JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF FISH AND GAME

September 28, 1979

Mr. Eric Yould, Director Alaska Power Authority 333 W. 4th Avenue Anchorage, Alaska 99510

Dear Mr. Yould:

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Inc. trose In accordance with the request in your letter of August 28, the Department of Fish and Game has reviewed the plans of study prepared by Harza Engineering, Acres-American Inc., and International Engineering Inc. to evaluate the sufficiency of the environmental studies they propose. The emphasis of our review focused on those programs and interdisciplinary tasks related to determining project feasibility and impacts with respect to fish and wildlife. We appreciate the opportunity to make this Department's recommendations with regard to the selection of a private sector consultant to conduct the Susitna Hydro engineering and environmental feasibility studies and to advise you of related issues.

In earlier correspondence to you on August 10th, the Department of Fish and Game described our expectations with regard to the development of the three consultant plans of study and the specific points we would address in a review of their products and which are summarized as follows:

- 1. Scope of studies - that is, the degree to which the study objectives meet biological data needs and integrate biological studies into a multi-disciplinary effort which can provide an assessment of project impacts.
- 2. Statutory and regulatory requirements - that is, the degree to which Federal, State and local statutory and regulatory requirements are recognized in the planning process so there are no surprises resulting in delay of the environmental assessment process to determine the project feasibility.
- 3. Study time frames - that is, first, the degree to which biological studies must follow the natural events of biological cycles and the physical factors of habitat and environment influencing them, to arrive at a point where our best and most

timely judgement of project impacts and mitigation requirements can be made. And second, the degree to which project and task scheduling accomodates the development of the field staff and administrative organization to carry out studies, coordinate studies, and make logistic and equipment arrangements to maximize the results of these studies.

4. Funding - that is, the degree to which a commitment is made to guarantee equal consideration of fish and wildlife resources through all phases of the project from initial planning to construction (if the project is approved) and thereafter. Monitoring of the impacts and operation of mitigation and enhancement programs is also essential.

In reality, this Department had five plans of study before it in this review. They are:

- 1. Alaska Department of Fish and Game, December 1977.
- U.S. Army Corps of Engineers, June 1978.
- 3. Acres-American, September 1979.
- 4. Harza Engineering, September 1979.
- 5. International Engineering, September 1979.

Overall, it is our opinion that each of these plans of study is inadequate for the reasons we discuss hereafter for each.

Alaska Department of Fish and Game December 1977

- 1. Scope of Studies The scope of studies by the Department of Fish and Game basically covers the objectives for fish and wildlife investigations as viewed solely by this Department. While we did our best to cover multi-disciplinary aspects of an environmental program related to fish and wildlife resources, vegetation analysis, water quality, hydrology, recreation and socio-economics that could be conducted by the Department, the study does not display the advantages of the integration of a true multi-disciplinary effort by other specialists representing the engineering and other non-fish and wildlife disciplines.
- 2. Statutory and Regulatory Requirements The current status of the National Environmental Policy Act, Fish and Wildlife Coordination Act, Coastal Zone Management Regulations, and the applicability of Alaska Statute 16.05.870, the Anadromous Fish Act, to this project are not clearly addressed.
- 3. Study Time Frames The time frames fit those required to meet the fish and wildlife investigations goal of providing our best judgement of project impacts in relation to the cycles and life histories of fish and wildlife in this basin. Further, they provide the time which is essential for organizing

- and administering these investigations. Important mileposts in coordination of possible alternatives for license application or EIS development are not detailed, however.
- 4. Funding - The budgets developed by ADF&G reflect the first steps toward a cost saving and minimization of duplication of effort that a coordinated multi- disciplinary effort could potentially provide (based upon limited data provided in the Corps of Engineers draft POS of October 1977). Interdisciplinary studies however, can and should be refined further. The budgets are the costs projected by ADF&G in 1977 dollars and don't reflect current and possibly inflationary values or costs of fish and wildlife investigations proposed by the U.S. Fish and Wildlife Service. I'd like to reiterate Commissioner Ronald O. Skoog's comment in his December 21, 1977 letter to Robert Ward, Chairman of the Alaska Power Authority, Board of Directors, transmitting this proposal, that is, "We believe from our extensive experience that we have excellent insight into what it actually costs to do business in the State."

U.S. Army Corps of Engineers, June 1978

- 1. Scope of Study The biological investigations of this plan of study are the result of a limited coordination effort between the Corps and the Department of Fish and Game. Narratively, this plan of study covers the scope of task areas of the biological investigations in a manner satisfactory to the Department of Fish and Game. The plan of study also provides for the shift of certain tasks exclusively from the biological investigations to other task descriptions in hydrology and water quality, making this a better effort at an inter-disciplinary study than found in the Corps' original draft of October 1977.
- 2. Statutory and Regulatory Requirements The Corps' June 1978 POS does not in our view reflect the current status or consideration of impacts of this project on fish and wildlife and mitigation in accordance with the Fish and Wildife Coordination Act and the National Environmental Policy Act. It also does not consider the application of AS 16.05.870, the new Federal Energy Regulatory Commission and Coastal Zone Management Regulations to this project.
- 3. Study Time Frames The Corps' studies were scoped into a 46 month time frame, which we believed to be inadequate. The Corps did allow, however, that continuation studies beyond the 46 month period to 60 months may be required. However, the wording in their POS implies that the construction decision will occur before completing portions of the 5 year biological studies we consider essential.
- 4. Funding The Corps's attachment of a 4.3 million dollar budget to biological investigations was inadequate in this Department's view. For the 46 month time frame, we proposed a 7.9 million dollar budget in 1977 dollars.

Acres American (Acres) - September, 1979
Harza Engineering (Harza) - September, 1979
International Engineering (IECO) - September, 1979

Scopes of Study - The present consultant plans of study are scoped in varying degrees of adequacy by the three firms. IECO's proposal is deficient in both the aquatic and terrestral segments. Acres' proposal does not have a satisfactory aquatic studies proposal but has a stronger description the terrestrial studies tasks. Harza's proposal contains the best aquatic studies presentation and has done a fair job on the terrestrial wildlife tasks also. In balance, Harza's biological investigations proposals provide for a better state-of-the-art application of study techniques and methodologies, such as radio telemetry, sonar application, and instream flow. I must point out, that although all three firms have adopted portions of the Department of Fish and Game's ideas or suggestions; the focus and results of their proposed activities are not totally in accord with the Department.

Statutory and Regulatory Requirements

All three consultant firms address FERC licensing and exhibit preparation requirements, but there is no specific discussion of the impact of the requirements of AS 16.05.870, the Fish and Wildlife Coordination Act, and Coastal Zone Management Act regulatory requirements regarding coordination, planning, and environmental protection in relation to this project.

Study Time Frames - All three firms were constrained to a 30 month time frame to FERC license application in accord with the APA contract specifications. IECO does emphasize a three-year study on anadromous species and a two-year study on large mammals but this is inconsistent with this Department's view of a required five-year study on some populations and habitats. Both Acres and Harza more strongly emphasize the continuation of fish and wildife investigations. We believe that APA must give the contractor for the final POS stronger direction to provide for the review of pre-FERC license studies, and provide a mechanism for the review, redirection and continuation of selected projects post-FERC license application.

Budgets - Because of the relatively short review time afforded this Department, we could not make an adequate assessment of the merits of the three consultant firms' POS budgets. Their interdisciplinary study plans and scoping of fish and wildlife tasks were not specifically budgeted in all cases. The numbers of personnel dedicated to fish and wildlife tasks detailed by two of the consultants (Acres and Harza) is also difficult to breakdown. We can only leave our final evaluation on the adequacy of the fish and wildlife investigations budgets to the one submitted in the final POS.

At this juncture, we recognize that the selection of a consultant to prepare a final POS and to implement the studies involved must be based on factors involving not only the fish and wildlife investigations. This Department desires to assure that the best final POS is developed. To accomplish this, we believe the fish and wildlife agencies must be the key participants in the development of the final POS. The consultant

firm selected should be one which has developed the best overall plan of study. That firm and the APA will have to make a commitment to synthesize a new final plan of study incorporating the concerns of the fish and wildlife agencies which meets our special statutory mandates for the protection of fish and wildlife resources. Funding for this planning and coordination will be required by ADF&G.

I would like to advise you here of some of the requirements of the Fish and Wildlife Coordination Act, Fish and Game Code, (Title 16), and Coastal Zone Management Act which can influence this project.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act, draft Uniform Procedures for compliance, May 1979 further standardizes procedures and interagency relationships to insure, "that wildlife conservation is fully considered and weighed equally with other project features in agency decision—making processes by integrating such considerations into project planning, National Environmental Policy Act (NEPA) compliance procedures, financial and economic analyses, authorization documents, and project implementation."

Subpart B-FWCA Compliance Procedures

Sec. 410.21 Equal consideration.

Equal consideration of wildlife resource values in project planning and approval is the essence of the FWCA compliance process. It requires action agencies to involve wildlife agencies throughout their planning, approval, and implementation process for a project and highlights the need to utilize a systematic approach to analyzing and establishing planning objectives for wildlife resource needs and problems and developing and evaluating alternative plans.

Sec. 410.22 Consultation

(a) Initiation. The FWCA compliance process may be initiated by a potential applicant, an action agency, or a wildlife agency.

(b) Potential Applicants. Implementing procedures of action agencies shall provide that applicants for those non-federal project approvals which require a water-dependent power project approval from the Federal Energy Regulartory Commission (FERC) (also applies to preliminary FERC permit) contain written evidence that they initiated the FWCA compliance process with both Regional Directors and the head of the State wildlife agency exercising administration over the fish and wildlife resources of the state(s) wherein the project is to be constructed and early site review (NRC) applicants. The intent of this paragraph (a)(1) of this section is to assist applicants in designing environmentally sound projects without waste of their planning resources and to minimize the potential for delay in the processing of applications. Action agency implementing procedures shall advise that consultation should be initiated by the applicant at the earliest stages of its project planning, and that its submissions to wildlife agencies shall indicate the general work or activity being considered, its purpose(s), and the general area in which it is contemplated.

In order to comply with these procedures, APA should initiate the process of consultation with the fish and wildlife agencies.

Title 16

Title 16, independently of Federal laws, mandates the Alaska Department of Fish and Game to manage, protect, maintain, enhance, and extend the fish, game, and aquatic plant resources and the habitat that sustains them including assisting the U.S. Fish and Wildife Service in the enforcement of federal laws and regulations pertaining to fish and wildlife.

Sec. 16.05.870 also states that:

- b) If a person or governmental agency desires to construct a hydraulic project, or use, divert, obstruct, pollute, or change the natural flow or bed of a specified river, lake or stream, or to use wheeled, tracked, or excavating equipment or log-dragging equipment in the bed of a specified river, lake, or stream, the person or governmental agency shall notify the commissioner of this intention before the beginning of the construction or use.
- c) If the commissioner determines to do so, he shall, in the letter of acknowledgement, require the person of governmental agency to submit to him full plans and specifications of the proposed construction or work, complete plans and specifications for the proper protection of fish and game in connection with the construction or work, or in connection with the use, and the approximate date the construction, work, or use will begin, and shall require the person or governmental agency to obtain written approval from him as to the sufficiency of the plans or specifications before the proposed construction or use is begun.

Purpose. - The purpose of this section is to protect and conserve fish and game and other natural resurces. 1964. Att'y Gen., No. 10.

Alaska Coastal Management Program

The recently approved Alaska Coastal Management Program (ACMP) mandates that all State, Federal and Local government agencies must coordinate all planning and development activities in the State's coastal zone to ensure adequate consideration and protection of Alaska's coastal waters and resources. As the proposed Susitna Hydropower project will occur within Alaska's coastal zone and certainly will directly influence coastal waters all planning and development plans must be consistent with the Coastal Standards and the Mat-Su Borough's District Coastal Plan once it is completed and approved. The Coastal Standards are . presently in effect and all State and Federal actions must be consistent with them. Section 6 AA C 80.130 states that:

- (a) habitats in the coastal area which are subject to the Alaska Coastal Management Program include:
 - (1) offshore areas
 - (2) estuaries
 - (3) wetlands and tidal flats
 - (4) rocky islands and sea cliffs

- (5) barrier islands and lagoons
- (6) exposed high energy coasts
- (7) rivers, streams and lakes
- (8) important upland habitat

These habitats which are specifically defined in the Standards must be identified within the Susitna Hydro Study area during the feasibility studies. In addition, Section (b) states that habitats contained in (a) of this section shall be managed so as to maintain or enhance the biological, physical and chemical characteristics of the habitat which contributes to their capacity to support living resources. Specific guidelines are also provided for each coastal habitat. The Coastal Zone Management consistancy requirements are mandated in both the Alaskan and Federal CZM Acts and the Fish and Wildlife Coordination Act. The question of consistancy with CZM standards goes well beyond the FERC licensing requirements and should be treated as a separate step in determining the feasibility of Hydro Fower alternatives.

Thank you for the opportunity to comment, we expect to provide more information to you during the next weeks regarding the development of a final POS.

Sincerely

Thomas M. Trent. Regional Supervisor

Habitat Protection Section

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