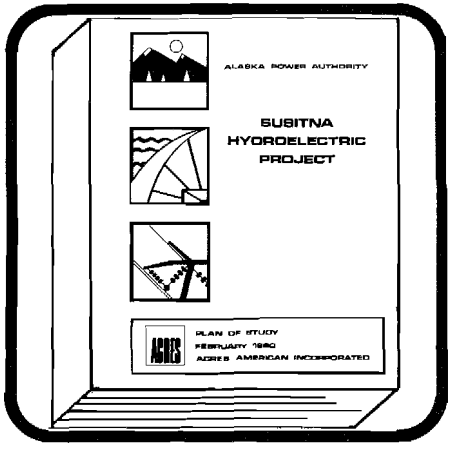
A report on
the first series of
community meetings
on the feasibility studies for the

Susitna hydroelectric project and other power alternatives

April 1980



Fairbanks
Talkeetna
Wasilla
Anchorage

ALASKA
POWER
AUTHORITY

CONTENTS

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INTRODUCTION

In April 1980, over 250 Alaskan citizens attended community meetings in Fairbanks, Talkeetna, Wasilla, and Anchorage to comment on the adequacy of the Plan of Study for the Susitna hydroelectric study.

What is the Plan of Study? It is a 528-page document that describes the individual studies that will be conducted to determine the feasibility of Susitna hydroelectric development. It describes how the studies will be conducted, who will do each study, and the time frame for completion. There are two aspects to a final decision on Susitna. First, there is the question of technical feasibility. This is determined by engineering studies. The other aspect is how desirable any alternative or group of alternatives is, and this is the part the public is involved in. Together both parts form the basis for an informed decision on Susitna hydroelectric development.

The Plan of Study is intended to be a dynamic document. That means it can be changed when changes are appropriate and the Plan of Study can be improved. Changes can be suggested from the public, from the legislature, from the governor, from state and federal agencies, from Acres American, Inc., from utilities, from anyone. This report describes the comments, the questions, and the suggested changes that came from the public at the April community meetings.

PUBLIC PARTICIPATION THROUGH APRIL 1980

The April community meetings were actually a continuation of public participation in developing the Plan of Study, as shown in the following chronology:

July 1979	Environmental panel raised key issues to engineering firms desiring contract for Susitna feasibility studies.
September 1979	Public reviews three plans of study, listens to presentations, questions top three engineering firms, and prefers Acres American, Inc.
December 1979	Agreement signed between state of Alaska and Acres American, Inc., to conduct feasibility study.
February 1980	Acres American, Inc. publishes Plan of Study. Alaska Power Authority distributes for review to groups, agencies, individuals and public libraries.
April 1980	Fairbanks, Talkeetna, Wasilla and Anchorage citizens comment on adequacy of Plan of Study at community meetings.

Anchorage community meeting

HOW PEOPLE WERE INVITED

1. Personal letters were sent to the presidents and contact persons for 46 groups and organizations in the railbelt communities, including commercial fishing groups, sportsmen's groups, general public interest groups, environmental groups, recreation groups, energy-related groups, business groups, and mining groups.
2. Personal phone calls were made to the groups and organizations.
3. Personal letters were sent to legislators, state and federal agencies, and utilities.
4. Personal letters were sent to members and subcontractors of the House Power Alternatives Study Committee.
5. Large display ads were published in community newspapers a week before the meetings.
6. Paid radio ads and public service announcements were aired on local stations.
7. Daily notices of meetings were placed in newspaper columns like "Today in Anchorage."
8. Press releases were issued informing the public that Plans of Study were available for review in public libraries and giving dates of upcoming community meetings.
9. The Fairbanks **Daily News Miner** wrote a five-part series on the Susitna hydroelectric project. The series ran the week prior to the meetings and helped to inform people about the issues and invite them to the meetings.

HOW MANY ATTENDED

Fairbanks		
April 14	Travelers Inn	70 persons
Talkeetna		
April 15	Talkeetna Elementary School	31 persons
Wasilla		
April 16	Wasilla High School	42 persons
Anchorage		
April 17	Bartlett High School	109 persons
		252 TOTAL

Eric Yould and Robert Mohn, Alaska Power Authority

HOW THE MEETINGS WERE ORGANIZED

The meetings were designed to meet three objectives:

—to describe the Plan of Study in understandable terms

—to give the public a variety of opportunities to comment on the adequacy of the Plan of Study and to suggest additional areas of concern that the Power Authority should be looking at

—to record all comments and questions in a useful way for decision makers.

This part of the report describes how information was given to the public and what methods were used to get information back from the public.

Giving Information to the Public

Describing the Plan of Study was accomplished by three formal presentations. It lasted about an hour and a half and included the following:

SLIDE SHOW HIGHLIGHTING PLAN OF STUDY
John Lawrence, Acres American, Inc. (consultants conducting the studies)

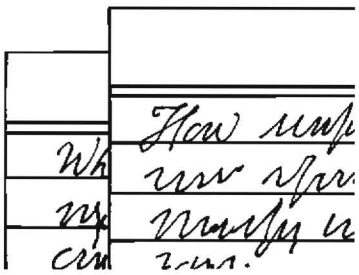
SLIDE SHOW DESCRIBING HOW ALTERNATIVES WOULD BE REVIEWED AND EVALUATED
Robert Mohn, Alaska Power Authority

DESCRIPTION OF PUBLIC PARTICIPATION PROGRAM AND ACTION SYSTEM
Nancy Blunck, Alaska Power Authority

Getting Information Back From the Public

A variety of methods was used to listen to what the public said and to record it. The methods are summarized below with a brief description:

QUESTION AND ANSWER PERIOD.



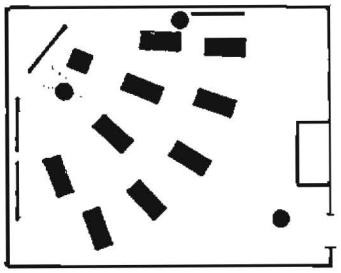
Questions were written on cards because of time constraints and the large numbers at some of the meetings. 165 questions were received in writing at all four meetings. Only in Anchorage was there not enough time to respond to all written questions. A complete list of questions is in Appendix B of this report.

In all communities, some time was also given to informal questions from the floor. These questions are recorded in the verbatim transcript stored at the Alaska Power Authority offices but are not included in this report.

Questions were answered by members of Acres American, Inc. study team and by members of the Alaska Power Authority.

Nancy Blunck, Alaska Power Authority

TABLE TOP DISCUSSIONS.



These discussions were held in Fairbanks, Talkeetna, and Anchorage, and gave each participant a chance to voice his or her concerns and opinions in small groups of 6-8 people.** Each table had a group member record all comments in writing, and this provided the raw data for the tables in Appendix A of this report. Each group was asked to consider these two questions:

- Is this an adequate Plan of Study?
- Are there other concerns or questions that the Alaska Power Authority should address?

The results of the table top discussions were reported to the Alaska Power Authority and to Acres American, Inc. in a summary form that night. The complete results are in this report. There were 182 table top comments received on the adequacy of the Plan of Study.

***Wasilla's meeting operated as a group of the whole and did not include individual table top discussions.*

INFORMAL CONVERSATIONS.

During breaks, during table top discussions, and after the meeting, members of the public individually talked with Acres American, Inc. and Alaska Power Authority staff.

Top and below: Talkeetna citizens giving table top discussion reports.

PUBLIC COMMENT PERIOD.

There was a formal opportunity at each meeting for people to give written or oral comments to the groups as a whole. Three persons presented written comments they had prepared ahead of time. The complete texts are included in the verbatim transcripts at the Alaska Power Authority offices. Additionally the testimonies have been entered into the ACTION SYSTEM and are being responded to in writing by Acres American, Inc. and the Alaska Power Authority.

A summary of the testimonies is included here:

TALKEETNA - Roberta Sheldon:

- Acres American, Inc. Plan of Study appears superior to previous Corps plans of study
- concern for objectivity of Alaska Power Authority
- concern for objectivity of public participation program
- concern for potential impacts of industrial growth associated with Susitna
- request that Talkeetna and other communities be included in recreation survey to be conducted by Acres American, Inc.
- request that "area residents impacted by dam" be included in list of groups addressed in the public participation program
- request that transmission corridor assessment include impact on open-to-entry property owners
- request that Plan of Study include sociocultural analysis of Talkeetna area

WASILLA - Michael Bronson:

- concern that environmental and social criteria be used in combination with cost information in determining the feasibility of Susitna hydroelectric development
- further concern that environmental and social standards be established *prior* to a decision

ANCHORAGE - Floyd Heimbuch, Executive Director of Cook Inlet Aquaculture Association:

- request that any mitigation plan or system have payment in salmon, not in cash payments, and not in a plan to fund research activities
- concern that the technology of stock separation is not yet developed and request that the technology be developed as a part of the Plan of Study
- concern that procedures for developing a quantitative description of rearing and spawning habitat are not well developed and therefore not highly accurate
- statement that not necessarily opposed to Susitna project and will help to provide answers to complex questions of fish impact

The following two persons gave oral comments:

FAIRBANKS - Ron Punton:

- support the immediate go ahead with the intertie between the Healy site and the Talkeetna site*

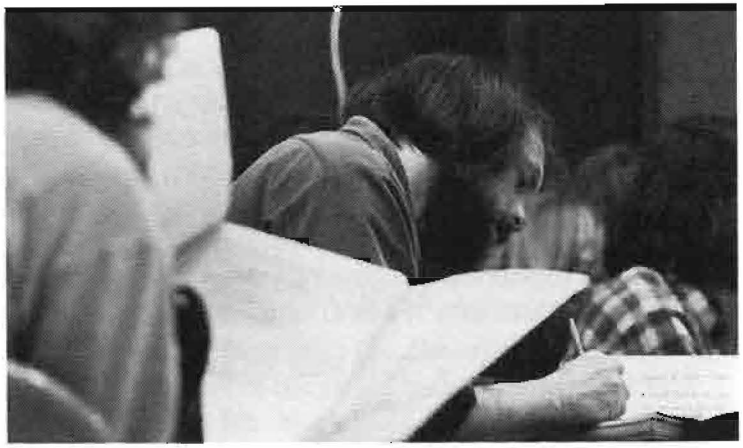
* *the Public Participation office interprets this to mean the intertie between Fairbanks and Anchorage*

ANCHORAGE - Paul Johnson, President of Anchorage Chapter of the Sierra Club:

- concern that it is very important to not get locked into Susitna but take a fair and good look at alternatives and that the public be involved in this

ACTION SYSTEM.

The Action System was introduced to the public during the week of the community meetings. Essentially this is a method for insuring that all questions or concerns raised by the public get a written response from the Alaska Power Authority and from Acres American, Inc. At the meetings, time did not allow adequate or full answers to all questions. An easy-to-use form was distributed at the meeting and people were encouraged to use it to get additional information. As of the writing of this report, over a hundred individual questions and concerns have been received by the Alaska Power Authority. Responses to these are being individually prepared and sent to the author of each request. The content of the Action System comments will be regularly summarized in future reports by the Public Participation office.



Talkeetna community meeting

MEETING SUMMARY

	Fairbanks	Talkeetna	Wasilla	Anchorage
Number of table top discussion groups	11 groups	2 groups	*	14 groups
Number of written comments from table top discussions	79 comments	25 comments	*	78 comments
Number of written questions received	23	26	37	79
Number of written questions responded to	23	26	37	27
Verbal comments given during public comment period	1 person	none	none	1 person
Written comments submitted during public comment period	none	1	1	1

**The same basic format was followed at all the meetings but was adapted to the size of the audience and to the community. Wasilla's meeting operated as a group of the whole and did not include individual table top discussions.*

ROLE OF THE ALASKA POWER AUTHORITY, THE STATE LEGISLATURE AND THE GOVERNOR

During the 1970's the federal government studied the feasibility of Susitna hydroelectric development through the U.S. Army Corps of Engineers.

In 1978 Alaska's congressional delegation advised the state of Alaska to consider its own sponsorship of the Susitna project because of the political climate in Washington D.C. It did not appear that any major hydroelectric project in Alaska would be funded with federal dollars.

The Alaska Power Authority is a state corporation and is the vehicle set up by the state to conduct feasibility studies and to finance and construct electrical power projects. Policy is set by a five-member Board of Directors appointed by the governor. The Authority has a staff of eleven, including an Executive Director, a Director of Finance, a Director of Engineering, and a Director of Public Participation.

Through the Alaska Power Authority Board, preliminary reports will be sent to the governor and the legislature. The first is due March 30, 1981, and the second is due April 30, 1982. Both reports will recommend whether to continue studies on Susitna and the other viable alternatives.

Additionally, the Power Authority will:

—manage the public participation process.

—monitor the work of Acres American, Inc. on all Susitna feasibility studies except the alternatives study (this will be conducted by an independent contractor and be managed by the Office of the Governor).

—submit a license application to the Federal Energy Regulatory Commission if Susitna hydroelectric development is selected as the most feasible and desirable alternative.

—recommend a financing plan and sell bonds if bonds are a part of the financing plan.

What is the role of the legislature and the governor? The legislature funds all studies and oversees the study process. The governor manages the alternatives study, and acts to accept, reject, or modify the recommendations from the Power Authority Board in selecting the most feasible and desirable way to meet future electrical needs.

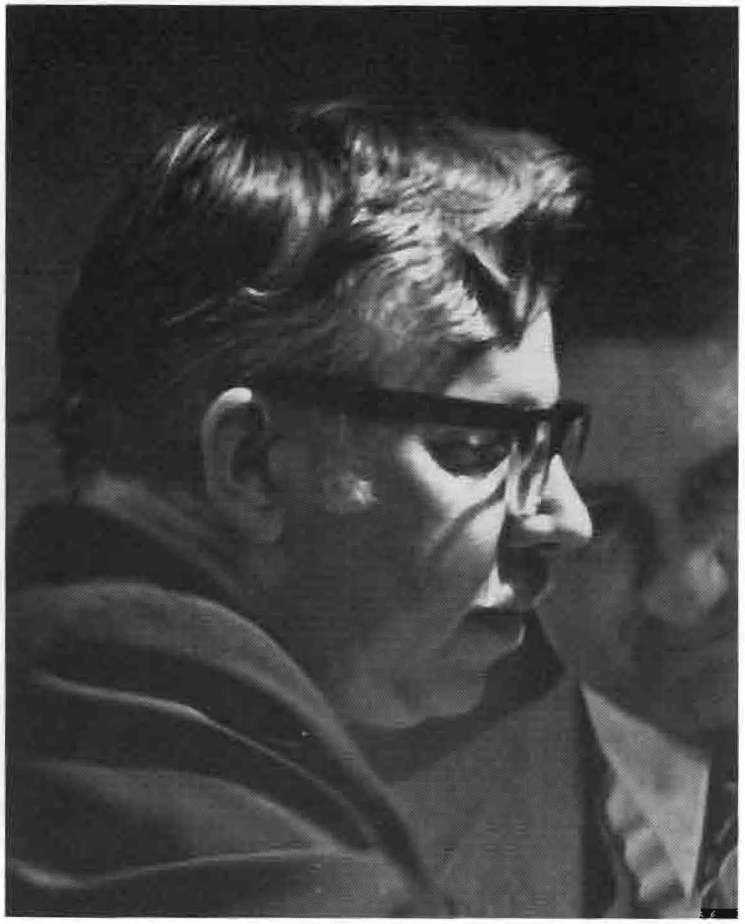
One of the roles of the Alaska Power Authority is to manage the public participation program, as seen at the Fairbanks community meeting.

WHY ACRES AMERICAN, INC. WAS SELECTED TO CONDUCT THE SUSITNA FEASIBILITY STUDIES

At its November 1979 meeting, the Alaska Power Authority Board selected Acres American, Inc. to conduct Susitna feasibility studies. Comments from the public were included in this selection as were comments received from the House Power Alternatives Study Committee. Both the public comments and the House Power Alternatives Study Committee supported the choice of Acres American, Inc.

Here is a summary of the reasons:

1. Acres American, Inc. possessed the greatest experience with sub-Arctic construction and planned to retain the most experienced firm in Alaska for geotechnical work.
2. Acres American, Inc. planned to spend a greater portion of its budget in-state than other firms.
3. The Acres American, Inc. proposal contained the most objective and detailed studies of power market demand and power alternatives.
4. The Acres American, Inc. proposal provided for the most extensive and direct public participation process.



Chuck Debelius and John Lawrence, Acres American, Inc.

WHO THE DECISION MAKERS ARE...

The Alaska Power Authority Board will make two preliminary reports to the governor and the legislature. The reports will be based on Acres American, Inc.'s work, on the work of the alternatives study, and on public input. The first report is due March 30, 1981, and will recommend whether studies should continue on the Susitna hydroelectric project. If the recommendation is that study should continue, the report shall explain the following in detail: economic evaluations and preliminary environmental impact assessments for the Susitna hydroelectric development and all viable alternatives; a description of the federal and state permits needed before construction can begin; and the expected construction start date.

The second report is due April 30, 1982 and shall again recommend if work should continue on the Susitna project and other viable alternatives. If the recommendation is to continue Susitna studies, the report will give more detail on design, on phases of construction, expected completion dates of each phase of construction, expected costs of each phase, and the costs to the state and to the consumers of the project under different methods of project financing (including revenue bonds, general obligation bonds and general fund appropriations).

Current members of the Alaska Power Authority Board are: (left to right) Charles Conway, Chairman (Sitka); Arnold Espe, Vice Chairman (Anchorage); Commissioner Charles Webber, Department of Commerce and Economic Development, member (Juneau); Robert Weeden, member (Fairbanks); and Tom Kelly, member (Anchorage).

Governor Hammond

II. SUMMARY OF WHAT THE PUBLIC SAID

8 MAJOR CONCERNS

The following areas received the most comments during the table top discussions:

15 comments saying Plan of Study adequate.

29 comments saying alternatives study not adequate and why.

25 suggestions for energy sources that should be considered in alternatives study.

17 suggestions for serious consideration of decentralized alternatives.

17 comments describing what the socioeconomic studies should address.

11 comments suggesting a level of effort on studies on fish, wildlife and plants.

8 comments describing concerns about transmission studies.

8 suggestions for getting information *to* the public.

THE 8 MOST ASKED QUESTIONS

Written questions were asked most often in the following areas (listed in rank order):

27 questions expressing concern for completeness of alternatives study

13 questions on adequacy of energy forecasts

11 questions on objectivity of those conducting the alternatives study

10 questions on the decision making process and the timing of decisions

10 questions on construction costs and schedules

8 questions on marketing and financing of Susitna

7 questions on access roads to damsites

7 questions on local hire in feasibility studies

TABLE TOP DISCUSSION SUMMARY

This chart summarizes the total number of table top comments received on the adequacy of the Plan of Study.

	# of comments	% of total
Plan of Study	29	16%
Task 1: Power Studies	84	46%
Task 2: Surveys and Site Facilities	none	-0-
Task 3: Hydrology	7	4%
Task 4: Seismic	4	2%
Task 5: Geotechnical	none	-0-
Task 6: Design Development	2	½%
Task 7: Environmental	30	17%
Task 8: Transmission	8	4%
Task 9: Construction Costs and Schedules	none	-0-
Task 10: Licensing	none	-0-
Task 11: Marketing and Financing	4	2%
Task 12: Public Participation	14	8%
TOTALS	182	100%

QUESTION AND ANSWER SUMMARY

This chart shows how many questions were asked about each TASK in the Plan of Study.

	# of questions asked	% of total questions
Plan of Study	5	3%
Task 1: Power Studies	79	48%
Task 2: Surveys and Site Facilities	9	6%
Task 3: Hydrology	2	1%
Task 4: Seismic	7	4%
Task 5: Geotechnical	2	1%
Task 6: Design Development	7	4%
Task 7: Environmental	9	6%
Task 8: Transmission	5	3%
Task 9: Construction Costs and Schedules	13	8%
Task 10: Licensing	1	less than 1%
Task 11: Marketing and Financing	8	5%
Task 12: Public Participation	6	4%
Miscellaneous	12	7%
TOTALS	165	100%

III. EVALUATION OF THE MEETINGS

The following is a summary of the evaluations filled out by those attending all four community meetings.

HOW UNDERSTANDABLE WAS EACH OF THE THREE PRESENTATIONS? *(statistical averages)*

A. Plan of Study (first slide show by Acres American, Inc.)

terribly confusing 1 2 3 4 5 6 **7.3** 8 9 10 very understandable

B. Selection Process and List of Alternatives (second slide show by Robert Mohn, Alaska Power Authority)

terribly confusing 1 2 3 4 5 6 **7.0** 8 9 10 very understandable

C. Public Participation Program (description by Nancy Blunck, Alaska Power Authority)

terribly confusing 1 2 3 4 5 6 7 **8.0** 9 10 very understandable

1. Is the handout on the overall decision-making process clear enough to understand without a verbal description?

   85% . . . . yes
   15% . . . . no

2. Are the proposed methods for responding to public comments and questions adequate?

   70% . . . . yes
   10% . . . . tentative yes/perhaps/somewhat
   11% . . . . no
   9% . . . . other
   100% TOTAL

3. Anything else we could be doing to get information to the public?

   Mentioned the most . . . . USE OF TELEVISION (mentioned 19 times).
   Second . . . . . USE OF NEWSPAPERS (mentioned 10 times).
   Third . . . . . EXPAND MAILING LIST AND MAIL IN ADVANCE (mentioned 7 times).

NOTE: "use of television" was most often mentioned in Anchorage and Fairbanks, but was also mentioned in Talkeetna and Wasilla.

4. Other comments:

   There were 33 comments on the meeting format. About 75% (24 comments) said that the table top discussions were very effective. Other issues appeared only once or twice.

Members of the public evaluate the content and design of the Talkeetna meeting.

The purpose of the public participation program is the incorporation of citizen ideas into the feasibility study...that's what happens in the NEXT STEP.

Wasilla community meeting

IV. THE NEXT STEP

The 1980 Legislature appropriated an additional $1,365,000 to make changes in the Plan of Study. The revised plan was prepared by the Alaska Power Authority and Acres American, Inc. It reflected the suggestions for change from the public at the community meetings, from consultants to the House Power Alternatives Study Committee, and from state and federal agency review of the Plan of Study.

The major suggested alterations in the alternatives study are summarized below:

—change the time frame for decision making and stretch it over an additional year

—increase the work allotted to identification and description of power alternatives, including conservation and load management

—present a *number* of alternative power plans for public review during the *second* year

—augment the demand forecast data base

—increase the level of effort allotted to financial and marketing aspects of the alternatives, and to risk analyses

—utilize a multidisciplinary review panel

—increase the environmental studies of alternatives

—conduct a more complete sensitivity analysis.

Additionally, the Office of the Governor is now overseeing the alternatives study. An independent firm will be hired to conduct the alternatives study, and this effort will be entirely separate from the Acres American, Inc. work on Susitna feasibility.

V. WHAT HAPPENS TO THIS REPORT?

Several things:

1. Acres American, Inc., their subcontractors, the Alaska Power Authority, and the Alaska Power Authority Board will have copies of this report so they are aware of the concerns expressed and so they can assure that the studies are responsive to the concerns.
2. The Federal Energy Regulatory Commission will have this report to assist them in their determination of the adequacy of the public participation program: how was the public encouraged to participate and how were their comments incorporated into the study process?
3. This report is the first of several documents that will be the major part of the Public Participation Director's report to the governor and to the Alaska Power Authority Board prior to decision making on Susitna. *(Also included in the report will be the reports from future meetings, workshops and ACTION list comments.)*
4. This report will help form the agenda for future workshops. The Public Participation office has kept track of those questions that were asked most frequently and those questions that were not adequately answered at the first set of meetings.
5. The Public Participation office will use this report to help plan the agenda for the next series of community meetings in 1981.
6. Communities will have the opportunity to see what concerns other communities had. The table top discussion comments and the questions are identified by community for comparison purposes.
7. This report will go to the Office of the Governor with the hope that it will be used in the conduct of the new alternatives study.
8. Others to receive this report:
   —public libraries within the railbelt region
   —commercial fishing groups
   —general public interest groups
   —recreation groups
   —business groups
   —media
   —sportsmen's groups
   —environmental groups
   —energy groups
   —mining groups
   —individuals upon request

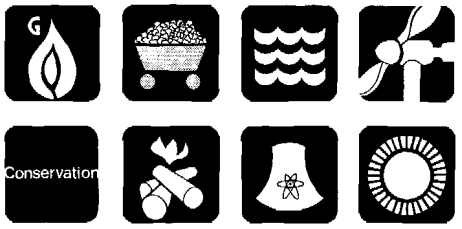
APPENDIX A: COMPLETE LIST OF TABLE TOP DISCUSSION COMMENTS

Following is a complete list of table top discussion comments received. They are organized by TASK in the same manner as the original Plan of Study document.

COMMENTS ON PLAN OF STUDY

	F	T	A	TOTAL	
Plan of Study—adequate	1	0	1	2	Plan of Study considered adequate.
	1	1	0	2	Plan of Study adequate *only* if studies completed properly.
	1	0	2	3	Plan of Study *more* than adequate.
	3	0	2	5	Enough studies have been done already—build Susitna now.
	1	0	1	2	Studies are an improvement over previous studies.
	1	0	0	1	People conducting studies appear to be open and objective.
				15	TOTAL
Plan of Study—difficult to understand and evaluate	2	0	2	4	Studies difficult to evaluate without knowing *how* studies will be done.
	0	1	0	1	Plan of Study should indicate more clearly what its priorities are.
	0	1	0	1	Plan of Study difficult to understand: break into smaller parts.
				6	TOTAL
Plan of Study—comments on scope of work	0	0	1	1	Plan of Study should include previous studies done by Corps of Engineers.
	0	0	4	4	Studies too broad, costly and are difficult to complete in time allowed.
				5	TOTAL
Plan of Study—assumptions questioned	1	0	0	1	Plan of Study appears to assume that railbelt people would favor converting to electric heat.
	1	0	0	1	Plan of Study appears to assume that we *should* be meeting future energy demands.
	0	0	1	1	Plan of Study appears to assume that hydro is best and only solution.
				3	TOTAL

F airbanks T alkeetna A nchorage

TASK 1  POWER STUDIES

- **determine the need for power generation facilities in the railbelt**
- **consider and evaluate all viable alternatives for satisfying the need**

ADEQUACY: 113 comments on adequacy of power studies:

alternatives study—not adequate

F	T	A	TOTAL	
4	0	1	5	Alternatives studies not adequate.
1	0	2	3	Criteria for evaluating alternatives appears vague and too mechanical. Specific concerns raised for evaluating alternatives were:
2	2	1	5	.... Will cost outweigh socioeconomic values?
1	1	0	2	.... Will value of Alaska's wilderness be given any weight?
1	0	0	1	.... Will "emotional public sentiment" outweigh economic considerations?
5	1	0	6	Not enough money for alternatives studies.
1	0	4	5	Acres American, Inc. experience and objectivity questioned.
0	1	0	1	Not enough time to do adequate alternatives studies.
1	0	0	1	Only "legitimate" alternatives should be considered.
			29	TOTAL

F airbanks T alkeetna A nchorage

continued

	F	T	A	TOTAL	
alternatives study—suggestions	4	2	0	6	Alternatives study should include CONSERVATION, both voluntary and government enforced.
	2	0	1	3	Alternatives study should include SMALL HYDROELECTRIC development.
	1	0	1	2	Alternatives study should include TIDAL.
	0	0	1	1	Alternatives study should include SOLAR.
	0	0	1	1	Alternatives study should include BURNING WOOD TO GENERATE ELECTRICITY.
	0	1	0	1	Alternatives study should include GEOTHERMAL near Devils Canyon.
	1	0	0	1	Alternatives study should include North Slope NATURAL GAS via pipeline.
	1	0	0	1	Alternatives study should include BELUGA COAL.
	1	0	0	1	Alternatives study should include NUCLEAR.
	2	0	1	3	Alternatives study should incorporate new technologies as they develop.
	2	1	2	5	Alternatives study should take into consideration some kind of overall energy plan.
				25	TOTAL
centralization versus decentralization	1	2	12	15	Alternatives study should consider decentralized alternatives to Susitna hydro; 8 of 15 comments suggested studying various combinations of decentralized alternatives.
	1	0	1	2	Alternatives study should evaluate vulnerability of centralized power source.
				17	TOTAL

continued

	F	T	A	TOTAL	
energy forecasts—suggestions	1	0	1	2	Load forecasts should identify seasonal variations as well as daily variations.
	1	0	1	2	Power studies should anticipate the effects of public reaction to increasing cost of energy and public desire to reduce energy consumption.
	1	0	0	1	Demand forecast should include possible electrification of Alaska Railroad.
	0	0	1	1	Load forecasts should provide for auxiliary back-up power in addition to main power supply.
				6	TOTAL
power costs	0	0	1	1	Studies should show how much of Susitna costs will be paid by consumer.
	0	0	1	1	Studies should compare consumer costs of Susitna relative to other alternatives.
	1	0	0	1	Studies should consider ways to lower power costs.
	1	0	0	1	Studies should show how the most economic power production is determined.
				4	TOTAL
energy independence	2	0	0	2	Studies should evaluate possibility of selecting a power plan that would achieve energy independence.
				2	TOTAL
	F	T	A	TOTAL	
decision making	0	0	1	1	Plan of Study should allow flexibility of decision making.
				1	TOTAL

Fairbanks Talkeetna Anchorage

continued

QUESTIONS:

four questions on power studies in table top reports:

—What kinds of power (other than hydro) will be available in the future? (Talkeetna)

—Looking beyond current technologies, what alternatives sources can be expected in the near future?

—If natural gas generators are to be prohibited in the future and/or fossil fuels become prohibitively costly, what would be the alternatives or how much power would be available without the use of hydropower—in the next 20 years? (Talkeetna)

—When will the Golden Valley Electric Association be bringing on capacity from the oil pipeline stations (the waste heat power project)? (Fairbanks)

VALUES:

27 values expressed on power studies during table top discussions:

pro Susitna

—I am in favor of it. (Fairbanks)

—Agree that it is a good project. (Fairbanks)

—Get going with project. (Anchorage)

—Build the dam first, then develop alternatives. (Fairbanks)

—Susitna is good, long term energy supplier. (Fairbanks)

—Project is environmentally desirable and inflation proof. (Fairbanks)

—Build dam now before costs are too high. (Fairbanks)

—Susitna is large in cost, but not in capacity. It is less affected by inflation. (Fairbanks)

—Feel that we lost out by not getting Rampart Dam—cost of energy will be too high if dam isn't built. (Fairbanks)

against Susitna

—Opposed to dam. (Fairbanks)

—Is Susitna a dinosaur egg that we'll be sorry we hatched? (Anchorage)

—For the $3 billion cost of Susitna project, with existing technology, distribution of that amount on a per capita ($10,000 per person) basis should be considered to reduce consumption and eliminate need for more generation capacity. (Anchorage)

continued

pro hydro

—In the presence of a shortage of energy, we shouldn't question hydro. (Anchorage)

—Hydro should be used by those who have access to the renewable resource; the fossils should be saved for those who don't have hydro potential. (Anchorage)

—Alaska does have hydro potential; it's clean and we should use it. (Fairbanks)

—Stationary energy requirements should be supplied by large hydro in preference to using coal. (Fairbanks)

—Hydro is the only form of energy other than nuclear that we could look to for the long term. (Fairbanks)

—"The water is all running down hill
—Better get at it—
The gas we can sell; water we can't.
Never seen a hydroproject blow up—just get wet." (25-year Alaskan; Anchorage)

alternatives study

—No need to study nuclear. (Anchorage)

—Conservation should be a priority in any projection of needs, as Alaska has a uniquely large potential for saving in that area. (Anchorage)

—Conservation is less costly than building new project. (Fairbanks)

—Should not consider heating homes with electricity—not efficient. (Anchorage)

power costs

—Reason for developing new energy sources should be lower cost of energy, not attracting new industry. (Talkeetna)

—Fairbanks pays a lot for electricity. (Fairbanks)

opposed to centralized power sources

—Opposed to centralization of energy sources. (Fairbanks)

—Opposed to government controlled centralization of energy sources. (Fairbanks)

TASK 2 SURVEYS AND SITE FACILITIES

- **provide safe, cost effective and environmentally acceptable logistical support for the feasibility studies**
- **conduct topographic surveys of the project area**
- **resolve real estate issues**

ADEQUACY: no table top comments received on adequacy of this section of Plan of Study.

QUESTIONS: three questions included in table top reports:

—Will native lands around dams be purchased at unreasonable prices? (Fairbanks, twice)
—Who owns the land at dam sites? (Fairbanks)
—Will any federal land withdrawals delay dam? (Fairbanks)

VALUES: no values expressed about the work to be done in this section of the Plan of Study.

TASK 3 HYDROLOGY

- **collect data and perform analysis for the hydrologic, hydraulic, ice and climatic factors in project planning and design**

ADEQUACY: seven comments on adequacy of hydrology studies:

F	T	A	TOTAL
0	1	1	2
2	1	1	4
0	0	1	1
			7

Studies should examine effects of large reservoirs on climate.
Studies should examine silting problems both behind dam and in river.
Studies should determine effects of ice break-up on Susitna.
TOTAL

QUESTIONS: no questions on hydrology included in table top reports.

VALUES: no values expressed about the work to be done in the hydrology section of the Plan of Study.

F airbanks T alkeetna A nchorage

TASK 4  SEISMIC STUDIES

- **assess seismic potential of Susitna basin**
- **determine seismic design criteria**
- **evaluate seismic stability of project structures**
- **assess the potential for reservoir-induced seismicity and landslides**

ADEQUACY: four comments on adequacy of seismic studies:

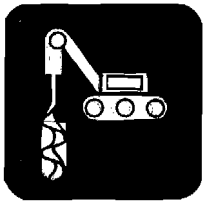
F	T	A	TOTAL
2	0	1	3
0	0	1	1
			4

Studies should include extensive seismic analysis which would continue after June 1982.
Studies should evaluate reliability of current knowledge about the effects of large reservoirs on highly seismic areas.
TOTAL

QUESTIONS: no questions on seismic studies included in table top reports.

VALUES: no values expressed about the work to be done in the seismic section of the Plan of Studies.

F airbanks T alkeetna A nchorage

TASK 5  GEOTECHNICAL EXPLORATION

- **determine the surface and subsurface geology and geotechnical conditions of the project sites**

ADEQUACY: no table top comments received on adequacy of this section of Plan of Study.

QUESTIONS: no questions on geotechnical exploration included in table top reports.

VALUES: no values expressed about the work to be done in the geotechnical section of the Plan of Studies.

TASK 6 DESIGN DEVELOPMENT

- **prepare the optimal plan for Susitna hydroelectric development (includes whether tunnel or dam, number of dams, types, where, size and timing of development if staged)**
- **prepare preliminary engineering and design information for the selected development plan**

ADEQUACY: two comments on adequacy of design development studies:

F	T	A	TOTAL
1	0	1	2
			2

Studies should identify appropriate minimum levels of stream flow during filling of reservoir.

TOTAL

QUESTIONS: three questions included in table top reports:

—How much voltage will be produced by the dam? (Talkeetna)

—What impacts would there be on railbelt communities if there was a major breakdown of Susitna hydro while it was on the line at -60 degrees? (Talkeetna)

—What is the life span of the dam project? (Fairbanks)

VALUES: no values expressed about the work to be done in the design development studies.

F airbanks T alkeetna A nchorage

TASK 7 ENVIRONMENTAL STUDIES

- **collect baseline data**
- **compare alternative plans from an environmental standpoint**
- **assess the socioeconomic, archaeological, historical, land use, recreational, water resource, fish, wildlife, and plant ecology impacts of Susitna development**

ADEQUACY: thirty comments on adequacy of environmental studies.

socioeconomic

F	T	A	TOTAL	
2	1	0	3	Socioeconomic studies should address goals of railbelt.
3	1	1	5	Studies should consider socioeconomic effects of Susitna hydro on railbelt communities.
				Specific concerns mentioned were:
1	0	0	1	—Will the rate of inflation increase like it did during pipeline days?
6	1	1	8	—What will the effects of new industrial development be?
			17	TOTAL

F airbanks T alkeetna A nchorage

continued

	F	T	A	TOTAL	
impact on fish, wildlife, plants	1	1	3	5	Studies should consider impact of fish populations in Susitna River and its tributaries.
	0	0	3	3	Studies should be more thorough and include inventory of plant and animal resources.
	1	0	0	1	Studies should continue for at least one normal animal cycle (a hare cycle is plus or minus ten years).
	2	0	0	2	Studies should consider impact on moose and caribou, particularly in Susitna flat estuary and Beluga calving grounds.
				11	TOTAL
environmental trade-offs	0	0	1	1	Studies should establish guidelines for acceptable environmental tradeoffs.
				1	TOTAL
Susitna as navigable river	1	0	0	1	Studies should evaluate Susitna as a navigable river.
				1	TOTAL

QUESTIONS:

no environmental questions asked during table top discussions.

VALUES:

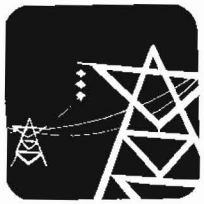
three values expressed related to environmental studies:

wilderness — Alaska has plenty of wilderness areas. (Fairbanks)

industrialization — Opposed to industrialization—keep things the way they are. (Fairbanks)

preserve river as natural system — Susitna is a beautiful, unique river. (Fairbanks)

F airbanks T alkeetna A nchorage

TASK 8  TRANSMISSION

- **select the transmission route**
- **produce conceptual designs for transmission facilities**

ADEQUACY: eight comments on adequacy of transmission studies:

F	T	A	TOTAL
1	0	0	1
0	4	0	4
1	1	0	2
1	0	0	1
			8

Studies should examine negative aspects of intertie.
Studies should identify health hazards of living near transmission lines.
Studies should examine best routes for transmission lines. *(NOTE: "best route" not defined at meetings.)*
Design of transmission lines should accommodate transmission of electricity from variety of sources.
TOTAL

QUESTIONS: three questions included in table top reports:

—Can you live near transmission lines and not receive power? (Talkeetna)
—Why does there need to be new transmission lines if there's already a connecting power line from North Pole to Homer? (Talkeetna)
—Will Cantwell be bypassed? (Fairbanks)

VALUES: two values expressed during table top discussions:

—Build intertie now. (Fairbanks, three times)
—Recommend putting transmission lines along highway and not along railroad—too many people live along railroad. (Talkeetna)

F airbanks T alkeetna A nchorage

TASK 9 CONSTRUCTION COST ESTIMATES AND SCHEDULES

- **develop cost estimates for the Susitna project**
- **prepare detailed engineering and construction schedules**
- **conduct risk analysis of all possible things that could affect cost overruns**

ADEQUACY: no table top comments received on adequacy of this section of Plan of Study.

QUESTIONS: one question included in table top reports:

—Is there a minimum acceptable benefit/cost ratio that will permit construction of the project? Will cost overruns be somehow included in contingency factor? (Anchorage)

VALUES: no values expressed about the work to be done in this section of the Plan of Study.

TASK 10  LICENSING

- **prepare and assemble all documentation for the license application to the Federal Energy Regulatory Commission (FERC)**

ADEQUACY: no table top comments received on adequacy of this section of Plan of Study.

QUESTIONS: one question included in table top reports:

—If the state of Alaska funded a significant (major) portion of this project, would federal environmental guidelines need to be followed and met? (Anchorage)

VALUES: one value expressed during table top discussions:

—Our consensus is that federal intervention is necessary to speed up the time frame of the project—to save real dollars and eliminate possible brownout. (Anchorage)

TASK 11  MARKETING AND FINANCING

- **assess methods of financing the Susitna project**
- **prepare draft support documentation for bond offering, including risk analysis**

ADEQUACY: four comments on adequacy of marketing and financing studies:

F	T	A	TOTAL
1	0	0	1
0	0	1	1
1	0	0	1
0	0	1	1
			4

Studies should determine costs of Susitna hydroelectric development.
Studies should determine whether or not Susitna project is economically feasible in a traditional sense (without big state inputs).
Studies should evaluate whether state can afford to finance both gas pipeline and Susitna hydro.
Financial studies should be delayed until conclusion of all other studies.
TOTAL

QUESTIONS: no questions on marketing and financing included in table top reports.

VALUES: no values expressed about the work to be done in the marketing and financing section of the Plan of Study.

F airbanks T alkeetna A nchorage

TASK 12  PUBLIC PARTICIPATION

- **keep the public fully informed of plans, progress and findings**
- **provide a means whereby the public can influence the course of the work**

ADEQUACY: fourteen comments on adequacy of public participation program:

	F	T	A	TOTAL	
information *to* the public	1	0	3	4	Need to educate public better. Suggestions included T.V., radio, attending community council meetings, using shopping center displays, and finding ways to reach persons who are unable to attend meetings (such as those in Pioneer Home).
	0	0	3	3	Preliminary reports should be available to public prior to community meetings and decision times.
	0	0	1	1	Final reports should be concise and easy to read.
				8	TOTAL
input *from* the public	0	0	3	3	Public needs more input—more time to speak at meetings.
	0	0	3	3	Public needs to know *how* their comments influence decisions; 2 or 3 comments expressed doubt that public comment has *any* affect on decisions.
				6	TOTAL

F airbanks T alkeetna A nchorage

continued

QUESTIONS: one question on the public participation program included in table top reports:

—Will the issue be brought up to a public vote? Possibility of making it so? (Fairbanks)

VALUES: five values expressed about the public participation program:

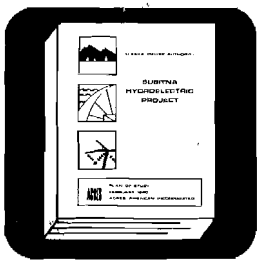
—Governor appoints Alaska Power Authority Board, yet input of Acres and public goes to Board. (Talkeetna)

—Four comments were included on the April 1980 community meetings:

- —Slide shows should have more numbers, fewer cartoons. (Fairbanks)
- —Slide show was clear, informative. (Fairbanks)
- —Rather than break for table top discussions, would have preferred you continue with written questions. (Anchorage)
- —The handout on alternatives did not emphasize alternatives enough. (Anchorage)

APPENDIX B: COMPLETE LIST OF QUESTIONS

Following is a complete list of written questions submitted at the meetings. They are organized by TASK in the same manner as the original Plan of Study document.



GENERAL QUESTIONS ON THE PLAN OF STUDY

use of past data

1. What's become of past data? Is it available? Will it be used? (Wasilla)
2. What additional information could possibly be needed after all the work that's been done? (Wasilla)

cost of feasibility studies

1. What is the total amount of the contract with Acres American, Inc.? (Anchorage)

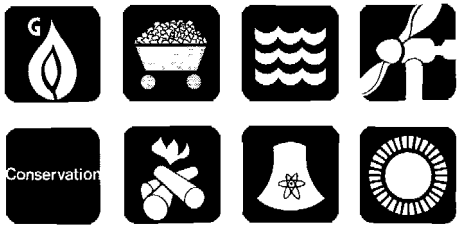
exchange of information

1. Are there any avenues for exchange of information between Acres American, Inc. and engineering firms which have completed large earth or concrete dams in other Arctic locations—such as in Scandinavia or Siberia? (Talkeetna)

UNANSWERED QUESTION *(in Anchorage this was not answered because of time and the very large number of written questions submitted)*

title of plan of study

1. Doesn't the title of the project, "Hydroelectric Feasibility Study," give the false assumption on the part of the general public that the study is not on all or many different power alternatives? Why was it named this?

TASK 1  POWER STUDIES

- **determine the need for power generation facilities in the railbelt**
- **consider and evaluate all viable alternatives for satisfying the need**

general on alternatives

1. Can you outline top three alternatives? (Wasilla)
2. Will anybody evaluate employment opportunities provided by different alternatives, both immediate and long term? (Fairbanks)

budget for alternatives

1. How much money is in the budget for alternatives? (Talkeetna)
2. How much money is being spent on Susitna feasibility study? By contrast, how much is being spent on the alternative feasibility studies? (Anchorage)
3. How much of the study plan's budget will be spent on identifying and evaluating alternatives? What percentage? (Fairbanks)

who is studying alternatives?

1. Who exactly is studying alternatives to Susitna? (Talkeetna)
2. Please clarify who is doing the alternatives investigation and when results will be available? (Anchorage)

continued

decentralized vs. centralized power

1. Will Category 'B' on the lavender sheet attempt to quantify and/or compare the risks (costs and otherwise) of a centralized source of power as opposed to decentralized sources? Will this take into account the cost of necessary backup (standby) systems? (Anchorage)
2. Considering the immensity and high cost of this project and the favorability of local decentralized power sources (wind and solar), what kind of assurance can you give that these alternatives will receive proper consideration? (Fairbanks)

Susitna hydro

1. Is there really an alternative better than Susitna? No need to look at alternatives. (Wasilla)

how Susitna power used

1. What are the uses envisioned for Susitna electricity? Space heat for residences, industry, transportation? (Anchorage)
2. What is the purpose of the Susitna project? To provide power for increased population? residential use? provide power for industrial development and expansion? to create jobs? other? (Anchorage)
3. Would you anticipate total electrification of the railbelt area, i.e. power substations for smaller communities which are currently without commercial electricity? (Fairbanks)

other hydro

1. Will Acres American, Inc. evaluate the 64 potential hydro sites identified by the federal government in southcentral and interior Alaska? In what detail? (Fairbanks)
2. What are other possible hydro sites (outside the railbelt)? (Wasilla)
3. What other hydro sites are being studied? (Talkeetna)

tidal

1. Is tidal power feasible for Anchorage? (Talkeetna)
2. Is the Cook Inlet tidal power project an alternative which could be considered competitive in cost with Susitna? (Anchorage)

continued

other alternatives

1. I understand there are questions concerning the availability of NATURAL GAS. How long will natural gas from Beluga and the Kenai Peninsula last? (Anchorage)
2. What has been done with the in-state GAS line idea and study of Bonner and Moor? (Fairbanks)
3. Why is the SOLAR alternative limited to centralized electrical generating units? (Anchorage)
4. What is the role of SOLAR residential applications (specifically, active and passive systems in new and existing housing stock)? (Anchorage)
5. With regard to WOOD, will the residential space heat potential be assessed (i.e. wood used in wood stoves as opposed to being burned in a generator)? (Anchorage)
6. Are studies of alternatives limited to a specific geographic area (i.e. railbelt)? GEOTHERMAL may not be a viable alternative for the railbelt but perhaps in the Copper River basin it would be. (Anchorage)
7. Will CONSERVATION, our #1 alternative, be tested extensively through application in existing facilities, or alternatively, will more efficient design be considered? (Anchorage)
8. Among the conservation measures considered, will direct LOAD CONTROL techniques and innovative rate structures be considered as a means of conserving generating capacity? (Anchorage)

costs of Susitna to consumer

1. I understand that Susitna power will be equal to $80/barrel of oil. Comment? (Fairbanks)
2. Whatever happened to the Rampart dam proposal? Is Susitna more cost effective? (Wasilla)
3. Will the Susitna project be economically viable? (Fairbanks)
4. If the federal government won't foot the construction bill, will power from Susitna (including transmission line costs) cost more than using natural gas in gas turbine, combined cycle power plants? (Fairbanks)

continued

costs of alternatives to consumer

1. Do you have any estimated costs on the alternatives? (Wasilla)

energy forecasts

1. What are power use trends in Alaska relative to nationwide trends? (Wasilla)
2. How have past population and power usage projection figures been formulated? (Talkeetna)
3. How will future population and power usage figures be formulated? (Talkeetna)
4. How are future energy projections determined? Is social opinion considered in making these projections? (Talkeetna)
5. How will we insure that our energy need projections will not be exaggerated? (Anchorage)
6. Doesn't a large forecast of energy become a self-fulfilling prophecy and be an invitation to industry to come in? (Wasilla)
7. Will the Susitna hydroelectric project produce excess energy? (Wasilla)
8. If the dam is to provide power for increased population—where are the people going to come from and what will they be doing? Hasn't population declined? (Anchorage)
9. Are energy load forecasts ready? Figures ready? (Wasilla)
10. What is the background for the Institute of Social and Economic Research (ISER)? Is it private? Is it funded? How long in Alaska? (Talkeetna)
11. Is anyone from ISER here? Their demand projections seem crucial and subject to conscious or unconscious bias. (Fairbanks)
12. ISER mentioned six consumer categories—half were industrial categories. Why the emphasis on *industrial use?* (Talkeetna)

how decisions made

1. Will the go/no go decision be made by the legislature or by a general voting opportunity? (Anchorage)
2. Will social and environmental factors be a part of the criteria for determining feasibility, or will cost be the only criteria? (Wasilla)

continued

power studies, *continued.*

timing of decisions

1. Why conduct detailed Susitna studies before alternative studies are complete? (Wasilla)
2. Why aren't considerations of environmental impacts involved in the first go/no go decision? Necessary environmental studies will not be completed in time for this important decision. (Fairbanks)
3. Will any decisions regarding Susitna (go/no go) be made before 1982? Or will phase I study results precede any decision at all? (Fairbanks)
4. Why is the decision schedule so long and drawn out? Considering the vast amount of studies already done, can't this process be expedited? (Fairbanks)
5. Why is the go-ahead decision being made in February 1981 before the seismic studies are done? (Talkeetna)

objectivity of Acres American

1. Acres American, Inc. seems to have a history of dam building proposals. Therefore I sense a predisposition to seeing Susitna as the only viable alternative. I would like Acres American, Inc. to tell in detail what past research they have done on alternatives to large-scale hydro? Has Acres American, Inc. ever done a study and decided a dam wasn't the best alternative? (Anchorage)
2. Can Acres American, Inc. be an advocate of such alternatives? (Anchorage)
3. We have seen many impressive slides of hydro projects in which Acres American, Inc. has been involved. What experience has Acres American, Inc. had in less imposing alternative energy sources such as solar and retrofitting of energy-saving alternatives? Have they been advocates for any alternatives? (Anchorage)
4. Acres American, Inc. has done feasibility studies on other dams. What percentage were actually built? (Talkeetna)
5. Isn't it in the financial interest of Acres American, Inc. to give a 'go' signal at the go/no go decision point? How can Acres American, Inc. be objective at this point? Who will review them? (Fairbanks)
6. Question to Acres American, Inc.: based on previous experience, what are the odds as you estimate them now that the study will be positive for hydro construction? (Fairbanks)

objectivity of Alaska Power Authority

1. Does the Alaska Power Authority have a vested interest in the project? i.e. How would your agency and you as individuals be affected by cancellation of the project? (Anchorage)

continued

UNANSWERED QUESTIONS *(in Anchorage these were not answered because of time and the very large number of written questions submitted)*

general on alternatives

1. What types of power sources is the APA studying besides hydro?
2. Concerning "parameters for evaluating alternatives": Where will you look at the (1) environmental quality and (2) socioeconomic opportunity costs of present or probable future uses of resources affected?
3. Will assessment of alternatives take into account the "state of the art" in 1990 as well as projected "cost" or "need"?

who is studying alternatives

1. What sort of experts will be employed in evaluating the alternatives, such as conservation, solar, and wind?

decentralized vs. centralized

1. How can the value and advantages of a decentralized system be realistically compared to a centralized system? A specific area of concern is the reliability of a large centralized system.

how Susitna power to be used

1. What is the potential power output of the Susitna project as it is now envisioned?
2. Will the dam meet all of Anchorage area energy needs?
3. For how many years will the Susitna Dam project (assuming Watana and Devils Canyon dams are built) be sufficient for our energy needs? I understand the Corps did a study showing that the dams will carry our energy load for only a few years. Then new sources will be needed to supplement.

industrial growth

1. I have heard conflicting justification for the second dam (Watana). Can you clarify what the purpose is for Watana: either additional storage or for anticipated industrial growth, or something else?
2. Will the dam cause heavy industry?

continued

power studies, *continued.*

other alternatives

1. Will you clarify passive solar and wood burning for heat?
2. Explain "additional aspects" under *wind power* on pink page 2 Power Alternatives?
3. To what degree is the possible reduced demand in electricity resulting from alternatively promoting conservation measures being studied?
4. What consideration is given to economic uses of waste heat from thermal generation plants (industrial, residential, agricultural, etc.) in the study?

cost of Susitna to consumer

1. How many barrels of oil to produce an equivalent amount of electricity? of coal?

energy forecasts

1. Bucky Fuller made a speech in Anchorage in December 1979 and discussed his prediction regarding Alaska's future. Will these comments be used in your energy forecasting efforts?

how decisions made

1. It appears that alternate energy advocates are continually voicing objection to this and other hydro projects without credible alternatives. How does the Alaska Power Authority intend to make a *final* decision determination in order to prevent this project's being its life's work?

timing of decisions

1. How much time will there be between completion of the "project overview" and the go/no go decision?

objectivity of Acres

1. Question to Acres American, Inc.—Given the strong political support for the Susitna project, how seriously do you believe other viable alternatives will be considered?
2. Robert Mohn stated that Acres American, Inc. and Woodward Clyde would study the power alternatives (i.e. coal-fired generation). Doesn't it seem a conflict since Acres American, Inc. was hired to study a dam proposal and their experience is designing dams?

experience of Acres

1. Aside from hydroelectric projects in the north and elsewhere, what other energy developments has Acres American, Inc. been in charge of or involved with?
2. How many coal-fired plants has Acres American, Inc. designed?

TASK 2 SURVEYS AND SITE FACILITIES

- **provide safe, cost effective and environmentally acceptable logistical support for the feasibility studies**
- **conduct topographic surveys of the project area**
- **resolve real estate issues**

land ownership

1. Who owns the land at the dam sites and upriver in the reservoir areas? (Wasilla)

road access

1. What are the probable access routes? primary roads? secondary roads? (Talkeetna)
2. How will route selections for road access be made? (Wasilla)

airport access

1. Where would the runway be located and what size would it be? (Wasilla)

UNANSWERED QUESTIONS *(in Anchorage these were not answered because of time and the very large number of written questions submitted)*

road access

1. At what stage of the planning process will a road be built to the construction site?
2. When is actual construction of road access?
3. What about roads and access?
4. If the dam(s) were constructed, how would the workers, officials, and general public gain access to the site(s) or to any developed recreational facilities or areas?
5. Once the right-of-way for the road has been established, will it be open for public use?

TASK 3 HYDROLOGY

- **collect data and perform analysis for the hydrologic, hydraulic, ice and climatic factors in project planning and design**

No questions were asked in Fairbanks, Talkeetna and Wasilla.

UNANSWERED QUESTIONS *(in Anchorage these were not answered because of time and the very large number of written questions submitted)*

climate	1. Are there studies on the effects of large reservoirs on climate throughout the Susitna River area?
ice	1. What types of studies are being planned to estimate the impact and problems of potential additional ice formation and icing problems in the lower reaches of the Susitna River (from Talkeetna to the mouth) and in Cook Inlet?

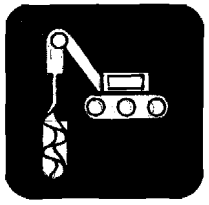
TASK 4  SEISMIC STUDIES

- **assess seismic potential of Susitna basin**
- **determine seismic design criteria**
- **evaluate seismic stability of project structures**
- **assess the potential for reservoir-induced seismicity and landslides**

general	1. What will two years of seismic monitoring tell us? (Talkeetna) 2. What is the maximum size quake that would preclude building a dam? (Wasilla)
faults	1. Where does the Susitna fault lie? (Fairbanks) 2. How close is the Susitna fault to the dam sites? (Fairbanks) 3. How would major seismic activity on the Susitna fault affect the dams? (Fairbanks)
dam failure	1. What would be the consequences if the dam broke? (Wasilla)

UNANSWERED QUESTION *(in Anchorage this was not answered because of time and the very large number of written questions submitted)*

reservoir induced earthquake	1. How does a large dam induce earthquakes?

TASK 5  GEOTECHNICAL EXPLORATION

- **determine the surface and subsurface geology and geotechnical conditions of the project site**

soils assessment

1. What soils assessment will be conducted? (Wasilla)

mineral resource assessment

1. Will the Plan of Study undertake detailed mineral resource assessments? Concern that significant deposits not become inaccessible. (Wasilla)

TASK 6 DESIGN DEVELOPMENT

- **prepare the optimal plan for Susitna hydroelectric development (includes whether tunnel or dam, number of dams, types, where, size, and timing of development if staged)**
- **prepare preliminary engineering and design information for the selected development plan**

size of reservoir

1. How large would the lake be? (Wasilla)
2. How many miles long would the reservoirs be? (Wasilla)
3. How wide would the reservoir be? (Wasilla)

employment potential

1. How many people would the dam employ? (Wasilla)
2. What is the maintenance level of employment on the Susitna project? (Wasilla)

tunnel alternative

1. Explain the tunnel alternative: the cost, time, head, environment. (Fairbanks)
   (Head: vertical drop from top of tunnel to bottom of tunnel.)

UNANSWERED QUESTION *(in Anchorage this was not answered because of time and the very large number of written questions submitted)*

how design for ice

1. How do you get power from the dam when the river is frozen?

TASK 7 ENVIRONMENTAL STUDIES

- **collect baseline data**
- **compare alternative plans from an environmental standpoint**
- **assess the socioeconomic, archaeological, historical, land use, recreational, water resource, fish, wildlife, and plant ecology impacts of Susitna development**

Talkeetna local hire

1. Will there be more inclusion of local labor in the study? Many skilled, able and willing are unemployed here. (Talkeetna)
2. I would like to know what efforts are being made toward local hire of workers for this study? Local hire is good public relations. (Talkeetna)
3. To what extent is Alaskan hire involved in present feasibility work and if it is a go decision, what process will be used to hire skilled and unskilled laborers? (Talkeetna)
4. Could a Talkeetna-based job service roster be established on a preferred basis to fill Acres American, Inc. positions? (Talkeetna)

recreational benefits of lake

1. What possible benefits would the lake have? (Wasilla)

continued

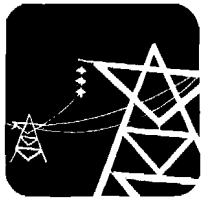
UNANSWERED QUESTIONS *(in Anchorage these were not answered because of time and the very large number of written questions submitted)*

environmental objectivity

1. The Department of Fish and Game is a state agency and so is the Alaska Power Authority. Both agencies are subject to the same bureaucratic pressures. Acres American, Inc. has been successful in getting dams built! Their job is to *satisfy* licensing requirements. Where does the objectivity for studying and reporting environmental impact come from?

Alaskan hire

1. How many Alaskans will be employed?
2. How big a *non*-Alaskan staff will be working on the plan of study? 10%, 30%, or 50%? How much of this report will be done outside the state of Alaska? 10%, 30% or 50%?
3. How much money will not go directly to Alaskans?

TASK 8  TRANSMISSION

- **select the transmission route**
- **produce conceptual designs for transmission facilities**

health impacts

1. In the report it stated that "transmission corridors will also be studied for environmental compatibility." Does this mean that the same type of transmission lines and towers that are now operating elsewhere will be studied as to the impact they have on the health of the people who live near them? (Talkeetna)

route selection

1. At this time what are alternative transmission corridors? (Talkeetna)
2. Do the transmission corridors encroach upon open-to-entry land in this area? (Talkeetna)
3. How will transmission route selection be done? (Wasilla)

intertie

1. Would an intertie between Anchorage and Fairbanks be of value at this time, before completion of studies? (Fairbanks)

TASK 9 CONSTRUCTION COST ESTIMATES AND SCHEDULES

- **develop cost estimates for the Susitna project**
- **prepare detailed engineering and construction schedules**
- **conduct risk analysis of all possible things that could affect cost overruns**

costs	1. If two dams are constructed, what will be the cost of concrete, rebar, and temporary damming or channeling of the river? (Fairbanks) 2. SB 295: are these costs an accurate estimate? (Wasilla) 3. In the figure $4.3 billion: have cost overruns been considered? (Wasilla) 4. Have you looked at the pipeline history of cost overruns? (Wasilla)
timing	1. If all goes to plan, when would the first phase of the dam be operational? (Wasilla) 2. When would construction begin? (Anchorage)
transportation for construction	1. What kind of transportation would be used for construction activities? (Wasilla)

continued

construction cost estimates and schedules, *continued.*

UNANSWERED QUESTIONS *(in Anchorage these were not answered because of time and the very large number of written questions submitted)*

costs

1. How many barrels of oil will it take to build the Susitna dam?
2. What is the present estimated total cost of this project?
3. Aside from the direct cost of studies, what are the costs of escalation during the study period, i.e. what would be the cost of an extra year of studies?

timing

1. Based on long drawn out issuance of a FERC license, when will the first kilowatt of electricity leave the dam site?
2. Present generating facilities have fairly definite replacement dates. How well does the proposed Susitna construction schedule fit those replacement schedules?

fast tracking the Susitna project

1. What are the procedures for placing the Susitna hydroelectric development on the federal "fast track" (the Energy Mobilization Board) assuming one is established?

TASK 10  LICENSING

- **prepare and assemble all documentation for the license application to the Federal Energy Regulatory Commission (FERC)**

Why FERC review

1. Why does FERC have to review a license application to construct Susitna? (Fairbanks)

TASK 11  MARKETING AND FINANCING

- **assess methods of financing the Susitna project**
- **prepare draft support documentation for bond offering, including risk analysis**

public or private funds

1. Would public or private entity finance, construct, and operate the Susitna dam? (Wasilla)
2. What state involvement would there be in the Susitna project? (Wasilla)

UNANSWERED QUESTIONS *(in Anchorage these were not answered because of time and the very large number of written questions submitted)*

financing

1. What are the financing options for the dam (7.5% or what?)
2. How will the Susitna project be financed? Bond issue? State sales tax?
3. What would the pro rata share for the federal government be?
4. What would the pro rata share for the state government be?

ownership of project

1. As the project is now proposed, will other utilities have the opportunity for participation as joint owners or will the project be 100% state funded?
2. Is the Alaska Power Authority willing to allow other utilities to purchase a portion of the total project?

TASK 12  PUBLIC PARTICIPATION

- **keep the public fully informed of plans, progress and findings**
- **provide a means whereby the public can influence the course of the work**

weight given to public input

1. What weight will be placed on public input in the evaluation process? (Talkeetna)

future workshops

1. The first workshop was scheduled for May 1980 in the Plan of Study. When is it now scheduled? Will it be advertised? (Wasilla)

citizens' advisory board

1. Is there an ongoing citizens' review and advisory board or citizens' review of each independent study? (Anchorage)

UNANSWERED QUESTIONS *(in Anchorage these were not answered because of time and the very large number of written questions submitted)*

meeting location

1. Why was this meeting held here rather than at a more central location that was more accessible to public transportation?

Kenai area public hearing

1. Why has the Kenai area been eliminated from having its own public hearing? Environmental impacts of this project on salmon resources may affect the available harvest allocated to this area.

MISCELLANEOUS QUESTIONS

Acres relationship to Corps of Engineers

1. What is the relationship between your proposed study and the Environmental Impact Statement, Upper Susitna River Basin, Southcentral Railbelt Area, Army Corps of Engineers? (Talkeetna)
2. What is the relationship of Acres American, Inc. to the Corps of Engineers or vice versa? (Talkeetna)

how Acres selected

1. How was Acres American, Inc. selected as the prime consultant for the study? (Anchorage)

who would build dam?

1. Who would build the actual dam if Acres American, Inc. okays feasibility? Would Acres American, Inc. build it? (Talkeetna)

who is the Alaska Power Authority?

1. With a change in administration (i.e. governor and legislature) what effect would there be on the Power Authority? (Fairbanks)
2. By what authority is the Power Authority established? (Wasilla)
3. What is the purpose of the Alaska Power Authority? Why does it exist? (Anchorage)

who appoints advisory board?

1. Who will make the appointments to the $1 million Advisory Board? (Anchorage)

other

1. HB 967—what is MEA's Project? (Wasilla)
2. One slide John Lawrence showed states that manpower of Acres American, Inc. would peak at 45. This figure seems low. Is it correct? (Anchorage)

UNANSWERED QUESTIONS *(in Anchorage these were not answered because of time and the very large number of written questions submitted)*

1. If additional areas are requested for study by the Alaska Power Authority, Acres American, Inc. will be paid more money. Is there any chance that payroll could be reduced if the Power Authority weeded out some of the unnecessary study items?
2. Over the next 10 years, how much money will be spent per year?

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The following individuals assisted in conducting the community meetings and in the preparation of this report.

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The Public Participation Program of the Alaska Power Authority is funded by the State of Alaska.

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