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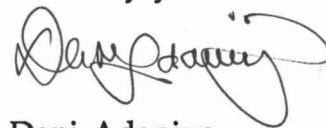
Dear Mr. Nakano:

I apologize this is belated, but I wanted to extend my deepest gratitude to you for taking the time to speak with me and accomodate my requests for Hawaii Geothermal Project documents and articles.

I have enclosed a copy of the paper I submitted for "Law of Planning and Urban Development" for you to perouse if you wish. It was a rather difficult paper to compose as the topic and analytical format were foreign to me. Nevertheless, it was an extraordinary learning experience.

While I feel fortunate to have the opportunity to study city planning here at the University of Pennsylvania, I also feel torn that I am not able to keep abreast of urban development in Hawaii. Every once in awhile, I will act upon that feeling and pursue a research topic that is a little closer to what I consider "home". Thank you again for allowing me to accomplish that.

Sincerely yours,



Deni Adaniya

Blue Ocean Preservation Society v. Watkins:

**The National Environmental Policy Act
And It's Threshold Issues**

Deni Adaniya
University of Pennsylvania
Planning Law CP 723
10 April 1992

TABLE OF CONTENTS

- I. Introduction
- II. General Facts Relevant to Blue Ocean I and Blue Ocean II
- III. An Examination of the Legal History of NEPA and its Threshold Issues
 - A. What Constitutes a *Major* Federal Action?
 - B. What Constitutes a *Major Federal* Action?
 - C. How is *Significant* Impact on the Quality of the Human Environment Determined?
 - D. Ripeness: When is the Time Ripe to Compel the Preparation of a Federal Environmental Impact Statement?
 - 1. If Separate Phases Are Deemed Parts of a Larger Whole
 - 2. If an Official Proposal Has Been Submitted
- IV. Legal Application of NEPA's Threshold Issues to Blue Ocean I
- V. Legal Application of NEPA's Threshold Issues to Blue Ocean II
- VI. Conclusion
- VII. Illustrations
- VIII. Bibliography

TABLE OF CASES

Baltimore Gas & Electric v. Natural Resources Defense Council, 462 U.S. 87 (1982)

Blue Ocean Preservation Society v. Watkins, 754 F. Supp. 1450 (D. Hawaii 1991)

Blue Ocean Preservation Society v. Watkins, 767 F. Supp. 1518 (D. Hawaii 1991)

City of New York v. United States, 337 F. Supp. 150 (E.D.N.Y. 1972)

Daly v. Volpe, 514 F.2d 1106 (9th Cir. 1975)

Hanly v. Kleindienst, 471 F.2d 823 (2d Cir. 1972).

Kleppe v. Sierra Club, 427 U.S. 390

Natural Resources Defense Council v. Grant, 341 F. Supp. 356 (E.D.N.C. 1972)

San Francisco v. United States, 615 F.2d 498 (9th Cir. 1980)

Save the Yaak Committee v. Block, 840 F.2d 714 (9th Cir. 1988)

Thomas v. Peterson, 753 F.2d 754 (9th Cir. 1985)

Township of Ridley v. Blanchette, 421 F. Supp. 435 (M.D. Pa. 1976)

Trout Unlimited v. Morton, 509 F.2d 1276 (9th Cir. 1974)

I. INTRODUCTION

The most fundamental basis for analysis of the world's energy crisis are the uncomplimentary network of supply and demand factors. Finding the point of equilibrium is far more complicated than adjusting the way we supply our energy needs to meet our voracious demand or adjusting our demand to meet ever reducing supply. The investigation requires examining endemic factors contributing to a region's energy consumption and delivery methods and their impacts as well as an intricate synthesis of the multitude of parties involved.

Nuclear, coal, oil, or hydroelectric plants all have their own respective infamous histories as electricity generating methods. Geothermal energy, however, is not the typical culprit as it more widely considered as one of the more benign methods of generating electricity. In Hawaii, potential geothermal energy development is certainly boiling many resident's blood.

Kilauea Volcano, located on the "Big Island" (Island of Hawaii) in Hawaii, is the site of one of the world's most active volcanoes. There is currently a zero reserve margin on the Big Island where plant capacity is pressed at 140 MW regularly so that residents are frequently hit with rolling brownouts.¹ With such a massive energy potential bubbling beneath the earth's surface, it seems ludicrous to continue to import more than 90% of the State's energy needs. The delay rests in the controversy stirred by the development. What distinguishes geothermal development in Hawaii from most other mainland geothermal plants are the cultural violations that are wrought against native Hawaiians and their religion, a plant siting in an

¹Zorbette, *Hawaii's Geothermal Program*, IEEE SPECTRUM 49 (February 1992)

ecologically significant tropical lowland rainforest, and the overland / submarine cable traversing the Big Island and continuing underwater to Maui and O'ahu. Constructing geothermal plants in native tropical rainforests certainly seems to be a counterproductive conservation activity seeking more trees and fewer exhaust pipes. With these and numerous other questions looming overhead, it is critical to thoroughly examine the environmental, cultural, and economic impacts of progressing with geothermal development in Hawaii as well as exploring what alternatives exist to meet the State's energy needs. Before it is possible to take a stand on this or any other case which involves a complicated network of issues, a forum must be established allowing all affected parties to voice their concerns and discuss them against others. This forum exists.

This paper will examine the national charter for environmental protection, the National Environmental Policy Act (NEPA) and its specific mandates relating to what triggers the key requirement of NEPA, the environmental impact statement (EIS). In *Blue Ocean Preservation Society v. Watkins*² (herein "*Blue Ocean I* ") and the subsequent case, *Blue Ocean Preservation Society v. Watkins*³ (herein "*Blue Ocean II* "), issues were raised regarding threshold questions. Threshold questions imbedded within legislative wording such as "major federal action" and "significantly affecting the quality of the human environment" are reviewed within the context of the Hawaii Geothermal Project and the two cases that were heard in U.S. District Court, *Blue Ocean I* and *Blue Ocean II*. What precisely constitutes a major federal action and how do the courts define a significant impact on the quality of the human environment? Other more procedural issues that are

² *Blue Ocean Preservation Society v. Watkins*, 754 F. Supp. 1450 (D. Hawaii 1991)

³ *Blue Ocean Preservation Society v. Watkins*, 767 F. Supp. 1518 (D. Hawaii 1991)

examined within the scope of this paper are those dealing with multi-phase on-going projects. More precisely, when are agencies compelled to produce an EIS at every phase of a multistage project? How is it determined whether they are distinct acts or whether they are interconnected parts of a larger whole? These questions give rise to "ripeness" claims: if the phases are found to be separate, unrelated acts, then at what point is the act sufficiently tangible to trigger an impact statement?

II. GENERAL FACTS RELEVANT TO *BLUE OCEAN I* AND *BLUE OCEAN II*

The Hawaii Geothermal Project (HGP) is the largest single development proposal by the State of Hawaii. Initiated in 1978 as a comprehensive Hawaii Geothermal Assessment and Development Strategy, HGP comprises of a four stage development scheme to build geothermal plants in the Puna District on the Big Island.

Phase 1--The Hawaii Geothermal Resource Assessment Program
Phase 1 was jointly funded by the State of Hawaii and the U.S. Department of Energy (DOE). The aims of this first phase were exploration and testing of the Big Island's geothermal resources. In 1979, DOE contributed \$10.7 million (80% of the project's phase 1 funds) for the geothermal testing and drilling and development of a 3 MW demonstration power plant at the HGP-A site.

Phase 2--The Hawaii Deep Water Cable Program
Phase 2 included a feasibility study of submarine transmission cables from the Big Island to Maui and O'ahu. The federal government contributed over \$24 million (83% of total cost) for research, design, construction, and routing of an undersea cable. This included general submarine cable research as well as site

specific inter-island routing scenarios and actual test-laying of the cable.⁴ This program, which was completed in 1991, was deemed to have successfully demonstrated the feasibility of the deep water power transmission cable.⁵

Phase 3--The Hawaii Geothermal Resource Verification Program Congress appropriated \$5 million for the drilling of 25 commercial scale exploration wells throughout the Kilauea East Rift Zone to "verify" the geothermal resources.⁶ Successful completion of Phase 3 will allow for full scale commercial development of up to 20 geothermal plants generating 500 MW of electricity in Phase 4. However, in *Blue Ocean II*, District Judge Ezra ordered the federal government to immediately commence with the preparation of an EIS in compliance with NEPA and enjoined all further government participation that is unrelated to the EIS. Phase 3 is presently delayed.

Phase 4--Construction of the Commercial Hawaii Geothermal Project Phase 4 will involve the construction of up to 20 commercial geothermal power plants of about 25 MW apiece. The separate plants will be connected by a series of roads and power lines throughout the geothermal resource subzone areas. It will also involve the laying of overland and submarine cables to transmit electricity to Maui and O'ahu.⁷

In 1988, the Hawaii legislature enacted the Geothermal and Cable System Development Permitting Act⁸ (the 1988 Act) in order to facilitate HGP. "The 1988 Act is designed primarily to streamline the approval and permit process."⁹ The 1988 Act described HGP in terms of its ultimate goal, to commercially generate and provide geothermal electricity, and its specific recognition of the interdependence of its two fundamental components:¹⁰

⁴ See 754 F. Supp. at 1453

⁵ See Notice of Intent, 170 Fed. Reg. 43,585 (September 3 1991)

⁶ See 754 F. Supp. at 1453

⁷ See 767 F. Supp. at 1520

⁸ H.R.S. §§ 196D-1, *et seq.*

⁹ See 754 F. Supp. at 1453

¹⁰ See 754 F. Supp. at 1454

The fundamental interrelationship between the development of geothermal resources and a cable system and the magnitude of the cost to undertake each of these developments clearly indicate that neither will be undertaken without the firm assurance that the other also will be undertaken in a synchronized and coordinated manner to enable both developments in substance to be completed concurrently..."¹¹

The 1988 Act also established the Interagency Group which consists of representatives from each agency with jurisdictional or permitting authority over some aspect of HGP. The Interagency Group's mission is to oversee the permitting process and to streamline out any inefficiencies. The purpose is to "overcome the daunting array of federal, state, and local permits and precesses that have discouraged potential developers."¹²

In a March 1990 Report on Phase IV, the State defined the broad-based interests in HGP as "A Federal-State-Private Partnership Leading Toward Commercialization".¹³ As was stated earlier, the federal government served as the primary source of project funding for Phases 1-3. The extent of the federal government's involvement, however, was much deeper.

The U.S. Department of Energy (DOE) has provided planning, research, technical, and financial assistance in various capacities aimed at providing the groundwork for commercial geothermal development. Twenty-one

¹¹ H.R.S. §§ 196D-1, *et seq.*

¹² 754 F. Supp. at 1454.

¹³ *see* Complaint for Declaratory Judgement and Injunctive Relief, Greenpeace U.S.A. v. Waihee, October 1991

reports were produced by DOE or its consultants specifically for HGP.¹⁴ In addition, DOE produced a number of impact analyses and resource assessments for the "Geothermal Resource Subzone Designations in Hawaii" report.¹⁵ Federal participation is further illustrated by the sheer quantity of the number of federal agencies who will presumably have some role in issuing permits during Phase 4: Department of Energy, Army Corps of Engineers, Department of Defense, Environmental Protection Agency, U.S. Fish and Wildlife Service, Department of the Interior, National Marine Fisheries Service, National Oceanographic and Atmospheric Administration, Department of Commerce, U.S. Navy, U.S. Army, and U.S. Pacific Fleet.¹⁶

III. THE LEGAL HISTORY OF NEPA AND ITS THRESHOLD ISSUES

The National Environmental Policy Act, enacted in 1969, is the legislative cornerstone of American environmental policy. NEPA has profoundly affected the development process at the national level by effectively structuring the information-gathering process and formalizing public participation. Unlike other environmental laws, NEPA affects all areas of environmental protection.

At its very roots, NEPA seeks to inform the federal decision-making process by injecting environmental, social, economic, and political concerns into the public forum by requiring an environmental impact statement (EIS).

¹⁴ *see* 754 F. Supp. at 1454

¹⁵ HAWAII STATE DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT, GEOTHERMAL RESOURCE SUBZONE DESIGNATIONS IN HAWAII (1986)

¹⁶ *see* 754 F. Supp

In *Baltimore Gas & Electric v. Natural Resources Defense Council*¹⁷, the Supreme Court identified the twin aims of NEPA:

- "1) It obligates the agency to consider every significant aspect of the environmental impact of a proposed action.
- 2) It ensures that the agency will inform the public that it has considered such environmental concerns in its decision-making process."¹⁸

The EIS is intended to serve as the primary mechanism informing, guiding and moving the decision-making process; a welcome digression away from the traditional mission-driven development game that paid little attention to long range developmental impacts. Therefore, rather than serve to promote post hoc environmental rationalizations of decisions already fully and finally made, its purpose is to ensure meaningful consideration of environmental factors at all stages of agency decision-making. The EIS serves to inform the public and agencies implicated at subsequent stages of decision making of the environmental costs of the proposal."¹⁹

As a tool in the decision-making process, it is necessary to discern what triggers the EIS into action. A significant issue that must be considered under NEPA is whether an agency is compelled to produce an EIS which involves interpreting a number of substantive and procedural issues raised by the legislation's language. Section 102(2)(C) of NEPA requires that federal agencies file an environmental impact statement (EIS) before undertaking

¹⁷ *Baltimore Gas & Electric v. Natural Resources Defense Council*, 462 U.S. 87 (1982)

¹⁸ 462 U.S. at 97 and 103

¹⁹ 42 U.S.C. § 4332(81)

"major Federal actions significantly affecting the quality of the human environment." ²⁰

A. Major Federal Action

There has been little attention given to the NEPA requirement that an action be a "major" one primarily because the determination is seen closely connected to whether it be deemed a "federal" action. Environmental impact statements are clearly required for projects solely undertaken by a federal agency. The question arises when the action is a collaborative one: a private sector action requiring public permits, variances, and financing from the federal government: when does federal participation become enough so as to trigger NEPA obligations? A frequently quoted definition referring to the extent of federal participation is as follows²¹: "A 'major' federal action is federal action that requires substantial planning, time resources, or expenditure."²² CEQ regulations define "major federal action" to include "new and continuous activities, including projects or programs entirely or partly financed, assisted, conducted, regulated, or approved by federal agencies...."²³

In *Township of Ridley v. Blanchette* ²⁴, the court determined that "major" federal actions included highway extensions, large structures which alter the neighborhood, major dams or river projects, and other projects which involve federal funding of more than \$ 1 million, large amounts of

²⁰ 42 U.S.C. § 4332 102(2)(C)

²¹ NEPA Law & Lit § 8:31

²² Natural Resources Defense Council, Inc. v. Grant, 341 F. Supp. 356 (E.D. N.C., 1972)

²³ 40 C.F.R. § 1508.18(a)

²⁴ Township of Ridley v. Blanchette, 421 F. Supp. 435 (M.D. Pa. 1976)

time for planning, the displacement of "many people or animals, or the reshaping of large areas of topography."²⁵ The court added:

"In sum, 'major' is a term of reasonable connotation, and serves to differentiate between projects which do not involve sufficiently serious effects to justify the costs of completing an impact statement, and those projects with potential effects which appear to offset the costs in time and resources of preparing a statement."²⁶

B. Major Federal Action

As was discussed above, when a court considers the extent of a federal action, it is simultaneously considering whether the action qualifies as a "federal" one. If the court finds that the extent of federal participation is minor, it will most probably conclude that the development action is not covered under NEPA.²⁷ Therefore, it is rather difficult to isolate whether the courts are clearly distinguishing between "major" and "federal" actions.

The Council on Environmental Quality does not specifically define "major federal actions" but instead provides general categories in which federal actions "tend to fall":

1) Adoption of official policy, such as rules, regulations, and interpretations adopted pursuant to the Administrative Procedure Act, 5 U.S.C. 551 *et seq* ...formal documents establishing an agency's policies

²⁵ 421 F. Supp. at 446

²⁶ *Township of Ridley v. Blanchette*, 421 F. Supp. 435, (M.D. Pa. 1976)

²⁷ NEPA Law & Lit § 8:15

which will result in or substantially alter agency programs.

2) Adoption of formal plans, such as official documents prepared or approved by federal agencies which guide or prescribe alternative uses of federal resources...

3) Adoption of programs, such as a group of concerted actions to implement a specific policy or plan; systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive.

4) Approval of specific projects, such as construction or management activities located in a defined geographic area. Projects include actions approved by permit or other regulatory decision as well as federal and federally assisted activities.²⁸

C. How is Significant Impact on the Quality of the Human Environment Determined?

An action that imposes significant impacts on the quality of the human environment will be compelled to produce an EIS. CEQ regulations provide the following guidelines for determining "significant" actions:

"Significantly" as used in NEPA requires considerations of both context and intensity:

a) *Context*

²⁸ 40 C.F.R. § 1508.18(b)

This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action... Both short and long term effects are relevant.

b) *Intensity*

This refers to the severity of impact...more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity: 1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial. 2) The degree to which the proposed action affects public health or safety. 3) Unique characteristics of the geographic area such as proximity to historic or cultural resources...park lands...ecologically critical areas. 4) The degree to which the effects on the quality of the human environment are likely to be controversial. 5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks. 6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration. 7) Whether the action is related to other actions with individually insignificant

but cumulatively significant impacts...Significance cannot be avoided by terming an action temporary or by breaking it down into small components parts. 8) The degree to which the action may...cause loss or destruction of significant scientific, cultural, or historical resources. 9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973. 10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment."²⁹

An early but seminal case which presented serious questions as to the interpretation of NEPA and its "opaque"³⁰ and "woefully ambiguous" language³¹ was *Hanly v. Kleindienst (Hanly II)*.³² Following the District Court's denial for the second time of preliminary injunction for the construction of a jail and other correctional facilities for the Metropolitan Correction Center (MCC) in downtown Manhattan, the Second Circuit Court of Appeals was to redetermine whether the General Services Administration (GSA) was obligated to produce a formal environmental impact statement as prescribed by § 102(2)(C) of NEPA.³³

²⁹ 40 C.F.R. § 1508.27

³⁰ *City of New York v. United States*, 337 F. Supp. 150, 159, (E.D.N.Y. 1972)

³¹ as quoted in *Hanly v. Kleindienst*, 471 F.2d 823, 825 from Harry Voigt, *The National Environmental Policy Act and The Independent Regulatory Agency*, NATURAL RESOURCES LAWYER 13, (1972)

³² *Hanly v. Kleindienst*, 471 F. 2d 823 (2d Cir. 1972), cert. denied, 412 U.S. 908 (1973)

³³ *see id.* at 826

The Second Circuit Court of Appeals pointed out that almost every major federal action, no matter how limited in scope, will have *some* adverse affect on the human environment.³⁴ However, NEPA qualified "major federal actions" as necessarily significant in order to trigger an EIS whereby a greater environmental impact would result than from any other "major federal action".³⁵ The court found that since the key term, "significant", was not specifically defined by Congress or by guidelines issued by the CEQ, that Congress was apparently willing to principally depend upon the agency's good faith determination as to what conduct would seriously affect environmental quality.³⁶

The *Hanly II* Court continued by stating that in the absence of Congressional or administrative definition of "significance", "we are persuaded that in deciding whether a major federal action will 'significantly' affect the quality of the human environment, the agency in charge, although vested with broad discretion, should normally be required to review the proposed action in the light of at least two relevant factors³⁷:

- 1) the extent to which the action will cause adverse environmental effects in excess of those created by existing uses...and 2) the absolute quantitative adverse environmental effects of the action itself including the cumulative harm that results from its contribution to existing adverse conditions..."³⁸

³⁴ *see id.* at 830

³⁵ *id.* at 830

³⁶ *see id.* at 830

³⁷ *see id.* at 830-831

³⁸ *id.* at 831

The *Hanly II* Court applied this baseline analysis which considered the action in an absolute and comparative sense. Thus, where an activity conforms to existing uses or presents another relatively similar sort of development, than its adverse consequences are deemed less serious than if the activity were to present radical change³⁹. On the other hand, one cannot disregard the additional impact of more development in an area simply because the area is already zoned for that particular use. Therefore, "even a slight increase in adverse conditions that form an existing environmental milieu may sometimes threaten harm that is significant."⁴⁰ The court held that an absolute and a comparative analysis of a major federal action must be conducted.⁴¹ However, the "vague" and "amorphous" term "significantly" was not completely addressed in *Hanly II* as it merely involved an interchange of adjectives. ⁴²

In *Save the Yaak Committee v. Block*⁴³, the plaintiffs from the Save the Yaak Committee argued that the Forest Service failed to comply with NEPA. The Yaak River Road runs through Montana winding through the Yaak and Eureka Range Districts of the Kootenai National Forest. The plaintiffs argued that 1) the environmental assessment the Forest Service produced was inadequate because it failed to analyze the project's impact on the environment and 2) that each group of timber sales contracts was related to the reconstruction of a section of Yaak River Road, the harvesting of timber, and the construction of secondary roadways necessary for the

³⁹ *see id.* at 831

⁴⁰ *id.* at 831

⁴¹ *see id.* at 831

⁴² *see* F. ANDERSON, D. MANDELKER, AND A.D.TARLOCK, ENVIRONMENTAL PROTECTION: LAW AND POLICY (2d ed. 1990)

⁴³ *Save the Yaak Committee v. Block*, 840 F.2d 714 (9th Cir. 1988)

harvesting. All of these actions produced a cumulative and adverse impact on the environment.⁴⁴

In reviewing the Forest Service's decision not to prepare an EIS, the court examined whether the agency responsible had "reasonably concluded" that the project would have no significant adverse environmental consequences.⁴⁵ The court concurred with the majority in *Foundation for North American Wild Sheep v. U.S. Department of Agriculture*⁴⁶ that held that if substantial questions were raised, the proposed action *may* have significant effect upon the human environment, a decision not to prepare an EIS would be deemed unreasonable.⁴⁷

The primary issue of particular relevance that the court examined in *Save the Yaak Committee v. Block* was its inquiry into the environmental analysis of interconnected elements of a single larger action.

D. When Is the Time Ripe to Compel the Preparation of a Federal Environmental Impact Statement?

The examination of ripeness as a threshold issue is pursued in two segments: 1) interconnectedness of on-going project in order to determine whether an EIS challenge is "ripe" and 2) defining a Proposal and the moment it becomes official.

(1) Interconnectedness

⁴⁴ *see id.* at 717

⁴⁵ *San Francisco v. United States*, 615 F.2d 498, 500 (9th Cir. 1980)

⁴⁶ *Foundation for North American Wild Sheep v. United States Department of Agriculture*, 681 F.2d 1172, 1178 (9th Cir. 1982)

⁴⁷ *see id.* at 1178

In *Save the Yaak Committee v. Block*, the 9th Circuit Court frequently cited their holdings in *Thomas v. Peterson*⁴⁸ as the two cases were strikingly similar. In *Thomas v. Peterson*, this court found that "connected actions" must "be considered together in a single EIS."⁴⁹ CEQ guidelines define "connected actions" as follows:

- "1) Connected actions trigger other actions which may require environmental impact statements.
- 2) Connected actions cannot or will not proceed unless other actions are taken previously or simultaneously.
- 3) Connected actions are interdependent parts of a larger action and depend on the larger actions for their justification."⁵⁰

As in the *Thomas v. Peterson*, the Court reviewed the same factors to determine whether the road reconstruction and timber sales were "connected actions" within the meaning of §1508.25(a)(1). These factors are: 1) the Forest Service's characterization of the road in its EA as a logging road, 2) the statement made in the EA that the reason the road was built was to "access the timber lands to be developed over the next twenty years", 3) the court's rejection of the "no action alternative" because "that alternative would not provide the needed timber access," 4) the cost-benefit analysis of the road considered timber revenues to be the benefit of the road, 5) the Forest Service failed to claim that other "benefits would justify the road in the absence of the timber sales," 6) the Regional Forester stated to the Forest Supervisor that since sales in the immediate future were dependent upon the early

⁴⁸ *Thomas v. Peterson*, 753 F.2d 754 (9th Cir. 1985)

⁴⁹ *see id.* at 758

⁵⁰ 40 C.F. R. § 1508.25(a)(1)

completion of portions of the road, "it would be advisable to divide the road into segments and establish separate completion dates for those portions to be used for those sales."⁵¹

In *Save the Yaak Committee*, the court concluded that there was a "clear nexus between the timber contracts and the improvement of the road"⁵² and added that "the road would not be [reconstructed] but for the contemplated timber sales."⁵³

In *Thomas v. Peterson*, the 9th Circuit Court justified their conclusion that NEPA requires a single EIS that considers both the road and timber sales by citing supportive 9th Circuit precedents.⁵⁴ In *Trout Unlimited v. Morton*, this Court held that an EIS must cover subsequent stages when "the dependency is such that it would be irrational, or at least unwise, to undertake the first phase if subsequent phases were not also undertaken."⁵⁵ The relationship between the road and timber sales met this criteria for it was demonstrated that it would have been irrational to construct the road without the anticipated timber sales.⁵⁶

In *Daly v. Volpe*, this Court held that the environmental impacts of a single highway segment may be considered separately from the whole highway if it can be shown that the segment has "independent utility."⁵⁷ The notion of "independent utility" was defined as an agency reasonably considering only constructing that segment.⁵⁸

⁵¹ 840 F.2d at 719

⁵² 840 F.2d at 720

⁵³ 753 F.2d at 758

⁵⁴ *see* 753 F.2d at 759

⁵⁵ *Trout Unlimited v. Morton*, 509 F.2d 1276 (9th Cir. 1974)

⁵⁶ *see id.* at 759

⁵⁷ *Daly v. Volpe*, 514 F.2d 1106 (9th Cir. 1975)

⁵⁸ *see id.* at 1115

(2) Proposals

In 1975, *Kleppe v. Sierra Club*⁵⁹ set the basis for the consideration of project proposals obligating an EIS. In *Kleppe*, the Department of the Interior and other federal agencies were involved in issuing coal mining leases, approving mine plans, and taking other actions to enable private companies to develop the coal reserves on federally controlled land in the Northern Great Plains region (which includes Wyoming, Montana, North Dakota, and South Dakota). The respondents claimed that the government could not allow further coal mine development without preparing a comprehensive EIS under NEPA § 102(2)(C) for the entire region.⁶⁰

The U.S. Supreme Court held that since there was no proposed legislation on the region and no evidence of a written proposal for major federal action, it was not practical to prepare a regional EIS. Without a proposal on record for a regional plan of development, "it is impossible to predict the level of coal-related activity that will occur in the region, and thus to analyze the environmental consequences and the resources commitments involved, and alternatives to, such activity."⁶¹ The Court then held that "quite apart from the fact that the statutory language requires an impact statement only in the event of a proposed action," a regional impact statement could not be prepared for "practical reasons". Since an impact statement requires detailed environmental analyses, it would be practically impossible to prepare without a regional plan. The Supreme Court explicitly reversed the Court of Appeal's previous holding that a regional plan was being "contemplated", and that was sufficient effort to "attempt to control

⁵⁹ *Kleppe v. Sierra Club*, 427 U.S. 390

⁶⁰ *see id.* at 390-91

⁶¹ *id.* at 391

development" in the region and serve as the basis for the regional plan. The Supreme Court found that the Court of Appeals had misinterpreted NEPA in holding that contemplation of an action required an EIS.⁶²

Although NEPA's statutory language clearly states that an agency is not required to prepare an EIS until it makes a recommendation or report on a proposal for legislation or major federal action,⁶³ *Kleppe* moves forward to further clarify the clause by including an action that may proceed without a proposal as well as a proposal that may trigger the EIS requirement. Yet, even after all of its focus on the necessary proposal, *Kleppe* failed to specifically define what a "proposal" must entail. Mandelker remarked: "The Supreme Court's decision in *Kleppe* leaves many questions unanswered. The Court stated that NEPA requires a 'precise' decision on whether an agency has 'proposed' an action, but it did not define 'proposal'."⁶⁴ He further commented on the shortcomings of the Court's holding logic:

"The Court's insistence that the statute requires 'precise' application also is undercut by its reliance on 'practical reasons' for its holding that no program impact was required...The regional setting of the *Kleppe* decision also limits its holding. The uncertainties that arise in agency planning at the broad regional level may not arise when an agency plans for a specific project."⁶⁵

⁶² *see id.* at 403

⁶³ *see id.* at 391

⁶⁴ NEPA Law & Lit § 8:13

⁶⁵ NEPA Law & Lit § 8:13

IV. LEGAL APPLICATIONS OF THRESHOLD PRINCIPLES TO *BLUE OCEAN I*

Legal action in *Blue Ocean I* was brought by the Blue Ocean Preservation Society, The Sierra Club, and Greenpeace Foundation to compel the federal government to produce an EIS before proceeding with any further involvement in the Hawaii Geothermal Project.⁶⁶ The defendant (federal government agencies listed earlier) moved for a summary judgment on the grounds that Plaintiff's claim was not ripe, and that therefore, the court lacked subject matter jurisdiction. Plaintiffs filed for a cross-motion on the issue of whether the geothermal project constitutes a "major federal action" within the meaning of NEPA 42 U.S.C. § 4332(2)(C).⁶⁷ This case primarily revolves around the NEPA threshold issues: when is an EIS required and when can it be compelled by legal action?⁶⁸

The Government contended that Blue Ocean's suit to compel an EIS was moot with respect to Phases 1 and 2 since they have been completed, and that it was unripe with respect to Phases 3 and 4 since no proposals were advanced for either stage. This contention raised the question as to whether the Hawaii Geothermal Project should be considered a single project for NEPA purposes. "The Government's ripeness arguments presuppose that the Project is nothing but four separate, independent projects, each subject to separate NEPA analysis."⁶⁹

⁶⁶ *Blue Ocean Preservation Society v. Watkins*, 754 F. Supp. 1450 (D. Hawaii 1991)

⁶⁷ *see id.* at 1452

⁶⁸ *see id.* at 1456

⁶⁹ *see id.* at 1456

The Court found that the four phases were sufficiently "connected" to require that they all be evaluated in a single EIS. The Court paid special attention to subsections (ii) and (iii) of CEQ's guidelines⁷⁰ (previously stated on page 15) as the most relevant criteria for determining connected actions, noting that the three subsections should be considered in the "disjunctive rather than the conjunctive."⁷¹ Therefore, if any of the three criteria are satisfied, then the action is "connected".

Under subsection (ii), it seemed clear that Phase 4 would not happen without Phases 1-3. The Second Circuit Court suggested that the more appropriate test under (ii) "is not whether the more remote action can proceed absent the more immediate action, but rather whether the more immediate action can proceed absent the remote action." When characterized this way, geothermal resource verification of Phase 3 did not necessitate commercial development (although that makes rational sense). However, the construction of the underwater cable system and the construction of geothermal plants with the capacity to produce 500 MW were necessary to each other⁷² (parts of the 1988 Act specifying the fundamental interrelationship between the development of geothermal resources and a cable system is stated on page 5). Therefore, the work for either of these components would not proceed without the assurance that the other would also be developed.

Subsection (iii) provided the clearest basis for analysis given this case's facts. Phases 1-3 were conceived as an explicit prelude to Phase IV, and thus their justification can be attributed to Phase IV. This Court referred to

⁷⁰ 40 C.F.R. § 1508.25(a)

⁷¹ *see* 754 F. Supp. at 1457

⁷² *see* 754 F. Supp. at 1458

standards established in previous 9th Circuit decisions. In *Save the Yaak Committee v. Block* (quoting *Trout Unlimited v. Morton*), the 9th Circuit Court defined interdependence that must exist between various phases if they are to be deemed connected: "The dependency is such that it would be irrational, or at least unwise, to undertake the first phase if subsequent phases were not also undertaken."⁷³

In *Thomas v. Peterson*, the Court further defined interdependence by introducing the notion of "independent utility" as such that "the agency might reasonably consider constructing only the segment in question."⁷⁴ Acknowledging these, the District Court found that the Government could not "reasonably consider" going ahead with the deep water cable research and construction without the geothermal energy to utilize the cable. "Most significantly, there is no 'independent utility' to the drilling of 25 commercial size wells to 'verify' a geothermal resource (Phase 3), that action is 'irrational'⁷⁵ absent imminent construction of a geothermal power plant."

Since *Kleppe*, ambiguities surrounding a firm definition of "proposal" have yet to be firmly resolved, but it is well established that an EIS cannot be required without one. The District Court found that since Congress had appropriated \$5 million as the first installment of \$25 million for Phase 3, that clearly established that some kind of proposal has been made.⁷⁶ I

Indeed, Congress appropriated the \$5 million in response to "Proposal to Establish the Hawaii Geothermal Resource Verification and Characterization Program" prepared by the Hawaii State Department of Business and Economic Development, and submitted to Congress in March

⁷³ see 840 F.2d at 719-20

⁷⁴ 753 F.2d at 759-60

⁷⁵ *Trout Unlimited v. Morton*, 509 F.2d 1285 (9th Cir. 1974)

⁷⁶ see 754 F. Supp. at 1462

1990. The Court held that this is clearly a "proposal" sufficient to trigger NEPA obligations, therefore, the time appears to be ripe for preparation of an EIS.⁷⁷

While *Blue Ocean I* examined a number of other procedural issues that pertain to NEPA, of interest here are its considerations of what comprises a "major federal action". This Court held that such significant federal funding in relative terms (more than 80%) is "enough standing alone to render the Project a 'major federal action.'"⁷⁸ Moreover, the federal government's substantial participation and involvement at every previous stage and its regulatory and permitting role in Phase IV qualifies the Project as a major federal action.

The Court concluded that even though material issues of fact remain regarding 1) the Government's, specifically DOE's, commitment to implementation of Phase 3, and 2) DOE's role with respect to the \$5 million appropriation, the Government's motion for summary judgment was denied. Plaintiffs were granted a motion for partial summary judgment.

V. LEGAL APPLICATIONS OF THRESHOLD PRINCIPLES TO *BLUE OCEAN II*

In *Blue Ocean II*, the Plaintiffs sought to compel the preparation of a federal EIS for the Project and to enjoin any further federal participation in the project until the EIS is complete.⁷⁹ In the intervening time between *Blue Ocean I* and *Blue Ocean II*, DOE attempted to "reprogram" the \$5 million Congress had already appropriated to the Project, but Congress rebuffed the

⁷⁷ see 754 F. Supp. at 1462

⁷⁸ see 754 F. Supp. at 1466

⁷⁹ see 767 F.Supp. at 1519

attempt, and directed that at least a portion of it be used to conduct an EIS.⁸⁰ The Government moved for a dismissal.

Unable to determine the validity of the Government's claim given the evidence disclosed, the District Court ruled that issues of fact remained as to 1) DOE's role with respect to the \$5 million appropriation, and 2) DOE's level of commitment to the implementation of Phase 3.⁸¹

In the wake of that decision and the court's ruling that the Government's participation in the Project constituted a "major federal action", DOE sought to apply the money to another project.⁸² DOE claimed that its primary research involvement did not constitute a "major federal action" and therefore, to avoid the "possible precedent-setting outcome of the lawsuit requiring Federal preparation of such an EIS, DOE attempted to reprogram the appropriated funding.⁸³

The Court responded that the facts and law could not support such a characterization and that as noted in the January 8 order, Phases 3 and 4 are "connected actions" that must be made the subject of a single EIS.⁸⁴

The other issue of fact that remained as of the January 8 Order was whether the time was ripe to compel an EIS since DOE's level of commitment was unclear. However, DOE's failure to reprogram the funds made it clear that by Congressional decree, DOE's level of commitment was significant and by implication of this Court's earlier findings, the matter was sufficiently ripe. The March 1990 Department of Business and Economic Development Proposal to Congress for Phase 3 satisfied the proposal criteria earlier

⁸⁰ *see* 767 F. Supp. at 1520

⁸¹ *see* 767 F. Supp. at 1521

⁸² *see* 767 F. Supp. at 1521

⁸³ *see* 767 F. Supp. at 1522

⁸⁴ *see* 767 F. Supp. at 1522

established, and the determination that Phases 1-3 do not maintain "independent utility" of Phase 4 satisfied the test for interconnectedness.

Having established that the Government's participation in the Project constituted a "major federal action," and that the action compelling the preparation of an EIS was ripe, the last remaining substantive question is whether the action would significantly affect the quality of the human and [natural] environment.⁸⁵

The Court recognized that the process of preparing an EIS would reveal whether and to what degree the proposed action will affect the human environment. Thus, an agency's preliminary decision of whether or not to do an EIS is necessarily based on uncertain information. Accordingly, it is not necessary for the Plaintiffs to prove significant effects on the environments in order to compel the agency to carry through with the study.⁸⁶ The 9th Circuit Court in *Save the Yaak Committee v. Block* ruled that "it is sufficient to raise substantial questions...regarding whether the proposed action may have a significant effect upon the human environment"⁸⁷ and if such substantial questions are raised, "a decision not to prepare an EIS is unreasonable."⁸⁸

Determining the environmental and cultural significance of Wao Kele 'O Puna is a relatively straightforward task given that the State laid favorable groundwork by designating the forest as a Natural Area Reserve. The State recognized its "importance as an environmental and natural heritage site" as well as a "research site" that would "preserve a gene pool of native plant and

⁸⁵ see 767 F. Supp. at 1526

⁸⁶ see 767 F. Supp. at 1526

⁸⁷ *Save the Yaak Committee v. Block*, 840 F.2d 714, 717 (9th Cir. 1988)

⁸⁸ *Blue Ocean Preservation Society v. Watkins*, 767 F. Supp. 1526 citing *Foundation for North American Wild Sheep v. U.S. Department of Agriculture*, 681 F. 2d 1172, 1178 (9th Cir. 1982).

animal species, particularly of rare and endangered species."⁸⁹ The State reports that led to this designation are summarized as follows:

The Natural Area Reserves System Commission is recommending that a 6,500 acre portion of...the Puna Rainforest Reserve be established as the Wao Kele 'O Puna Natural Area Reserve....

The purpose of the proposed Natural Area Reserve is to preserve for present and future generations a representative ohi'a fern forest ecosystem much as it existed before the arrival of Captain Cook...it would be a living example of a natural heritage...it would preserve a gene pool of native plant and animal species."⁹⁰

The Wao Kele 'O Puna Natural Area Reserve was later revoked in a "land exchange" between Campbell Estate and the State Department of Land and Natural Resources in order to facilitate the proposed geothermal development.⁹¹

In addition to the significant botanical, ecological, avian, and genetic impacts that the Hawaii Geothermal Project will impose detailed in the expert testimony presented, there is a wide range of other anticipated archaeological, geologic, marine, economic, public health, safety, and social impacts that HGP involves. The District Judge Ezra ruled that the Plaintiffs successfully

⁸⁹ as quoted in 767 F. Supp. at 1527

⁹⁰ as quoted in Plaintiffs' Notice of Motion and Motion for Summary Judgment and a Permanent Injunction, Blue Ocean Preservation Society v. Watkins 767 F. Supp. 1519 (D. Hawaii 1991)

⁹¹ 767 F. Supp. at 1527

established ripeness and "significance" and were granted a summary judgment.

VI. CONCLUSION

There are clearly two equally legitimate and rational arguments on geothermal development. The argument for diversifying the energy requirements for the islands are soundly rooted in the economic strain that a 90% foreign oil dependency presents to the State. The enormous renewable energy resource that exists indigenously presents an untapped potential to many who plan for the State's energy needs. In times still scarred by the Persian Gulf crisis, the 1970 oil crisis and on-going tensions in the remaining OPEC countries, it seems foolish not to partake of the fortunate advantages bestowed upon us.

However, distinctive local conditions for geothermal development preclude an automatic rubber-stamp approval of this tremendous project: 1) the presence of an exorbitantly expensive and unwieldy energy transmission system via underwater cables across rifts and chasms of up to 6,900 feet below sea level, 2) the unavoidable sacrilege that would be committed against modern day practitioners of the Native Hawaiian religion should any sort of geothermal extrapolation project proceed, and 3) the project's siting in Wao Kele 'O Puna, a lowland tropical rainforest.

In March 1990, Northwest Economic Associates, an economic analysis consulting firm in Washington, released a report that original cost estimates for the 500 megawatt geothermal complex were massively underestimated because more test wells were required to hit successful well, the cable would

be longer than expected because of previously unknown underwater terrain, a new ship would have to be constructed to lay the cable, and developers may need to purchase insurance against volcanic eruptions. The report finally concluded that the State should consider less-expensive alternative energy forms, especially conservation programs, before committing to geothermal development, with all of the unanswered questions it presents on public health, safety, environmental, and social costs. These ends may be achieved by a more rigorous and objective review of project implications.

The Honolulu Star-Bulletin remains an ardent supporter of geothermal development. Repeatedly, its editorials have blamed opponents for the unnecessary delays that have plagued HGP. On January 11, 1991, in the Star-Bulletin's response to *Blue Ocean Society I*'s legal challenge, the Star-Bulletin stated, "Opponents of geothermal could virtually kill the Big Island geothermal operations for the near future, if the court rules that a study is needed."⁹² Yet, these delays are critical elements to making sound decisions for appropriate and sustainable geothermal development. Moreover, if sound planning procedures were applied from the outset and decisions were made looking forward, not justifying the past, then many of the present concerns with this project would have been properly addressed.

A federal EIS is a necessary and crucial component of any geothermal development in Hawaii. As of date, the State has yet to complete their EIS and geothermal Master Plan even though the significance criteria established by the Hawaii Environmental Policy Act have been met. On October 22, 1991, twelve environmental groups (many of the same plaintiffs from *Blue Ocean I* and *Blue Ocean II*) sued the State and Hawaii County in an attempt to enjoin

⁹²Honolulu Star-Bulletin, Jan. 11, 1991 at A18

further public participation until a Hawaii EIS is completed for the project.⁹³ Many critics feel that even if the State should eventually produce the document, that it will be unfairly biased since there is so much public gain from this mammoth project (utility royalties, real estate taxes, etc.) The State planning offices have made a questionable showing thus far as planning standards and regulations regarding industrial development of this magnitude have been the point of legal fire in the past few years.

The many issues that surround this project require further examination via an exhaustive and participatory environmental impact statement in order to fully consider these issues and the alternatives that exist currently or in the near future. If such sums of taxpayer and utility payer dollars are to be used to fund such a venture, it is government's responsibility to comprehensively examine, disseminate study results, and involve the public in meaningful long range planning. If the relevant agencies complied with NEPA's minimum procedural requirements to proceed with an EIS from project initiation, a considerable amount of costly litigation and development delays could have been avoided.

The State's failure to establish standardized air quality regulations, an adequate residential evacuation plan, and fulfill its own HEPA obligations have proven disastrous for the project's well-being. Without the proper planning mechanisms in place, one potential developer has already withdrawn from HGP. HGP's future seems grey as the project is tainted by volatile legal, political, and cultural challenges and it is therefore difficult to project whether other energy developers would submerge themselves in such high risk.

⁹³ Honolulu Advertiser, Oct. 23, 1991

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