

3-1-1976

The Coast: Where Energy Meets the Environment

Richard G. Hildreth

Follow this and additional works at: <https://digital.sandiego.edu/sdlr>



Part of the [Law Commons](#)

Recommended Citation

Richard G. Hildreth, *The Coast: Where Energy Meets the Environment*, 13 SAN DIEGO L. REV. 253 (1976).
Available at: <https://digital.sandiego.edu/sdlr/vol13/iss2/2>

This Article is brought to you for free and open access by the Law School Journals at Digital USD. It has been accepted for inclusion in *San Diego Law Review* by an authorized editor of Digital USD. For more information, please contact digital@sandiego.edu.

The Coast: Where Energy Meets the Environment

RICHARD G. HILDRETH*

The United States is in the midst of an energy crunch. We are facing both fuel and power shortages.¹ At present rates of consumption, proven domestic reserves of oil and natural gas, our two principal fuels, may be exhausted in ten to 15 years, forcing greater reliance on unstable foreign sources.² Fuel supply is one of several

* Associate Professor of Law, University of San Diego School of Law. The author would like to acknowledge the able assistance of George Boisseau (class of 1977) and Marilyn Riley (class of 1978). Thanks also to Jean Ritenour for her dedication to the task of typing and retyping the manuscript. Although the author is responsible for the conclusions stated herein, the Coastal Zone Management Conference at Asilomar, California, May 27-29, 1975, confirmed the importance of the subjects treated. The author would like to thank the conference participants for their stimulating discussions of the issues involved.

1. Significant amounts of fuel are consumed in generating electric power. Power plants accounted for 57 percent of U.S. coal consumption, 18 percent of gas consumption and eight percent of oil consumption in 1970. N.Y. CITY BAR, SPECIAL COMMITTEE ON ELECTRIC POWER AND THE ENVIRONMENT, *ELECTRICITY AND THE ENVIRONMENT* 32 (1972).

2. FEA, PROJECT INDEPENDENCE REPORT 17 (1974). The United States consumes about 17 million barrels of oil per day, of which 6.3 million are imported. *Id.* at 3. The estimated rate of consumption for 1985 ranges from 13 million to 25 million barrels per day. 1 COUNCIL ON ENVIRONMENTAL

complex factors affecting power supply.³

The federal government is contemplating various ways to expand supplies of fuel and power.⁴ Because the benefits and burdens of such expansion would not fall evenly on the states, federal energy proposals have provoked considerable controversy.⁵ Debate has centered on the coastal states, where the great majority of Americans live and where federal energy activity is now concentrated.

Some forms of energy development have greater impact on the coast than others. Deepwater ports, liquified natural gas terminals, floating nuclear power plants, and oil and gas development on the outer continental shelf have considerable environmental and socio-economic impact on the coast. Although fossil fuel and conventional nuclear power plants traditionally have presented coastal siting problems, they are not coastal-dependent. Coal strip mining occurs inland. Coal gasification and liquification, oil shale, and synthetic fossil fuel may become important sources in the near future, but their environmental and socioeconomic impacts will be felt inland. Long-range energy sources, such as solar and wind power, are also not coastal-dependent. Geothermal power generation will impact the inland environment and probably not affect the coast.

The impacts of the inland programs should not be minimized.⁶ However, analysis of the coastal situation is necessary now because of the coastal environment's uniqueness and economic importance and the nearness in time of energy development impacts there. This Article analyzes mechanisms for handling consequences of the coastal dependent energy programs. Its focus is the United States Department of the Interior plan for increased oil and gas production on the outer continental shelf. Of the four coastal dependent programs, this one has progressed furthest in the imple-

QUALITY, OCS OIL AND GAS—AN ENVIRONMENTAL ASSESSMENT 33 (1974) [hereinafter cited as CEQ REPORT]. We currently rely on oil for 46 percent of our energy needs and on natural gas for 32 percent. Coal, which presently accounts for only 17 percent of U.S. consumption, represents over 95 percent of our total domestic energy resources. FEA, PROJECT INDEPENDENCE REPORT 17 (1974).

3. See N.Y. CITY BAR, SPECIAL COMMITTEE ON ELECTRIC POWER AND THE ENVIRONMENT, *ELECTRICITY AND THE ENVIRONMENT* (1972).

4. As the owner of over half our fossil fuel resources, the federal government has favored energy expansion rather than energy conservation measures. See FORD FOUNDATION ENERGY POLICY PROJECT, *A TIME TO CHOOSE* 399 (1974).

5. A few states are aggressively promoting energy conservation measures.

6. Strip mining damage already suffered in Appalachia is estimated at more than \$2.8 billion. ENVIRONMENTAL LAW INSTITUTE, *FEDERAL ENVIRONMENTAL LAW* 997 n.478 (1974).

mentation process.⁷ Deepwater ports are considered in connection with the Deepwater Port Act of 1974, the first federal legislation which explicitly attempts to account for national, regional, state, local, and environmental interests in energy development decision-making. Because the number of liquified natural gas terminals proposed is small and the plans for floating nuclear power plants are preliminary, no specific consideration is given their coastal impacts. As these programs mature, the lessons learned from outer continental shelf development will certainly be relevant.

DEVELOPMENT OF THE OUTER CONTINENTAL SHELF

The United States continental shelf represents a relatively untapped oil and gas source. The United States Geological Survey has estimated that it contains as much as 150 billion barrels of oil and 900 trillion cubic feet of gas.⁸ Experts believe oil rich areas lie off each of the United States coastlines. Current Interior Department plans call for greatly expanded oil and gas development on the federally-owned outer continental shelf (OCS), which commences three miles offshore.⁹ These plans include major tracts in the Atlantic, Gulf of Mexico, Pacific, and Gulf of Alaska.

Estimates of the Atlantic OCS oil deposits reach 20 billion barrels of oil or 14 percent of total offshore resources.¹⁰ However, at best, Atlantic OCS areas could contribute only six percent of the national oil supply and two percent of the total gas supply by 1985.¹¹ Atlantic OCS development would reduce New England's dependence on other sources, but only from 100 percent to approximately 70 percent.¹²

The maximum estimate for the Pacific and Alaska OCS areas is between 40 and 80 billion barrels.¹³ Nevertheless, petroleum self-sufficiency in the Pacific region would require in addition to Pacific

7. Tracts sold or scheduled for sale to private oil companies in 1975 are located in the Gulf of Mexico (July), off southern California (December), and in the Gulf of Alaska (December).

8. 1 CEQ REPORT 23-24.

9. *Id.* at 1. Approximately ten percent of domestic oil production currently comes from offshore sources, mostly from the Gulf of Mexico.

10. *Id.* at 23.

11. *Id.* at 46.

12. *See id.* at 54.

13. *Id.* at 23.

OCS production about 60 percent of Alaskan North Slope production, or a combination of North Slope and Alaska OCS oil.¹⁴

Thus OCS resources are small in relation to demand. Moreover, these resources are not immediately available. Significant production will not begin until five to eight years after leasing; peak production is achieved even later. Therefore, virtually no oil will be available from the previously untouched Atlantic or Gulf of Alaska areas before the end of the decade.¹⁵

In addition, OCS development is not without serious environmental and socioeconomic impacts, many of which are felt prior to any oil and gas production. Without careful planning and regulation, the impacts accompanying OCS development will create problems for coastal communities that will remain long after the last drop of oil is extracted from the ocean.¹⁶

IMPACTS OF OCS DEVELOPMENT

Some OCS development activities will have minor or short-term impacts, but others—for example, dredging and filling of wetlands, air and water pollution from refineries, and chronic oil pollution—can be expected to cause serious environmental damage over extended periods of time. Impacts on the coastal environment from OCS development could in the long run be significant enough to outweigh any short-run gains from exploitation of its resources.¹⁷

The Coast Today

The Marine Environment

Marine organisms such as phytoplankton and zooplankton, shellfish, fish, marine and shore birds, and marine mammals abound in

14. *Id.* at 35.

15. *Id.* at 41.

16. Morgan City, Louisiana, was once a quiet coastal fishing village that celebrated the fact that the first oil well out of sight of land was drilled off its shore. The town now is a collection of fast food franchises, motels and bunk house-type hotels where workers gather to drink beer and watch a communal television set. Housing is scarce, and no effort is made on anything except building the drilling rigs. Huge piles of rusting steel scraps litter the roads for miles. The landscape is an industrial wasteland. Furgurson, *Offshore Oil: Not Offshore*, L.A. Times, June 3, 1975, § 2, at 5, col. 4 (city ed.).

17. A committee of the National Academy of Sciences has estimated the present value of OCS oil and gas development at \$80 billion after deducting direct exploration, development and production costs. Unfortunately the state of the art is not such that the other economic, social and environmental costs of OCS development can be similarly estimated. Even if they are less than \$80 billion, a similar investment in some other energy source might yield a greater value at smaller social and environmental costs. 1 CEQ REPORT 197.

the coastal environment. Kelp beds are a habitat for numerous species of fish and invertebrates. Offshore rocks and islands serve as breeding and hauling-out grounds for seals and sea lions and are important nesting areas for sea birds. Bays and estuaries serve an invaluable function as breeding grounds for fish and shellfish.¹⁸

Though productive, the marine environment is also hazardous. Coastal areas are susceptible to severe storms and winds. Earthquakes, natural oil seeps, and landslides are geological hazards with serious consequences. Oil drilling rigs and platforms are not immune to these natural phenomena.

Recreation

In 1968, about \$14 billion was spent by an estimated 112 million people seeking recreation in the coastal zone.¹⁹ During 1975, visitors will spend approximately \$5.4 billion for swimming, surfing, skin diving, pleasure boating, and sport fishing alone.²⁰ Twenty million people engage in coastal boating, and the number of recreational boats is increasing at the rate of 200,000 per year.²¹ In California, the economic return from sport fishing exceeds that from commercial fishing.²² Presently more than half of all Americans vacation on the coast.

Tourism

Tourism is a significant business in coastal regions. For example, tourism is the third largest industry in southern California and supports approximately one million jobs.²³ The overall effect of tourist expenditures on a region's economy is about two times the dollar

18. The biological productivity of most estuarine areas is 15-30 times that of the open ocean and up to twice that of the best inland agricultural areas. S. REP. NO. 92-753, 92d Cong., 2d Sess. (1972), in 3 U.S. CODE CONG. & AD. NEWS 4776, 4777 (1972).

19. B. KETCHUM, *THE WATER'S EDGE: CRITICAL PROBLEMS OF THE COASTAL ZONE* 84 (1972) [hereinafter cited as *WATER'S EDGE*].

20. *Id.*

21. *Id.* at 89.

22. 1 DEPARTMENT OF THE INTERIOR, DRAFT ENVIRONMENTAL STATEMENT OF THE PROPOSED 1975 OUTER CONTINENTAL SHELF OIL AND GAS GENERAL LEASE SALE OFFSHORE SOUTHERN CALIFORNIA 624 (1975) [hereinafter cited as *SOUTHERN CALIFORNIA TRACT SPECIFIC EIS*].

23. *Id.* at 534. In 1973, an estimated 8.5 million out-of-state visitors spent almost \$2 billion in southern California. *Id.* at 534-35.

amount of the expenditures.²⁴ Tourists pay significant amounts of taxes while making relatively small demands on governmental services such as police and fire protection. Tourism perhaps provides the best basis for putting a dollar figure on the scenic value of the coast. Viewing unbroken ocean vistas, watching sailboats, and feeling the brisk sea breeze are just a few of the special activities that make the coast so attractive.

Place of Residence

The seven largest cities in the United States are located on the coast.²⁵ According to the 1970 census, a population shift occurred during the 1960's from the center of the country to the sea coasts.²⁶ Thirty-one coastal and Great Lakes states now contain more than 75 percent of the United States population.²⁷ Estuarine regions, which encompass only 15 percent of the land, contain 33 percent of the population.²⁸ In the year 2000, nearly 200 million people may live in the coastal zone.²⁹ Population concentration along the coast, of course, increases the development pressures on undeveloped coastal lands.

Industry

"[I]ndustries concentrate in the coastal zone because of transportation advantages, import and export requirements, and the need for large quantities of water."³⁰ Forty percent of the nation's industrial complexes are located in estuarine regions.³¹ The significance of the California coastal zone is demonstrated by the fact that the coastal counties from Santa Barbara south to the Mexican border produce more than one-half of the state's total goods and services.³² Commercial fishing in coastal waters is an important industry. In 1969, United States fishermen harvested 4.3 billion pounds of fish worth \$500 million from coastal and estuarine waters.³³ These figures represent approximately 70 percent of the United States commercial fishing effort.³⁴

24. *Id.* at 535.

25. WATER'S EDGE 103.

26. *Id.*

27. *Id.*

28. *Id.*

29. *Id.* at 10-11.

30. *Id.* at 106-07.

31. *Id.* at 107.

32. 1 SOUTHERN CALIFORNIA TRACT SPECIFIC EIS 785.

33. WATER'S EDGE 45.

34. COMMISSION ON MARINE SCIENCE, ENGINEERING AND RESOURCES, OUR NATION AND THE SEA 53 (1969).

Land

As migration into coastal areas continues, more coastal land is required for housing, recreation, and industry, but undeveloped coastal land is in short supply. From 1949 to 1969, housing development destroyed seven percent of the nation's important estuarine areas.³⁵ Of the 21,724 miles of United States shoreline classified as suitable for recreation, less than ten percent is publicly owned.³⁶ Although the amount of coastal land occupied by industry will probably remain relatively small, the area affected by industrial pollutants will be much greater. Even without OCS development, if present trends continue, the nation stands to lose large amounts of coastal land having great recreational value and immense biological productivity.

Offshore and Nearshore Impacts of OCS Development

Oil Spills and Chronic Discharges

Offshore drilling has occurred on a small scale for many years, but the increasing depth of water in which wells are drilled, the larger number of wells drilled, and the ocean-to-shore transfer of larger quantities of oil create a much greater risk of damage to the coastline and marine habitats. Oil spills pose the most immediate threat to the environment. From 1953 to 1972, when nearly all wells in the OCS were drilled, 43 major accidents occurred.³⁷ The consequences of a spill from a drilling platform or pipeline depends on the oil composition, oil amounts, and affected habitats. In a severe spill, the offshore bottom habitats and nearshore habitats (for example, the sand shore, rocky shore, salt marsh, estuary, and bay) can suffer both short-term and long-term damage.

Oil spills also have significant social and economic impacts. Tourism and land values go down, reducing the local government tax base. As a result of the 1969 Santa Barbara oil spill, tourist-oriented business in the city of Santa Barbara lost approximately \$3.6 million in revenues.³⁸ An additional \$2.5 to \$3.2 million was lost

35. WATER'S EDGE 104.

36. *Id.* at 85.

37. 1 CEQ REPORT 69.

38. See SOUTHERN CALIFORNIA COUNCIL OF LOCAL GOVERNMENTS, ANALYSIS OF DRAFT ENVIRONMENTAL IMPACT STATEMENT REGARDING "PROPOSED IN-

through diminution in value of lands, primarily parks, owned by the city.³⁹ The State of California suffered a loss of approximately \$3.8 to \$5.2 million in use values of state parks and beaches.⁴⁰ To these losses must be added clean up costs.

In addition to large spills, there are chronic discharges of oil from drilling and production operations. Small amounts of oil are continuously discharged from each platform oil-water separator unit.⁴¹ Other chronic discharges are drilling mud components and drill cuttings.⁴² Sedimentation of these discharges may harm bottom organisms and create ocean discoloration.

Interference with Fishing

The commercial and sports fishing industries will be affected by OCS development. Fishing harbor uses may be displaced by harbor dredging and wharf construction necessary to service OCS construction, maintenance, and supply activities.⁴³ Of course, no guarantee exists that fishing displaced by OCS development will return when the oil and gas resources are depleted.⁴⁴ Temporary and permanent platforms, pipelines, and OCS boat and barge traffic can conflict with fishing operations. OCS sea floor construction can damage purse seines and trawling nets.

Wetlands Alteration

Petroleum-related development often involves construction on or through wetlands. In this process, biological productivity is destroyed, water flow altered, and water quality degraded. Shallow water dredging for pipelines, boats and barges increases erosion and turbidity. Land clearing, filling, and resurfacing increase erosion and permanently destroy wetland habitats.⁴⁵

CREASE IN ACREAGE TO BE OFFERED FOR OIL AND GAS LEASING ON THE OUTER CONTINENTAL SHELF" 243 (1975) [hereinafter cited as COUNTER EIS].

39. *Id.* at 254.

40. *Id.*

41. 1 CEQ REPORT 110.

42. *Id.* at 112.

43. Some 3,000 tons of material had to be transferred to each drilling rig during the several months necessary to drill exploratory wells off Scotland. OFFICE OF COASTAL ZONE MANAGEMENT, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, COASTAL MANAGEMENT ASPECTS OF OCS OIL AND GAS DEVELOPMENT 24 (1975) [hereinafter cited as COASTAL MANAGEMENT OF THE OCS].

44. See P. BALDWIN & M. BALDWIN, ONSHORE PLANNING FOR OFFSHORE OIL: LESSONS FROM SCOTLAND 47-66 (1975) [hereinafter cited as LESSONS FROM SCOTLAND].

45. Settlement and industrialization of the coastal zone has already led to extensive degradation of highly productive estuaries and

Onshore Impacts of OCS Development

Introduction

OCS development clearly has negative impacts upon the environment even without the oil spill threat. Onshore impacts are especially significant in this regard. In fact, onshore activities associated with offshore oil and gas development hold far greater potential for long-term damage to the coastal environment than does the risk of accidental oil pollution.

Although onshore development may occur prior to exploratory drilling,⁴⁶ onshore impacts become most significant when exploration reveals developable resources. The size of an offshore field in terms of both deposits and surface area determines the number of platforms and supply boats required, the number and diameter of pipelines, and the need for tanker terminals and refineries.⁴⁷ The environmental, social, and economic consequences of oil and gas production also depend to a great extent on the rate at which the resources are extracted. The extent of previous offshore oil and gas development and the existing resources of the community are other important factors in determining the nature of onshore impacts.

Onshore impacts can be classified as either primary or secondary. Primary impacts encompass all activities necessary for development and production of petroleum products. These activities include harbor dredging and wharf construction for support vessels, platform fabrication, transport of supplies and equipment to rigs and platforms, construction and operation of pipelines, refineries, gas processing plants, and storage and transfer facilities.⁴⁸

Secondary impacts encompass commercial enterprises attracted to the area by the primary oil and gas development, measures required for upgrading transportation facilities, housing to accommodate

marshlands. For example, in the period 1922-1954 over one quarter of the salt marshes in the U.S.A. were destroyed by filling, diking, draining or by constructing walls along the seaward marsh edge. In the following 10 years a further 10 percent of the remaining salt marsh between Maine and Delaware was destroyed. On the west coast of the U.S.A. the rate of destruction is almost certainly much greater, for the marsh areas and the estuaries are much smaller. S. REP. No. 92-753, 92d Cong., 2d Sess. (1972), in 3 U.S. CODE CONG. & AD. NEWS 4776, 4777 (1972).

46. COASTAL MANAGEMENT OF THE OCS 24.

47. LESSONS FROM SCOTLAND 31.

48. COASTAL MANAGEMENT OF THE OCS 23-24.

people drawn by temporary and permanent employment opportunities, and public services for all these activities.⁴⁹ The secondary impacts of OCS oil and gas development and production can be either positive or negative. Positive impacts include increased employment, additional income, immigration of skilled labor, and increased economic diversification. Negative impacts are rapid population growth due to the labor intensive nature of construction work,⁵⁰ increased unemployment after initial construction work, labor shortages in non-oil industries because workers are drawn to oil by the higher pay, development into a single-industry community, the pressure of rapid growth on community infrastructure, and the need for local revenues to finance increased public services before tax-producing industries are operating.⁵¹ Generally, the advantages of oil and gas development accrue to the larger region involved whereas the disadvantages tend to be localized in the vicinity of the development.⁵² The degree to which an area is urbanized and economically diverse also influences the extent to which the negative secondary impacts are felt. For a large metropolitan area, the increased growth seems modest and manageable in terms of existing schools, hospitals and housing. But if the majority of the new population should locate in smaller towns in the area, a significant strain is put on community services where resources are fewest.⁵³ A sudden increase in population carries with it the potential for social conflict, especially when the increase occurs in a small, closely-knit rural community.

Land Use Impacts

Most OCS-related onshore activities occur in coastal areas where intense competition for land already exists. Although in some

49. *Id.* at 23.

50. Oil-related developments are likely to require large numbers of construction workers for four to six years. A platform fabrication plant may employ up to 2000 workers for two years. An oil refinery may require 2000 workers for construction, but only 300 for operation. Construction for commercial enterprises drawn to the area, transportation facilities, housing and public services occur over a longer period of time. A Louisiana study estimates that each offshore job produces 1.7 jobs in oil and gas-related onshore activities and that each of these jobs generates 2.1 jobs in the service sector. COASTAL MANAGEMENT OF THE OCS 32-34. In southern California the estimates are a maximum increase of 14,953 workers within a 15 to 20 year period, or 35,887 persons when families are included. 2 SOUTHERN CALIFORNIA TRACT SPECIFIC EIS 216. In the eastern Massachusetts-Rhode Island region the new employment could amount to 77,000 workers in 1985 and 83,000 workers in the year 2000. 4 CEQ REPORT ch. 3, at 18.

51. COASTAL MANAGEMENT OF THE OCS 29.

52. *Id.* at 36.

53. 4 CEQ REPORT ch. 3, at 22.

areas there is undeveloped coastal land, not all this land is available for development. Constraints, such as conflicting existing and projected uses, environmental fragility, and coastal and wetlands conservation legislation reduce considerably the amount of developable land.⁵⁴

Most of the important decisions concerning onshore facilities are made during the development phase after exploration has discovered oil and gas deposits.⁵⁵ Sites are located for platform construction,⁵⁶ pipeline landings, refineries, storage tanks and tanker terminals. Housing and other facilities for construction workers also must be obtained from existing supplies or constructed as manpower requirements reach their peak during the development phase.⁵⁷

Of all the facilities to be constructed during the development phase, new and expanded refineries have the greatest potential impact.⁵⁸ Because high shipping costs encourage bulk transport of

54. In the proposed OCS development area of Skagit and Whatcum Counties, Washington, the environmental and locational constraints imposed by mountains and croplands eliminate more than 95 percent of the currently undeveloped land in the region. 4 CEQ REPORT ch. 8, at 23, 27.

55. LESSONS FROM SCOTLAND 25.

56. The federal Council on Environmental Quality reports that by 1985, 38 new platforms may be required on the Atlantic Coast and 19 on the Alaskan Coast. 4 CEQ REPORT ch. 2, at 12, ch. 7, at 7. The Scottish experience suggests that platform construction is likely to occur as near as possible to the oil development area rather than at an existing shipyard. At the outset there probably will be a shortage of skilled workers while a sizable skilled work force is trained or imported from other areas. But platform fabrication is subject to sudden and unpredictable lay-offs and build-ups. Because of this fluctuation small communities are apt to experience substantial social and economic disruption. See LESSONS FROM SCOTLAND 67-94.

Platform construction plans for the east coast already exist. Brown and Root, an engineering firm with extensive platform building operations in Scotland, has proposed the location of such a facility at Cape Charles, Virginia. This firm has purchased 2,000 acres of land for \$5 million. If the project is approved, Cape Charles' experience in coping with its impacts will be an important example for future planning. *Id.* at 68.

57. LESSONS FROM SCOTLAND 25.

58. Increased demand for petroleum products, anticipated supplies of crude oil from the Alaskan North Slope, and OCS development will increase pressure for refinery construction along the west coast. However, the Bureau of Land Management projects only one new refinery for California on the theory that OCS and Alaskan oil will displace imported oil currently being processed. See 2 SOUTHERN CALIFORNIA TRACT SPECIFIC EIS 271. In these calculations the Bureau has ignored its own projection of growth in demand for California refined products. See 1 *id.* at 17.

crude oil rather than shipment of an assortment of refined products, refineries are usually located close to metropolitan markets, where undeveloped coastal land is in shortest supply. A typical refinery processing 200,000 barrels daily requires 1200-1400 acres of land,⁵⁹ 8 million gallons of water per day, and 420 million kilowatt hours of electricity per year.⁶⁰

Other onshore facilities have adverse impacts on land use. Pipeline terminal construction near a beach or other recreation area interferes with the use of about 40 acres.⁶¹ Other facilities which have significant land use impacts include storage and treatment plants,⁶² navigation and access channels, crew boat basins and equipment depots.

Other Environmental Impacts

In addition to their land use impacts, all the above facilities generate air, noise, and water pollution, which reduce aesthetic enjoyment and property values and can be health hazards.

Increased refinery production in particular can mean serious degradation of air quality. A single 200,000 barrels-per-day refinery can contribute significantly to violation of federal ambient air quality standards in the surrounding area even though emissions from the refinery do not by themselves violate applicable emission standards.⁶³ Water quality is also adversely affected by refinery operations.⁶⁴

59. In Ventura County, California, a proposed refinery will occupy at least 1000 acres of valuable farmland. See 2 *id.* at 271-72.

60. 4 CEQ REPORT ch. II, at 9.

61. OCS development planned off southern California could affect 400 to 600 acres in this manner. 2 SOUTHERN CALIFORNIA TRACT SPECIFIC EIS 219.

62. An estimated seven to 15 of these plants would be necessary in southern California. *Id.* at 237.

63. Refineries emit five major pollutants: oxides of sulfur, nitrogen, carbon, particulate matter, and hydrocarbons. Sulfur dioxide is emitted from refineries processing oil containing sulfur. Nitrogen oxides are components of the gases which are released during the furnace and power plant boiler stages. The catalytic cracker is a significant potential source of particulate matter and carbon monoxide. Hydrocarbons leak throughout the refinery and storage areas and especially around pumps, valve glands and flange areas. Technology exists to remove the sulfur, and if the refinery installed the best control devices and followed good maintenance procedures, particulate matter and carbon monoxide emissions could be contained within federal standards. But even if these procedures were followed, hydrocarbon emissions would be in excess of federal standards by a factor of 20 to 40. Hydrocarbon emissions themselves are not known to be a health hazard, but photochemical smog formed from hydrocarbons is a significant health hazard. See Radian Corporation, *Some Environmental Considerations in the Petroleum Refining Industry* 7-24, in 2 CEQ REPORT.

64. Although sewage treatment plant discharges are the primary source

Economic Impacts

High oil industry wages and the burst of investment accompanying OCS development bring benefits to many, but the inflationary side effects make economic survival for those outside the oil industry more difficult. The development phase can lead to a severe housing shortage in smaller communities.⁶⁵ Private housing construction may lag because contractors are at work on OCS-related projects.

The economic impacts on state and local government are equally significant. Public services are required immediately for large groups of people who are likely to have jobs in the area for only a relatively short period. Thus public expenditures increase significantly faster than revenues during the development phase of OCS activity.⁶⁶ After the initial construction stage, the demand for labor decreases substantially and unemployment rises.

Ultimately the oil and gas deposits are exhausted: unless careful planning and management of oil and gas activities has occurred, the abandonment of oil and gas wells may leave boom communities and their governments severely in debt, with a substantial supply of unneeded capital facilities.⁶⁷

Through long-range planning, community planners can attempt to diversify the economy sufficiently so that the classic boom-bust cycle does not materialize.⁶⁸ Nevertheless, evidence indicates that

of water pollution in coastal areas, petroleum-related industries also contribute significant amounts of waste. In the Santa Barbara Channel, Santa Monica Bay, and the northern coast of Orange County, California, direct ocean discharges from petroleum-related industries contribute about six percent of the suspended solids, 14 percent of the oil and grease, two percent of the biochemical oxygen demand, and ten percent of the chemical oxygen demand. They discharge additional amounts of waste into municipal systems. These wastes are then discharged into the ocean after varying degrees of treatment. See 1 SOUTHERN CALIFORNIA TRACT SPECIFIC EIS 711.

65. The cost of housing in Peterhead on the North Sea in Scotland has tripled since 1970 when the offshore oil industry arrived. LESSONS FROM SCOTLAND 62.

66. *Id.* at 35.

67. *Id.* at 37.

68. See COASTAL MANAGEMENT OF THE OCS 29-37. In Scotland, the planning and land use control mechanisms are highly developed. See LESSONS FROM SCOTLAND 129-33. Yet the burdens of coping with the immediate problems of North Sea oil development have been too great to allow long-range planning. See *id.* at 134-40.

over the long term the economic costs of OCS development to state and local governments will exceed the revenues they receive.⁶⁹

Conclusion

Large communities can absorb OCS development more readily than small ones. The former generally have a more diverse economic base and greater planning resources. Yet in large communities pollution problems are the worst and undeveloped coastal land is in shortest supply. However, many small communities do not have sufficient schools, housing, roads, and other facilities to cope with a rapid increase in jobs and population, nor sufficient resources and knowledge to create and apply a long-term development plan. In any case, the legal framework in which United States OCS development is taking place does not encourage planning by local governments with respect to onshore impacts.

LEGAL FRAMEWORK FOR OCS DEVELOPMENT

The principal components of the legal framework in which OCS development is proceeding are: (1) the Truman Proclamation of 1945⁷⁰ and the 1958 Geneva Convention on the Continental Shelf;⁷¹ (2) the Submerged Lands Act⁷² and the Outer Continental Shelf Lands Act,⁷³ both enacted in 1953; (3) the National Environmental Policy Act;⁷⁴ and (4) the Coastal Zone Management Act.⁷⁵

69. Under present tax and revenue structures the State of Louisiana claims that it sustains net onshore costs in excess of assignable tax revenues of \$38 million per year in order to provide services in support of operations on the federal OCS involving 124,400 employees and their families, a total of 391,000 people. COUNTER EIS 218, 265. The lost revenues derive from the inapplicability to the federal OCS of state severance, income, corporate franchise, sales and use, occupational license, ad valorem and miscellaneous taxes. Louisiana estimates this loss at \$183 million in state taxes and \$84 million in parish and municipal taxes. GULF SOUTH RESEARCH INSTITUTE, OFFSHORE REVENUE SHARING: AN ANALYSIS OF OFFSHORE OPERATIONS IN COASTAL STATES 558 (1974).

70. Proclamation No. 2667, Sept. 28, 1945, 3 C.F.R. § 67 (1943-1948 Comp.).

71. Convention on the Continental Shelf, *done at Geneva*, April 29, 1958, *in force* June 10, 1964, art. 1, 15 U.S.T. 471, T.I.A.S. No. 5578, 499 U.N.T.S. 311.

72. 43 U.S.C. §§ 1301-15 (1970).

73. *Id.* §§ 1331-43.

74. 42 U.S.C. §§ 4321-47 (1970).

75. 16 U.S.C. §§ 1451-64 (Supp. IV, 1974). The Federal Water Pollution Control Act [hereinafter cited as FWPCA], 33 U.S.C. §§ 1251-376 (Supp. III, 1973), and the Clean Air Act, 42 U.S.C. §§ 1857-58a (1970), *as amended*, (Supp. III, 1973), apply to a broad range of OCS development activities and are discussed later in connection with the Coastal Zone Management Act. The federal Noise Control Act of 1972, 42 U.S.C. §§ 4901-18 (Supp.

The Truman Proclamation of 1945 and the 1958 Geneva Convention on the Continental Shelf

The Truman Proclamation of 1945 claimed the “. . . natural resources of the subsoil and sea bed of the continental shelf contiguous to the coasts of the United States” as subject to United States jurisdiction and control.⁷⁶ Its principal purpose was to facilitate development of continental shelf petroleum resources.⁷⁷ This assertion of sovereignty was codified in the 1958 Geneva Convention on the Continental Shelf. The Convention defined the continental shelf as the seabed and subsoil out to a depth of 200 meters or beyond “. . . to where the depth of the superjacent waters admits of the exploitation of the natural resources.”⁷⁸ Most importantly, the Convention recognized the rights of coastal nations in the shelf as

III, 1973), is much narrower in scope; in any case, noise is not one of the more worrisome aspects of OCS development. The federal Marine Protection, Research, and Sanctuaries Act of 1972, 16 U.S.C. §§ 1431-34, 33 U.S.C. 1401-44 (Supp. IV, 1973), known as the “Ocean Dumping Act,” applies to matter dumped in OCS waters from vessels but not from fixed structures such as offshore oil drilling rigs; furthermore, it does not apply to oil spills or sewage from either source. The FWPCA covers oil spills from vessels in OCS waters and all discharges, *except oil spills*, from fixed structures such as drilling rigs. 33 U.S.C. § 1362(12)(B) (Supp. III, 1973). Oil spills from drilling rigs are governed solely by regulations issued under the Outer Continental Shelf Lands Act. Under those regulations lessees are responsible for clean-up costs, but no liability for damages to third parties is imposed. See ENVIRONMENTAL LAW INSTITUTE, FEDERAL ENVIRONMENTAL LAW 653-55, 738 n.241, 744-46 (1974). The Ocean Dumping Act also provides for the establishment of development-free marine sanctuaries extending to the seaward limit of the outer continental shelf. 16 U.S.C. §§ 1431-34 (Supp. IV, 1974). The only sanctuary designated to date, the area surrounding the submerged wreck of the Civil War ship *Monitor*, was established for historical rather than ecological reasons. See 40 Fed. Reg. 21706 (1975).

A host of state and local laws such as land use controls and building codes come into play in connection with the onshore manifestations of OCS development. Generally state air and water pollution programs now operate under the federal Clean Air Act and the FWPCA. Coastal land use controls are being reorganized under the Coastal Zone Management Act. For a summary of legislation affecting the OCS, see SENATE COMM. ON COMMERCE, 93d Cong., 2d Sess., OUTER CONTINENTAL SHELF OIL AND GAS DEVELOPMENT AND THE COASTAL ZONE (Comm. Print 1974).

76. Proclamation No. 2667, Sept. 28, 1945, 3 C.F.R. §§ 67, 68 (1943-1948 Comp.).

77. Krueger, *International and National Regulation of Pollution from Offshore Oil Production*, 7 SAN DIEGO L. REV. 541, 542 (1970).

78. Convention on the Continental Shelf, *done at Geneva*, April 29, 1958, in force June 10, 1964, art. 1, 15 U.S.T. 471, T.I.A.S. No. 5578, 499 U.N.T.S. 311.

being "exclusive [and] sovereign for the purpose of exploring it and exploiting its natural resources."⁷⁹ Thus the current international regime governing increased United States petroleum development of the continental shelf is sympathetic to exploitation.⁸⁰ However, this regime, particularly its open-ended recognition of national sovereignty, could be significantly changed as a result of the United Nations Law of the Seas negotiations.⁸¹ Even with a new regime, certain rights under the 1958 Convention may be recognized as "vested."⁸²

The Submerged Lands Act and the Outer Continental Shelf Lands Act

The Submerged Lands Act and the OCS Lands Act grew out of the landmark 1947 decision in *United States v. California*,⁸³ in which the Supreme Court held that the federal government rather than the states owned the seabed adjacent to the states' coastlines.⁸⁴ Congress responded in 1953 with the Submerged Lands Act, conveying to the states the portion of the seabed extending seaward three geographical miles.⁸⁵ Three months later the OCS Lands Act

79. *Id.* art. 2, paras. 1, 2.

80. The convention does prohibit unjustifiable interferences with navigation, fishing and conservation of living resources, *id.* art. 5, para. 1, and the companion 1958 Convention on the High Seas requires regulations to prevent pollution resulting from seabed exploration activities or from the discharge of oil from ships or pipelines. Convention on the High Seas, done at Geneva, April 29, 1958, *in force* Sept. 30, 1962, art. 24, 13 U.S.T. 2312, T.I.A.S. No. 5200, 450 U.N.T.S. 82.

81. The issues raised in these negotiations have been discussed extensively in legal literature. See, for example, recent Law of the Sea symposia in the *San Diego Law Review*, issue number three of volumes 8-12.

82. See Knight, *United States Ocean Policy: Perspective 1974*, 49 *NOYRE DAME LAW.* 241, 249 (1973).

83. 332 U.S. 19 (1947).

84. California claimed only the first three miles of adjacent seabed. *United States v. California* was then applied to defeat more expansive claims in *United States v. Louisiana*, 339 U.S. 699 (1950) and *United States v. Texas*, 339 U.S. 707 (1950).

85. 43 U.S.C. §§ 1301-15 (1970). The act was held constitutional in *Alabama v. Texas*, 347 U.S. 272, *rehearing denied*, 347 U.S. 950 (1954). If at the time a state became a member of the Union, its seaward boundary extended farther than three miles, the extended boundary was recognized and preserved by the Act. 43 U.S.C. § 1301(b) (1970). Eventually, the Supreme Court held that only Texas and Florida could establish the requisite historical interest and therefore were entitled to three marine leagues (10½ geographic miles) from their coasts; the rest of the states were entitled to three geographic miles. *United States v. Florida*, 363 U.S. 121 (1960); *United States v. Louisiana*, 363 U.S. 1, *rehearing denied*, 364 U.S. 856 (1960). The very difficult process of settling the exact boundary between state and federal ownership continues today. See *United States v. Louisiana*, 95 S.

was passed authorizing the Secretary of the Interior to grant oil and gas leases to the highest bidder on the balance retained in federal ownership.⁸⁶ By 1963 over 3.5 million acres off the gulf coasts of Florida, Louisiana, and Texas had been leased.⁸⁷ The Pacific Coast was opened with the leasing of substantial acreage off Santa Barbara, California in 1968.⁸⁸ Several states also enacted similar legislation and proceeded to lease portions of their ownership for oil and gas development.⁸⁹

Recent proposals for substantial increases in the federal acreage leased, including previously unexplored frontier areas on the Atlantic and Alaskan coasts, have stimulated judicial and congressional reconsideration of the state-federal ownership system and the OCS Lands Act. Nevertheless, the outlook for change is not promising. With the exception of Florida, all thirteen states bordering the Atlantic Ocean attempted to establish state ownership of the entire continental shelf off their coasts, basing their claim on the fact that such ownership existed at the time they entered the Union. However, the Supreme Court in *United States v. Maine*,⁹⁰ decided in

Ct. 1180 (1975); Wulf, *Freezing the Boundary Dividing Federal and State Interests in Offshore Submerged Lands*, 8 SAN DIEGO L. REV. 584 (1971).

86. 43 U.S.C. §§ 1331-43 (1970).

87. Walmsley, *Oil Pollution Problems Arising out of Exploitation of the Continental Shelf: The Santa Barbara Disaster*, 9 SAN DIEGO L. REV. 514, 522 (1972), citing DEPARTMENT OF THE INTERIOR, PLAIN FACTS ABOUT OIL 21 (1963).

88. The notorious 1969 Santa Barbara oil spill occurred at a well on this leased federal acreage. The seabed off Louisiana has been the most productive with over 95 percent of OCS production to date. 1 CEQ REPORT 176.

89. See, e.g., CAL. PUB. RES. CODE §§ 6870-79 (West Supp. 1975). Actually, California granted the first state offshore oil lease in 1921, prior to the decision in *United States v. California*, 332 U.S. 19 (1947). For a detailed history of the exploration of submerged lands off the coasts of California, Texas and Louisiana, see E. BARTLEY, *THE TIDELANDS OIL CONTROVERSY, A LEGAL AND HISTORICAL ANALYSIS* (1953). See also Metcalfe, *The Tidelands Controversy: A Study in Development of a Political-Legal Problem*, 4 SYRACUSE L. REV. 39 (1952).

90. 95 S. Ct. 1155 (1975). Ownership claims of Alaska and Florida also were recently rejected. *United States v. Alaska*, 95 S. Ct. 2240 (1975); *United States v. Florida*, 95 S. Ct. 1162 (1975). Although the states have generally proceeded more slowly to develop the submerged lands under their jurisdiction, and although drainage problems sometimes occur between adjacent state and federal tracts along the three-mile line, the states did not pursue these claims for competitive reasons or pure greed. What the states fear the most and hoped to avoid by establishing ownership are the

March 1975, rejected these claims. The Court returned to *United States v. California*⁹¹ for the principle that whatever interest the states might have had prior to statehood was relinquished to the federal government upon entry into the union; present state ownership is derived solely from and subject to the conditions and limitations of the Submerged Lands Act.⁹² With federal ownership of the Atlantic OCS thus clearly established, the Department of the Interior is proceeding with its program for oil and gas development of the Atlantic frontier under the OCS Lands Act.⁹³

However, the OCS Lands Act is not without its critics. The principal complaint is that Congress has authorized development of valuable public resources located in a fragile environment without sufficiently regulating either the receipt and distribution of the revenues received for the resources or the impacts flowing from their development.⁹⁴ The two are not unrelated, for proper revenue distribution may go a long way toward healing the wounds caused by development of the resources. Thus there have been numerous proposals to distribute various portions of OCS oil and gas revenues to impacted coastal state and local governments.⁹⁵ However, passage of such a measure remains problematic, given current federal fiscal circumstances and executive office views thereon. In any case, the more such adverse impacts are avoided or mitigated in the development process, the less money is required to compensate for them.

Unfortunately, the OCS Lands Act says nothing about avoidance or mitigation, nor does it provide for planning in regard to the impacts that do occur. Authority over safety and navigation on OCS

onshore impacts of accelerated federal development. See 5 BNA ENVIR. REP. CURRENT DEVELOPMENTS 1408-09 (1975).

91. 332 U.S. 19 (1947).

92. 95 S. Ct. at 1159-61.

93. See 1 DEPARTMENT OF THE INTERIOR, DRAFT ENVIRONMENTAL STATEMENT: PROPOSED INCREASE IN ACREAGE TO BE OFFERED FOR OIL AND GAS LEASING ON THE OUTER CONTINENTAL SHELF 173-266, 558-704 (1974) [hereinafter cited as PROGRAMMATIC EIS].

94. See text accompanying notes 37-69 *supra*.

95. *E.g.*, S. 521, 94th Cong., 1st Sess. (1975); see 1 CEQ REPORT 209; GULF SOUTH RESEARCH INSTITUTE, OFFSHORE REVENUE SHARING: AN ANALYSIS OF OFFSHORE OPERATION ON COASTAL STATES (1974); LESSONS FROM SCOTLAND 173-74. The OCS Lands Act presently provides that OCS revenues are to be deposited in the Treasury of the United States and that state taxation laws do not apply to the OCS, and the Act generally denies the states any other interest in the resources and revenues of the OCS. 43 U.S.C. §§ 1333 (a) (2), (3) (1970); 43 U.S.C. § 1338 (1970). However, revenues from other public lands are generally shared with state and local governments. See ENVIRONMENTAL LAW INSTITUTE, FEDERAL ENVIRONMENTAL LAW 533-34 (1974).

waters is granted to the Coast Guard⁹⁶ and the Army,⁹⁷ and the Secretary of the Interior is authorized to adopt regulations for conserving OCS resources⁹⁸ and preventing waste. But the Act focuses on granting leases ". . . in order to meet the urgent need for further exploration and development of the oil and gas deposits"⁹⁹

The record of the Department of the Interior in administering OCS oil and gas leases is at best spotty. The failures of the system in regard to the monumental 1969 Santa Barbara oil spill and the 1969 and 1970 blowouts in the Gulf of Mexico have been documented elsewhere.¹⁰⁰ In response to these disasters, there has been much discussion of changes in lease administration and enforcement,¹⁰¹ but current Department of the Interior proposals for increased leasing are premised on continuation of the present system.¹⁰²

Even the choice of leasing as the method by which rights in the OCS are transferred needs rethinking, along with the terms upon

96. 43 U.S.C. §§ 1333(e)(1), (2) (1970) (safety and navigation markers); see 14 U.S.C. §§ 81-93 (1970).

97. 43 U.S.C. § 1333(f) (1970) (obstructions to navigation); see 33 U.S.C. §§ 540-45 (1970).

98. 43 U.S.C. § 1334(a)(1) (1970).

99. *Id.* § 1337(a) (1970).

100. Nanda & Stiles, *Offshore Oil Spills: An Evaluation of Recent United States Responses*, 7 SAN DIEGO L. REV. 519 (1970); Walmsley, *Oil Pollution Problems Arising Out of Exploitation of the Continental Shelf: The Santa Barbara Disaster*, 9 SAN DIEGO L. REV. 514 (1972). The parties injured by the 1969 Santa Barbara spill have not had an easy time recovering damages for their losses. *Id.* at 537-60; see *Union Oil v. Oppen*, 501 F.2d 558 (9th Cir. 1974) (commercial fishermen may recover for profits lost due to oil company negligence); *Oppen v. Aetna Ins.*, 485 F.2d 252 (9th Cir. 1973) (private pleasure boat owners may recover for physical damages but not loss of use). See also *Union Oil v. Minier*, 437 F.2d 408 (9th Cir. 1970) (state prosecution for criminal nuisance enjoined).

101. H.R. 3638, 94th Cong., 1st Sess. (1975), would impose strict liability for oil spills on OCS lessees and owners and operators of vessels used in connection with OCS activities.

102. 2 PROGRAMMATIC EIS 342. Proposed orders governing operations by lessees in the frontier Gulf of Alaska area have been criticized by the federal Environmental Protection Agency. 5 ENVIRONMENTAL LAW INSTITUTE, ENVIRONMENTAL LAW REPORTER 10090-91 (1975) [hereinafter cited as ELR]. See also DEPARTMENT OF THE INTERIOR, DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR PROPOSED REGULATIONS PURSUANT TO GEOLOGICAL AND GEOPHYSICAL EXPLORATIONS IN THE OUTER CONTINENTAL SHELF 3 (1975), where the first consideration listed in regulating exploration activities is to avoid interfering with present lease operations.

which the leasing is done. This point is illustrated by recent decisions of the Ninth Circuit Court of Appeals concerning actions taken by the Secretary of the Interior to suspend oil operations off Santa Barbara after the 1969 spill. In *Gulf Oil v. Morton*¹⁰³ and *Union Oil v. Morton*,¹⁰⁴ the court of appeals held that the Secretary could only temporarily suspend operations and that an indefinite suspension not in accordance with regulations in force at the time the leases were entered would constitute a "taking" of oil company property rights.¹⁰⁵ Thus, under the present system, even after a disastrous spill, either the lessees must be compensated for the value of their leases or operations allowed to continue despite extraordinary risks, a most unsatisfactory and unnecessary choice. Whether rights in the OCS continue to be transferred by leases, it would seem legally possible, economically feasible, and highly desirable to condition exercise of the rights transferred upon a showing of relative safety by the transferee. After appropriate notice, the transferee could be required to suspend operations and make such a showing before resuming an activity believed to be unusually dangerous. If prospective transferees reduce their offers because of such conditions, acceptance is still justified by the needed flexibility gained.¹⁰⁶ To ensure enforcement of these conditions a "citizen suit" provision could be provided. This provision, similar to those in several federal pollution control statutes,¹⁰⁷ would allow

103. 493 F.2d 141 (9th Cir. 1973), *vacating* 345 F. Supp. 685 (1972).

104. 512 F.2d 743 (9th Cir. 1975).

105. *Id.* at 750-52. Similar claims are being pursued by Sun Oil Company and Superior Oil Company in the United States Court of Claims, *Sun Oil v. United States*. See 6 BNA ENVIR. REP. CURRENT DEVELOPMENTS 7-8 (1975). The Programmatic EIS rather meekly accepts the approach of *Union Oil v. Morton*. 2 PROGRAMMATIC EIS 342.

106. The recent decision of the Fifth Circuit Court of Appeals in *Sierra Club v. Morton* (MAFLA OCS Leasing), 510 F.2d 813 (5th Cir. 1975), discussed in further detail later in connection with the National Environmental Policy Act, makes the inclusion of such conditions even more important. In upholding the adequacy of an environmental impact statement prepared by the Department of the Interior for OCS leasing off Mississippi, Alabama and Florida (MAFLA), the court relied heavily on the alleged "continuously controllable" nature of the project. *Id.* at 824; *see id.* at 824-28. However, the principal powers of federal field supervisors under the present system appear to be limited to alternative placement of structures within the leased tract and deployment of oil spill containment equipment. SOUTHERN CALIFORNIA COUNCIL OF LOCAL GOVERNMENTS, ANALYSIS OF DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR PROPOSED 1975 OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALE OFFSHORE SOUTHERN CALIFORNIA 87 (1975) [hereinafter cited as COUNTER TRACT SPECIFIC EIS]. If the costs of improved safety and environmental protection measures make development unattractive, the answer is not to forego such measures, but rather to defer development until technological advances reduce the costs or until the value of the resource increases. 1 CEQ REPORT 207.

107. See 33 U.S.C. §§ 1365, 1415 (g) (Supp. III, 1973); 42 U.S.C. §§ 1857h-2,

any person to enforce the conditions through notice to the appropriate administrator and suit in federal district court.¹⁰⁸

These and other defects in procedures under the OCS Lands Act are widely acknowledged.¹⁰⁹ Proposals to amend the act have been introduced in Congress,¹¹⁰ but they are given little chance of passage during the current administration. Given the circumstances, it is understandable why those concerned about the impacts of accelerated OCS development have turned to the well-known National Environmental Policy Act (NEPA)¹¹¹ as a means of improving the OCS decision-making process. However, these efforts have been on the whole unsuccessful,¹¹² for the NEPA impact statement procedure does not supply either the substantive environmental criteria¹¹³ or the planning mechanisms¹¹⁴ missing from the OCS Lands Act decision-making process.¹¹⁵ Because further challenges to the

4911 (Supp. III, 1973). In addition, these provisions authorize the court to award reasonable attorney and expert witness fees to any party whenever the court determines such an award is appropriate.

108. Several sources, including a committee of the National Academy of Sciences, recommend the use of citizen suits in connection with OCS leasing. See 1 CEQ REPORT 184, 210.

109. See, e.g., commentary cited note 100 *supra*.

110. E.g., H.R. 2892, 94th Cong., 1st Sess. (1975).

111. 42 U.S.C. §§ 4321-47 (1970).

112. See, e.g., *Sierra Club v. Morton* (MAFLA OCS Leasing), 510 F.2d 813 (5th Cir. 1975). The threat of litigation under NEPA did motivate the Department of the Interior to prepare an environmental impact statement on its total proposed leasing program (the *Programmatic EIS*), rather than to rely solely on individual EIS's for each tract to be leased. See 5 BNA ENVIR. REP. CURRENT DEVELOPMENTS 566-67 (1974). NEPA also contributed to an environmentally protective interpretation of the regulatory powers of the Secretary of the Interior under the OCS Lands Act in *Gulf Oil v. Morton*, 493 F.2d 141, 145-46 (9th Cir. 1973).

113. As a stop-gap measure, S. 827, 94th Cong., 1st Sess. (1975), and the companion H.R. 3719, 94th Cong., 1st Sess. (1975), would require disclosure of "performance standards" applied to OCS lessees in a supplemental NEPA statement to accompany all EIS's prepared in connection with OCS leasing.

114. The District of Columbia Circuit Court of Appeals in *Sierra Club v. Morton* (Great Plains Coal), 514 F.2d 856 (D.C. Cir. 1975) suggests that under NEPA "the duty to plan comprehensively can be imposed on the Government apart from the duty to file an impact statement . . ." *Id.* at 874. The problem remains that nowhere in NEPA is there any indication of how this planning is to be carried out.

115. The "Proximity Evaluation" matrices relied upon by the Department of the Interior to evaluate OCS development risks, see, e.g., *Sierra Club v. Morton* (MAFLA OCS Leasing), 510 F.2d 813, 821 n.16 (5th Cir. 1975); 2 SOUTHERN CALIFORNIA TRACT SPECIFIC EIS 320-348, are inadequate for decision-making purposes because: (1) the risks different tracts pose to im-

OCS program under NEPA are almost certain,¹¹⁶ and because subjecting OCS proposals to NEPA review has shed light on defects in both the NEPA and OCS Lands Act processes, the application of NEPA to OCS development is discussed in detail.

The National Environmental Policy Act

The principal requirement of NEPA is that an environmental impact statement (EIS) be prepared for all proposed “. . . major federal actions significantly affecting the quality of the human environment”; the EIS then accompanies the proposal through the agency review process.¹¹⁷ The statement must discuss in detail the proposal’s environmental impact, including adverse environmental effects, short-term consumption versus long-term productivity, irreversible effects and irretrievable commitments of resources; it must also present reasonable alternatives to the proposal together with their environmental impacts.¹¹⁸ Although NEPA does not specifically address energy problems, its procedures have been invoked in several significant energy decisions.¹¹⁹

Evaluation of Energy Alternatives

The leading case on the scope of the alternatives which must be considered in an EIS is *Natural Resources Defense Council, Inc. v. Morton*,¹²⁰ decided in 1972. This is also the first case in which the desire to use OCS oil and gas as a short-term solution to the “energy crisis” clashed with the longer range perspectives of NEPA. In an

portant resources are evaluated in regard to only two hazards, oil spills and disruption from structures, and other factors such as the location of earthquake fault lines are ignored, *id.* at 320; and (2) the system is arbitrary in that it develops relative priorities only among tracts, without any evaluation of whether the risks from all tracts are too great to permit development of any of them. The Department of the Interior acknowledges the system is “subjective.” *Id.* at 343. In the recent Gulf of Mexico “MAFLA” lease offering, no tracts were eliminated because of environmental data developed through the impact statement process. 1 CEQ REPORT 181. Without extensive research to develop baseline environmental data for areas exposed to OCS development, these problems can never be solved. *See id.* at 210. Estimates of the time required to do such research range from two to five years. COUNTER TRACT SPECIFIC EIS 87, 189.

116. *See, e.g.,* County of Suffolk v. Department of the Interior, No. 75 C-208 (E.D.N.Y. complaint filed Feb. 10, 1975), 5 ELR 65257 (Digest Facsimile Service No. 332, 1975).

117. 42 U.S.C. § 4332(2) (C) (1970).

118. *Id.* §§ (i)-(v).

119. The most useful NEPA commentaries are F. ANDERSON, *NEPA IN THE COURTS* (1973) and the chapter on NEPA by the same author in *ENVIRONMENTAL LAW INSTITUTE, FEDERAL ENVIRONMENTAL LAW* 238-419 (1974).

120. 458 F.2d 827 (D.C. Cir. 1972).

EIS covering the proposed leasing of 80 tracts in the Gulf of Mexico, the Secretary of the Interior refused to consider increasing oil imports as an alternative to OCS development on the ground he lacked authority to increase imports.¹²¹ The court ordered the Secretary to consider all reasonable alternatives to the proposed leasing regardless of whether their implementation is in his power. An EIS is intended to enlighten the public, Congress and other government officials, as well as the agency preparing the statement.¹²² In essence the court was telling the Secretary to prepare a definitive national energy plan encompassing all potential sources of supply and demand for the foreseeable future. Without such a plan, a particular energy development proposal cannot be placed in context and its costs and benefits weighed against those of feasible alternatives, including energy conservation measures.¹²³ To date no such plan has been prepared.

Environmental Impact Analysis

The EIS at issue in *National Resources Defense Council, Inc. v. Morton* is 67 pages long, excluding appendices.¹²⁴ For subsequent OCS proposals, the EIS's are much longer¹²⁵ and discuss alternative energy sources,¹²⁶ but other defects remain unremedied. For example, continuing blind faith is placed in regulations *qua* regulations as a means of preventing pollution from OCS drilling, notwithstanding a fully documented history of weak enforcement.¹²⁷ Onshore land use and economic and social impacts are still given

121. More specifically, he lacked authority to reduce or eliminate entirely quotas on oil imports. *Id.* at 834.

122. *Id.* at 833, 835, 844.

123. See 1 CEQ REPORT 196-200.

124. 458 F.2d 827, 830 (D.C. Cir. 1972).

125. The two volume *Programmatic EIS* is 1250 pages long excluding appendices and the four volume *Southern California Tract Specific EIS* contains 2000 pages including appendices. Lengthy "counter EIS's" also have been spawned. The *Programmatic Counter EIS* is 527 pages long and the *Counter Tract Specific EIS* is 202 pages.

126. The EIS covering the leasing of 147 additional tracts in the Gulf of Mexico unsuccessfully attacked in *Sierra Club v. Morton* (MAFLA OCS Leasing), 510 F.2d 813 (5th Cir. 1975), devoted 352 pages to alternatives alone. *Id.* at 825 n.32.

127. See *id.* at 821-23, 825-28; *National Resources Defense Council, Inc. v. Morton*, 458 F.2d 827, 831 (D.C. Cir. 1972). The EIS challenged in *Sierra Club v. Morton* (MAFLA OCS Leasing) disclosed numerous violations of regulations by lessees. See 1 CEQ REPORT 183. When an agency promises in an EIS to change a regulatory system, problems are presented of evaluat-

short shrift,¹²⁸ despite continuing criticism.¹²⁹

However, it is unlikely these defects will cause the courts to hold that the EIS's do not adequately fulfill NEPA's requirements. Although it contains such defects, an EIS for increased OCS leasing in the Gulf of Mexico was recently held adequate by the Fifth Circuit in *Sierra Club v. Morton (MAFLA OCS Leasing)*.¹³⁰ The court's reasoning is unsatisfactory. Pollution hazards were said to be "continuously controllable"¹³¹ through lease stipulations and regulations despite the very poor enforcement record.¹³² As to onshore impacts, it was sufficient that the states ". . . have been consulted on several occasions and encouraged to begin planning environmental safeguards for the construction and operation of onshore pipelines and facilities."¹³³ Under this narrow interpretation, no hope exists for those who seek to utilize NEPA's processes in planning onshore impacts.¹³⁴ The states will have to rely solely on the coastal planning mechanisms of the Coastal Zone Management Act.¹³⁵

For future litigants who dispute the Fifth Circuit's narrow approach, the recent decision of the Supreme Court in *Aberdeen & Rockfish Railroad v. Students Challenging Regulatory Agency Procedures (SCRAP II)*¹³⁶ is of little comfort. In its first decision on the merits under NEPA,¹³⁷ the Court held adequate an EIS prepared by the Interstate Commerce Commission for proposed freight rate increases. The three-judge district court had described the EIS as "combative, defensive"¹³⁸ and otherwise "sorely deficient."¹³⁹

ing now the effectiveness of future changes and, if changes are in fact made, of monitoring and reporting their effectiveness to the original decision-maker, interested agencies and the public. In addition there is the question of whether such promises are legally enforceable.

128. See *Sierra Club v. Morton (MAFLA OCS Leasing)*, 510 F.2d 813, 824 (5th Cir. 1975); *National Resources Defense Council, Inc. v. Morton*, 458 F.2d 827, 831 (D.C. Cir. 1972). The *Programmatic EIS* devotes 20 of its 1250 pages to onshore land use and socioeconomic effects. 2 PROGRAMMATIC EIS 219-39. The 2000 page *Southern California Tract Specific EIS* covers the same subject in 35 pages. 2 SOUTHERN CALIFORNIA TRACT SPECIFIC EIS 264-99.

129. See 4 BNA ENVIR. REP. CURRENT DEVELOPMENTS 1855 (1974); COUNTER EIS 208-19; COUNTER TRACT SPECIFIC EIS 62-65.

130. 510 F.2d 813 (5th Cir. 1975).

131. *Id.* at 824.

132. See *id.* at 822-23, 825-28.

133. *Id.* at 824.

134. See 1 CEQ REPORT 180; LESSONS FROM SCOTLAND 164-65.

135. 16 U.S.C. §§ 1451-64 (Supp. IV, 1974).

136. 95 S. Ct. 2336 (1975).

137. The Court took a sympathetic approach toward standing to sue to enforce NEPA in *United States v. SCRAP (SCRAP I)*, 412 U.S. 669 (1973).

138. *SCRAP v. United States*, 371 F. Supp. 1291, 1302 (1974).

139. *Id.* at 1299. Specific defects included failing to study the environ-

The procedural complexities of ICC rate-making proceedings did play a significant role in the Court's decision;¹⁴⁰ even so, the opinion is not sympathetic to NEPA.¹⁴¹

Standard of Judicial Review

Another important hurdle for litigants challenging the adequacy of OCS EIS's is the standard of judicial review applied. The Supreme Court did not reach the question in *SCRAP II*,¹⁴² but most circuit courts agree that the appropriate test for adequacy of an EIS is the "arbitrary and capricious" standard of the Administrative Procedure Act.¹⁴³ In addition, although there is less agreement on the point, the Fifth Circuit held in *Sierra Club v. Morton (MAFLA OCS Leasing)* that at trial the plaintiffs must demonstrate inadequacy by a preponderance of the evidence, rather than by a mere prima facie showing of deficiencies; before the court of appeals, they must show that the district court was clearly erroneous.¹⁴⁴ Thus the burdens on litigants challenging the adequacy of OCS EIS's are substantial.

Programmatic Statements

On other issues NEPA has been interpreted more sympathetically

mental impact of the underlying rate structure to which the proposed increases would be added, failing to react to the critical comments of other federal agencies and environmental groups, and generally attempting to justify in the statement a decision already made. *Id.* at 1301-04.

140. *See* 95 S. Ct. at 2352-53, 2357-58.

141. *See id.* at 2355-59. Justice Douglas in dissent said the EIS had been "thoroughly discredited by the comments of other federal agencies" and therefore should be held inadequate. *Id.* at 2360. Perhaps the strongest statement the majority made in favor of NEPA enforcement was the following:

NEPA does create a discreet procedural obligation on government agencies to give written consideration of environmental issues in connection with certain major federal actions and a right of action in adversely affected parties to enforce that obligation. When agency or departmental consideration of environmental factors in connection with that "federal action" is complete, notions of finality and exhaustion do not stand in the way of judicial review of the adequacy of such consideration *Id.* at 2355.

142. *Id.* at 2359 n.28.

143. 5 U.S.C. § 706(2) (A) (1970); *see* *Sierra Club v. Morton (MAFLA OCS Leasing)*, 510 F.2d 813, 829 n.49 (5th Cir. 1975). Still unresolved is the question of the extent to which agency approval of a project remains reviewable once an adequate EIS is prepared. *See* *SCRAP II*, 95 S. Ct. 2336, 2354-55 n.18 (1975); Note, *The Latest Adverse Alternative Approach to Substantive Review Under NEPA*, 88 HARV. L. REV. 735 nn.2, 3 (1975).

144. 510 F.2d at 818.

in the energy context. Under NEPA, there is a general problem of deciding when an idea for a federal program significantly affecting the environment has progressed sufficiently to become a "proposal for major federal action" so that an EIS must be prepared. The leading case on this point arose in connection with the Atomic Energy Commission's¹⁴⁵ research and development program for the liquid-metal fast-breeder reactor. In *Scientists' Institute for Public Information v. Atomic Energy Commission*,¹⁴⁶ the District of Columbia Court of Appeals held that because the program had moved beyond pure scientific research toward creation of a viable power industry based on the breeder reactor, the time was appropriate for preparation of an EIS evaluating the program.¹⁴⁷ The *Scientists' Institute for Public Information* case and the Council on Environmental Quality guideline upon which it relied¹⁴⁸ have become the foundation for a new generation of EIS's which cover entire programs. Prior practice had been to prepare statements for individual construction projects within a program. Programmatic EIS's do not replace these; instead, they provide a framework for the individual project EIS's.

The lack of a programmatic EIS for OCS development was a major problem in *National Resources Defense Council, Inc. v. Morton*.¹⁴⁹ Since this decision, draft and final programmatic EIS's for OCS development have been prepared¹⁵⁰ and circulated for comment, and public hearings have been held on the draft EIS, all pursuant to the statute and to Council on Environmental Quality guidelines.¹⁵¹ Both the draft and final OCS programmatic EIS's

145. The AEC has since been split into ERDA, the Energy Research and Development Administration, and the Nuclear Regulatory Commission (NRC). See ENVIRONMENTAL LAW INSTITUTE, FEDERAL ENVIRONMENTAL LAW 983-84 (1974).

146. 481 F.2d 1079 (D.C. Cir. 1973).

147. Related factors in the court's decision to order preparation of an EIS were the sheer magnitude of the federal investment in the program which would restrict future alternatives, and the controversial nature of the program. *Id.* at 1082. The AEC had committed an average of \$100 million a year toward the goal of commercial viability by 1980 and had expected breeder reactors to constitute 25 percent of all electrical generating capacity in the United States by the year 2000. *Id.* at 328.

148. See 481 F.2d at 1090. The current guideline is found at 40 C.F.R. § 1500.6(d) (1) (1975).

149. See text accompanying notes 121-23 *supra*.

150. See PROGRAMMATIC EIS and DEPARTMENT OF THE INTERIOR, FINAL ENVIRONMENTAL STATEMENT, PROPOSED INCREASE IN OIL AND GAS LEASING ON THE OUTER CONTINENTAL SHELF (1975) [hereinafter cited as FINAL PROGRAMMATIC EIS].

151. The Council on Environmental Quality guidelines to federal agencies for the implementation of NEPA do not have the force of law, but they are accorded great weight by the courts. See *Sierra Club v. Morton* (Great

share the previously noted defects—unwarranted reliance on regulations and lease stipulations to prevent pollution¹⁵² and failure to analyze the onshore impacts of OCS development.¹⁵³ Even the evaluation of alternatives to OCS development, the principal purpose to be served by a programmatic EIS, has been criticized as inadequate.¹⁵⁴ However, because the standards which an adequate programmatic EIS must meet have not been formulated with any specificity, a successful court challenge to the final OCS programmatic EIS seems unlikely.¹⁵⁵

Regional Impact Statements

In addition to programmatic and tract specific EIS's for OCS development, several commentators¹⁵⁶ have recommended that intermediate regional EIS's be prepared, each covering, for example, a portion of the Atlantic coast where leasing is expected to take place in several stages. These regional EIS's would be especially useful for comprehensive planning of the region-wide, cumulative onshore impacts.¹⁵⁷ So far, the Department of the Interior has not adopted the suggestion in connection with its current proposals for OCS development.¹⁵⁸

The recent decision in *Sierra Club v. Morton (Great Plains*

Plains Coal), 514 F.2d 856, 871 n.22, 873-74 n.24. (D.C. Cir. 1975). The Department of the Interior's implementation of the guidelines in connection with OCS development has not been free from criticism. Despite the fact that such action is not expressly prohibited, the Department probably violated the spirit of the guidelines by circulating the draft *Southern California Tract Specific EIS* prior to the *Final Programmatic EIS*. See COUNTER TRACT SPECIFIC EIS 20-22. Such actions lend credibility to allegations that the OCS EIS's are being prepared merely to justify decisions already made. See generally *Sierra Club v. Morton (Great Plains Coal)*, 514 F.2d 856, 879 (D.C. Cir. 1975).

152. See note 127 *supra*.

153. See note 128 *supra*.

154. COUNTER EIS 38-129.

155. See ENVIRONMENTAL LAW INSTITUTE, FEDERAL ENVIRONMENTAL LAW 338 (1974).

156. These commentators include the Council on Environmental Quality and a committee of the National Academy of Sciences. 1 CEQ REPORT 180, 193, 210; see LESSONS FROM SCOTLAND 171-72.

157. See 1 CEQ REPORT 180; cf. *Sierra Club v. Morton (Great Plains Coal)*, 514 F.2d 856 (D.C. Cir. 1975).

158. The draft *Southern California Tract Specific EIS* makes an inadequate attempt to assess the impacts of OCS development on the southern California region. See 2 SOUTHERN CALIFORNIA TRACT SPECIFIC EIS 264-99.

Coal)¹⁵⁹ provides only a tenuous basis for compelling the preparation of regional EIS's. In a lengthy opinion, the District of Columbia Court of Appeals remanded the question of whether the time was ripe for preparation of a regional EIS covering the activities of several federal agencies (principally the Department of the Interior)¹⁶⁰ concerned with coal development in the Northern Great Plains region.¹⁶¹ A national coal programmatic EIS and EIS's for individual coal projects within the Northern Great Plains region had previously been prepared. Two preliminary regional studies initiated by the Department of the Interior had been abandoned; but a third, intended to assess the social, economic, and environmental impacts of Northern Great Plains coal development and obviously useful in preparing a regional EIS, was underway.¹⁶² The question was whether, in addition to the national and individual project EIS's, NEPA *required* preparation of a regional EIS.

Although the court remanded the question to the agencies,¹⁶³ its broad interpretations of NEPA should be noted:

Whether a comprehensive [regional] impact statement is required cannot turn simply on whether the agency has denominated a comprehensive series of actions a "program." . . . [NEPA] plainly contemplates imposing a requirement of comprehensive planning on the Government when it refuses to do so itself. . . . Agency violation of this substantive duty by a failure to improve its plans or coordinate its actions might justify a judicial directive to coordinate various major federal actions into one comprehensive major federal action, followed by a directive ordering issuance of a comprehensive impact statement for the newly-comprised action. . . . Surely we are not willing to hold that the less comprehensive planning an agency chooses to do, the less NEPA requires it to do. . . . [W]hen the federal government, through exercise of its

159. 514 F.2d 856 (D.C. Cir. 1975).

160. In *Scientists' Institute for Public Information v. Atomic Energy Commission*, only one agency (the AEC) was involved, and this agency admitted that it was carrying out a "program"—the only question was the proper scope and timing of EIS's in regard to that program. In *Great Plains Coal*, the several agencies involved denied they were together carrying out a "program." This problem is not present in connection with OCS development, for the Department of the Interior is clearly in charge of a nationwide program and has prepared a nationwide programmatic EIS as well as tract specific EIS's for tracts within a region offered for leasing at the same time. The question remains whether more comprehensive regional EIS's are also required.

161. This region is defined as northeastern Wyoming, eastern Montana, western North and South Dakota, with strips extending southerly into Nebraska and Colorado. 514 F.2d at 861. One of the problems in preparing regional EIS's is defining the appropriate region to be analyzed. The Department of the Interior seems to have broad discretion in defining the geographic boundaries of any regional OCS EIS's that are prepared. See *id.* at 881 n.33.

162. *Id.* at 863, 875-76, 892; see *id.* at 872.

163. See *id.* at 879-83.

power to approve leases, mining plans, rights-of-way, and water option contracts, attempts to "control development" of a definite region, it is engaged in a regional program constituting major federal action within the meaning of NEPA, whether it labels its attempts a "plan," a "program," or nothing at all.¹⁶⁴

Unfortunately, the emphasis of the court and others on the NEPA process as a tool for regional planning is misplaced. The focus of impact analysis is incremental effects whereas planning is specifically intended to be nonincremental, *i.e.*, comprehensive. However, the Council on Environmental Quality envisions expansion of the NEPA process into a regional planning device for OCS onshore development by allowing state and local governments to participate with the Department of the Interior in the preparation of regional EIS's. Conflicts would be reconciled through the NEPA circulation and comment process.¹⁶⁵

Although some benefits would certainly be derived from EIS's prepared in this manner, the goal of comprehensive regional planning probably could not be achieved. Someone, presumably the Secretary of the Interior, would have to determine the boundaries of the region covered in the EIS. After the region is defined, the major problem remains of getting state and local officials and the Department of the Interior representatives to work together on the EIS.¹⁶⁶ Because regional development planning is outside the Department of the Interior's usual functions, the value of its contribution would be suspect. Outside expertise could be brought in, but the Department of the Interior must remain in the process to some extent because it controls the resource whose exploitation will cause the planned development. In addition, the parties would be well advised to resolve as many conflicts as possible in the draft EIS; because the circulation and comment process has not functioned well for traditional statements,¹⁶⁷ it could not be counted upon to play the vital role of conflict resolution for regional EIS's.

Ironically, if despite all difficulties, a cooperative body with regional planning capability is assembled and kept together, the prod-

164. *Id.* at 873-75, 878 (emphasis in original).

165. 1 CEQ REPORT 177, 180; see LESSONS FROM SCOTLAND 171-72.

166. With the problem of accelerated OCS development, see text accompanying note 9 *supra*, state and local governments have so far been Interior's adversaries, both in and out of the courtroom.

167. See ENVIRONMENTAL LAW INSTITUTE, FEDERAL ENVIRONMENTAL LAW 253-55, 270-73, 389-96 (1974).

uct produced will probably be an EIS in name only. Fulfilling a regional planning function requires a comprehensive regional planning document whose focus is not the five aspects of incremental environmental impact mandated by NEPA.¹⁶⁸ Additionally, a regional plan produced under NEPA may duplicate or, what is more likely, conflict with a state coastal zone plan prepared under the federal Coastal Zone Management Act (CZMA).¹⁶⁹ That being the case, it would seem much more efficient to channel OCS onshore planning through the CZMA mechanism from the beginning, rather than to try creating a new regional planning process under NEPA which then must be meshed with state coastal zone programs.

Regardless of the difficulties surrounding preparation of useful OCS regional EIS's, one must still ask whether the *Great Plains Coal* case mandates their preparation. Potentially significant factual differences exist between the OCS and *Great Plains Coal* situations. The court found that "regional development of the Northern Great Plains is contemplated" by the agencies involved.¹⁷⁰ As to the OCS, the Department of the Interior might successfully argue that the development it "contemplates" is limited to the OCS itself and that this development is not on a regional basis. Of course the Department of the Interior would not deny that onshore development, primarily facilities for processing and transporting OCS oil and gas, is a foreseeable consequence of the OCS development it contemplates; but the department has no authority to regulate onshore development.¹⁷¹ The only means available to it are indirect, such as regulation of the timing and quantity of OCS development permitted offshore. However, in the Northern Great Plains, federal agencies have direct permit and licensing power over both the energy resource and the industry necessary to process and transport it.¹⁷² Therefore, they have more control over development of the region, and it is more reasonable to ask them to prepare a comprehensive regional EIS to aid in planning that development, in addition to national programmatic and individual project EIS's.

Furthermore, the court in *Great Plains Coal* was not unmindful of the difficulties inherent in its decision, both on a practical¹⁷³

168. See text accompanying note 118 *supra*.

169. 16 U.S.C. §§ 1451-64 (Supp. IV, 1973).

170. 514 F.2d at 875.

171. See text accompanying notes 187-98 *infra*.

172. See 514 F.2d at 865-66.

173. The court said the agencies should decide whether a joint regional EIS or several single-agency regional EIS's should be prepared, whether a regional EIS should be subdivided into subregional EIS's, and whether a regional EIS should be incorporated into individual project EIS's: "All

and a "spiritual" level,¹⁷⁴ and seemed particularly unwilling to decide the threshold question of whether a Northern Great Plains regional EIS should be prepared.¹⁷⁵ Apparently federal agencies have greater discretion in deciding whether to prepare regional EIS's than they do in resolving other NEPA threshold questions.¹⁷⁶ However, this approach is justified only when the agency has analyzed the alternatives to its program in the programmatic EIS and has the data and competence to discover and avoid or mitigate unreasonable environmental risks posed by individual projects within the program. In such cases, EIS's evaluating the cumulative secondary impacts of the program on particular regions are still useful although they are performing functions more efficiently delegated to formal regional planning processes.

Unfortunately, the foregoing analysis does not apply to OCS development. Alternatives to OCS development could not be meaningfully analyzed in the OCS programmatic EIS because no national energy plan exists. The evaluation of environmental risks in the tract specific EIS's is inadequate because insufficient environmental baseline data are available on the OCS.¹⁷⁷ The ability of the present OCS regulatory system to prevent or mitigate environmental impacts is doubtful. Finally, the United States has no viable interstate regional planning mechanism to prefer over regional

that matters is that a comprehensive study of the region is made." *Id.* at 882 n.36.

174. "Certainly federal officers are entitled to dream out loud without filing an impact statement." *Id.* at 879.

175. *See id.* at 882 n.40. It also declined to enjoin the agencies from taking any action in regard to coal development in the Northern Great Plains pending their decision on whether and how to prepare a regional EIS. *Id.* at 883.

176. The standard of judicial review of the threshold agency decision not to prepare a regional EIS is said to be the familiar "arbitrary and capricious" test. *Id.* at 875. Courts have applied varying degrees of scrutiny to different agency actions under NEPA, although all are stated to be subject to the arbitrary and capricious test. As to threshold questions of whether to prepare EIS's for national programs and individual projects, *see ENVIRONMENTAL LAW INSTITUTE, FEDERAL ENVIRONMENTAL LAW 328-30, 356-62 (1974).*

177. *See note 115 supra.* Whether NEPA requires agencies to research gaps in the knowledge necessary to evaluate project impacts is unclear; at least some district courts think so. *See Natural Resources Defense Council, Inc. v. Grant*, 355 F. Supp. 280, 287-89 (E.D.N.C. 1973); *Brooks v. Volpe*, 350 F. Supp. 269, 279-80 (W.D. Wash. 1972); *Environmental Defense Fund v. Hardin*, 325 F. Supp. 1401, 1403 (D.D.C. 1971).

EIS's.¹⁷⁸ The coastal planning supported by the Coastal Zone Management Act is statewide only, and most coastal states have not completed the programs called for by the Act.¹⁷⁹ However, for reasons suggested above¹⁸⁰ and discussed more fully below, to the extent successful planning of the onshore impacts of OCS development occurs, it will more likely be under the CZMA than NEPA.

Coastal Zone Management Act

Introduction

The Coastal Zone Management Act was passed in 1972 for the stated purpose of encouraging coastal states to exercise full authority over the lands and waters of their coastal zones.¹⁸¹ The 30 coastal states (including those bordering the Great Lakes) are encouraged to participate by a two-step funding program administered by the Secretary of Commerce, who has delegated his authority under the Act to the Administrator of the National Oceanic and Atmospheric Administration (the Administrator).¹⁸² The Administrator may grant funds to aid development of a state coastal zone management program¹⁸³ and then, after reviewing and approving the program, may award additional funds to assist the state in op-

178. For special situations, interstate compacts to regulate development are possible. However, the Tahoe Regional Planning Agency created in 1969 by compact between California and Nevada has had some serious operational problems. See Comment, *Regional Government for Lake Tahoe*, 22 HASTINGS L.J. 705 (1971). The Coastal Zone Management Act is designed to mesh with more comprehensive national land use legislation. See 16 U.S.C. § 1456(g) (Supp. IV, 1974). So far Congress has failed to enact such legislation, leaving the CZMA as the most comprehensive federal land use legislation to date.

179. See DEPARTMENT OF COMMERCE, STATE COASTAL ZONE MANAGEMENT ACTIVITIES 1974 (1974). Regional and interstate coordination and cooperation are authorized and encouraged by the act, but no mechanisms for such activities are provided. See 16 U.S.C. §§ 1452(d), 1454(g), 1455(c) (2) (Supp. IV, 1974).

180. See text accompanying notes 166-69 *supra*.

181. 16 U.S.C. § 1451(h) (Supp. IV, 1974); see Hollings, *Congress and Coastal Zone Management*, 1 COASTAL ZONE MANAGEMENT J. 115 (1973). Two sanctuaries, Coos Bay, Oregon, and Sapelo Island, Georgia, have been designated under the estuarine sanctuary provision of the Act. 16 U.S.C. § 1461 (Supp. IV, 1974). Several other locations are under consideration. Funding of estuarine sanctuaries is based on equal federal and state contributions.

182. Congress expected that such a delegation would occur because of the technical expertise in coastal zone matters of the National Oceanic and Atmospheric Administration. H.R. CONF. REP. No. 92-1544, 92d Cong., 2d Sess. (1972), in 3 U.S. CODE CONG. & AD. NEWS 4822 (1972) [hereinafter cited as CONFERENCE REPORT].

183. 16 U.S.C. § 1454 (Supp. IV, 1974).

erating the program.¹⁸⁴ An approved program must control development and resolve conflicts among competing uses in the coastal zone and permit acquisition and condemnation of property for those purposes.¹⁸⁵ The state may either directly control land and water uses in the coastal zone or simply review local program implementation.¹⁸⁶

Approved state CZMA programs do not automatically displace the multitude of other federal, state and local regulations applicable to energy development in the coastal zone. For OCS development, federal and state regulations apply to pipelines¹⁸⁷ and other offshore facilities within three miles of the coast. Federal, state and local controls apply to onshore facilities necessary to process and transport OCS oil and gas. The CZMA states that the limits on air and water pollution established under the Federal Water Pollution Control Act (FWPCA)¹⁸⁸ and the Clean Air Act¹⁸⁹ shall be the pollution limits in state coastal zone programs.¹⁹⁰ The result is not to restrict CZMA programs to land use control as some observers have feared,¹⁹¹ for both the FWPCA and the Clean Air Act allow state and local governments to impose air and water pollution standards stricter than those promulgated by the federal Environmental Protection Agency.¹⁹² Thus, for example, state and local responses to the hazard of sulfuric acid mist formation in moist coastal air are permitted.¹⁹³ Under the Clean Air Act, implementa-

184. *Id.* § 1455. Funding of both steps is on a two-thirds federal, one-third state basis.

185. *Id.* § 1455(d).

186. *Id.* § 1455(e).

187. See ENVIRONMENTAL LAW INSTITUTE, *FEDERAL ENVIRONMENTAL LAW* 973-74, 1002 (1974).

188. 33 U.S.C. §§ 1251-376 (1970), *as amended*, (Supp. III, 1973).

189. 42 U.S.C. § 1857 *et seq.* (1970), *as amended*, (Supp. III, 1973).

190. 16 U.S.C. § 1456(f) (Supp. IV, 1974); see 40 Fed. Reg. 1691, 1693 (1975).

191. Mandelker & Sherry, *The National Coastal Zone Management Act of 1972*, 7 URBAN L. ANN. 119, 132-34 (1973). *But cf.* Mandelker & Rothchild, *The Role of Land-Use Controls in Combating Air Pollution Under the Clean Air Act of 1970*, 3 ECOLOGY L.Q. 235, 270-71 (1973).

192. 33 U.S.C. § 1370 (Supp. III, 1973); 42 U.S.C. § 1857d-1 (1970).

193. The discussion at 118 CONG. REC. 14183 (1972) supports the proposition that the authorizations for stricter state and local air and water pollution standards are not restricted by the CZMA. Special coastal air pollution regulations could be included in an approved CZMA program so long as the CZMA coordination requirements are met.

tion of the nondegradation requirement¹⁹⁴ could limit significantly coastal siting of new air pollution sources such as refineries. New refineries sited in the coastal zone will be subject to Clean Air Act new source performance standards¹⁹⁵ and FWPCA effluent guidelines and standards.¹⁹⁶ They will also be subject to state environmental impact assessment procedures¹⁹⁷ and state and local land use controls.¹⁹⁸ The CZMA program development process presents an opportunity to coordinate all of these requirements to the maximum extent possible.

Siting of Energy Facilities in the Coastal Zone

As to the substantive content of a program, the Coastal Zone Management Act mandates only four things: (1) control of land and water uses within the coastal zone which have a direct and significant impact on coastal waters;¹⁹⁹ (2) procedures for preserving or restoring areas of recreational, ecological, or aesthetic value;²⁰⁰ (3) “. . . a method of assuring that local land and water use regulations within the coastal zone do not unreasonably restrict or exclude land and water uses of regional benefit”;²⁰¹ and (4) “. . . adequate consideration of the national interest involved in siting of facilities necessary to meet requirements which are other than local in nature.”²⁰²

Although paragraph (3), the uses of regional benefit provision, would seem to cover energy-related uses,²⁰³ the legislative history and regulations implementing the Act focus on paragraph (4), the

194. See *Sierra Club v. Ruckelshaus*, 344 F. Supp. 253 (D.D.C. 1972), *aff'd sub nom. Fri v. Sierra Club*, 412 U.S. 541 (1973) (4-4 vote); ENVIRONMENTAL LAW INSTITUTE, FEDERAL ENVIRONMENTAL LAW 1077-82 (1974).

195. See ENVIRONMENTAL LAW INSTITUTE, FEDERAL ENVIRONMENTAL LAW 1104-06 (1974).

196. See *id.* at 695-96. The validity of these standards will almost certainly be litigated by the petroleum industry. See *American Petroleum Institute v. Train*, 5 ELR 20298 (D. Colo. April 8, 1975). Delaying OCS development until state CZMA programs are approved would also allow time for finalizing these standards.

197. See, e.g., the California Environmental Quality Act, CAL. PUB. RES. CODE §§ 21000-174 (West Supp. 1975).

198. No coastal state has enacted a “one-stop” industrial siting law, although a few have adopted such a procedure for electric generating plants. See, e.g., Washington Thermal Power Plant Siting Law, WASH. REV. CODE ANN. §§ 80.50.010-.900 (1974). The CZMA does not require states to enact such laws as part of their coastal zone programs.

199. 16 U.S.C. §§ 1454(b) (2), (4) (Supp. IV, 1974).

200. *Id.* § 1455(c) (9).

201. *Id.* § 1455(e) (2).

202. *Id.* § 1455(c) (8). Paragraphs (3) and (4) are quoted directly from the Act because of their relevance to the subject at hand—the impact of energy development on the coastal zone.

203. The regulations define a use of regional benefit as “a land or water

facilities siting requirement, which originated in the House version of the Act.²⁰⁴ According to the House report, if a state coastal zone program fails to recognize the national interest in the siting of power plants, transportation facilities and other public services, the Administrator may not approve the program for the second stage of funding.²⁰⁵ Nevertheless, "the primary responsibility for developing the state program remains in the state," rather than in federal agencies.²⁰⁶

The regulations governing program approval repeat the same two themes. A program should evaluate the siting needs of regional energy facilities, including oil and gas wells, storage tanks and pipelines, refineries, power plants and deepwater ports.²⁰⁷ Such facilities cannot be "arbitrarily excluded" or "unreasonably restricted" without "good and sufficient reasons."²⁰⁸ However, these requirements ". . . should not be construed as compelling the States to propose a program which accommodates certain types of facilities" ²⁰⁹ Neither do the regulations (nor does the Act) require a state to adopt a special facilities siting procedure; existing land use controls may be utilized so long as the above requirements are met.

use that typically provides benefits to a significant area beyond the boundaries of a single unit of the lowest level of local, general-purpose government," and link this requirement to the "facilities siting" requirement. 40 Fed. Reg. 1684, 1689 (1975). Blanket exclusions or restrictions on uses of regional benefit in the coastal zone are not permitted unless they are based upon "reasonable considerations of the suitability of the area for the uses or the carrying capacity of the area"; uses of regional benefit may be prohibited in specific areas so long as the prohibition is not "capricious." 40 Fed. Reg. 1689 (1975).

204. H.R. 14146, 92d Cong., 2d Sess. (1972). Most of the act's other provisions originated in the Senate. See S. 3507, 92d Cong., 2d Sess. (1972); CONFERENCE REPORT 4824.

205. H.R. REP. NO. 92-1049, 92d Cong., 2d Sess. 18 (1972) [hereinafter cited as HOUSE REPORT]. The provision was apparently inserted at the request of the electric utility industry which was concerned about exclusion of power plants and related facilities. Mandelker & Sherry, *The National Coastal Zone Management Act of 1972*, 7 URBAN L. ANN. 119, 135 (1974). Robert Knecht, Director of the Office of Coastal Zone Management, the federal office in charge of administration of the CZMA, has stated that the facilities siting requirement includes "power plants and the like." Knecht, *Coastal Zone Management—A Federal Perspective*, 1 COASTAL ZONE MANAGEMENT J. 123, 127 (1973).

206. HOUSE REPORT 18.

207. 40 Fed. Reg. 1687-88 (1975). The adverse impacts of these facilities are to be minimized. *Id.* at 1687.

208. *Id.* at 1688.

209. *Id.*

Obviously, a state that desires to minimize the energy facilities located in its coastal zone, while developing a program eligible for further funding, faces a difficult task.²¹⁰ The Act's coordination and mediation provisions must be used extensively.²¹¹ The state must allow parties interested in the energy aspects of its coastal zone program, including federal agencies, regional organizations, port authorities, utilities and oil companies, to participate fully in the program's development.²¹² Coordination with federal agencies is especially important because the Administrator cannot approve a program until the views of affected federal agencies have been

210. As of the date of writing, no state program has been finally approved under the act. The Delaware Coastal Zone Act, upon which Delaware's program presumably would be based, bans new heavy industry, including refineries, within two miles of the coast. DEL. CODE ANN. tit. 7, ch. 70, § 7003 (1974); see *Kreshtool v. Delmarva Power & Light Co.*, 310 A.2d 649 (Del. 1973); Comment, *Land-Use Management in Delaware's Coastal Zone*, 6 U. MICH. J. LAW REFORM 251 (1972); 118 CONG. REC. 14173-75 (1972); Note, 21 BUFFALO L. REV. 481 (1972). The coastal zone plan being developed for the California legislature's consideration would permit construction of a refinery in the coastal zone only if there is no less environmentally damaging site available elsewhere in the state. CALIFORNIA COASTAL ZONE CONSERVATION COMMISSIONS, PRELIMINARY COASTAL PLAN 227 (Hearing Draft, March 1975); see Douglas, *Coastal Zone Management—A New Approach in California*, 1 COASTAL ZONE MANAGEMENT J. 1 (1973); Healy, *Saving California's Coast: The Coastal Zone Initiative and Its Aftermath*, 1 COASTAL ZONE MANAGEMENT J. 365 (1974). In Maine, the Governor's Task Force on Energy, Heavy Industry and the Maine Coast has recommended that new heavy industry be located in two designated zones with the remainder of the coast held free from new heavy industry. U.S. DEPARTMENT OF COMMERCE, STATE COASTAL ZONE MANAGEMENT ACTIVITIES 1974 at 42 (1974); see MacDonald, *Shoreland Zoning in Maine*, 1 COASTAL ZONE MANAGEMENT J. 109 (1973). The Washington Shoreline Management Act of 1971, upon which Washington's CZMA program is based, prohibits surface drilling for oil and gas in Puget Sound and the Strait of Juan de Fuca and on land within 1,000 feet of those waters. WASH. REV. CODE ANN. § 90.58.160 (1974); see Crooks, *The Washington Shoreline Management Act*, 54 ORE. L. REV. 35, 58 (1975). See generally Zwicky & Clark, *Environmental Protection Motivation in Coastal Zone Land-Use Legislation*, 1 COASTAL ZONE MANAGEMENT J. 103 (1973). The preference of state coastal zone programs for inland refinery locations and the transportability of crude oil to those locations suggest the need for national land use planning legislation analogous to the CZMA. See 1 CEQ REPORT 205; LESSONS FROM SCOTLAND 127.

211. Strategic considerations in utilizing these provisions are outlined in Hershman & Folkenroth, *Coastal Zone Management and Intergovernmental Coordination*, 54 ORE. L. REV. 13, 30-32 (1975). Key questions are who among the states, interested federal agencies and the Office of Coastal Zone Management has the burden of initiating coordination and who has the greatest bargaining strength. *Id.* The regulations on coordination with federal agencies appear to place the burden on the state and put federal agencies in a stronger position. See 40 Fed. Reg. 8547 (1975).

212. 16 U.S.C. § 1455(c)(1) (Supp. IV, 1974). The regulations urge particular attention to coordination requirements in connection with energy facilities. 40 Fed. Reg. 1692 (1975).

adequately considered.²¹³ When disagreements occur between federal agencies and states, the Administrator mediates them with the aid of the Executive Office of the President.²¹⁴ If a state insists, the Administrator ultimately decides whether a particular provision requires disapproval of the program.²¹⁵

Consistency of Federal Activities With Approved State Coastal Zone Programs

Once a state coastal zone program is approved, it not only is eligible for further funding but also is entitled to the benefits of the Act's federal consistency provisions.²¹⁶ Federal development projects and other activities "directly affecting the coastal zone" must be consistent with approved state management programs "to the maximum extent practicable."²¹⁷ Federal licenses and permits for activities "affecting land and water uses in the coastal zone" may be granted only if the state certifies that the activity complies with and will be conducted consistently with the program. However, the Administrator may override state objections to a permit or license if he finds that the activity is consistent with the objectives of the Act or is otherwise necessary in the interest of national security.²¹⁸ Because of the leverage gained over federal projects affecting the coastal zone, the federal consistency requirements are clearly an important incentive to the states to develop programs for final approval.²¹⁹ However, until final approval is obtained, federal consistency with developing state programs depends on the good will of the federal agencies involved.²²⁰

213. 16 U.S.C. § 1456(b) (Supp. IV, 1974); see 40 Fed. Reg. 8546-48 (1975). If the Administrator shows too much deference to federal agency views, a state can withdraw its application for program approval without penalty—state participation in the CZMA scheme is voluntary at both the program development and program implementation stages.

214. 16 U.S.C. § 1456(b) (Supp. IV, 1974); 40 Fed. Reg. 8547-48 (1975).

215. See 40 Fed. Reg. 8547-48 (1975); HOUSE REPORT 19.

216. 16 U.S.C. § 1456(c) (Supp. IV, 1974).

217. *Id.* §§ 1456(c) (1), (2).

218. *Id.* § 1456(c) (3). Without the Act's consistency requirements, federal activities would be immune from state coastal zone regulation under the property and supremacy clauses of the United States Constitution. U.S. CONST. art. IV § 3; *id.* art. VI, cl. 2.

219. See Knecht, *Coastal Zone Management—A Federal Perspective*, 1 COASTAL ZONE MANAGEMENT J. 123, 127 (1973).

220. 57 OP. CAL. ATT'Y GEN. 51-52 (1974); see *San Diego Coastwatch v.*

The coastal zone extends seaward to the outer limit of the United States territorial sea, currently three miles, which is also the limit of state ownership under the Submerged Lands Act.²²¹ The coastal zone extends inland only to the extent necessary to control shorelands whose uses "have a direct and significant impact on the coastal waters," with the exact inland boundary determined by the state in developing its program.²²² But federally owned lands within these boundaries are excluded from the coastal zone;²²³ therefore, federal agencies conducting or supporting activities on federally owned land are subject to the consistency requirements only if the activities "directly affect" nonfederally owned land within the coastal zone. However, licensed activities of nonfederal entities on federal land still require state certification of program compliance or override by the Administrator if they affect land and water uses in the coastal zone.²²⁴

Unfortunately, no regulations clarifying the federal consistency requirements have been issued. The legislative history is sparse; the various overrides of the consistency requirement were a major concern. When a project inconsistent with an approved state program is alleged to be necessary for national security, the Adminis-

Schlesinger, No. 74-366-E (S.D. Cal., Aug. 14, 1974), 5 ELR 65254 (Digest Facsimile Service No. 328, 1975).

221. 16 U.S.C. § 1453(a) (Supp. IV, 1974); see 40 Fed. Reg. 1686 (1975). Apparently the seaward limit of the coastal zone for CZMA purposes was initially intended to expand (or contract) with international redefinitions of the territorial sea. See HOUSE REPORT 13-14; S. REP. NO. 92-753, 92d Cong., 2d Sess. (1972) in 3 U.S. CODE CONG. & AD. NEWS 4783 (1972) [hereinafter cited as SENATE REPORT]. But under the Submerged Lands Act the limit of state ownership is fixed. Thus so long as the coastal zone is defined as excluding federal lands and the Submerged Lands Act is not amended, the seaward limit of the CZMA coastal zone will remain at three miles despite international expansion of the territorial sea. See CONFERENCE REPORT 4822, 4824. However, a clarifying amendment reflecting this approach adopted by the Senate was rejected in conference. See 118 CONG. REC. 14185 (1972).

222. 16 U.S.C. § 1453(a) (Supp. IV, 1974); see 15 C.F.R. § 920.11 (1975); 40 Fed. Reg. 1686 (1975); HOUSE REPORT 13-14; SENATE REPORT 4783-84; Robbins & Hershman, *Boundaries of the Coastal Zone: A Survey of State Laws*, 1 COASTAL ZONE MANAGEMENT J. 305 (1974).

223. 16 U.S.C. § 1453(a) (Supp. IV, 1974): "Excluded from the coastal zone are lands the use of which is by law subject solely to the discretion of or which is held in trust by the Federal Government, its officers or agents." By this language Congress apparently intended to exclude all federally owned lands. See CONFERENCE REPORT 4822.

224. The conference report accompanying the CZMA states: ". . . Federal lands are not included within a state's coastal zone. As to the use of such lands which would affect a state's coastal zone, the provisions of section 307(c) [the consistency requirements of 16 U.S.C. § 1456(c)] would apply." CONFERENCE REPORT 4822.

trator is to make an independent inquiry and attempt to "reconcile" national security needs with the state program.²²⁵ He may not simply accept the allegation and allow the inconsistent project to proceed. The Act requires consistency only to the maximum extent practicable.²²⁶ This language was inserted in recognition of the fact that all conflicts between federal activities and state programs cannot be foreseen and resolved in the approval process; situations may arise after approval in which "as a practical matter" complete adherence is prevented. However, the number of such situations anticipated is not large.²²⁷ Thus, the override and maximum extent practicable provisions authorize variances when technical inconsistencies arise, but they are not loopholes through which federal programs may be driven unimpeded. In any case, federal inconsistencies with approved state programs are to be reported to Congress so it may take corrective measures.²²⁸

The legislative history also makes clear that the state certification of compliance requirement for federal licenses and permits applies only to new activities commenced after the date of enactment. The distinction is between federal permits for dredging a new channel and maintaining an old one; the latter permit is not subject to the certification requirement even if it is granted after the state program is approved.²²⁹

Application of the Coastal Zone Management Act to Outer Continental Shelf Oil and Gas Development

Federal Consistency Requirements

When the CZMA scheme is applied to OCS development, several

225. SENATE REPORT 4793.

226. 16 U.S.C. §§ 1456(c)(1), (2) (Supp. IV, 1974).

227. HOUSE REPORT 20.

228. 16 U.S.C. § 1462(a)(5) (Supp. IV, 1974); CONFERENCE REPORT 4824.

229. SENATE REPORT 4793-94. Professor Hershman has discussed the application of the federal consistency requirements in situations where a federal agency denies a permit for an activity the state finds in compliance with its approved coastal zone program. Hershman & Folkenroth, *Coastal Zone Management and Intergovernmental Cooperation*, 54 ORE. L. REV. 13, 24-29 (1975). In the energy context, for example, OCS oil and gas development, federal grants, rather than denials, of licenses and permits would more likely conflict with approved state programs. In cases of conflict, Professor Hershman recommends that a formal mediation process be available. *Id.* at 32 n.82. Otherwise the commentators have not explored the Act's consistency requirements.

points emerge. The federal consistency requirements do not apply to current OCS leasing activities because no state's program has been finally approved under the Act.²³⁰ But as state programs gain approval, two questions arise: (1) By leasing OCS lands for oil and gas development, is the federal government "conducting or supporting activities directly affecting the coastal zone" of a state with an approved management program?²³¹ (2) Is an OCS lease a "federal license or permit to conduct an activity affecting land and water uses in the coastal zone" of a state with an approved management program?²³²

If question (1) is answered yes, consistency with the state program to the maximum extent practicable is required.²³³ If question (2) is answered yes, state certification of program compliance is required before the lease may be granted.²³⁴

Within each of the foregoing questions is an issue of statutory interpretation and a question of fact. The issue of statutory interpretation in question (1) appears relatively easy to resolve based on the plain meaning of the Act's language: by leasing federal OCS lands for private oil and gas development, the Department of Interior would seem to be "supporting" the activities of the oil company lessees. But before consistency is required, such activities must *directly* affect the coastal zone. Although the wells drilled pursuant to the leases are outside the coastal zone, the coastal zone is impacted by the many direct effects of drilling discussed above.²³⁵

230. The Maine and Washington programs have progressed the furthest in the approval process at the date of writing. The program approval regulations provide for an optional preliminary approval step, and Washington's program has received such preliminary approval. 40 Fed. Reg. 23778 (1975); see 40 Fed. Reg. 1684 (1975). The shift of Rogers Morton, who promoted OCS oil and gas development as Secretary of Interior, to Secretary of Commerce with cabinet-level responsibility for CZMA program development was somewhat ironic in this context. The states hope that their CZMA programs will not be viewed merely as impediments to OCS development and that attempts will not be made to slow down the program approval process. Such attempts would lend additional credence to previous allegations that Interior was trying to "beat" the CZMA timetable with its accelerated OCS leasing program.

231. 16 U.S.C. § 1456(c) (1) (Supp. IV, 1974).

232. *Id.* § 1456(c) (3).

233. *Id.* § 1456(c) (1).

234. *Id.* § 1456(c) (3).

235. See text accompanying notes 37-45 *supra*. The final tract specific environmental impact statement for southern California appears to concede the applicability of the CZMA consistency requirement to OCS leasing. See 3 DEPARTMENT OF THE INTERIOR, FINAL ENVIRONMENTAL STATEMENT, PROPOSED 1975 OUTER CONTINENTAL SHELF OIL AND GAS GENERAL LEASE SALE OFFSHORE SOUTHERN CALIFORNIA 433 (1975). The Resources Agency of California believes the Intergovernmental Cooperation Act, 42 U.S.C. § 4231(c) (1973), also mandates consistency. FINAL ENVIRONMENTAL STATEMENT,

States whose coastal zones are directly affected are entitled to consistency with their approved management programs to the maximum extent practicable. In this context consistency would seem to include following state-designated pipeline and boat and barge traffic corridors and state locational preferences for onshore facilities.²³⁶ More difficult questions of consistency will have to be negotiated, and if necessary, mediated on a case-by-case basis. Pursuant to the Act, cases of persistent inconsistency should be reported to Congress for resolution.²³⁷

Resolution of the issue of statutory interpretation raised by question (2) is more difficult. Licenses and permits, for which the Act expressly requires state certification of program compliance, are forms of entitlement to use, and an OCS lease can be viewed in the same way. However, the Act²³⁸ and congressional deliberations on it²³⁹ reflect a concern for protecting federal jurisdiction

supra at 151. The statement in the House Report that the consistency requirement applies "to any development projects which are undertaken by a federal agency in the contiguous zone" is puzzling. HOUSE REPORT 20. The House version of the consistency requirements clearly referred to federal agencies conducting or supporting activities "in the coastal zone." 118 CONG. REC. 26502 (1972). An amendment to change the language to "significantly affecting land use within the coastal zone" was defeated. *Id.* at 26493-94. The reference to consistency of federal development in the contiguous zone may be to the coordinated federal contiguous zone management program provided in the House version, which ultimately was dropped in conference. See *id.* at 26503. The Act's language—consistency of federal activities "directly affecting the coastal zone"—first appears in the conference version. See CONFERENCE REPORT 4824; 118 CONG. REC. 34185 (1972).

236. Recall that as a condition of program approval, state programs are required to recognize the national interest involved in the siting of facilities which are other than local in nature and assure that local land and water use regulations do not unreasonably restrict or exclude land and water uses of regional benefit. 16 U.S.C. §§ 1455(c)(8), (e)(2) (Supp. IV, 1974). The application of these requirements to OCS development is discussed subsequently. The regulations recognize that a state program may require the location of pipelines, transmission lines and similar facilities in specific corridors. See 40 Fed. Reg. 1690-91 (1975).

237. 16 U.S.C. § 1462(a)(5) (Supp. IV, 1974); CONFERENCE REPORT 4824.

238. 16 U.S.C. § 1456(e)(1) (Supp. IV, 1974) states that nothing in the act shall diminish federal (or state) jurisdiction over "submerged lands." See CONFERENCE REPORT 4824.

239. See 118 CONG. REC. 14180-81, 14183-84, 14185, 26490, 26495, 35548 (1972). Other reflections upon OCS development's relation to the CZMA have been in connection with facilities siting and program development

over the OCS, particularly the federal proprietary interest,²⁴⁰ a part of which is conveyed by an OCS lease.

Judicial resolution of the issue seems likely, for application of the certification requirement to OCS leases offers the states two advantages over the other consistency requirements. First, the requirement of certification gives the states a more precise role²⁴¹ in the federal OCS leasing process, in contrast to the negotiation and mediation necessary to enforce the other consistency requirements. Second, the factual prerequisite for invoking the certification requirement, an effect on land and water uses in the coastal zone, is perhaps easier to satisfy than the "directly affecting the coastal zone" test for applying the other consistency requirements.²⁴² But consistency is required to the maximum extent practicable whereas overrides of the certification requirement are possible if the Administrator finds the licensed activity consistent with the objectives of the Act or otherwise necessary to national security.²⁴³

grants, as discussed subsequently. There are also occasional references to the need to account for "mineral resources" development in coastal zone management programs. See, e.g., the statement of President Nixon in signing the Act, 8 WEEKLY COMP. 1583 (1972); 40 Fed. Reg. 1685 (1975); HOUSE REPORT 17. Such language was added to the final version of the CZMA program approval regulations proposed in 1974. Compare 40 Fed. Reg. 1688 (1975), with 39 Fed. Reg. 30158 (1974).

240. SENATE REPORT 4783.

241. The certification procedures are set forth in 16 U.S.C. § 1456(c) (3) (Supp. IV, 1974). Upon notice of an application for a federal permit or license affecting the coastal zone, the state has six months in which to object, or its concurrence is conclusively presumed. No such license or permit may be granted without the actual or presumed concurrence of the state or without a finding by the Administrator that the activity is consistent with the act or otherwise necessary to national security. Before the Administrator may make such findings, the state must be given a reasonable opportunity to make detailed comments.

242. There may be a contrary implication in the Senate Report, which describes the certification requirement as applying to "any new activity in the coastal zone, *directly, significantly and adversely* affecting the coastal waters." SENATE REPORT 4793 (emphasis added). If this is the test for invoking the certification requirement, the granting of an OCS lease, which can result in oil spills, chronic discharges of pollutants, pipelines and increased marine traffic in adjacent coastal zone waters, would appear to meet it. OCS leases granted prior to the date of enactment, October 27, 1972, would appear to be exempt from the certification requirement, but future leases affecting land and water uses in a state (or states) with an approved management program would be "new activity" requiring certification from each state affected. See text accompanying note 225 *supra*. Similar problems arise under the act in defining the landward extent of the coastal zone and permissible land and water uses in the coastal zone, both of which are based on "direct and significant impact on the coastal waters." 16 U.S.C. §§ 1453(a), 1454(b) (2) (Supp. IV, 1974); see 15 C.F.R. §§ 920.11, .12 (1975); 40 Fed. Reg. 1686-87 (1975).

243. 16 U.S.C. § 1456(c) (3) (Supp. IV, 1974); see text accompanying note 221 *supra*.

The ultimate benefits to the states of applying the certification requirements to OCS leasing would appear to be the same as the other consistency requirements—control over such things as pipelines, traffic lanes and the siting of onshore facilities.²⁴⁴

Facilities Siting

The CZMA was passed with at least some recognition that OCS development requires facilities in the coastal zones of adjacent states, both on land and in coastal zone waters. When the Act was in conference, the offshore oil industry fought successfully for retention of the House facilities siting provision discussed previously.²⁴⁵ The secondary growth induced by OCS development is another subject to which state programs should address themselves.²⁴⁶

More recently, regulations have been issued addressing the impacts of OCS development on state CZMA programs and allocating

244. 16 U.S.C. § 1456(c) (3) (Supp. IV, 1974) requires certification that the licensed activity "will be conducted in a manner consistent with the program."

245. *Id.* § 1455(c) (8); see Zile, *A Legislative-Political History of the Coastal Zone Management Act of 1972*, 1 COASTAL ZONE MANAGEMENT J. 235, 273 (1974) [hereinafter cited as Zile]. The offshore oil industry would have preferred that the Department of the Interior, with which it already had a working relationship, administer the CZMA. The final House version of the Act placed the CZMA program with the Department of the Interior, but in conference the program was returned to Commerce. See CONFERENCE REPORT 4822-23; Zile 271-73. Related ideas were deferring action on the CZMA in favor of comprehensive national land use legislation administered by the Department of the Interior and transporting concepts from such legislation into the CZMA; both of these proposals failed. See *id.*; 118 CONG. REC. 26482, 26494 (1972). However, the oil industry exercised its influence successfully in other ways. A provision for federal OCS sanctuaries adjacent to state estuarine sanctuaries was deleted at the request of offshore oil interests. Zile 273. In addition, a provision for a \$500,000 study of the environmental hazards of OCS drilling in the Atlantic Ocean was quietly dropped in conference. *Id.*; see 118 CONG. REC. 14176-82, 14191, 35547-50 (1972).

246. Knecht, *Coastal Zone Management—A Federal Perspective*, 1 COASTAL ZONE MANAGEMENT J. 123, 126 (1973). The comment to 40 Fed. Reg. 1685 (1975), states that

development outside the coastal zone may often have a significant impact in the coastal zone and create a range of public problems and issues which must be dealt with in the coastal zone management program.

See also COMMISSION ON MARINE SCIENCE, ENGINEERING AND RESOURCES, OUR NATION AND THE SEA 127 (1969).

funds for OCS impact planning by the states.²⁴⁷ On the one hand, the regulations urge a regional²⁴⁸ approach by the states involved without specifying a particular procedure; on the other hand, they urge redistribution of the funds to impacted local governments.²⁴⁹ Facilities siting aspects are stressed throughout.²⁵⁰ In a key paragraph, the Act's requirement of recognition of the national interest in facilities siting is interpreted as meaning that

[s]tates may not arbitrarily exclude or restrict the siting of facilities deemed to be of greater than statewide significance. In locations where regional groupings of States are likely to be affected, it is important that one State not be called upon to bear the entire regional burden of such facilities, nor should it expect to receive all of the benefits of such development. Siting decisions in such cases should be taken in the context of a broad regional approach which assesses both economic and social needs, environmental considerations and public desires in the affected States.²⁵¹

From a state's rights point of view, the regulations can be interpreted as saying that so long as a state accounts for its regional fair share of OCS onshore facilities, the state may determine where the facilities are to be located. In addition to preserving a measure of federalism in OCS decision-making, this approach distributes the benefits and burdens fairly within a region. This regional fair share concept could also be useful in resolving other federal-state energy development conflicts.

However, several problems must be solved before it can be utilized in OCS or other energy development situations. As with regional environmental impact statements, appropriate regional boundaries must be selected. The region's share must be determined before the fair shares of states within the region can be established. Here the lack of a national energy plan is again a stumbling block: determining regional shares without such a plan is difficult if not impossible. In the national plan the factors to be weighed in determining regional and state fair shares should be specified. The regulation quoted above suggests four factors: economic and social needs, environmental aspects (such as existing pollution loads, uniqueness of environmental resources), and public attitudes in the affected areas. To these should be added, on a re-

247. 40 Fed. Reg. 23276-78 (1975).

248. The term "regional" can have two meanings in a United States planning context. The one intended by these regulations is an interstate approach, but for larger states at least "regional" can also refer to suitable subareas of the state.

249. 40 Fed. Reg. 23276-77 (1975).

250. *See, e.g., id.* at 23277.

251. *Id.* at 23276.

gional and state basis, energy supply and demand, contribution to other national needs such as national defense and food supply, and basic statistics such as population.²⁵²

The states should develop criteria for siting the facilities included in their fair shares. Economic feasibility must be considered or unacceptable siting decisions may result.²⁵³ With regard to OCS oil and gas and other coastal dependent energy programs, the Coastal Zone Management Act provides a process for developing state siting criteria.²⁵⁴ The question remains whether the CZMA process is preferable to other systems for siting energy facilities.

OTHER MODELS FOR ENERGY DEVELOPMENT DECISION-MAKING

Deepwater Port Act of 1974

The Deepwater Port Act of 1974²⁵⁵ is the first federal legislation which explicitly attempts to account for national, regional, state, local and environmental interests in energy development. Deepwater ports are offshore facilities for loading and unloading oil, principally imported oil transported by supertankers,²⁵⁶ which are too large for conventional United States harbor facilities.²⁵⁷ The

252. See *id.* at 1688.

253. The outlines of a system for making feasible siting decisions with the least environmental impact are sketched in Note, *The Least Adverse Alternative Approach to Substantive Review Under NEPA*, 88 HARV. L. REV. 735, 750-56 (1975). Additional suggestions for state onshore impact planning are offered in COASTAL MANAGEMENT OF THE OCS 51-59.

254. See, e.g., CALIFORNIA COASTAL ZONE COMMISSIONS, PRELIMINARY COASTAL PLAN 199-243 (Hearing Draft, March 1975).

255. Act of Jan. 3, 1974, Pub. L. No. 93-627, 88 Stat. 2126; see Note, 5 ELR 50043 (1975); Comment, 3 ELR 10165 (1973). The deepwater port regulations appear at 40 Fed. Reg. 52540 (1975).

256. Substantial subsidies are available for the construction of supertankers in the U.S. See 46 U.S.C. § 1151 *et seq.* (Supp. III, 1973). Construction standards for domestic vessels engaged in trade from one U.S. port to another are specified in regulations under the Port and Waterways Safety Act, Pub. L. No. 92-340, 86 Stat. 427 (July 10, 1972). See 39 Fed. Reg. 24150 (1974); Note, 5 ELR 50043, 50044, 50047 (1975). For U.S. vessels in foreign trade and foreign vessels entering U.S. waters, the standards are set by international convention. See ENVIRONMENTAL LAW INSTITUTE, FEDERAL ENVIRONMENTAL LAW 645-49 (1974).

257. The United States has no developed harbor capable of handling tankers in the 150,000 deadweight-tons (dwt) class, the size of a small supertanker or very large crude carrier (VLCC). Deepwater ports would be designed for supertankers up to 500,000 dwt. ENVIRONMENTAL LAW INSTITUTE, FEDERAL ENVIRONMENTAL LAW 673-74 (1974).

need for deepwater ports and supertankers is tied to the success of OCS and other domestic oil development and conservation programs. United States self-sufficiency in oil obviates the need for foreign oil transported by supertankers to United States deepwater ports.²⁵⁸ Deepwater ports and oil and gas development are potentially conflicting uses of the OCS. OCS waters should be zoned where necessary to keep supertankers and drilling platforms a safe distance apart. Location of a deepwater port near OCS oil and gas deposits also significantly increases the impacts on adjacent states. As with OCS development, states oppose deepwater ports for their onshore impacts. Opposition to deepwater ports is not as strong, for supertankers using deepwater ports are an improvement over smaller tankers using conventional harbors, and the projected number of deepwater ports is small.²⁵⁹ A few states are even seeking location of deepwater ports off their coasts.

Under the Deepwater Port Act, the Secretary of Transportation controls licensing of deepwater ports more than three miles offshore.²⁶⁰ The Act grants each significantly affected coastal state a veto over the license.²⁶¹ A license also cannot be issued if the port would violate federal pollution laws.²⁶² Facilities for which licenses are granted must utilize the "best available technology" to minimize environmental impacts and must operate consistently with state environmental protection programs.²⁶³ Should a threat to the environment arise, the Secretary of Transportation may or-

258. Supertankers and west coast deepwater ports could also be used to transport Alaskan oil to the lower 48 states.

259. See *id.* at 675-76; Ludwigson, *Coastal Zone Management, A Whole New Ballgame*, BNA ENVIR. REP. MONOGRAPH No. 18 at 3 (1974). Up to 250,000 dwt, there are also significant cost savings in transporting oil long distances by supertanker. See ASSEMBLY SELECT COMMITTEE ON DEEPWATER PORTS, DEEPWATER PORTS IN CALIFORNIA 24-25 (1974).

260. Deepwater port components within three miles of shore are subject to existing federal and state regulations. S. REP. NO. 93-1217, 93d Cong., 2d Sess. (1974), in 4 U.S. CODE CONG. & AD. NEWS 7562 (1974). Licensing and regulation of deepwater ports entirely within the three-mile limit are left to the adjacent coastal state.

261. Act of Jan. 3, 1974, Pub. L. No. 93-627, § 4(c) (9). Veto power is granted to all states within 15 miles of the proposed port or directly connected by pipeline to it and to those with an equivalent risk of damage. *Id.* § 9(a). Where there are competing applications for a license, preference is given to applications from nearby coastal states or their political subdivisions. *Id.* § 5(i) (2).

262. *Id.* § 4(b) (6). A deepwater port is treated as a "new source" for purposes of the Clean Air Act and the FWPCA. *Id.* § 3(10). Compliance with the Ocean Dumping Act, 33 U.S.C. §§ 1401-44 (Supp. III, 1973), is also required. Act of Jan. 3, 1974, Pub. L. No. 93-627, § 4(b) (6). Similar compliance by onshore facilities related to the port is required by existing law.

263. Act of Jan. 3, 1974, Pub. L. No. 93-627, §§ 4(b) (5), 9(b) (1).

der port operations suspended immediately; should he fail to take action in such a situation, a citizen suit may be brought to enforce suspension.²⁶⁴ When oil spills do occur, liability without fault, backed by a Deepwater Port Liability Fund, is imposed.²⁶⁵

The Act gives special attention to the onshore impacts of deepwater ports. Applicants for a license must disclose the onshore facilities required by their proposal.²⁶⁶ The effects of land-based development related to deepwater port development must be evaluated in the NEPA impact statement prepared for the proposal.²⁶⁷ The quantity of onshore development stimulated by a deepwater port can be restricted by limiting the annual throughput of the port.²⁶⁸ States having tank farms and pipelines connected to the deepwater port can collect fees to compensate for the "environmental and administrative costs attributable to the construction and operation" of the deepwater port and land based facilities.²⁶⁹

Moreover, the Coastal Zone Management Act is not ignored. No license may be granted unless the coastal state directly connected to the port by pipeline is developing a CZMA program covering the affected areas.²⁷⁰ The CZMA is recognized as the principal vehicle for controlling the port's onshore impacts and accommodating port development interests with other coastal-related interests.²⁷¹

264. *Id.* §§ 12(b), 16. The court in its discretion may award attorney and expert witness fees. *Id.* § 12(d).

265. *Id.* §§ 18(d), (e), (f). These provisions are patterned after similar provisions in the Trans-Alaska Pipeline Authorization Act, 43 U.S.C. § 1653 (Supp. III, 1973). See S. REP. No. 93-1217, 93d Cong., 2d Sess. (1974), in 4 U.S. CODE CONG. & AD. NEWS 7543 (1974). The states are not preempted by either act from imposing additional liabilities. Act of Jan. 3, 1974, Pub. L. No. 93-627, § 18(k) (1); 43 U.S.C. § 1653(c) (9) (Supp. III, 1973); see *Askew v. American Waterways Operators*, 411 U.S. 325 (1973).

266. Act of Jan. 3, 1974, Pub. L. No. 93-627, § 5(c) (2).

267. *Id.* §§ 5(f), 6(a) (5).

268. S. REP. No. 93-1217, 93d Cong., 2d Sess. (1975) in 4 U.S. CODE CONG. & AD. NEWS 7567 (1975). Throughput limits might lead to an increase in the number of ports proposed.

269. Act of Jan. 3, 1974, Pub. L. No. 93-627, § 5(h) (2); see H.R. CONF. REP. No. 93-1605, 93d Cong., 2d Sess. (1975), in 4 U.S. CODE CONG. & AD. NEWS 7633 (1975).

270. Act of Jan. 3, 1974, Pub. L. No. 93-627, §§ 4(c) (10), 9(c). The requirement is weak in that continued development and eventual approval of the program are not required. See S. REP. No. 93-1217, 93d Cong., 2d Sess. (1974), in 4 U.S. CODE CONG. & AD. NEWS 7539-40 (1974).

271. S. REP. No. 93-1217, 93d Cong., 2d Sess. (1974), in 4 U.S. CODE CONG. & AD. NEWS, 7539-40 (1974); Hershman & Folkenroth, *Coastal Zone Man-*

If necessary, the states can veto deepwater port proposals to protect the integrity of their coastal zone programs.

In sum, the Deepwater Port Act reflects the growth of environmental consciousness since 1953, when the OCS Lands Act was passed.²⁷² It contains several features which will undoubtedly be considered in reforming the OCS Lands Act. The most striking is the state veto over deepwater port development. However, a similar veto over OCS development is probably not workable. In part, Congress accepted state veto of deepwater ports because some states were clearly enthusiastic about ports located off their coasts.²⁷³ OCS development has not been greeted with such enthusiasm, and occasionally state officials have admitted that a state veto over OCS development could lead to serious frustration of national energy needs.²⁷⁴

Preemptive Federal Siting of Energy Facilities

With respect to environmental protection and energy development, the limits on federal power have not been precisely determined. Nevertheless, congressional power over commerce probably encompasses legislation determining the location of energy facilities even over state objections.²⁷⁵ An example is Senate bill 619,²⁷⁶

ment and Intergovernmental Cooperation, 54 ORE. L. REV. 13, 22 (1975). However, in Louisiana the deepwater port development effort so far has outpaced the CZMA program development effort. Neither act is clear as to whether the CZMA state certification of program compliance requirement also applies to licenses granted under the Deepwater Port Act. If it does, activities pursuant to the deepwater port license are required to be consistent with approved state CZMA programs. See S. REP. NO. 92-753, 92d Cong., 2d Sess. (1972), in 3 U.S. CODE CONG. & AD. NEWS 4793-94 (1972). The deepwater port regulations assume the certification requirement applies. See 40 Fed. Reg. 52556 (1975).

272. The Deepwater Port Act orders the Secretary of Transportation to regulate the safe construction and operation of oil pipelines on the OCS, whether for deepwater ports or OCS development, because of previous jurisdictional confusion among federal agencies. Act of Jan. 3, 1974, Pub. L. No. 93-627, § 21.

273. See S. REP. NO. 93-1217, 93d Cong., 2d Sess. (1974), in 4 U.S. CODE CONG. & AD. NEWS 7537-38 (1974).

274. E.g., 6 BNA ENVIR. REP. CURRENT DEVELOPMENTS 345 (1975); see 5 *id.* 1274-75 (1974). But see *id.* at 1408-09 (1975).

275. See ENVIRONMENTAL LAW INSTITUTE, FEDERAL ENVIRONMENTAL LAW 38-39, 852-60 (1974); cf. Federal Power Comm'n v. Oregon, 349 U.S. 435 (1955) (state regulation of FPC-licensed hydroelectric dam preempted); Northern States Power Co. v. Minnesota, 447 F.2d 1143 (8th Cir. 1971), *aff'd per curiam*, 405 U.S. 1035 (1972) (state regulation of radioactive waste discharge from federally licensed nuclear power plant preempted). But see HOUSE COMMITTEE ON THE JUDICIARY, OUTER CONTINENTAL SHELF OIL AND GAS, Serial No. 93-31, 93d Cong., 2d Sess., at 186 (1974).

276. 94th Cong., 1st Sess. (1975).

which authorizes federal energy facilities planning for a state if the state does not develop a satisfactory plan. Such legislation reflects impatience with the delays and costs of today's multiple procedures at several levels of government. However, expediting the approval process is a short-term energy measure only; it does not fulfill the need for comprehensive long-range planning.²⁷⁷ Furthermore, recent federal legislation, such as the Coastal Zone Management Act, has sought not to preempt but rather to strengthen the role of the states in land use control. It might prove administratively impossible to pull energy facility siting questions up to the federal level without bringing the myriad of other land use decisions along with them.²⁷⁸

The fact that neither house of Congress has passed a federal facilities siting bill suggests that federal preemption of siting is politically infeasible at this time.²⁷⁹ However, the possibility stands as a warning to the states to be reasonable in their demands for a role in decisions concerning federal energy resources. As one observer has commented about preemptive federal siting: "Apparently, when the problem is perceived as serious enough, no amount of past rhetoric about states' rights will stand in the way of federal action."²⁸⁰

IMPROVING OCS DECISION-MAKING

Many suggestions short of federal preemption or a state veto have been offered for improving OCS development decision-making. From the states' point of view, a principal problem is that currently their rights are basically procedural. For example, they may require preparation of an adequate NEPA impact statement prior

277. See Binder, *The Energy Crisis, The Environment and the Consumer: A Solomonian Task*, 1 OHIO NORTH. L. REV. 215, 264 (1974).

278. INTERAGENCY STUDY TEAM, FEDERAL ENERGY REGULATION STUDY 33-34 (U.S. Govt. Printing Office 1974); see N.Y. CITY BAR, SPECIAL COMMITTEE ON ELECTRIC POWER AND THE ENVIRONMENT, ELECTRICITY AND THE ENVIRONMENT 271-72 (1972).

279. See SPECIAL COMMITTEE ON ENVIRONMENTAL LAW OF THE AMERICAN BAR ASSOCIATION, INDUSTRIAL DEVELOPMENTS AND THE ENVIRONMENT ch. 1, at 5 (1973). See also *Power Plant Siting—An Overview of Litigation and Legislation*, BNA ENVIR. REP. MONOGRAPH No. 15 (1973).

280. ENVIRONMENTAL LAW INSTITUTE, FEDERAL ENVIRONMENTAL LAW 1464-65 n.163 (1974).

to the Department of the Interior's leasing decision. Exercising such rights may only delay the decision, not change it. The CZMA requirement of consistency with approved state coastal zone programs is not available to the coastal states yet because they are still in the process of developing their programs.

The suggested improvements include OCS lease provisions requiring lessees to conform with state regulations protecting state offshore resources and controlling onshore impacts,²⁸¹ combining leased tracts into larger units for development purposes,²⁸² and replacing private exploration for OCS oil and gas deposits with federal exploration.²⁸³ However, suggestions for separating exploration of a tract from its development have received the greatest attention.²⁸⁴ This separation can be merely a "pause" while the lessee prepares and circulates to the affected states a development plan for the resources discovered; or it can be legal separation of the right to develop from the right to explore, with perhaps a preference for awarding development to the exploring company if, after impact analysis, the Department of the Interior decides to develop the resources. Under either approach, disputes between the Department of the Interior and the states on whether and how to develop the resources would be subject to arbitration or judicial resolution.²⁸⁵ Development should be separated from exploration in order to give the states time to plan and mitigate the impacts of development, which depend greatly on the size and location of the deposits discovered and on the rate they are extracted. The Department of the Interior is wary of separating exploration from development, for separation could delay OCS oil and gas production.²⁸⁶

Numerous bills have been introduced in the Ninety-Fourth Congress to amend the OCS Lands Act, the CZMA or both to incorpo-

281. 1 CEQ REPORT 210.

282. Such unitization would aid assessment of the cumulative impacts of OCS development. See 2 DEPARTMENT OF THE INTERIOR, FINAL ENVIRONMENTAL STATEMENT, PROPOSED 1975 OUTER CONTINENTAL SHELF OIL AND GAS GENERAL LEASE SALE OFFSHORE SOUTHERN CALIFORNIA 753, 756-57 (1975).

283. Interior believes that competitive private exploration yields more discoveries. 5 BNA ENVIR. REP. CURRENT DEVELOPMENTS 1841 (1975).

284. See Lee, *Decision to Lease Outer Continental Shelf Lands*, 2 COASTAL ZONE MANAGEMENT J. 31, 40-45 (1975). For coal mining on public lands administered by Interior, there is a separation of the exploration and development decisions. See *Sierra Club v. Morton* (Great Plains Coal), 514 F.2d 856, 865 n.12 (D.C. Cir. 1975).

285. See 6 BNA ENVIR. REP. CURRENT DEVELOPMENTS 345-46 (1975).

286. See 5 *id.* 1840-41 (1975). Legal separation of exploration and development rights could radically alter the bids received; bids for development rights to tracts with known resources would of course be much higher.

rate features of the Deepwater Port Act and suggestions of the commentators.²⁸⁷ As of December 1975, the leading contenders for enactment were Senate bill 521²⁸⁸ and Senate bill 586,²⁸⁹ amending the OCS Lands Act and CZMA respectively; both passed the Senate in July 1975. Although neither bill gives coastal states a veto over OCS development, the states' role in the decision-making process is increased considerably, impacts are compensated, and federal preemption of energy facilities siting is avoided.

Senate bill 586 adds to the CZMA a comprehensive program of financial support to coastal states impacted by energy resource development and facility siting. If the net impacts on the state over the life of a project are adverse, grants are authorized; if adverse impacts are temporary and net benefits to the state are expected, loans are available. However, states impacted by OCS development are entitled to grants without a showing of net adverse impacts. Grants and loans may be used to provide public facilities and services necessitated by the project as well as to compensate for adverse impacts. Impact planning grants and state and local impact bond guarantees are also available. Funds received for any of the above purposes may be reallocated by the state to local governments.

The strings attached to impact funds are minimal—satisfactory progress in CZMA program development and use of impact funds consistent with the program. Senate bill 586 also requires inclusion of an energy facilities planning process in CZMA programs. The emphasis here is on planning; state enactment of energy facility siting legislation is not required, and federal review of individual siting decisions is specifically negated in the bill. The bill reaffirms the principle of federal consistency with approved state CZMA programs and subjects federal leasing activities to state certification of program compliance.

Senate bill 521 amends the OCS Lands Act to provide grants from OCS revenues to coastal states impacted by OCS development. Funds granted may be used to provide public facilities and services

287. As of August 1975, over 40 such bills had been introduced in the House alone.

288. 94th Cong., 1st Sess. (July 17, 1975), titled the Outer Continental Shelf Management Act of 1975. A similar measure passed the Senate in 1974.

289. 94th Cong., 1st Sess. (July 16, 1975), titled the Coastal Zone Management Act Amendments of 1975.

and may be reallocated by the states to local governments. A \$100 million fund is divided among the impacted states according to the state's share of OCS acreage leased, wells drilled, oil and gas landed, OCS employment and onshore capital investment related to OCS development. To the extent net adverse impacts exceed the state's share of the fund, the Secretary of Interior may grant additional amounts. To be eligible the states must establish offshore pollution containment and cleanup systems, and all grants are coordinated with state CZMA programs.

Senate bill 521 attempts to avoid or mitigate the impacts of OCS development by requiring environmental baseline studies and monitoring, evaluation in NEPA impact statements of onshore effects including effects on coastal zone programs, onshore planning information from federal agencies, and improvements in safety on the OCS. Citizen suits are authorized to enforce these obligations, and strict liability is imposed for oil spills.

Senate bill 521 also attempts to enlarge the role of the coastal states in OCS decision-making. After 1977, OCS leasing is to proceed under a five-year program prepared by the Department of the Interior consistent with approved state CZMA programs. Effective immediately, prior to development and production on a tract, the lessee must prepare and submit for public hearings a development plan which discloses the onshore facilities needed if development proceeds and which is consistent with approved state CZMA programs. The Secretary of Interior's approval of five-year programs and development plans is judicially reviewable.

Both Senate bill 521 and Senate bill 586 emphasize consistency of OCS development with approved state CZMA programs.²⁹⁰ Senate bill 586 covers other coastal energy programs as well. Both determine net adverse impacts on a statewide basis but allow the states to redistribute impact funds to local governments; neither defines which impacts are adverse.²⁹¹ They disagree as to who shall distribute impact funds, the Secretary of Interior (Senate bill 521) or the Secretary of Commerce (Senate bill 586). The formal OCS tract development plan required by Senate bill 521 may be the "pause" between exploration and development that some commentators are requesting, but it certainly is not a complete separation of the exploration and development decisions. Overall, Senate bill

290. S. 586 goes further by expressly providing that certification of program compliance is required for federal "leases" as well as for federal licenses and permits.

291. One sometimes discovers there are "adverse benefits" accompanying growth and development.

586 probably has the best chance for enactment: its reforms, which are limited to the CZMA, steer clear of the Department of the Interior and oil industry resistance to change in the OCS Lands Act.²⁹²

CONCLUSION

Recent energy development issues probably have placed the greatest strain on federal-state relations since school integration. There is no single answer to energy questions. What is needed is a decision-making process which accounts for the various interests at stake in reaching feasible solutions to our energy problems. The two extremes among the models available are the Deepwater Port Act, which accords the states a veto, and preemptive federal siting of energy facilities. However, for energy programs with coastal impacts, the CZMA process seems the desirable course. The CZMA preserves federalism in energy decisions, emphasizing the role of the states as mediator between the national and local levels of government. Unlike the Deepwater Port Act, the CZMA process can be utilized for a variety of energy problems. The CZMA is flexible enough to encompass particular solutions, such as separation of exploration and development of the OCS. Furthermore, the CZMA process has already been established. Most proposals before Congress are aimed at strengthening rather than replacing it. Use of the CZMA process for coastal energy questions will test the viability of federalism in energy decisions.

292. See, e.g., 6 BNA ENVIR. REP. CURRENT DEVELOPMENTS 360-61 (1975).