy facilities, and is mandated by the Legislative Assembly:

To promote coordinated administration of land uses consistent with comprehensive plans adopted throughout the state, it is necessary to establish a process for the review of state agency, city, county, and special district land conservation and development plans for compliance with statewide planning goals. (ORS 197.005)

As a result, Oregon has developed a strong set of coordination programs, some of which have been working for several years, and some of which are now being implemented. These programs are implemented by the State Permit Coordination Center in the Intergovernmental Relations Division, the Energy Facility Siting Council, the Land

Conservation and Development Commission, and various other state agencies. The programs include the State Agency Coordination Programs, the State Permit Consistency Rule (still in draft form), Federal Consistency Determination, and the A-95 review process. These programs are discussed in more detail below in response to 15 CFR 923.14.

Procedures

This section presents an overview of the energy facility planning process. An applicant for siting an energy facility in Oregon follows one of two basic tracks, each of which is prescribed according to the type of facility proposed: either (1) he follows the one-stop process of the Energy Facility Siting Council, or (2) he must attempt to satisfy individually several permitting authorities, a process which may be facilitated by completing a Master Application to the State Permit Coordination Center. This latter track is not exclusive to energy facilities, but may be used by any development applicant. In either case, review for consistency of the proposed project with the OCMP is automatic. The two procedures are simplified to flow charts in Figure 1.

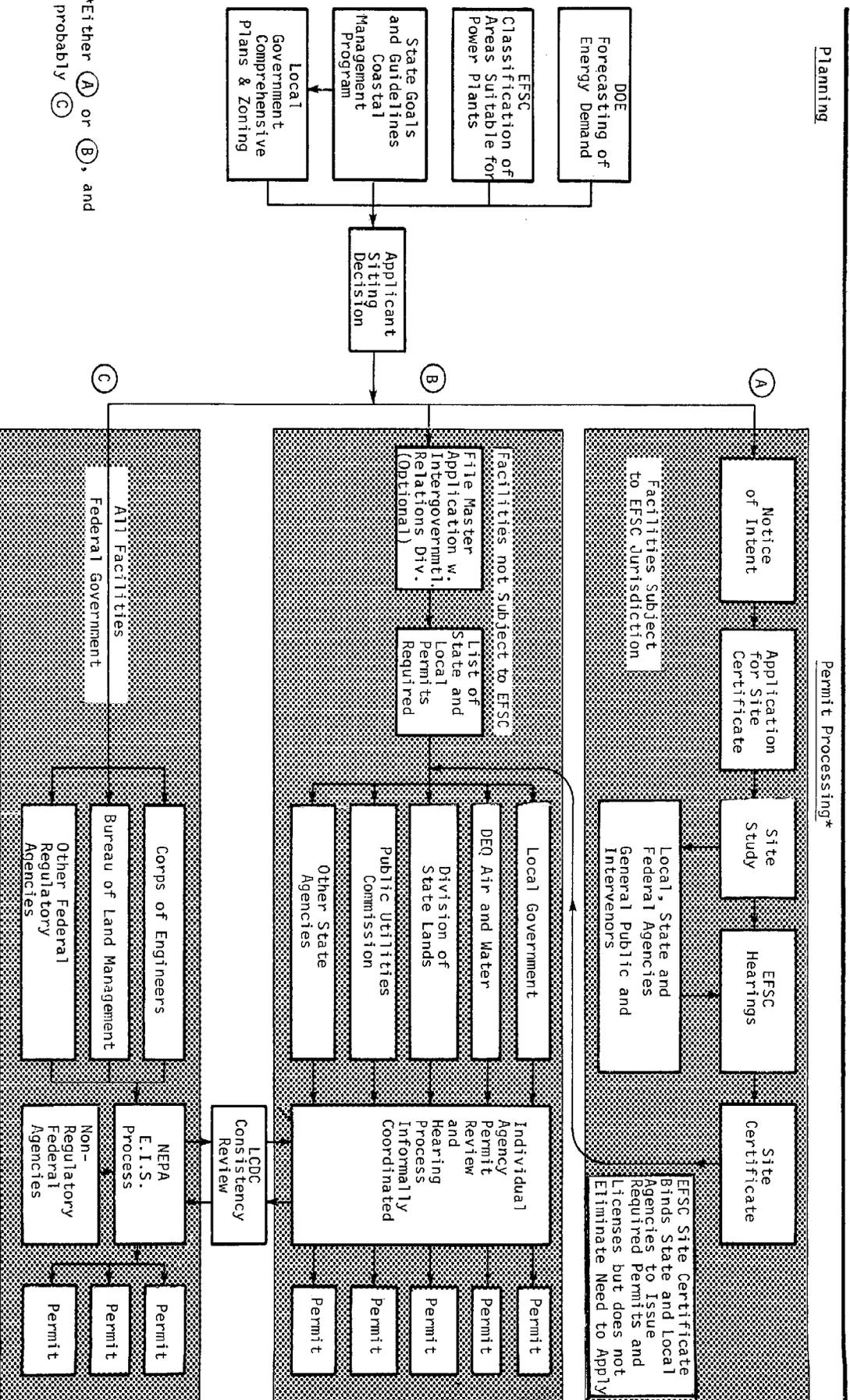
The Energy Facility Siting Council consists of seven public members, each appointed by the Governor for a four-year term. The Council is directed to:

1. Conduct studies relating to all aspects of site selection
2. Designate areas that are suitable or unsuitable for use as sites for nuclear or fossil-fueled thermal power plants larger than 200 megawatts, and geothermal power plants
3. Establish standards for the issuance of site certificates (ORS 469.470)

The energy facilities under the jurisdiction of EFSC are:

1. Any electric power generating plant with a capacity greater than 25 megawatts, including both hydro and thermal power
2. Any nuclear power reactor, fuel fabrication or reprocessing plant

THE OREGON ENERGY FACILITY PLANNING PROCESS



*Either (A) or (B), and probably (C)

SOURCE: Adapted from Seton, Johnson & Odell, Inc. and Cogan & Associates June 28, 1978 Discussion Paper

3. Transmission lines of more than ten miles in length with a capacity in excess of 230 kV
4. A solar collecting facility using more than 100 acres of land, or providing more than 25 megawatts of power
5. A pipeline five miles or longer in length and six inches in diameter, used for petroleum, LNG, or geothermal energy, or 16 inches in diameter used for natural or synthetic gas
6. Related or supporting facilities

An applicant who wishes to build a thermal power plant (except a combustion turbine or geothermal power plant) with a capacity greater than 200 megawatts must file a notice of intent (NOI) to file an application for a site certificate. This triggers a public notice. The application may not be filed until 120 days after filing of the NOI. The NOI and all applications must be sent for comment and recommendation within specified deadlines to numerous state agencies and any city or county affected by the application.

Hearings must be held, and EFSC must approve or reject an application within specified times. Any person, including agencies of the federal government and other states, may present testimony in any hearing. In addition, formal intervenor status may be granted to any person by EFSC, provided the request is made before the final taking of evidence in the hearing. The Oregon Department of Energy serves to generate information about the application and has intervenor status. Any intervenor may appeal the EFSC decision, within a specified time, to the Oregon Supreme Court.

While EFSC may grant a site certificate, it does not actually issue the necessary permits. However, the site certificate binds state and local agencies to issue the necessary permits subject only to the conditions of the certificate. The conditions imposed will be the result of agency comments on the application and will be determined by agency negotiations with EFSC. Each agency continues to exert enforcement authority over any permit it issues. Furthermore, a site certificate may be issued only after EFSC finds that the proposed facility is in conformance with the local comprehensive plan in effect at the time of filing the NOI (OAR 345-75-025(5)(a)). By this rule EFSC appears to have disavowed pre-emption authority over local comprehensive plans.

Following the second track, EFSC is not involved in the siting decision for an oil port, an LNG terminal, an oil production platform fabrication yard, or an oil refinery, for examples. In these cases, the applicant may seek the assistance of the State Permit Coordination Center operated by the Intergovernmental Relations Division (IRD). The IRD will ask the applicant to complete a short Master Application from which IRD will determine what state permits are necessary and supply the applicant with appropriate regulations. The applicant is then on his own to individually obtain each of the designated permits, although if more than one public hearing is required, he may request that they be combined.

Major state permits likely to be required by energy facilities include those listed in Table 1. The state permits may be issued if the applicant meets certain standards or conditions. They will be reviewed for consistency with the OCMP by circulating the applications to other state agencies, and by requesting local governments to make a finding of compatibility with their comprehensive plans. As was pointed out earlier, several agencies will not issue a permit unless the application is shown to be in conformance with local plans. The permits, if granted, may be conditioned to minimize impacts.

The appeals process for each state agency permit decision is described in each agency's enabling legislation (Appendix 5 of the OCMP). If dissatisfied with the outcome of that process, any state agency, city, county, or special district governing body, may petition to LCDC to review a land conservation and development action taken by a state agency, city, county, or special district on the basis that the action is in conflict with statewide planning goals. LCDC will undertake the review only after the normal appeals procedure for the action agency has been exhausted.

Response to Federal Requirements

The Office of Coastal Zone Management has published five requirements for an energy facility planning process that must be met by an approved program. These requirements are published in 15 CFR 923.14, and are here addressed in detail, one at a time.

1. *Identification of energy facilities which are likely to locate in, or which may significantly affect, a state's coastal zone.*

TABLE 1
LIKELY NEEDED STATE PERMITS

● Probably needed
○ May be needed

FACILITY	ASSUMPTIONS	ENERGY SYSTEMS PERMIT Department of Energy Alternative Energy Device Tax Credit Energy Supplier Weatherization and Energy Conservation Services Energy Facilities Siting Certificate	LAND USE PERMIT Department of Environmental Quality Permit for Activities in Wilderness Area	Department of Forestry Permit to Clear Right-of-Way Easement (Permanent) on State-Owned Forest Land Permit to Enter Closed Area Special Use Permit	Department of Geology & Mineral Industry Permit to Drill Geophysical Test Hole Permit to Drill Geothermal Well Permit to Drill New Oil or Gas Well Permit to Drill Stratigraphic Test Hole	Department of Transportation Parks and Recreation Branch Land Use Changes, etc. Near Scenic Waters Ocean Shore Development Permit Ocean Shore Products Removal Permit Ocean Shore Pipelines, Cables, Conduit	Division of Lands Geothermal Exploration on State Lands Geothermal Lease on State Lands Oil and Gas Exploration on State Lands Oil, Gas and Sulphur Lease on State Upland Oil, Gas and Sulphur Lease on Tidal and Submerged Lands
Electrical Plants Fossil Fuel	Coal (On Coast)	●			○	●	
	Gas Turbine (Upland)	○		○ ○ ○	○		
Nuclear	On Coast	●			○	● ●	
Biomass	Co-Generation at Pulp Mill			● ● ● ●			
	Biomass Farm on State Forest			● ● ● ●			
Direct Solar	Central Photovoltaic (Private Upland)	●					
Wind Power	Multiple Units (Uplands)	○		● ● ●			
	Coastal Headlands	○				○ ●	
Geothermal	Uplands	●		● ● ●			● ●
Hydro		●		○ ○ ○			
High Voltage Transmission	Existing Corridor						
	New Corridor	●		● ● ●		○	●
Oil/Gas Exploration	Uplands		○	○ ○ ○	● ● ●		● ●
	Marine Submerged Land				● ● ●		● ●
	Oregon OCS						
Oil/Gas Production	Uplands		○	● ●	● ●		● ●
	State Submerged Lands				● ●		●
	Oregon OCS						
Oil/Gas Tanker Traffic	Columbia River Along Coast						
Marine Pipeline	Landfall at Existing Port	○					●
Oil/Gas Port and Terminal Facilities	Deepwater Port in State Water						
	Deep Draft Port Tank Farm					● ●	● ●
	Deep Draft Port LNG Facility				● ●		● ●
Petroleum Refinery	At Existing Port				● ●	● ●	○
Gasification Plant	Coal Imported From Alaska at Existing Port				● ●	● ●	○
Geopressurized Gas	Aquifer Storage				● ●	○	○
OCS Platform Construction						● ●	○
OCS Support Base	Temporary						○
	Permanent						○
Pipeline		○					○

TABLE 1 (Continued)

FACILITY	ASSUMPTIONS	PLANT-RELATED PERMITS Department of Commerce Building Codes Division Boiler or Pressure Vessel; Operate Boiler or Pressure Vessel, Installation Building Permit and Plans Review Electrical Permit/Label Elevator Mechanical Permit Plumbing Permit State Fire Marshall Explosives Flammable and Combustible Liquids (Handle, Store, Distribute) LPG Containers LPG Delivery Trucks LPG Fitters LPG Installer LPG Tank Installation	Department of Environmental Quality Solid Waste Disposal Facility Plans Approval Solid Waste Disposal Site Permit Hazardous Waste Disposal	TRANSPORTATION Public Utility Commissioner Rail-Air Program Permits for Rail-Highway Intersection	Department of Transportation Aeronautics Division Approval of Airport/Heliport Sites Registration/License for Airport Heliport Sites	Highway Division Permit to Perform Operations on H.D. Property (Pipeline, Pole Lines, etc.) Road Approach Construction Permit
Electrical Plants Fossil Fuel	Coal (On Coast)	• • • • •				•
	Gas Turbine (Upland)	• • • • •	•			•
Nuclear	On Coast	• • • • •		○		•
Biomass	Co-Generation at Pulp Mill	• • •		•		•
	Biomass Farm on State Forest	•				•
Direct Solar	Central Photovoltaic (Private Upland)	• •				•
Wind Power	Multiple Units (Uplands)	○ • •				
	Coastal (Headlands)	○ • •				
Geothermal	Uplands	• • • • •				•
High Voltage Transmission	Existing Corridor					
	New Corridor					
Oil/Gas Exploration	Uplands	• •	•			•
	Marine Submerged Land	•	•			•
	Oregon OCS					
Oil/Gas Production	Uplands	• • •	•			•
	State Submerged Lands	• • •	•			•
	Oregon OCS					
Oil/Gas Tanker Traffic	Columbia River Along Coast					
Marine Pipeline	Landfall at Existing Port	•	○			
Oil/Gas Port and Terminal Facilities	Deepwater Port in State Water	• • • • •	•			
	Deep Draft Port Tank Farm	• • • • •	•			
	Deep Draft Port LNG Facility	• • • • •	• • • • •			
Petroleum Refinery	At Existing Port	• • • • •	•		○	•
Gasification Plant	Coal Imported From Alaska at Existing Port	• • • • •	•		○	•
	Geopressurized Gas	• • • • •	•			•
OCS Platform Construction	Aquifer Storage	• • • • •	•			•
OCS Support Base	Temporary	• • • • •	•	○	○	•
	Permanent	• • • • •	•		• • •	•
Pipeline			•			•

The identification of energy facilities is made in several ways:

- Inventory of existing facilities
- Ongoing study of likely energy facilities
- Forecasts of state and regional needs
- Permit requirements, public notice, and coordination
- OCS Task Force

Existing facilities in the Oregon Coastal Zone (OCZ) have been inventoried under a contract supported by NOAA/OCZM funds, and are summarized in Table 2. The inventory was conducted by literature review, interviews with knowledgeable public and private officials, and industry contacts.

Electrical Generation (Conventional)--Except for several small cogeneration facilities at local and wood products mills, no electricity is generated within the Oregon Coastal Zone. There is a gas turbine generator at Clatskanie, and a nuclear steam plant near Rainier, both of which are adjacent to the coastal zone in Columbia County. There are several hydroelectric projects under active or semi-active consideration (on the Trask, Coquille, and Illinois Rivers), but no construction. No thermal plant proposals are active, although site suitability studies have been done for coal fired plants. Utilities generally refuse to rule out the possibility of siting major electrical generation plants on the coast.

Electrical Generation (Alternate Sources)--Wind facilities are currently technologically feasible and the coast is recognized as being a high potential area in Oregon. Use of residential to community-sized wind generators on the coast is possible in the near future.

Electricity from photovoltaic cells is currently technologically feasible but so costly that it would only be used for special applications and at remote sites. Rapid advances may change this assessment in the near to mid-future. Electric production from a solar thermal cycle is not likely to be located on the coast.

TABLE 2
SUMMARY OF EXISTING ENERGY FACILITIES IN THE OREGON COASTAL ZONE

Type of Facilities	Now Exists	Specific Plans	Important Factors
Electrical Plants:			
Fossil	No	No	Alaskan Coal Import
Nuclear	No	No	Utilities Interest Deferred
Biomass	Small-Scale	Yes	Forest Products Market
Direct Solar	No	No	Price
Ocean Power	No	No	Environmental Constraints
Wind Power	No	R&D by Utilities	Price of Machines, Power
Geothermal	No	No	Low Potential
Hydroelectric	No	Trask-Eden Ridge; Buzzards Roost	Status of Wild & Scenic Rivers
High Voltage Transmission	Yes	Yes	Load Growth in OCZ
Oil/Gas Exploration Offshore	Yes (Minor)	State Lands Only	OCS Activity Elsewhere
Oil/Gas Exploration Onshore	Yes (Minor)	Some Leasing Anticipated	Exploratory Success
Oil/Gas Production Offshore	No	No	Depends on Finds
Oil/Gas Production Onshore	No	No	Depends on Finds
Oil/Gas Tanker Traffic	Yes	Yes	Environ. Consid; Midwest Pipeline(s)
Marine Pipeline	No	No	Depends on OCS Finds
Oil/Gas Port Terminals	Yes	Yes	Oil/Gas Delivery Alternat.
LNG Facility	Yes	Yes	Avail. of Alaska LNG
Petroleum Refinery	Yes (Portland)		
Gasification Plant	No	Yes (Rainier)	
Geopressurized Gas	No		
Oil/Gas Pipelines	Yes	No	
OCS Platform Construction	No	Yes (Brown & Root)	OCS Activity Elsewhere
OCS Support Base	No	No	OCS Activity

SOURCE: Mathematical Sciences Northwest, Inc., 1978.

Production of power from tidal, wave, or ocean thermal energy is not technologically, economically, or environmentally feasible at this time.

Geothermal potential in the OCZ is considered very low.

Biomass productivity in the OCZ is very high. It is likely that residues from timber production will continue to be utilized for the production of electricity in industrial cogeneration facilities. New electric generating facilities burning biomass fuels grown specifically for that purpose are considered less likely.

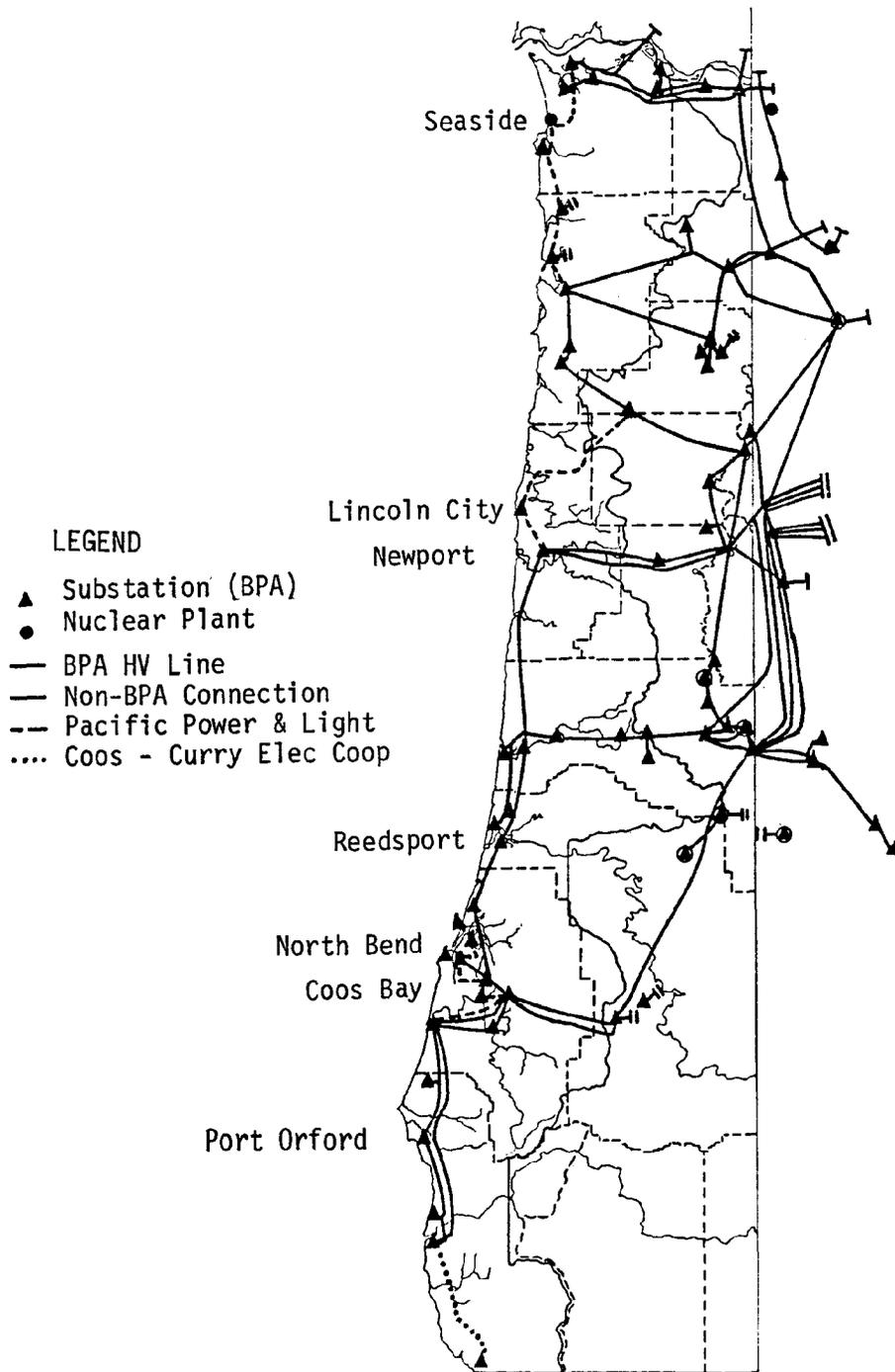
Electrical Transmission--High voltage transmission lines belonging to Bonneville Power Administration (BPA) serve local utilities in the OCZ. BPA lines charged at 115 kV and 230 kV are shown in Map 1. Seven utility corridors enter the OCZ from the Willamette Valley and the Portland/Columbia County area. Nine local utilities on the coast distribute and sell power bought from BPA or from Pacific Power and Light Company or Portland General Electric Company.

Oil/Gas Exploration--Wells drilled onshore in the coastal zone have generally yielded little or no oil and only small amounts of gas have been found. Exploratory drilling has been very limited and the eventual potential in many portions of the OCZ is not known. Geologically favorable formations reportedly exist in Coos and Douglas Counties. Offshore drilling on federal and state lease tracts during 1961 through 1969 generally were disappointing, and no production wells were established. However, prospects are considered fair to good off the coasts of Coos, Douglas and Lane Counties.

Present state lands offshore and uplands leasing and exploratory drilling proposals have been confined to the Columbia River area off Clatsop County. Federal plans for OCS leasing off the Oregon Coast have been shelved indefinitely, due to the limited interest shown during the tract nomination cycle.

Oil Transport--The Columbia River currently has some oil tanker and oil barge traffic which supplies crude and refined oil products to Chevron USA facilities at Portland. Crude is delivered to Chevron's asphalt refinery, and refined products are delivered to the Wilbridge Distribution Terminal, where they are stored and then distributed. No expansion in capacity is anticipated. Increased utilization of Alaskan crude at the refinery is likely.

The Cascade Energy Company is planning to build a new refinery near Rainier, to be supplied by Alaskan crude brought up the Columbia River on barges or tanker ship.



MAP 1

High Voltage Transmission Lines In The Oregon Coastal Zone

The GATX Corporation is proposing to build a tanker off-loading, oil storage, and rail transshipment facility at Port Westward, also in Columbia County. This proposal, currently the subject of an EIS by the Army Corps of Engineers, would supply crude oil to Montana or Minnesota refineries. If implemented, the project will increase oil transport on the Columbia River by 76 percent.

Oil Refinery--Although no refineries exist in the OCZ, an existing asphalt refinery at Portland (Chevron USA) and a proposed new refinery at Rainier (Cascade Energy Company) may significantly affect the coastal zone. The Chevron refinery receives oil by ship from Alaska and elsewhere; the Cascade refinery would be supplied by barge from Alaska. No other plans for adding refinery capacity are known.

Natural Gas--Natural gas is imported overland into the Oregon Coastal Zone. Two natural gas pipelines owned by Northwest Natural Gas Company enter the OCZ from the east, as shown on Map 2. That company serves the Astoria-Seaside and Lincoln City-Newport areas and also operates a small propane delivery system in the Coos Bay area. Northwest Natural Gas Company recently built an LNG storage facility at Newport, which is used to store natural gas in liquid form (LNG) during summer, for use during peak winter demands. Gas for the system is purchased from the Northwest Pipeline Corporation. Northwest Natural Gas Company intends to import LNG from southern Alaska to the Newport facility, and will reportedly seek to build the necessary docks and piping within two years.

OCS Support--No OCS support bases exist in the OCZ, and none are likely in the near future given the current lack of OCS activity off the Oregon coast.

OCS Platform Construction Facilities--Brown and Root, Inc. has proposed to build an OCS platform construction yard near Warrenton. This proposal is currently in the EIS stage, under the jurisdiction of the Army Corps of Engineers in Portland. About 1,000 people would be permanently employed at the 200-acre facility, which would produce steel production platforms for use in Alaskan and Californian OCS fields.

As part of the same study that generated the existing facilities inventory, likely energy facilities were identified on the basis of existing forecasts of the demand for energy, the existing standards for siting energy facilities, and a matching of facility requirements with physical and biological characteristics of the Oregon coast to determine suitability. The study also identified the significant effects of these likely facilities on coastal zone resources, and any technical conditions that require siting in the

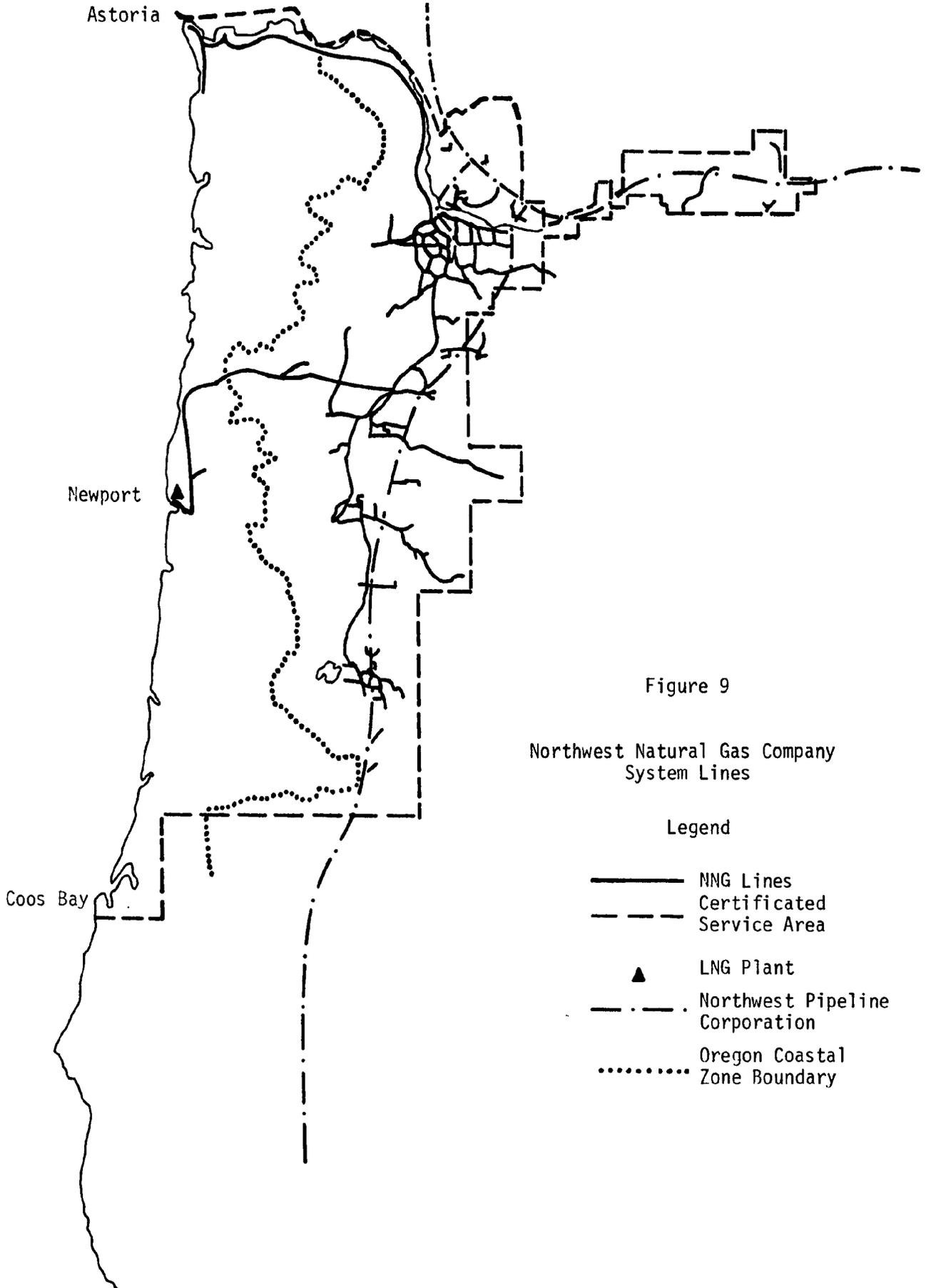


Figure 9

Northwest Natural Gas Company
System Lines

Legend

- NNG Lines
- - - - - Certificated Service Area
- ▲ LNG Plant
- . - . - Northwest Pipeline Corporation
- Oregon Coastal Zone Boundary

coastal zone. Both the inventory of existing energy facilities and the study of likely new or expanded energy facilities consider those facilities listed in 15 CFR 923.14(d).

A third aspect in the identification of likely energy facilities is the annual forecast of energy demands and resources prepared by the Oregon Department of Energy (DOE). The 1975 Oregon Legislature stated:

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:

- (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. (ORS 469.010)

In support of this goal (and others), DOE is required by statute to issue an annual energy forecast for the State of Oregon.

The forecast shall include....an estimate of

- (a) Energy demand and the resources available to meet that demand; and
- (b) Impacts of conservation and new technology, increased efficiency of present energy facilities, additions to present facilities, and construction of new facilities, on the availability of energy to Oregon. (ORS 469.070)

To this end, the forecast incorporates information from the State Energy Conservation Plan. This forecast appears as the Department of Energy's Annual Report, and is supported by the following technical documents:

An Energy Demand Forecasting Model for Oregon

*Energy Consumption and Related Data in Oregon:
Some Historical Perspectives*

Demographic and Economic Forecasts for Oregon

*Future Electricity Prices in Oregon: A Cost-Based
Analysis*

*Testimony Prepared for Oregon Energy Facility Siting
Council (EFSC) on Pebble Springs*

In addition, each year utilities, petroleum suppliers and coal suppliers must submit energy forecasts to DOE. (ORS 469.070)

DOE and industry forecasts for the state, as well as forecasts for the region prepared by the Northwest Energy Policy Project, the West Group, and the Pacific Northwest Utilities Conference Committee, are all valuable sources for anticipating energy facilities.

A major purpose of the requirement for the identification of energy facilities is to assure consideration of energy facilities as land or water uses having impacts and subject to the coastal management program. This is assured in Oregon as virtually all energy facilities will require a state or federal permit. As discussed above in Policies and Procedures, each public action, including the issuance of a permit, must be evaluated for consistency with the OCMP. The mechanisms for doing so are discussed in greater detail below.

Finally, because of anticipated Pacific Coast oil and gas lease sales potentially affecting Oregon's coastal resources, and because of the need to present a strong, consolidated state response in a timely fashion to Outer Continental Shelf plans and activities, the Governor in January 1977 issued Executive Order No. EO-77-1 creating an Oregon Outer Continental Shelf Oil and Gas Development Task Force. The objectives of the OCS Task Force are:

- To identify and define the state's interest in federal and state OCS waters
- To coordinate state input to and review of OCS proposals and projects
- To coordinate the state response to specific OCS-related proposals affecting Oregon's coast
- To recommend a permanent structure within state government for dealing with OCS activities
- To coordinate Oregon's OCS activities with those in neighboring states

This Task Force will terminate at the end of 1978. It and its proposed permanent successor will provide early warning of potential OCS-related energy facilities before facility permits are actually applied for.

2. *Procedures for assessing the suitability of sites for such facilities*

Site suitability in Oregon is determined in several ways:

- Coastal resource inventory
- Special site suitability studies
- Site-specific review of application

Inventories of natural and man-made coastal resources were conducted by LCDC's predecessor, the Oregon Coastal Conservation and Development Commission. Although a tool for coastal program development, the resource inventories also serve as baseline information for program implementation. These inventories include:

Coastal Wetlands of Oregon

Estuarine Resources of the Oregon Coast

Historical and Archaeological Resources of the Oregon Coast

Fish and Wildlife Resources Oregon Coastal Zone

Freshwater Resources of the Oregon Coastal Zone

Visual Resource Analysis of the Oregon Coastal Zone

Resource Analysis of Oregon's Coastal Uplands

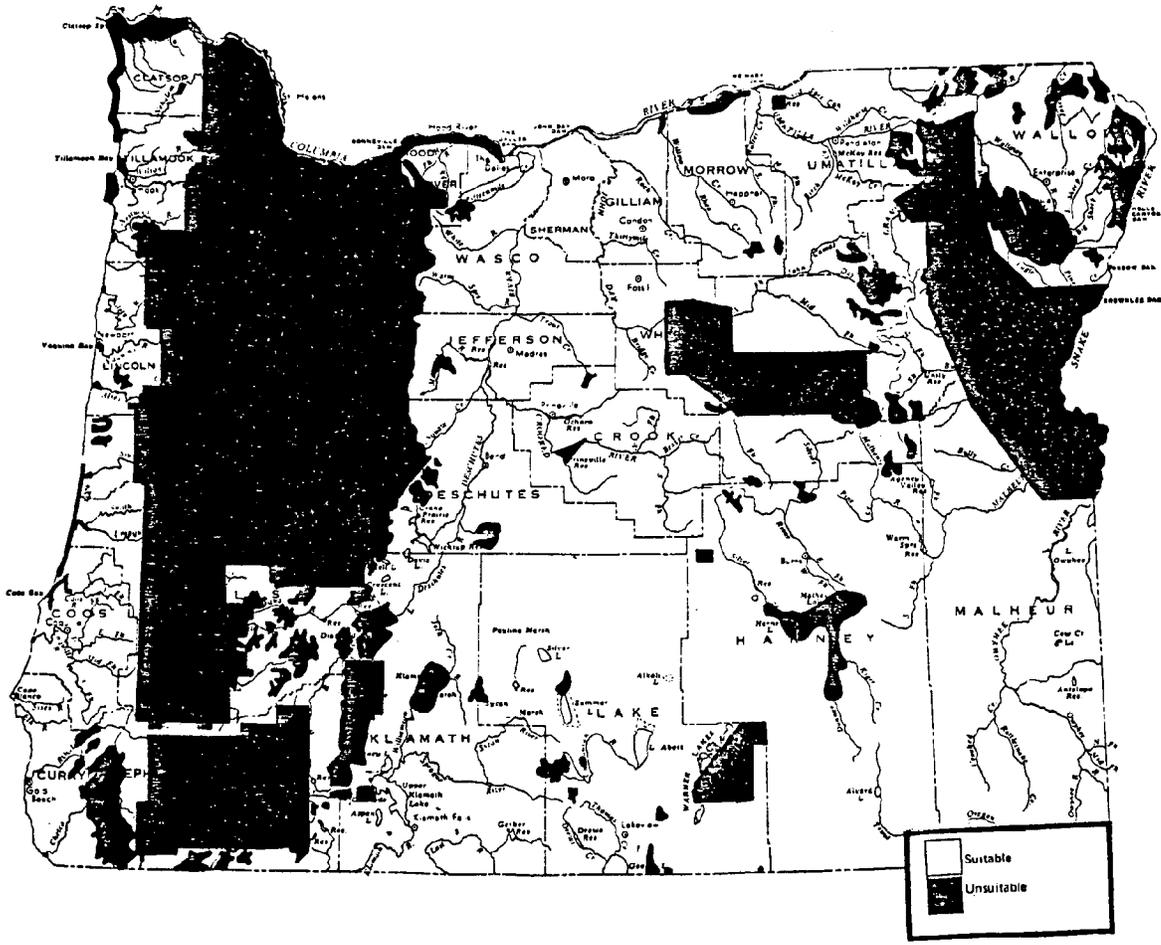
Beaches and Dunes of the Oregon Coast

These inventories were used as part of a special study on likely energy facilities described earlier, in two ways: first, the study reviewed the location and distribution of these resources relative to the potential location of new energy facilities in the coastal zone; and second, the study assessed the potential for direct and significant impacts on these coastal resources resulting from the development of energy facilities. The probable suitability of various resource types to accommodate energy facilities was also evaluated, with respect to the statewide land use planning goals.

Another special study conducted for Oregon is the 1974 Oregon Nuclear and Thermal Energy Council State-Wide Siting Task Force Report. This council was the predecessor of the Energy Facility Siting Council. One of the duties of the past and present councils is to designate areas of the state that are suitable or unsuitable for nuclear and fossil-fueled thermal power plants of 200 megawatts or greater capacity, and geothermal power plants (ORS 469.470(2)). Other energy facilities may be added to the list but EFSC has not yet done so. The 1974 Task Force Report developed maps showing suitable, less suitable, and unsuitable areas for these facilities based on natural resource areas, meteorology, population, water restrictions, and geology. This report now carries force of administrative rule (OAR 345-40-005 to 040). Construction of the above named facilities will not be permitted in areas designated unsuitable, unless the applicant can show that the designation was based on insufficient or incorrect information. DOE plans to update the Task Force Report to include evaluation of the suitability of specific sites. (See Maps 3 and 4.)

LCDC has within its scope of authority another means of assessing site suitability: it may recommend to the legislature the designation of areas of critical state concern (ORS 197.405(2)). Each such recommendation

- Must specify the need for additional state regulations for the area
- Must describe existing state and local programs and regulations applicable to the area
- Must locate a boundary for the area



MAP 4: Land Use Designations for Fossil Fuel Power Plants.

- May include a management plan for the area
- May establish permissible use limitations for the area
- May designate permissible use standards for the area or establish standards for the issuance of permits regulating specified uses of lands in the area

The authority to designate areas of critical state concern rests with the legislature. While it is a potentially powerful tool for managing land use, LCDC has not recommended any such designation, largely because it is presently, and through 1980, will be devoting its resources to the review and approval of local comprehensive plans.

Site-specific reviews in response to applications for the construction of energy facilities are yet another means Oregon uses to assess site suitability. These procedures have been discussed earlier for EFSC and for other permits. EFSC applies a broad range of federal and state standards in assessing site suitability. In addition, EFSC has its own general standards which include the following considerations bearing on site suitability:

- Risk of injury to public health and safety
- Environmental and socioeconomic impacts
- Conformance with statewide planning goals and with comprehensive land use plans and zoning ordinances of political subdivisions (OAR 345-75-010 to 025)

EFSC is also developing standards specific to energy facility types. Standards for thermal power plants have been adopted (OAR 345-76-010 to 045), and standards for transmission lines are nearing the hearing stage.

3. *Articulation of state policies for managing energy facilities and their impacts, including a clear articulation of policies regarding conditions that may be imposed on site location and facility development*

The policy of the State of Oregon is to permit all types of energy facilities in the coastal zone where local plans or the applications of statewide goals find them individually appropriate to the proposed site, and where such energy facilities can meet environmental standards set forth in state and federal law or rule. The only exception is to the aforementioned thermal power plants where OAR 345-40-005 through 040 prohibits their location in areas designated unsuitable. (See Maps 3 and 4 for graphic summary of unsuitable areas.) There is no blanket prohibition or systematic discouragement of any class of energy facilities.

Broad policy of the Energy Facility Siting Council in managing energy facility impacts is articulated in ORS 469.310:

In the interests of the public health and 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 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.

Siting conditions of EFSC are embodied in general and specific standards. EFSC must make a determination that each of its standards is met by an applicant. If they are, then EFSC will approve the application for a site certificate. As stated by the general standards, mandatory findings shall include:

1. There is a need for the facility, based on objective forecasts, and the proposed facility is a prudent method to meet the demand from an economic standpoint, taking into account alternative means of supplying the energy
2. Risk of injury to the public health and safety will be reduced to the maximum extent practicable
3. Adverse impacts on the environment will be reduced to the maximum extent practicable

4. Siting, construction and operation of the proposed facility will be carried out in conformance with statewide planning goals and in conformance with local comprehensive land use plans
5. Construction and operation will be conducted so as to avoid adverse impacts upon historic or archaeological sites
6. The applicant has the organizational, managerial and technical expertise to construct, operate and retire the proposed facility
7. The applicant has the financial strength to assure completion, operation and retirement of the facility
8. The applicant has identified socioeconomic impacts of the proposed facility, and the affected area can absorb the projected industrial and population growth resulting from construction and operation of the facility.
(ORS 345-75-025)

In addition to these conditions or standards that must be met in the siting, construction and operation of energy facilities, EFSC has continuing authority over the site for which a certificate is issued, and may inspect the site at any time (ORS 469.430). EFSC also conducts programs to monitor the environmental and ecological effects of thermal power plants (ORS 469.500).

Other state agencies involved in issuing permits directly for energy facilities have their own substantive standards to protect the resources under their jurisdiction. Because these agencies may be numerous, depending on the proposed activity, Appendix 5, State Statutes and Authorities, of the OCMP should be consulted. A few of the more likely applicable policies are described here as examples.

Legislation establishing Department of Environmental Quality control over air quality states that it is the public policy of the State of Oregon:

- To restore and maintain the quality of air resources of the state in a condition as free from pollution as is practicable, consistent with the overall public welfare of the state
(ORS 468.280)

Similarly, for water quality, it is the public policy of the state

- To protect, maintain and improve the quality of the waters of the state
- To provide that no waste be discharged into any waters of this state without first receiving the necessary treatment
- To provide for the prevention, abatement and control of new or existing water pollution (ORS 468.710)

In both cases, the Environmental Quality Commission may establish standards regulating air quality and emissions and water quality and purity (ORS 468.295 and 468.735).

ORS 541.610 establishes policy for the removal of material from the beds and banks of state waters and for the filling of state waters. The Division of State Lands circulates permit applications to affected state and local agencies to determine their interests in the matter. These interests are taken into account by DSL by imposing conditions on the permit. Also, in determining whether or not to issue a fill permit, DSL must consider:

- Whether the proposed fill unreasonably interferes with the paramount policy of this state to preserve the use of its waters for navigation, fishing and public recreation
- Whether the proposed fill conforms to sound policies of conservation and would not interfere with public health and safety
- Whether the proposed fill is in conformance with existing public uses of the waters
- Whether the proposed fill is consistent with a duly enacted zoning or land use plan for the area where the proposed fill is to take place (ORS 541.625)

Any permit issued by DEQ will also specify the conditions for compliance with the rules and standards adopted by the Environmental Quality Commission (ORS 468.065). EFSC, in addition to its standards and those of other state and local agencies, sets forth conditions for the construction and operation of its energy facilities, for the protection of the public health and safety, and for compliance with

lawful ordinances of an incorporated city where an energy facility site is proposed (ORS 469.400). Thus, conditions may be imposed on permits and site certificates to mitigate undesirable impacts and to ensure that agency standards are met.

4. *Identification of how interested and affected public and private parties may be involved in the planning process, and a discussion of the means for continued consideration of the national interest, in the planning for and siting of energy facilities that are necessary to meet more than local requirements, after program approval*

Much of the background to Oregon's response to this requirement is presented in Chapter IV, Processes for Implementing OCMP, and Chapter V, Authorities and Organizations of the OCMP, and should be consulted for further understanding.

The lead CZM agency in Oregon is LCDC. Other state agencies, while not surrendering their autonomy, must coordinate their actions with LCDC and the OCMP. This is true of EFSC as well as other regulatory agencies. The responsibilities of LCDC, local government, and state and federal agencies with respect to coastal resource management and, in effect, energy facility planning for the coastal zone, are listed on Pages 47 and 48 of the OCMP.

A key procedure by which public and private parties may be involved in the planning process is coordination.

Coordination is carried out in several ways:

- County citizen advisory committees and local officials advisory committees for the development of local comprehensive plans
- State agency assistance to local governments in the development of their comprehensive plans
- Local reviews of state and federal permit applications
- Local advisory group to EFSC
- State agency coordination programs
- State permit consistency rule (in draft)
- Federal consistency requirements

Each county must have a program for citizen involvement in preparing, adopting and revising comprehensive plans within the county. This program must provide for a citizen advisory committee (ORS 197.160). In addition, LCDC has appointed a Local Officials Advisory Committee to advise and assist LCDC on its policies and program affecting local governments (ORS 197.165).

Each state agency has made provision for participation in the development of local comprehensive plans as needed. Information and technical assistance is provided to local governments. This participation and assistance is described in each State Agency Coordination Program.

Each permitting agency, before issuance of a permit, circulates the permit application to affected local governments for review and comment. Comments are taken into consideration in conditioning permits, and if the proposed project is not compatible with local plans, the permit will not be issued.

EFSC must designate the governing body of the city or county as a special advisory group in any city or county where a proposed site is located (ORS 469.480).

ORS 197.180 requires that state agencies submit to the Department of Land Conservation and Development, a State Agency Coordination Program. The coordination program must contain:

1. A summary of agency rules and programs affecting land use
2. A program for cooperation and technical assistance to local governments
3. A program for assuring conformance with the goals and compatibility with comprehensive plans
4. A program for coordination with other governmental agencies and bodies (LCDC Administrative Rule adopted 9 December 1977)

Each agency program must be approved by DLCD. As of 14 June 1978, all but four programs had been approved.

LCDC has also drafted a proposed state permit consistency rule. More information on this rule will be available when it is finally adopted.

EFSC has some specific direction to pursue state-federal coordination. As general policy, it is the purpose of EFSC "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" (ORS 469.310). Specifically, EFSC's standards and rules must take into account rules and regulations of the federal Nuclear Regulatory Commission, the Environmental Protection Agency, the Department of Transportation and the Federal Energy Administration and their successors (ORS 469.510).

Federal consistency requirements, as set forth in Section 307 of the Coastal Zone Management Act, also serve to coordinate federal funding, programs and actions with the OCMP. Memoranda of agreement between federal agencies and A-95 clearinghouses in Oregon include state review of significant federal permits. Federal consistency and the A-95 review process are particularly important to Oregon because federal agencies control nearly 40 percent of the land within the coastal zone boundaries. A study by the Intergovernmental Relations Division, Intergovernmental Coordination: Perils and Potentials for Coastal States, should be consulted for more detail about the A-95 process than can be discussed here.

In one way or another, the federal government is involved in regulation of most of the energy facilities considered in this study. This regulation may be either direct, as in the role of the Nuclear Regulatory Commission in licensing nuclear-fueled power plants, or advisory, as in the role of the Fish and Wildlife Service, in reviewing and approving other agencies' permits (e.g. U.S. Forest Service, Bureau of Land Management, Bureau of Indian Affairs, etc.). Similarly, the federal agencies review and comment on all projects at the local, state or federal level which may affect their resources, jurisdictions, or missions. Some agencies become involved mainly through enforcement of standards or laws governing some attribute of an energy facility (e.g. Occupational Safety and Health Administration enforces safety laws at all facilities).

One result of federal action affecting energy facility siting will be the preparation of an environmental impact statement under the National Environmental Policy Act. The EIS then presents another opportunity for intergovernmental coordination and information sharing.

For information regarding federal-state consultation (15 CFR 923.51) and full participation (15 CFR 923.55) in the development of the approved OCMP, the reader should review Appendices 8, 9, and 10 of the OCMP.

Possible federal involvement in energy facility siting is summarized in Table 3. It should be noted that this table is merely a guide and is not definitive. A more complete summary of federal agency interests can be found in Volume II of this study.

TABLE 3
FEDERAL REGULATORY ACTIVITIES
FOR ENERGY FACILITIES

	FERC	NRC	USFS	USCG	ACOE	FWS	NMFS	USGS	BLM	BIA	BR	NPS	EPA	FMA	BPA	FCC	ICC	OPS	OSHA	JD	FTC	SEC	CEQ
Fossil-Fueled Power Plant	P		F		P	A	A	F	F	F	F	F	A	A					S	S	S	S	E
Nuclear Power Plant		P	F		P	A	A	C	F	F	F	F	A	A					S	S	S	S	E
Direct Solar Generating			F			A	A	F	F	F	F	F							S	S	S	S	E
Biomass Fueled Power Plant	P		F		P	A	A	F	F	F	F	F	A	A					S	S	S	S	E
Wind Energy System			F			A	A	F	F	F	F	F		A					S	S	S	S	E
Ocean Power Plant				P	P	A	A	F											S	S	S	S	E
Hydroelectric Gen. Plant	P		F		P	A	A	F	F	F	F	F	A						S	S	S	S	E
Geothermal Power Plant			F		P	A	A	P, M	F	F	F	F	A	A					S	S	S	S	E
Hi-Voltage Elect. Trans. Lines	P		F		P	A	A	P	F	F	F	F		A	F				S	S	S	S	E
OCS Survey and Exploration					P	A	A	P, M	F										S	S	S	S	E
Production					P	A	A	P, M	F										S	S	S	S	E
Federal Lands O/G Survey & Expl.			F		P	A	A	P, M	F	F	F	F	A	A					S	S	S	S	E
Production			F		P	A	A	P, M	F	F	F	F		A					S	S	S	S	E
State/Private Lands and Water																							
Survey and Exploration			F		P	A	A	P	F	F	F	F		A					S	S	S	S	E
Production			F		P	A	A	P	F	F	F	F		A					S	S	S	S	E
Oil Deepwater Ports				P	P	A	A																
Marine O/G Pipelines	P				P	A	A	P											S	S	S	S	E
Onshore Trunk Pipelines			F		P	A	A	F	F	F	F	F							S	S	S	S	E
Onshore Interst. Pipelines	P		F		P	P	A	F	F	F	F	F	A	A	F	F	A		S	S	S	S	E
Oil Refineries	P				P	A	A						A	M					S	S	S	S	E
Onshore O/G/LNG Ports	P		F		P	A	A	F	F	F	F	F	A	A					S	S	S	S	E
LNG Pipelines	P		F		P	A	A	F	F	F	F	F							S	S	S	S	E
Gasification Plants	P		F		P	A	A	F	F	F	F	F	A	A					S	S	S	S	E
OCS Platform Yard					P	A	A	F	F	F	F	F	A	A					S	S	S	S	E
OCS Support Bases			F		P	A	A						A	A					S	S	S	S	E

Key:
P = Permit
F = Permit, Lease, or R-O-W for its land
A = Major Approval or Clearance
M = Manages Lease of Federal Lands
C = Consultative Role
S = Enforces Standards or Laws
E = Distributes and Coordinates EISs

SOURCE: Booz, Alen and Hamilton, Inc. (1975); Northwest Federal Regional Council (1977); Resources Planning Associates (1976).

Other interested or affected parties to a siting decision may be granted intervenor status in EFSC proceedings, and may be involved through public hearings required for major permits, adoption of local plans and agency rules, and through an LCDC appeals process which will be described below.

Consideration of the national interest in the planning for and siting of energy facilities that are of greater than local interest, is of key importance to the federal-state relationship established by the Coastal Zone Management Act. The basic idea is that federal agencies will submit to the requirement that their activities be consistent with an approved state management program, under the condition that the national interest has been given adequate consideration in the development of the program, and will continue to be considered during program implementation.

Energy facilities of national interest should include, at a minimum, those whose impacts (positive or negative) are more than local or statewide. Thus, facilities which import or export energy resources or products marketed in international commerce, or facilities used for transporting or marketing energy resources or products in interstate commerce, would be of national interest. The planning for and siting of these energy facilities, as well as those of less than national interest, is discussed throughout this report. For more general background on consideration of the national interest in the development of the OCMP, Chapter III of the OCMP should be consulted.

The planning process must be capable of anticipating and managing the impacts of energy facilities. Consideration of the national interest in anticipating energy facilities is given through consideration of national energy forecasts and interstate plans and programs. The assumptions adopted by the Oregon Department of Energy in its energy demand forecasting are made as consistent as possible with the assumptions adopted by the U.S. DOE. In evaluating energy supply alternatives, the Oregon DOE uses reliability criteria of the West Group Area of the Pacific Northwest Utilities Conference Committee, which is a subsystem of the area overseen by the Western Systems Coordinating Council. These groups are planning rather than implementing organizations, and they carry no real force. Most, if not all, interstate plans or programs are sponsored by industry rather than government, although the Bonneville Power Administration, a federal agency, heavily influences the direction of long-range power planning in the northwest states.

Continued consideration of the national interest is supported by techniques for managing the impacts of energy facilities. Federal agencies have the opportunity to participate as parties to EFSC proceedings, although some national interests are already addressed

because EFSC requires coordination with federal standards. For facilities outside EFSC jurisdiction, state and federal agencies which have corresponding responsibilities informally coordinate their activities. For example, the Division of State Lands acts as the state clearinghouse for Army Corps of Engineers dredge and fill permit applications. Similarly, DEQ implements several major EPA programs at the state level, resulting in a correspondence of resource protection interests. Finally, the national interest is considered by the involvement of federal agencies in review and comment on the OCMP and its amendments.

5. *Identification of legal authorities and management techniques that will be used to implement state policies and procedures*

The legal basis for implementing Oregon policies and procedures for the siting of energy facilities has been documented throughout this discussion. However, one important legal process that has not been described is the procedure for appeal of decisions which the appellant believes are contrary to statewide planning goals or local comprehensive plans.

Each permitting agency has its own appeals process. These will not be described here as they are included in the statutes for each agency in the OCMP (Appendix 5). EFSC may grant intervenor status to any person, organization, or state or federal agency, who has an interest in the results of the contested case hearing, or who represents a public interest in such results (ORS 469.380). Any such intervenor may appeal EFSC's approval or rejection of an application directly to the Oregon Supreme Court. The petition must be filed within 60 days of the Council decision.

LCDC must review:

1. Upon petition by a county, city, special district, or state agency, a comprehensive plan provision or ordinance adopted by any such jurisdiction that the petitioner considers to be in conflict with statewide planning goals
2. Upon petition by a city, county, special district or state agency, a land conservation or development action taken by any such jurisdiction that the petitioner believes to be in conflict with statewide planning goals

3. Upon petition by a state agency, city, county, or special district, any county action that the petitioner believes to be improperly taken or outside the scope of the governing body's authority
4. Upon petition by any person whose interests are substantially affected, a comprehensive plan provision or ordinance that the petitioner believes to be in violation of statewide planning goals (ORS 197.300)

The petition must be filed within 60 days of the action. LCDC must base its proceedings solely on the administrative record. Any person or agency whose interests are substantially affected may intervene and be made a party to any such review proceedings, subject to approval of the hearings officer or LCDC (ORS 197.305). LCDC will not review the petition until all normal administrative appeals have been exhausted. Judicial appeal from an LCDC ruling is then permitted.

Recommendations

Recommendation 1:

Legislation should be introduced enlarging the scope of EFSC jurisdiction to include all facilities that store, process, transmit/transport, generate, or otherwise handle energy resources or products in liquid, gaseous or electrical form.

EFSC would thus have jurisdiction over oil or gas storage tanks, oil refineries, coal/gas liquefaction plants, oil and gas pipelines and electricity transmission lines, and hydro and thermal electric generating plants. These facilities should be defined to include geothermal, wind and solar power production, but to exclude waste heat applications such as district heating from manufacturing processes. Limitations should be placed on size of facility to insure that the EFSC does not become overburdened. This recommendation would strengthen a centralized one-stop process for energy facility planning, and clarify the responsibility for a lead decision-making agency.

Recommendation 2:

Pursuant to ORS 197.400, the LCDC should designate as activities of statewide significance major energy-related industrial facilities such as platform fabrication yards, pipe-coating yards, and OCS production support facilities, which will seriously affect land use in the coastal zone.

These activities do not have the same health and safety implications as do facilities which store, process, transmit/transport, or generate energy, yet do have significant land use and socioeconomic impacts in the coastal zone, a fact which has been given recognition by the inclusion of these activities in OCZM's list of energy facilities which must be a part of the planning process. The immediate effect of this recommendation would be to require the developer of an energy-related industrial facility to apply to LCDC for a permit.

LCDC has placed a priority in the near future on acknowledgment of compliance of local plans. Thus the feasibility of this recommendation rests on a recognition that it will not be acted upon before 1980. However, the reality of current U.S. OCS exploration plans is that no lease sales for the Pacific Northwest OCS will occur before 1980. However, LCDC should not postpone action on this recommendation until a lease sale takes place, because land options are exercised and development may occur before firm exploration plans are set--viz., the platform fabrication yard proposed by Brown and Root at Warrenton.

Recommendation 3:

The Energy Facility Siting Council should designate areas within the state that are suitable or unsuitable for facilities that store, process, transmit/transport, generate, or otherwise handle energy resources or products in liquid, gaseous, or electrical form.

This designation would then be a companion to the 1974 Task Force Report on Thermal Power Plant Siting. There are two ways to accomplish this. First, EFSC presently has the authority to undertake such a designation for "each additional type of energy facility for which the council determines such designations are necessary" (ORS 469.470(2)(c)). Thus the council, by its own initiative, could achieve the recommended result. However, it is unclear from the statute whether or not EFSC's discretion extends to energy facilities not now within its jurisdiction. Implementation of Recommendation 1 would remove this question. Alternatively, the statute could be amended to direct EFSC to make suitable or unsuitable designations for all such facilities described in the recommendation.

Presently, ORS 469.470 charges EFSC with designation of areas that are suitable or unsuitable only for nuclear and fossil-fuel thermal power plants and geothermal power plants, and grants EFSC discretion for additional types of energy facilities, as noted above. Maintaining this flexibility may be desirable to control EFSC's workload, but the effect is to postpone planning that could be helpful to the energy facility siting process.

Recommendation 4:

LCDC should identify areas of critical state concern and recommend to the legislature that they be recognized as such.

This task might appear to duplicate the site suitability studies recommended to EFSC. However, the EFSC site suitability studies, if similar to those reported in 1974 for thermal power plants, are relatively general and are based on a limited number of criteria. Areas of critical state concern should be identified by unique or valuable resources which the state wishes to protect. LCDC's recommendations and the legislature's designation would thus complement work by EFSC. This effort would be especially useful in aiding the state's response to OCS tract nominations. In particular, areas of critical state concern (including water areas out to the three-mile limit) could be used for negative nominations--areas the state feels should not be leased because of the proximity to some valuable fishery or unique species. Also in the event of OCS development, designation of areas of critical state concern could be used to

influence, if not control, the location of marine pipelines and support facilities. The impacts from those can be substantial, yet they would not be covered by EFSC site suitability studies.

Recommendation 5:

The States of Oregon and Washington should establish formal mechanisms for coordinating energy facility planning.

Oregon and Washington are perhaps not the only states where energy facility planning should be coordinated, but there are several unique reasons why coordination between Oregon and Washington should be emphasized. The Columbia River is an important common resource for electricity production and power plant cooling; the two states share a petroleum products pipeline and common pressures for coastal energy ports; and the purpose of this study is to focus on energy planning for the coastal zone, which is contiguous. Coordinating mechanisms should include efforts to develop common policies, early notification of energy facility applications, and regular information transfer. Mechanisms for coordinating a response to OCS activity are discussed in another recommendation.

Coordination between the two states is complicated by the fact that energy facility planning responsibilities are divided among several agencies, especially in Oregon. This complication could be relieved if Recommendation 1 were implemented. The development of common policy presents the most difficulty because of different political perspectives. However, it also presents the opportunity of showing a common set of rules to prospective applicants for site certification. For example, joint development of regional energy forecasts, to be used in generic studies of the need for the facility, would effectively shorten the debate that now accompanies each proposed facility. Common environmental and siting standards would be less confusing to applicants and perhaps avoid a concentration of facilities in one state. Alternative site banking could be examined for its appropriateness to the two states. These are examples of subjects that could be addressed through common policy development.

An early warning of each state's siting activity would be useful to permit the representation of neighboring states' interests in the early critical stages. A first step in establishing an early warning system would be to identify who should be notified in the neighbor state. Regular information transfer, by providing documents in the siting process, could be established as a courtesy without requiring neighbor states to become a formal party to the proceedings.

Presently, some coordination occurs through an *ad hoc* interstate committee. However, representation is limited to two siting councils, which are restricted in scope. The siting councils, plus wider representation of siting interests, could be directed by the governors to meet once annually to review the status of applications. Additional meetings could be called by either state to discuss special problems. Alternatively, the new Regional Energy Advisory Board, established by the Pacific Northwest Regional Commission, could be used to focus interstate cooperation. This Regional Energy Advisory Board would have to draw upon the siting expertise of the councils, so it is likely the same people would be involved in either case.

Recommendation 6:

An interstate OCS Task Force for Oregon, Washington and California should be established to study and prepare for potential OCS tract leasing.

California should be included in this task force because Oregon may feel some impacts of a northern California lease sale; because northern California, Oregon and Washington share general geological characteristics; and because California has some experience in representing state interests in what is essentially a federal process--experience from which Oregon can benefit. Although Oregon OCS activity appears unlikely in the near future, that is precisely the reason why anticipatory planning should begin now, in a rational climate. There is still time to develop policies and procedures for responding to a call for nomination.

In 1977, Governor Straub responded to a U.S. Department of Interior request for comment on a proposed lease schedule by stating: "Oregon has not as yet identified possible multiple use conflicts [in the lease area]" and "Oregon has not yet identified areas of critical environmental concern..." The Task Force should consider ways to develop a strong response which should include mapping critical areas or valuable resources. The Task Force should also address how to present a common interstate front to the development of onshore support facilities to ensure that development is planned, rather than simply accommodated. For more detailed OCS recommendations, the reader should consult a report by the University of Oregon School of Law, Ocean Resources Law Program, entitled *Development of Petroleum Resources From the Outer Continental Shelf: Management Problems and Capabilities in Oregon (Preliminary Draft)*.

