HB

237

HOUSE COMMITTEE REPORT

(9)
Date Referred: March 22, 1989 FURTHER REFERRALS: FINANCE

Date of Committee Action: 4-9-90

The RESOURCES Committee considered: HB 237

HOUSE BILL NO. 237 [APPROP: HEALY COGENERATION PROJECT]
"An Act making a contingent appropriation to the Alaska Industrial Development and Export Authority for the Healy cogeneration project; and providing for an effective date."

RECOMMENDATIONS:
[X] be replaced with CS HB 237 (RES) [ ] the same title [ ] a new title
[ ] have attached amendment(s)
[X] do pass
[ ] do not pass
[ ] no recommendation
[ ] individual recommendations
[ ] additional referral to the _____ Committee

ADOPTS: _____ letter of intent

ATTACHES NEW FISCAL NOTE(s): (Dept)
[ ] fiscal impact _____
[ ] zero fiscal note _____
[ ] zero with analysis _____

APPROVES PREVIOUS: (Date/Dept)
[ ] fiscal note(s) _____
[ ] zero fiscal note(s) _____
[ ] zero fn/analysis _____

SIGNING DO PASS:

MENARD
SHARP
FURNACE
FOSTER

SIGNING: (Check approp. column)

	Do Not Pass	No Rec	Amend
DAVIDSON			
HUDSON		✓	

Chairman's Signature

6-0996Ea
Cramer/
Utermohle

A M E N D M E N T

OFFERED IN THE HOUSE BY REP. BOYER

TO: HB 237

Page 1, line 6:

Delete "contingent"

Insert "special"

Page 1, lines 11 - 24:

Delete all material.

Insert new bill sections to read:

"* Section 1. FINDINGS AND INTENT. The legislature finds that the Alaska Industrial Development and Export Authority has included the amount of interest expected to be earned on the $30,000,000 appropriated in sec. 2 of this Act when computing the financial feasibility of the Healy cogeneration project. It is the intent of the legislature that the Department of Revenue transfer the $30,000,000 appropriated in sec. 2 of this Act to the Alaska Industrial Development and Export Authority on July 1, 1990, or immediately thereafter.

* Sec. 2. The sum of $30,000,000 and the interest earned on that sum beginning on July 1, 1990, are appropriated from the Healy cogeneration project reserve in the Railbelt energy fund (AS 37.05.530) in the general fund to the Alaska Industrial Development and Export Authority for the design and construction of the Healy cogeneration project.

Page 1, line 26, after "AS 37.25.020" through line 29:

Delete all material except the period.

Page 2, line 1:

Delete "1989"

Insert "1990"

Adjust funding information accordingly.

Alaska State Legislature

REPRESENTATIVE
MARK BOYER

VICE-CHAIRMAN, HOUSE
HEALTH, EDUCATION AND
SOCIAL SERVICES COMMITTEE

MEMBER, HOUSE LABOR AND
COMMERCE COMMITTEE

CHAIR, CHILDREN'S CAUCUS

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House of Representatives

February 8, 1990

Dear Colleagues:

As you will recall, during the last legislative session we segregated $30 million within the Railbelt Energy Fund as a contingent appropriation for the construction of a coal co-generation power plant at Healy.

The contingencies to that appropriation were: that draft power sales agreements be in place before the effective date of the actual appropriation; that other funds, especially federal funds would be available to the project of at least $30 million; and that a financial plan for the project be available to the legislature.

Since that time, the federal Department of Energy priorities have refocused on clean coal burning and power generating processes which resulted in a revised Healy project and the allocation of $92.3 million for that project from the Clean Coal Technology grant program. The federal allocation would go to the Alaska Industrial Development and Export Authority which is currently developing a full financial plan to be presented to the legislature in March. Additionally, AIDEA and the Alaska Energy Authority are working with the Golden Valley Electric Association and the Usibelli Coal Company to develop draft power sales agreements. by March.

I am introducing the attached authorization legislation to foster the discussion regarding the project. It is my hope that with the introduction of this legislation that we will be able to have early hearings on the technical aspects of the project as well as a full discussion of the impact of the project on railbelt consumers.

If we are to reappropriate monies from the Railbelt Energy Fund this session, is is my firm belief that legitimate energy projects be funded before any other uses of the fund.

Your interest in and co-sponsorship of this legislation will be appreciated.

Mark Boyer

FAIRBANKS 20B

USIBELLI COAL MINE
PRELIMINARY RESULTS
FEBRUARY 2, 1990

Feb bill file

*** And how many years have you lived in Alaska?

Less than one year (-1)	2%
Since 1984 (1-4)	9%
Since 1979 (5-9)	15%
Since 1974 (10-14)	16%
or since 1973 or before (15+)	58%

1. Overall, which source of power to generate electricity do you support the most for this area? (READ AND ROTATE)

Natural gas	34%
Oil and diesel	10%
Hydro-electric	33%
Coal	8%
Wood	1%
Solar	5%
Nuclear	2%
COMBINATION OF ABOVE	3%
OTHER _____	
UNSURE	3%

2. As far as air pollution is concerned, how would you rate natural gas as a way to generate large amounts of electrical power -- very clean, quite clean, not too clean or not at all clean?

Very clean	31%
Quite clean	44%
Not too clean	9%
Not at all clean	2%
UNSURE	15%

3. ...and what about coal using current, modern technology, how would rate it as a way to generate large amounts of electrical power...

Very clean	7%
Quite clean	29%
Not too clean	31%
Not at all clean	18%
UNSURE	15%

*** OK, before I ask the next question, I'll read some background information: Under its clean coal technology program, the U.S. Department of Energy has offered to pay approximately half the total cost of building a new, coal-fired power plant at Healy, Alaska, which is about halfway between Anchorage and Fairbanks. The Healy project was selected because it will use clean-burning technology and low-sulphur coal, and may become the cleanest coal-burning plant in the world.

4. Do you basically support or oppose the idea of developing a high-technology, clean-burning, coal-fired power plant?

Support	81%
Oppose	11%
UNSURE	8%

5. If constructed, the Healy project could bring world-wide attention to clean burning coal technology and Alaska's large reserves of clean coal. How important is this to Alaska?

	Very important	61%
	Somewhat important	28%
	Not too important	5%
or	Not at all important	3%
	UNSURE	3%

6. While electricity generated by the proposed Healy plant will be mainly used in the northern railbelt region, the plant could also provide power to the Anchorage area and Kenai peninsula communities during power outages and other emergencies. How important is this to you?

Very important	33%
Somewhat important	32%
Not too important	21%
Not at all important	11%
UNSURE	3%

7. The 230 million dollar Railbelt Energy Fund was created by the Alaska legislature to help provide low-cost power to railbelt communities from Kenai to Fairbanks. Last year the state legislature reserved 30 million dollars from the Railbelt Energy Fund for the Healy project if it was selected for the clean coal program. Now that Healy has been selected, do you feel the legislature should or should not grant the 30 million dollars that was set aside for the project?

Should	79%
Should not	9%
UNSURE	12%

8. Would you still say the state "should not" grant the 30 million dollars if that caused the cancellation of the project?

Yes, still say "should not"	82%
Change mind and support	4%
UNSURE	14%

9. What do you feel the Railbelt Energy Fund should be used for? (PROBE: Which kind of projects, if any?)

First mention	Hydro-electric power	15%
Second mention	Education	12%
Third mention	Money to gen'l revenue fund	12%

**More detailed responses will be provided in the Verbatim Comments section of the report.

10. One of the organizations which is involved in providing fuel for electrical power in Alaska is Usibelli Coal Mine. Please tell me whether you have heard of them or not, and if you have, whether you have a favorable or non-favorable opinion of Usibelli Coal Mine?

	Favorable	51%
	Unfavorable	2%
(DON'T READ)	HEARD OF/UNSURE/NEUTRAL	20%
	Never heard of	27%

11. Which age group do you fit into ... I come to your age group.

18-24 years	[illegible]
25-40 years	43%
41-55 years	33%
56 years plus	18%

12. Sex (by observation)

Male	50%
Female	50%

13. Do you work for the Federal, state or local government, or do you work for a private company?

Federal	9%
State	9%
Local/school district	9%
Private company	52%
NOT WORKING	21%

14. When you registered to vote, did you register as a democrat, republican, or non-partisan?

Democrat	22%
Republican	29%
Non-Partisan	42%
NOT REGISTERED	7%

HEALY COGENERATION PROJECT

PROJECT HISTORY

1988

* 150 MEGAWATT CONCEPT
  -TECHNICAL EVALUATION
* MARKET ANALYSIS
  -POWER & COAL
* 50 MEGAWATT CONCEPT
  -PRELIM. FEASIBILITY

1989

* PROJECT RESERVE BY
  STATE LEGISLATURE
* PROPOSAL TO DOE

PROJECT PARTICIPANTS
HEALY POWER PROJECT

M0290113

• Alaska Industrial Development and Export Authority	AIDEA
• Golden Valley Electric Association, Inc.	GVEA
• Joy Technologies, Inc. and Niro Atomizer	JOY
• Stone & Webster Engineering Corporation	SWEC
• TRW Combustion Business Unit	TRW
• Usibelli Coal Mine, Inc.	UCM

DOE CLEAN COAL III

OBJECTIVES

* REDUCE ACID RAIN PRECURSORS (SO_x & NO_x)
* REDUCE U.S. - CANADA AIR POLLUTION
* COMMERCIALIZE CCT's
  - RETROFIT
  - REPOWER
  - NEW COAL-BASED ELECT. GENERATION

DOE CLEAN COAL III

FUNDING

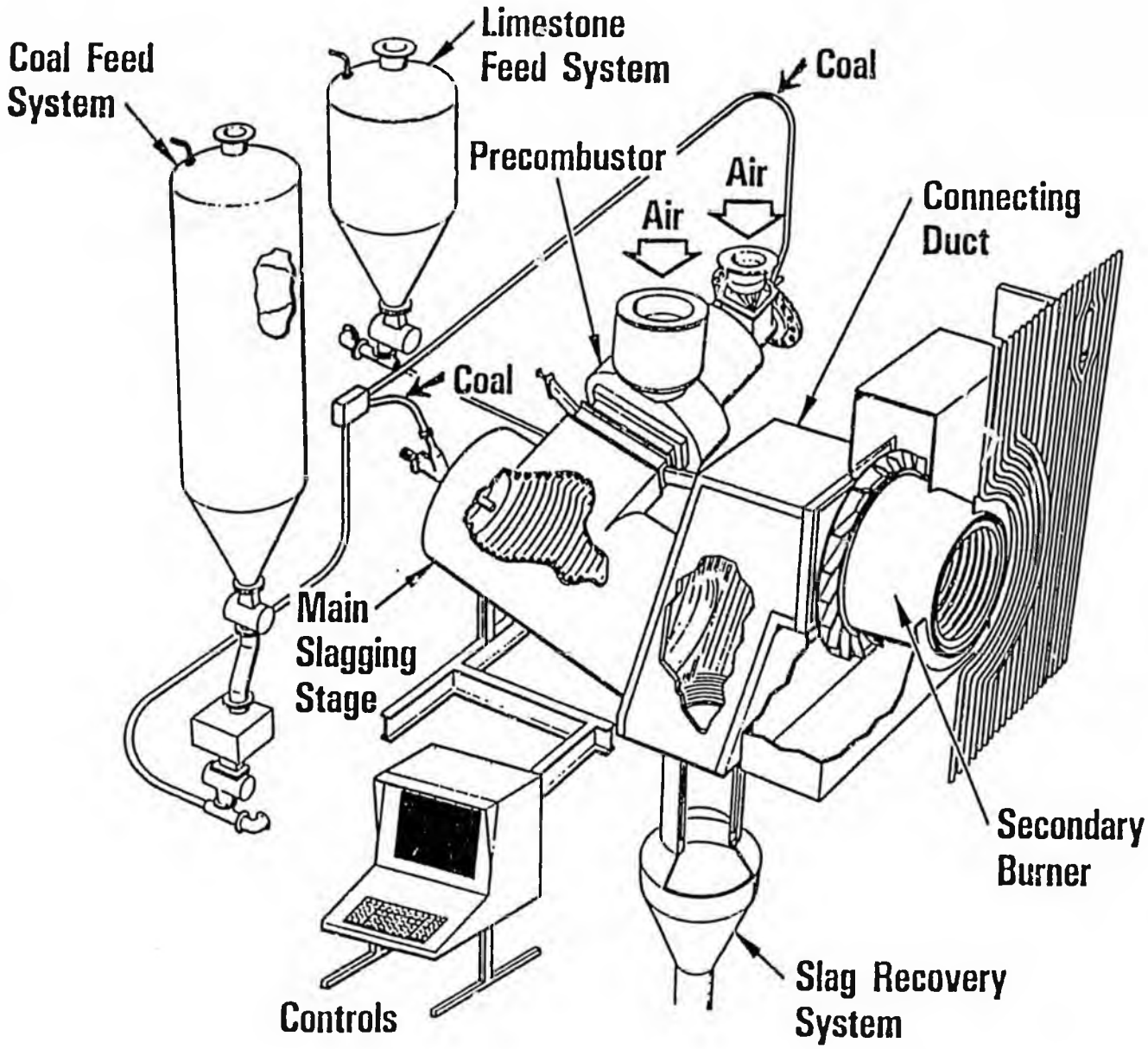
ROUNDS I & II	$973 MILLION
ROUND III	$575 MILLION
ROUNDS IV & V	$1,200 MILLION
	$2,748 MILLION

TECHNOLOGIES

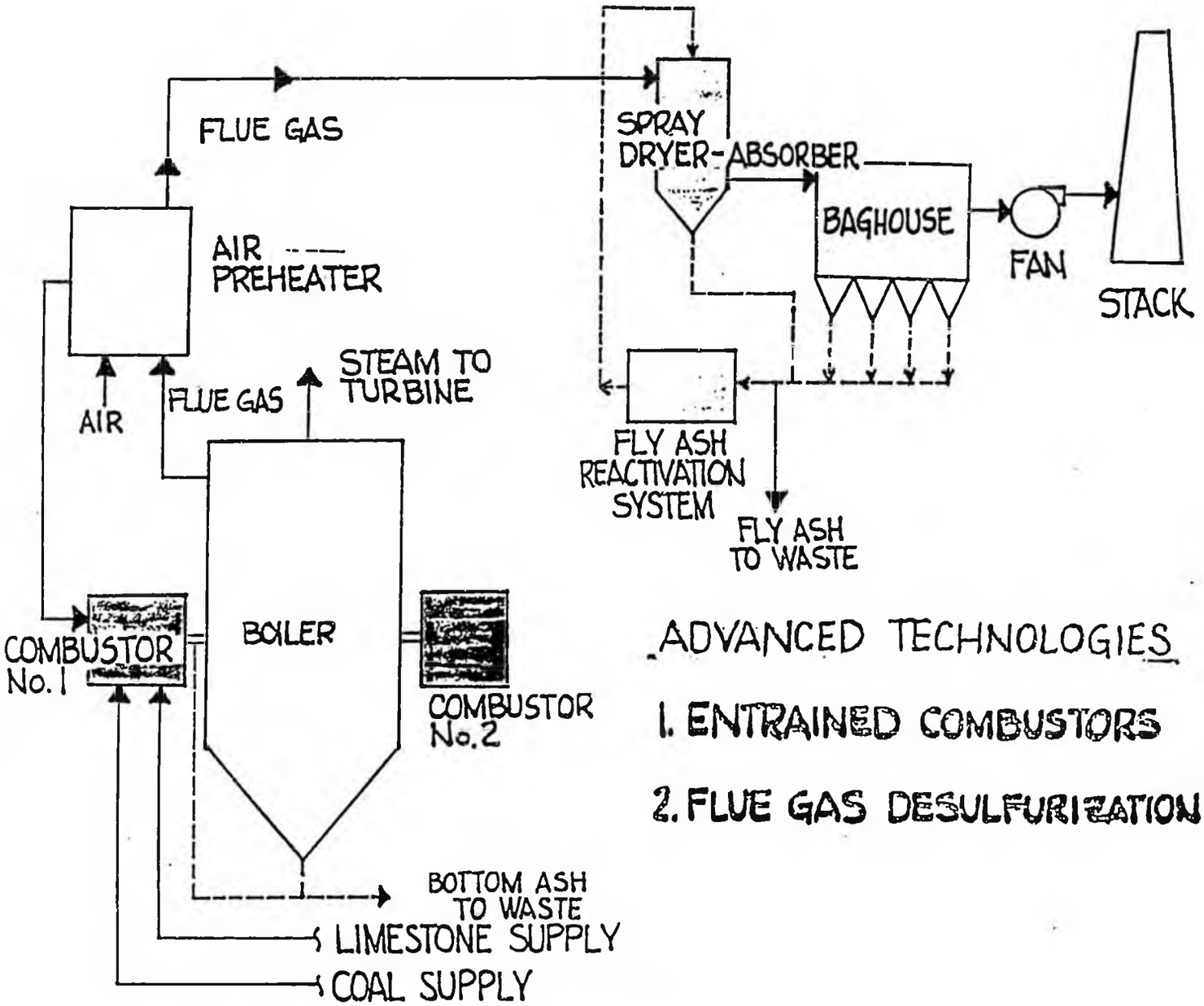
PRECOMBUSTION
- COAL CLEANING, GASIFICATION

COMBUSTION
- ENTRAINED COMB., AFB, PFB

POST COMBUSTION
- FLUE GAS DESULFURIZATION



TRW ENTRAINED COMBUSTION SYSTEM
Alaska Industrial Development and Export Authority



ADVANCED TECHNOLOGIES

1. ENTRAINED COMBUSTORS

2. FLUE GAS DESULFURIZATION

HCP BENEFITS

- LOW COST, COAL-BASED POWER
- CLEAN COAL TECHNOLOGY - LOW PLANT EMISSIONS
- FUEL DIVERSIFICATION FOR POWER GENERATION
- WASTE COAL UTILIZED
- ENHANCED COAL EXPORT
- USEFUL BYPRODUCTS

SOURCES OF FUNDS

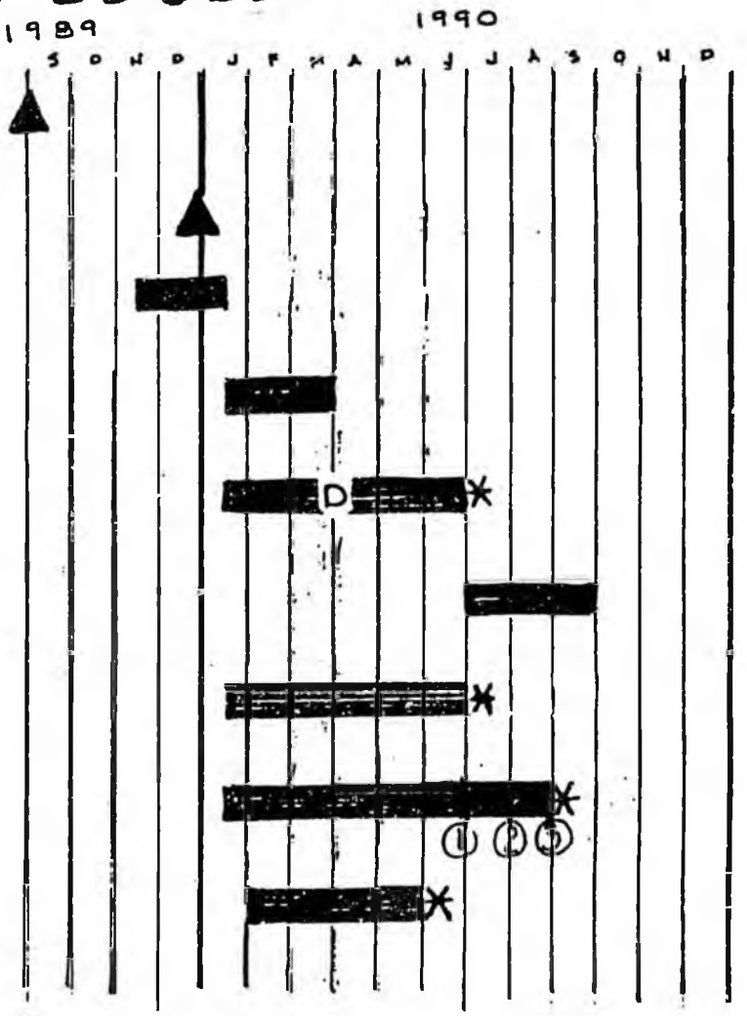
* CCT PROGRAM	$93,186,000
* RAILBELT FUND	30,000,000
* AIDEA BONDS	68,532,000
	$191,718,000

USES OF FUNDS

* DESIGN & PERMITS	$ 26,721,000
* CONSTRUCTION	134,197,000
* DEMONSTRATION	30,800,000
	$191,718,000

HCP NEAR-TERM SCHEDULE

DOE PROPOSAL
DOE SELECTION
FIN. CONSULT. SELECT.
FINANCIAL PLAN
POWER SALES AGMT.
APUC REVIEW P.S. AGMT.
COAL SALES AGMT.
DOE COOP. AGMT.
SECURE LEG. APPRN.



DOE COOP. AGMT.
① FINAL REPAYMENT PLAN
② HOST SITE AGREEMENT
③ DEMONSTRATE FINANCIAL CAPABILITY

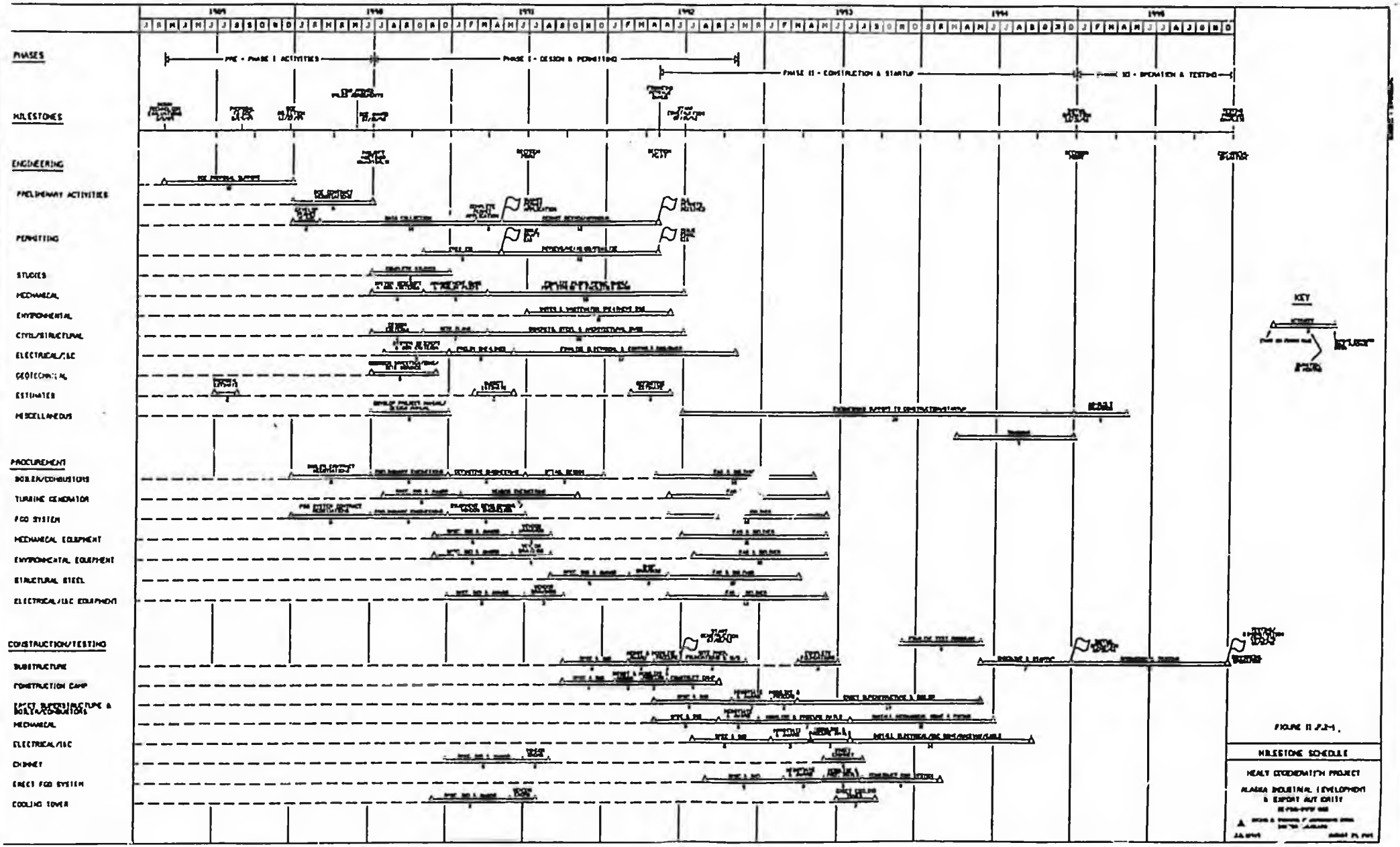
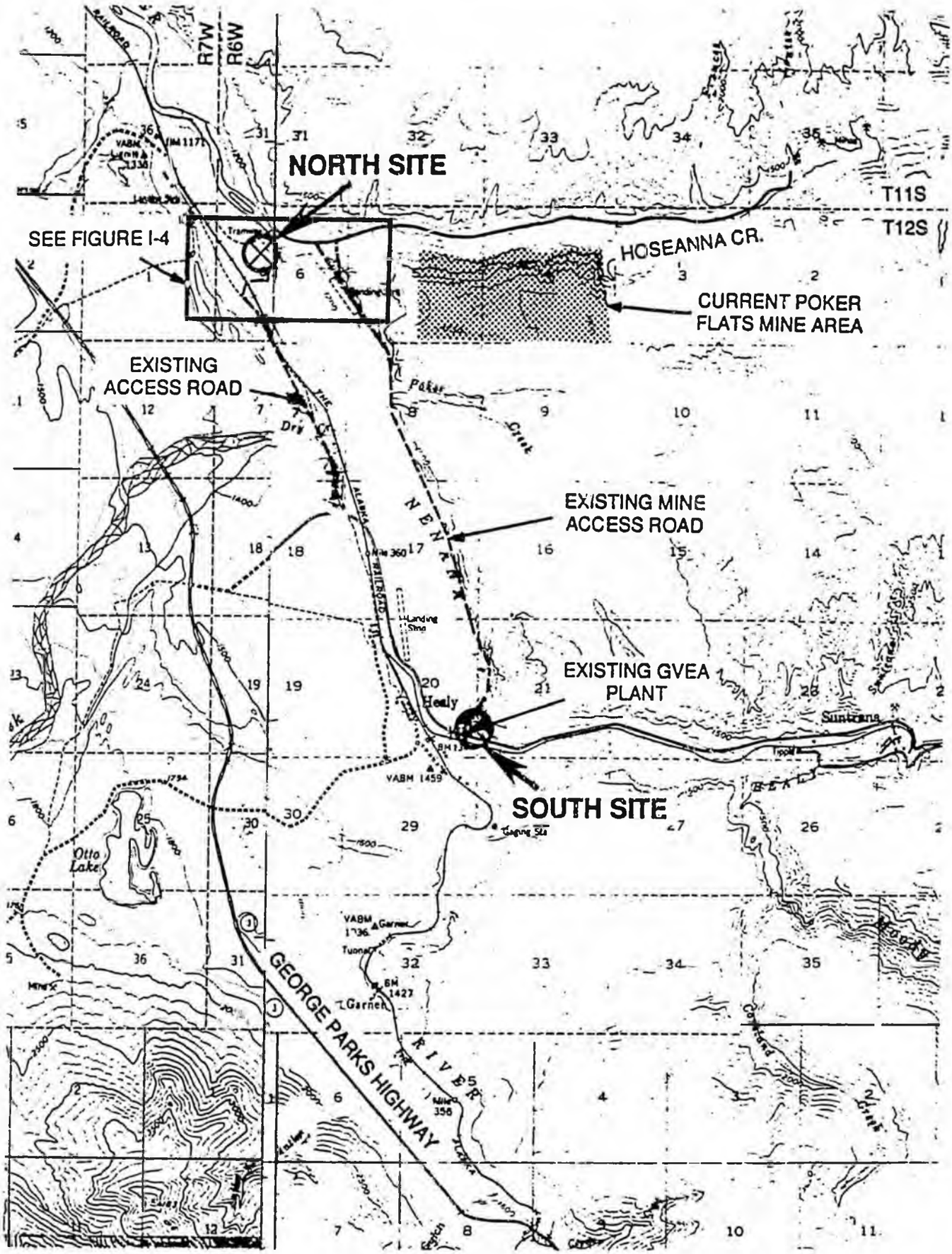


FIGURE II.2.1-1

MILESTONE SCHEDULE

HEALY CLEAN COAL PROJECT

ALASKA INDUSTRIAL DEVELOPMENT & EXPORT AUTHORITY



PROJECT AREA
HEALY POWER PROJECT
Alaska Industrial Development and Export Authority

A0290002A

CONSTRUCTION EMPLOYMENT

Mid - 1992 through 1994

$134,197,000 Budget

Construction Employment - 200 Workers

OPERATIONAL EMPLOYMENT

GVEA/UCM - Power Generation
50 to 60 workers

UCM - Coal Beneficiation (Potential)
Additional Workers

February 1, 1990

Healy Cogeneration Project

The combination of new coal-burning technologies and low-sulfur Alaska coal will result in one of the cleanest coal-burning power plants in the world

Healy Cogeneration Project Selected

In August 1989 the Alaska Industrial Development and Export Authority (AIDEA) submitted a proposal for the Healy Cogeneration Project (HCP) to the U.S. Department of Energy (DoE) under the DoE's Clean Coal Technology Program. In December 1989, the HCP proposal was selected from among 48 other projects for grant funding of up to $93.2 million. The grant will finance nearly half of the design, capital and initial operating costs of the HCP plant. The project schedule calls for plant construction to be complete in 1995 with a one-year start-up and test program to follow.

The HCP project will construct a state-of-the-art coal-fired power plant at Healy, Alaska. The power plant will provide 50 megawatts of competitively priced electricity to satisfy increasing railbelt demand; will demonstrate innovative coal burning technologies; and may provide energy for the future development of a pilot-scale plant to beneficiate high-moisture Alaska coals. The combination of new coal-burning technologies and low-sulfur Alaska coal will result in one of the cleanest coal-burning plants in the world.

Alaska Benefits

The Healy Cogeneration Project will draw national and international attention to the demonstration of leading-edge technologies and provide a variety of benefits to the state's economy. The project will employ approximately 200 workers during a two year construction period and create about 50 year-round jobs in Healy once the plant is fully operational. In addition to employment, several other long-term economic benefits will contribute to the future well-being of Alaska's railbelt.

Satisfying Growing Railbelt Energy Needs

The addition of a new, efficient 50 megawatt power plant will provide power to satisfy increasing railbelt energy demands and will help diversify the fuel base of the railbelt power grid. Between 1984 and 1989, kilowatt-hour sales by GVEA increased nearly 24 percent. By the mid to late 1990's, additional base load generating capacity will be needed. While primarily serving northern railbelt customers, the strategically located generating plant would also be available for transmitting power to the southern railbelt.

Technology for New and Existing Power Plants

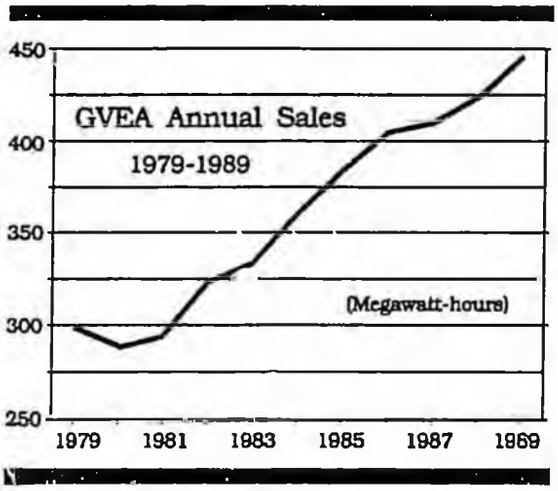
The HCP will demonstrate a clean-burning technology that can be used to retrofit or repower existing power plants in Alaska, the nation, and the Pacific Rim.

Most coal-fired power plants in Alaska and other states will require life extension work within the next 10 to 15 years. EPA's stringent New

The addition of a new, efficient 50 megawatt power plant will provide competitively priced power to satisfy increasing railbelt energy demands.

Source Performance Standards will be applied to these plants and HCP technology may be the lowest-cost solution for meeting these standards.

In addition to environmental advantages, the use of HCP technology to retrofit coal-fired power plants in the Pacific Rim will open new markets for Alaskan coal. Currently, few Pacific Rim plants are designed to use Alaska's high-moisture low-energy coal. HCP technology will allow Alaskan coal to be burned in these plants without the need for extensive boiler modifications.



The project may also demonstrate the feasibility of new power plants in other areas of Alaska. The reduced size of HCP technology relative to conventional coal plants will make the use of modular construction possible. This may result in lower construction costs for small sized plants which heretofore have not been economically feasible.

Beneficiation of Alaska Coal

A future component of the project may be the use of energy from HCP in a proposed pilot plant which will test methods to increase the quality of Alaskan subbituminous coal by reducing its moisture content or by producing entirely new fuel products. Alaska subbituminous coal has superior environmental qualities compared to coal from virtually all other states and countries. However, its low energy value -- due primarily to its high-moisture content -- makes the coal costly to transport and puts it at an economic disadvantage in international markets. The value and competitiveness of Alaska coal could be increased through drying, gasification, liquefaction or a combination of these processes. The excellent environmental qualities and high energy value of beneficiated Alaska coal would result in a premium fuel for export markets.

Focus on Alaska's Coal Resources

Alaska has enormous resources of coal and could become a major energy supplier to the Pacific Rim. The HCP project will be a showcase for leading-edge coal-burning technology and will bring national and international attention to Alaska's low-sulfur coal resources. The project will also send a clear signal to industry that Alaska is serious about using new and environmentally superior technologies to utilize the state's enormous natural resources.

Clean Coal Technology Program

The Clean Coal Technology program (CCT) was created by the U.S. Congress in response to concerns about acid rain. The program is administered by the DoE and focuses on the reduction of air pollutants considered to be precursors of acid rain. Five rounds of funding totaling over $2.5 billion have been planned. The first two rounds made $973 million available while the third and current round has $540 million available to support qualifying projects. The $93.2 million granted to HCP represented over 17 percent of the total funding available in round three.

The objectives of the current round of CCT funding are to promote, through demonstration projects, the commercialization of innovative technologies which are capable of significantly reducing emissions of sulfur dioxide and nitrogen oxides in existing coal burning facilities and/or providing for future energy needs in an environmentally acceptable manner.

The DoE may match up to 50 percent of the costs for the design, construction and initial operation of selected projects. Project owners are responsible for financing the re-

The project will employ approximately 200 workers during a two year construction period and create about 50 year-round jobs when complete

mainder of the cost. Under the terms of the program, AIDEA and DoE must negotiate an agreement during 1990 for the design, construction, demonstration and financing of the HCP project before federal funding may be awarded.

Project Description

The Healy Cogeneration Project involves six participants. These include the Alaska Industrial Development and Export Authority (AIDEA), which will own the project and be assisted by the Alaska Energy Authority; Golden Valley Electric Association (GVEA) which will operate, maintain and purchase power from the project; Usibelli Coal Mine, Inc. (UCM) which will supply coal and has offered a project location site; Stone & Webster Engineering Corporation, which will act as project design and management engineer; TRW Combustion Business Unit, which will provide proprietary combustion technology; and Joy Technologies Inc. which will provide proprietary emission control technology.

The HCP power plant will use an innovative design integrating advanced combustion, heat recovery, and emission control technologies. The environmental emissions from the HCP plant, including sulfur dioxide and nitrogen oxides, may be lower than any other coal-based power system in the world.

The HCP plant will use approximately 300,000 tons per year of low-sulfur subbituminous coal and will produce 50 megawatts of competitively priced electrical power. The plant will contribute to energy resource conservation by burning both run-of-mine coal and high-ash waste coal that could not be normally utilized. In the project's demonstration phase, various Alaska coals will be tested and the plant will be made available for testing coals from other states.

The estimated cost of the project is $192 million. The HCP was selected for up to $93.2 million of cost-sharing by DoE. Additionally, in the 1989 legislative session, the Alaska legislature reserved $30 million from the Railbelt Energy Fund for potential appropriation to the HCP project. The appropriation of the reserve was to be contingent upon the selection of the project by DoE, the preparation by AIDEA of an acceptable financial plan, and the drafting of power sales agreements. The HCP participants are requesting that the reserved funds be appropriated to the project during the 1990 legislative session. The balance of the project costs will be secured by AIDEA through the sale of revenue bonds.

Project Participants

Six participants cooperated in the preparation of the HCP proposal and will participate in the performance of the project.

1. The Alaska Industrial Development and Export Authority (AIDEA) supervised the preparation and submittal of the HCP proposal to DoE and will:
   - be the HCP project owner and coordinate the functions of the Alaska Energy Authority;
   - prepare a financial plan for submittal to the Alaska legislature; and
   - issue revenue bonds to finance project costs not covered by federal or state grants.
2. Golden Valley Electric Association (GVEA) will:
   - oversee the project's design and construction;
   - operate and maintain the HCP power plant;
   - purchase electricity produced by the project;
   - manage the training of operator personnel; and
   - perform power plant start-up activities.
3. Usibelli Coal Mine, Inc. (UCM) initiated, oversaw and funded the costs of preparing the HCP proposal and will:
   - make land owned or leased by UCM available for the siting of the HCP project;
   - supply coal to HCP and dispose of plant ash; and
   - review project design and construction activities.
4. Stone and Webster Engineering Corporation acted as consulting engineer and prepared the HCP proposal under contract to UCM and will:
   - act as design engineer and supply key members to the project management and design team; and
   - provide construction and management services to AIDEA.

The project will draw international attention to the demonstration of leading-edge technology and provide a variety of benefits to Alaska's economy.

5. TRW Combustion Business Unit assisted in the preparation of the HCP proposal and will:
   - provide proprietary combustion technology to the project;
   - participate in the project design; and
   - provide warranties and guarantees covering the design and performance of TRW equipment.
6. Joy Technologies Inc. assisted in the preparation of the HCP proposal and will:
   - provide proprietary technology for the sulfur and ash removal;
   - participate in the project design; and
   - provide warranties and guarantees covering the design and performance of Joy Technologies equipment.

New Technologies

The Healy project will integrate entrained coal combustion (ECC) technology developed by TRW Combustion Business Unit and spray dryer absorber (SDA) technology developed by Joy Technologies Inc.

Entrained Coal Combustion

In ECC technology, pulverized coal is injected into a precombustion chamber where it is entrained in swirling air and partially burned. The ash contained in the coal is converted to molten slag which is collected and drained off the chamber walls. The removal of over 80 percent of the ash before reaching the boiler minimizes conventional maintenance problems and allows the combustion technology to be used with boilers originally designed for other fuels.

Additional air is added in a secondary burner where further combustion of the hot gases takes place before entering the boiler. At the entrance to the boiler, limestone is injected into the combustion gases to react with and provide first-stage removal of sulfur dioxide. The temperatures and oxygen levels throughout the combustion stages are carefully controlled to both minimize the formation of nitrogen oxides and maximize sulfur removal.

Pilot tests of ECC have demonstrated its reliability and high energy efficiencies, while emissions of sulfur dioxide and nitrogen oxides have been shown to be equal to or lower than those from other new technologies. Additionally, the size of ECC combustion units are relatively small compared with other new technologies. Therefore, they can be more easily adapted to existing boilers and may make smaller-scale coal plants feasible.

Spray Dryer Absorber

In addition to sulfur reductions in the ECC combustion system, Joy Technologies' SDA emission control system further reduces sulfur dioxide levels in the flue gases. A recycled ash product, produced by the limestone injected during combustion, is mixed with water and sprayed into the flue gases. Sulfur dioxide reacts with the spray and is removed along with the remaining ash in filter bags. The second-stage removal of sulfur dioxide and the reduced costs of limestone recycling contribute to the environmental and operational efficiencies of the HCP design.

Project Contacts

For further information on the Healy Cogeneration Project, contact the personnel listed below.

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Fax. (907) 561-8998

Golden Valley Electric Association
Mike Kelly, General Manager
Vayla Colonell, Member Services
758 Illinois Street
P.O. Box 71249
Fairbanks, AK 99707-1249
Tel. (907) 452-1151
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Usibelli Coal Mine, Inc.
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Steve Denton, Consulting Engineer
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Fairbanks, Ak 99701
Tel. (907) 452-2625
Fax. (907) 451-6543

DRAFT POWER SALES AGREEMENT

HEALY CO-GENERATION PROJECT

To fulfill the requirements of Section 217(e)(2)(A), 1989 SLA Ch. 117, Alaska Industrial Development and Export Authority ("AIDEA") and Golden Valley Electric Association, Inc. ("GVEA") record their intention to enter into a final Power Sales Agreement ("Agreement") with respect to the Healy Co-Generation Project ("Project") containing the following provisions:

1. AIDEA will use its best efforts to issue bonds in an amount not to exceed $85 million to finance the Project and to design, construct and complete the Project according to a timetable to be agreed and attached to the Agreement. The Bonds will be payable from Project revenues or from sources other than the state, as identified in the Agreement.

2. GVEA will agree to purchase 100 percent of the energy output ("Project Capacity") of the Project. Amounts paid for Project Capacity ("Payments") in each year will be payable on a monthly basis in amounts equal to amounts that AIDEA is required to deposit in its various accounts under the bond resolution or bond indenture which will be attached to the Agreement; such amounts to include debt service on the bonds, operations and maintenance costs, insurance, and payments to repair and replacement reserve accounts agreed to by the parties. The actual debt service component payment amounts will be fixed at the time of issuance of bonds. GVEA will make its commitments irrevocable prior to the beginning of construction or the issuance of bonds. GVEA's obligation will also be contingent upon entering into appropriate coal purchase and steam sales agreements satisfactory to it. GVEA will also pay all costs of operation and maintenance of the Project and normal repairs and replacements. The parties will agree as to the means of financing major repairs and improvements which could include a covenant by AIDEA to use its best efforts to finance the costs of such major repairs and improvements.

3. The term of the Agreement will commence when the Agreement has been signed, when all necessary approvals, including approval by the Alaska Public Utilities Commission (APUC), have been obtained and when state and federal appropriations, and grants and authorizations are made available. The grants include (a) grant from U.S. Department of Energy of $93.2 million, (b) State appropriation to AIDEA of $30 million in 1990 dollars with interest, and (c) State appropriation to AEA for the Northern Intertie totalling $66 million in 1990 dollars with interest. Further necessary approvals will be identified in the Agreement. The time within which the necessary approvals must be obtained and appropriations made available will be fixed prior to the financing date. The Agreement will extend 35 years from the date of commercial operation.

4. The obligation to make Payments by GVEA will begin on the date of commercial operation. The date of commercial operation will be the date on which the DOE completes all demonstration and testing of Project technology, the Project demonstrates full Project capability, and engineers retained for the purpose declare the Project to be fully able to be operated at not less than its design capacity on a sustained basis for its projected life of 35 years. The Agreement will contain a provision allowing its termination by either party if the date of commercial operation is not achieved prior to a fixed date.

5. Financing during construction will be credit enhanced under a letter of credit with the construction and project guarantys customary for this kind of financing. The agreement will be "Take or Pay" from the date of commercial operation. This means that GVEA will agree to make Payments notwithstanding a suspension or reduction in the mount of energy supplied by the Project. Other agreements with Project participants may provide for financial assistance to the Project and GVEA if the technology performs below that of conventional plants.

6. Prior to the issuance of Bonds, GVEA will agree to operate and maintain the Project under terms and conditions acceptable to both parties.

7. GVEA will have the right to make optional additions to the Project at its own expense. AIDEA and GVEA will agree to accept an independent consultant's determination as to whether or not the proposed addition would have any adverse affect on GVEA's abilities to perform under the Agreement. The Agreement will contain covenants by GVEA to establish appropriate rates to meet its obligations under the Agreement, to maintain its system in good repair, and not to enter into contracts which limit its power to perform under the Agreement; provided, however, that GVEA's relationship with the Rural Electrification Administration will not be compromised by these covenants.

8. The Agreement will contain provisions permitting the assignment of payments to the Trustee under the bond resolution or indenture and provisions that additional bonds may be issued upon a joint finding that additions are necessary to provide for the economic and efficient operation of the Project.

9. The Agreement will provide that GVEA will maintain appropriate insurance.

10. GVEA will agree to consent to the adoption of supplemental resolutions or indentures for the issuance of bonds to either complete the Project or to finance additions and improvements in a form to be determined by the parties and attached to the Agreement. Appropriate permission for GVEA to assign the agreement as required by its other financing documents will be included.

11. The Agreement will permit GVEA, upon providing for payment of (a) the AIDEA bonds, (b) the $30 million AIDEA contribution, and (c) any other obligations AIDEA has incurred concerning the Project, to terminate the Agreement and end the Project or to purchase the Project.

12. AIDEA will have a right to bring suit immediately to enforce payments due under the Agreement and the right to terminate or suspend the delivery of energy. GVEA will have the right to bring any action, suit or proceeding as necessary to enforce its rights but will not have the right to suspend its payment obligations.

13. The Agreement will contain covenants to maintain the integrity of the Agreement, require GVEA and AIDEA to pursue all necessary administrative and judicial remedies, and to take necessary steps to comply with federal and state law and to comply with all lawful terms of applicable licenses.

14. The Agreement will contain all agreements necessary for tax exempt financing, if tax exempt financing can be secured.

15. The Agreement will make provision for potential use of unused heat from the Project by Usibelli Coal Mine, Inc. under conditions mutually acceptable to GVEA and Usibelli, and approved by AIDEA.

16. The Agreement will contain appropriate severability, a no-remedies cumulative provision and similar contract technical provisions.

17. The parties agree to negotiate in good faith to finalize a power sales agreement including the above terms, and to use their respective best efforts to complete such agreement and submit it to all appropriate bodies, for approval no later than September ___, 1990 (including, but not limited to, the governing bodies of both parties, the Alaska Public Utilities Commission and the U.S. Rural Electrification Administration).

Agreed, this __th day of March, 1990;

ALASKA INDUSTRIAL DEVELOPMENT AND EXPORT AUTHORITY

Bertram L. Wagnon
Executive Director

GOLDEN VALLEY ELECTRIC ASSOCIATION

Michael P. Kelly
General Manager

With the legislature in the final stretch time clicks along for the Healy plant; it needs $30 million soon

By Imre Nemeth

What happens to $93.5 million in Department of Energy (DOE) grant money awarded for a Healy clean-burning coal fired cogeneration plant last December hinges to a large extent on what Juneau lawmakers decide in the next few weeks of the session. Last year, $30 million of the Railbelt Energy Fund was earmarked expressly for that purpose. But the official act must be made to get the deal going to meet a Dec. 22 deadline, Usibelli officials said last week.

The 50-megawatt facility, which would be the first of its kind in the country, was one of 13 projects to receive funding as part of DOE's Clean Coal Technology Program.

"The best we can say is we're rapidly approaching the last 30 days," said John Sims, Usibelli Coal Mines' vice president of marketing.

He said the "fence," as he called it, around the $30 million put around the money by the legislature last year was contingent on the project meeting three goals. All three — federal approval of the grant, demonstration of financial feasibility and a draft power market agreement — "are or are in the process of being met," he added.

"Politically, I wouldn't like to characterize it as done by any means," he said adding that the compelling argument in favor of forwarding the funds is that the federal committment disappears at the end of the year.

Sims said he is hopeful, however, and guessed bipartisan support would arise to pass it.

Under terms of the plan approved by DOE, the plant would be owned by the Alaska Industrial Development and Export Authority (AIDEA) and operated by the tentative power purchaser, Golden Valley Electric Association in Fairbanks. The $30 million would be only part of the funding needed. Coupled with the federal grant, it still leaves more than $60 million that would need to be financed. The rest would be raised as needs through revenue bonds.

See POWER page 16

POWERS: Employment may top 50 long term

Continued from page 11

During construction, which is predicted to begin sometime in late 1992 or early 1993, peak employment would top out at about 200, said Steve Denton, a mining and energy consultant working with Usibelli on the project.

"Long term jobs would probably be on the order of 50," he said.

The exact location of the structure may be determined according to financial considerations, Denton said. He seemed to think that DOE and AIDEA may be more inclined to chose a site adjacent to the existing Healy mine mouth power plant. Another location, some three miles distant, had been considered because the long-term prospects of the cogeneration plant had included teaming its heat creating ability with a coal-drying operation, he added.

"The original proposal to DOE was done with the idea of adding a coal drying facility to this plant," Denton said from Usibelli's Fairbanks office. "But the question came up looking at the financial feasibility of locating it next to the existing plant rather than speculating on the possibility of (later adding) a coal drying plant."

The option of coal drying won't be left out, however. Denton envisions a small pilot coal drying facility established next to the new plant.

"That would be a more upscale development facility rather than a commercial one (on the first proposal to DOE) that was geared to overseas shipments of coal," he said. "Ideally, it would be enough to produce a test shipment."

Denton said the burning procedure is a "totally new" concept and one that may draw quite a bit of national and international attention to the new facility.

"It really is an innovative concept," he said. "We're doing a lot of believing in what the technology developer tells us and I believe most of it. (It appears to be) the lowest cost option of buring coal in the the marketplace."

The facility will incorporate a new power plant design that links an advanced, clean-burning "slagging coal combuster" developed by TRW, Inc., according to AIDEA sources. The slagging combustor's capability of removing large amounts of ash before it can foul the boiler makes it particularly suitable for burning coal with impurities.

"This technology can also solve technology for existing coal plants through retrofit by pulling off existing burners," Denton said adding that these plants have the potential for rather remarkable increases in environmental performance.

An agreement to install similar combustors in Poland has already been finalized.

The time line on the project allows 18 months to two years for the environmental impact and permit gathering process. Denton says developers are looking at something on the order of 1994 or 1995 in terms of start up. After that, one year has been set aside for testing various types of coal and to iron the bugs out, he adds.

At 50 megawatts, the new plant would be twice as powerful as the existing mine mouth plant.

Sims said the possibility of constructing a railbelt intertie, that would allow the transfer of power easily between communities, is an obvious boon to the project.

"They would be mutually beneficial," he said. "One suffers without the other."

Alaska State Legislature

REPRESENTATIVE
MARK BOYER

VICE-CHAIRMAN, HOUSE
HEALTH, EDUCATION AND
SOCIAL SERVICES COMMITTEE

MEMBER, HOUSE LABOR AND
COMMERCE COMMITTEE

CHAIR, CHILDREN'S CAUCUS

House of Representatives

FAIRBANKS

1098 LAKEVIEW TERRACE
FAIRBANKS, ALASKA 99701
(907) 456-6473

JUNEAU

P.O. BOX V
STATE CAPITOL
JUNEAU, ALASKA 99811
(907) 465-3466

April 4, 1989

MEMORANDUM

TO: Representatives Curt Menard and Cliff Davidson,
Co-Chairmen of the House Resources Committtee

FROM: Representative Mark Boyer

RE: HB 237

Thank you for scheduling HB 237 so promptly. This bill would approopriate $30 million from the Railbelt Energy Fund contingent upon a federal matching grant under the Department of Energy's Clean Coal Technology III program.

Thank you for your consideration.

Department of Energy
Washington, DC 20585

March 15, 1989

PROGRAM OPPORTUNITY NOTICE FOR
CLEAN COAL TECHNOLOGY DEMONSTRATION PROJECTS

PON NUMBER DE-PS01-89FE61825

Prospective Proposers:

The Clean Coal Technology Demonstration Program is a $5-billion national commitment, cost-shared by the Government and the private sector, to demonstrate economic and environmentally sound methods for using our Nation's most abundant energy resource. The Program will foster the energy efficient use of the Nation's vast coal resource base. By doing so, the Program will contribute significantly to the long-term energy security of the United States, will further the Nation's objectives for a cleaner environment, and will improve its competitive standing in the international energy market.

The first two Clean Coal Technology solicitations were issued in 1986 and 1988. This Program Opportunity Notice (PON) is in response to the Clean Coal Technology (CCT) portion of Public Law No. 100-446, "An Act Making Appropriations for the Department of Interior and Related Agencies for the Fiscal Year Ending September 30, 1989, and for Other Purposes." Through this PON, the Department of Energy (DOE) is soliciting proposals for financial assistance required to conduct cost-shared CCT projects to demonstrate energy efficient technologies that are capable of being commercialized in the 1990s. These technologies should be capable of (1) achieving significant reductions in the emissions of sulfur dioxide and/or the oxides of nitrogen from existing facilities to minimize environmental impacts such as transboundary and interstate pollution and/or (2) providing for future energy needs in an environmentally acceptable manner.

The following is a summary of the salient elements of this PON, but not an integral part of the enclosed Draft PON. In the event of any conflict between this PON cover letter and the enclosed Draft PON document, the data and information in the PON shall prevail.

Each project will consist of three phases: (1) Design, (2) Construction, and (3) Operation. The period of performance is to be proposed.

Proposals must be submitted in accordance with the instructions in Sections 3 and 5. Each of the four proposal volumes should be bound separately. The proposals must be received at the place designated in Section 3.5, "Time, Date, and Place Proposals Are Due," not later than 4:30 p.m. local time, Washington, D.C., on August 29, 1989.

A Preproposal Conference for this PON will be held on May 18, 1989, at 10:00 a.m. local time, Washington, D.C., in the Thomas Jefferson Auditorium, U.S. Department of Agriculture (South Building between the 5th and 6th wings), 14th and Independence Avenue, S.W., Washington, D.C.

Only proposals that can satisfy the Qualification Criteria and pass Preliminary Evaluation will be considered for Comprehensive Evaluation. Technical, Business and Management, and Cost evaluation criteria are provided in Section 4. The program policy factors applicable to this PON are described in Section 4.5.

Depending on the evaluated potential of proposals submitted, one or more cooperative agreements may be awarded as a result of this PON.

This PON does not commit the Government to pay any costs incurred in connection with any proposal, to procure or contract for any services, or to provide financial assistance to any proposer. The Government reserves the right, without limitation, to accept or reject any or all proposals regardless of the terms of the original proposal, and to request additional clarifying information, including cost and pricing data. DOE, however, may select a proposal for negotiation without conducting discussions with the proposer.

Proposers are advised that a Clean Coal Technology project selected for financial assistance as a result of this PON will be subject to the requirements of the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq.) and related DOE compliance procedures. Should a proposal be selected, the proposer will be asked to provide information to be used in preparing necessary NEPA documentation. See Section 3.26, "National Environmental Policy Act (NEPA) Strategy," for more information.

All proposers are required to prepare and include in their proposals an abstract of the highlights of their proposed demonstration project, that may be released to the public at any time, in whole or in part. See Section 5.3.1.1., "Public Abstract."

Proposers are cautioned that certain proposal material submitted may become subject to disclosure to the public pursuant to the provisions of the Freedom of Information Act, as amended. See Section 3.27, "Proprietary Data or Confidential Business Information."

The designated Government Representative for this PON is Mr. Herbert D. Watkins. All communications should cite the PON number and be directed to his attention at the address prescribed in Section 3.4, "DOE Issuing Office," or by telephone call to (202) 586-1026.

Proposals must remain valid and be authorized for a period of time for acceptance by the Government of not less than 365 calendar days from the date specified above for receipt of proposals. Furthermore, proposers are cautioned that late proposals, modifications, and withdrawals will be treated in accordance with Section 3.34, "Late Proposals, Amendments of Proposals, and Withdrawals of Proposals."

Please complete and return the "Intention to Propose" form provided in Appendix B at the earliest practicable date. No other material should be returned if there is no intent to submit a proposal.

Sincerely,

Marcia L. Morris

Marcia L. Morris
Deputy Director
Office of Procurement Operations

Enclosures

USIBELLI COAL MINE, INC.

MARKETING
122 First Avenue
Suite 302
Fairbanks, Alaska 99701
(907) 452-2625
FAX 451-6543

RECEIVED
3 1989

February 27, 1989

Representative Mark Boyer
P.O. Box V
Juneau, AK 99811

Dear Representative ~~tative~~ Mark Boyer:

I want to bring you up to date on the Healy Cogeneration Project (HCP) and enlist your support in helping make it a reality. I would hope, having read this letter, that you can share my belief that the HCP represents the best economic development project currently under consideration within the Railbelt and as such deserves your political support.

As currently planned the HCP comprises a 50 Mega-Watt powerplant utilizing state-of-the-art, environmentally benign, coal combustion technology coupled with a coal processing (drying) facility which would use heat from the powerplant to produce 500,000 tons of stable, premium, beneficiated fuel per year. Electrical power from the powerplant would satisfy future base-load demand in the Northern Railbelt at a time when this increment will be needed both to satisfy normal growth and service economic expansion. Successful financing of the project, along the lines that I will propose, would ensure low-cost predictable firm power for the Northern Railbelt over the life of project. The coal drying facility will address the single greatest constraint to the marketing of sub-bituminous Alaska coal, its the high moisture content. By reducing the moisture content to produce a stable end product the resulting premium quality coal will command broad market acceptance in the Pacific-rim and within Alaska.

The HCP could be operational by 1993, however prior to then a workforce, which could peak at 300, would be engaged in construction. Once in operation the project would directly account for more than 130 permanent, quality, year round jobs at the mine, in the powerplant and coal processor and across the transportation system. Many other general sector jobs would be created as a indirect consequence of the HCP. The capital cost of the project is currently estimated at $130 million with the powerplant accounting for $100 million and the balance attributable to the coal processing plant.

Until recently (latter part of 1988) UCM had cooperated under a memorandum of understanding (MOU) with Brown & Root on a project concept which utilized a 150 MW powerplant. Our current

thinking is that this powerplant sizing is too large for anticipated electrical power demand growth in the early 1990's; hence the more conservative size. The MOU with Brown and Root is no longer in effect.

Convinced of the overiding merits of a downscaled project UCM's Board of Directors have recently approved a considerable "at risk" appropriation to move the project forward and in particular submit the project for Federal Clean Coal Technology III support. This "at risk" appropriation is quite apart from capital investments that the company will make in the project in the future. UCM is currently in the process of selecting a new engineering consultant for the HCP.

The Federal Clean Coal Technology III (CCT III) solicitation process affords a unique opportunity to bring major federal dollars into play for the HCP. CCT III, administered by the Department of Energy (DOE), will distribute $575 million to qualifying projects. The intent of the CCT program is to facilitate the demonstration, deployment and commercialization of clean coal technologies by sharing in the cost and hence the risks involved. Coal cleaning (processing), coal combustion and post-combustion clean-up facilities are expected to be candidates for the CCT III funding process. The HCP will utilize, in an integrated plant, coal cleaning technology in the coal processor and advanced coal combustion technology in the powerplant. This integrated approach has attracted favorable comment from the DOE resulting in UCM's decision to advance the HCP as a candidate for funding under CCT III. If successful, the chances are perhaps realistically 1 in 3, the CCT III program could provide between 40% and 50% of the HCP capital cost (say $55 million out of $130 million).

In earlier awards under the DOE administered Clean Coal Technology program significant weight has attached to financial commitments made by State governments in support of clean coal projects. The same will certainly be true for the HCP and Alaska.

It is with this in mind that we are asking your support for a conditional appropriation from the Railbelt Energy Fund (REF) towards the project of $30 million. The money could be appropriated to the Alaska Industrial Development and Export Authority (AIDEA) pending the outcome of the DOE CCT III award process late in 1989.

This request for a conditional appropriation is a departure from our former position which involved drawing upon the corpus of the REF to underwrite a low interest loan to the project. This would require changes in the statutory authority of AIDEA and would encumber much more of the REF than our current strategy. Since there are limited funds within the REF, UCM would be competing head-on with Railbelt utilities. Under the

conditional appropriation scenario there would be money available for major intertie projects as well as the HCP.

UCM is very cognizant of working closely and effectively with the Northern Railbelt utilities and to this end UCM would certainly support construction of the Healy to Fairbanks intertie as a needed component of infrastructure. Support for the HCP, including the $30 M appropriation from the REF, has been approved by the Golden Valley Electric Association Board of Directors. This will be reported to you by GVEA in a follow up letter.

Of the intertie scenerios UCM most vehemently resists the proposed expenditure of $38 million on the Willow end of the Northern intertie.

The $30 million that UCM is requesting from the state leverages another $100 million of project financing from federal ($55 million) and private sources including UCM ($45 million). I would certainly characterize a state financial commitment as a prudent investment. The best dollars to bring to Alaska at this time surely are federal match and private venture capital.

The HCP, in conjunction with the Wishbone Hill Project, could be a vital shot in the arm for Alaska's coal industry. Resolving the high moisture problem of most Railbelt coals by the use of drying technologies will pay-off in a big way in the future. In deploying these advanced technologies Alaska will attract global attention and demonstrate ability to penetrate overseas markets with a premium low sulfur coal.

The HCP is truly an exciting opportunity not just the Northern Railbelt but also for the entire State of Alaska.

I ask for your enthusiastic support for the HCP and look forward to working with you to help bring this project in all its complexities to fruition.

I will be calling on you in Juneau and am prepared, together with my UCM colleagues, to provide any information that you may request concerning the HCP.

Sincerely,

John Sims
Usibelli Coal Mine, Inc.
Vice-President Marketing

JS/me

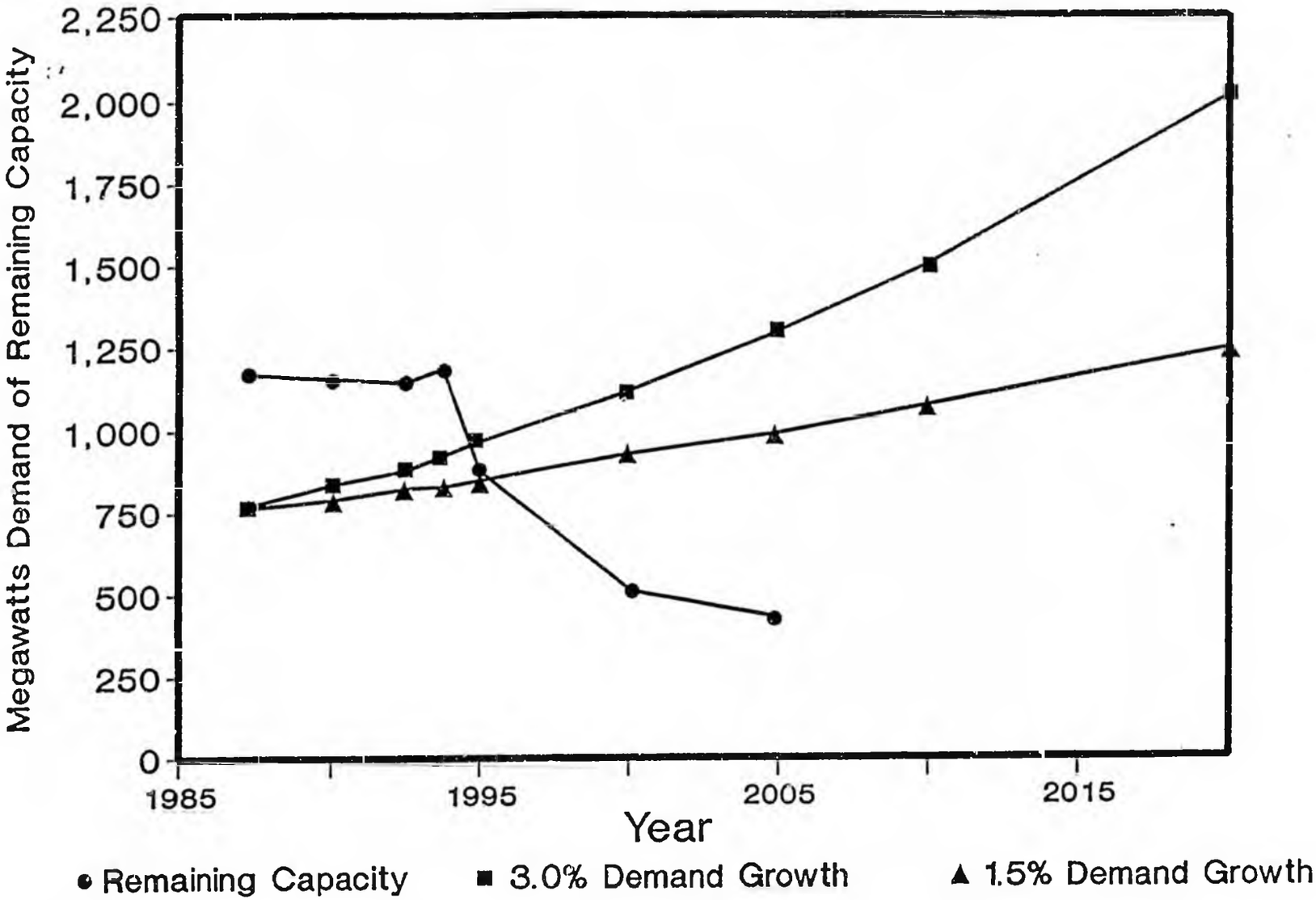
The same letter has been sent to the Governor and members of the Federal delegation

I hope we can count together on this

Thanks. JS

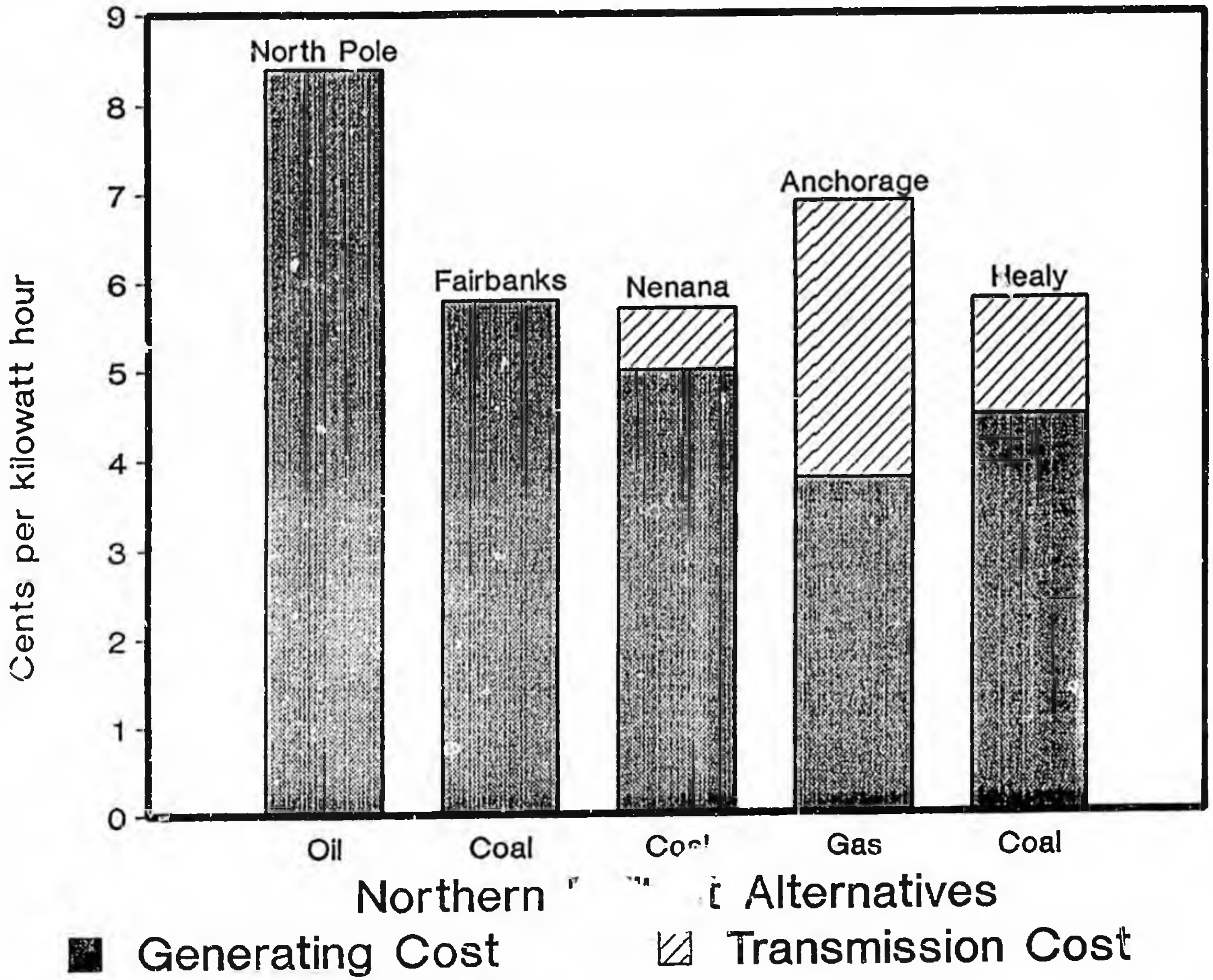
ALASKA RAILBELT ELECTRICITY

Demand + Reserve & Remaining Capacity



NORTHERN RAILBELT OPTIONS

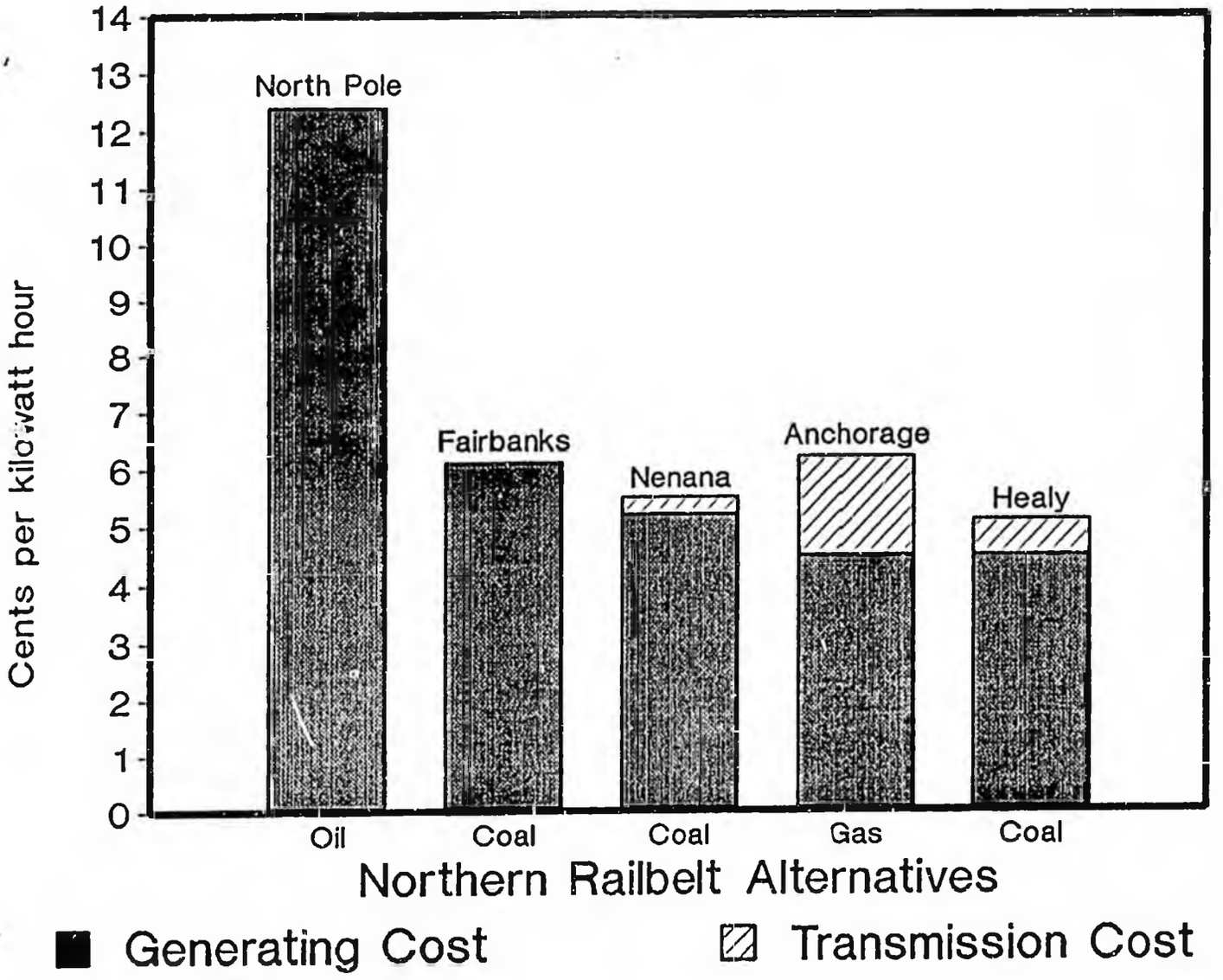
For 50 Megawatt Addition 1995



~~300 Plant Construction~~

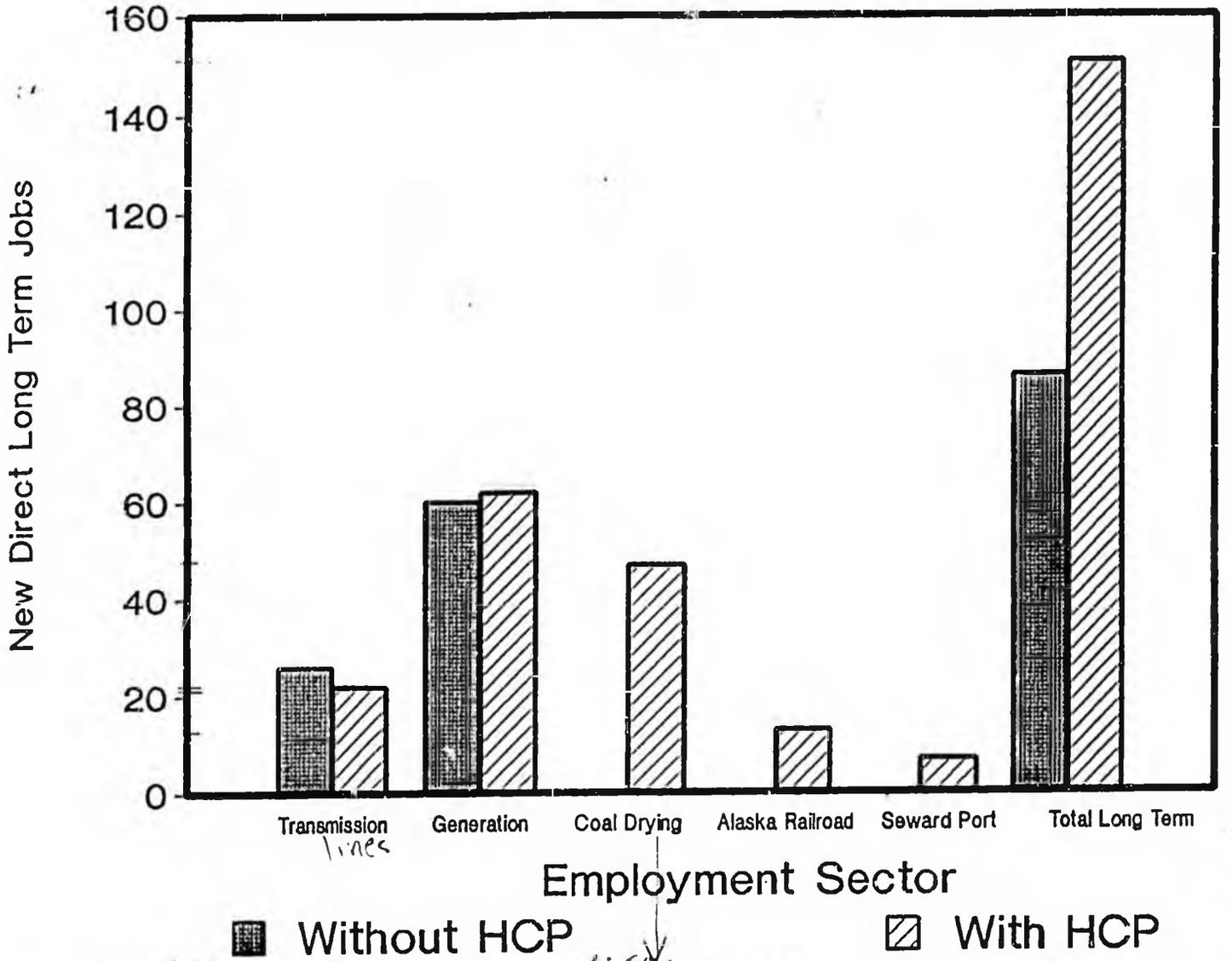
NORTHERN RAILBELT OPTIONS

For 100 Megawatt Addition 2010



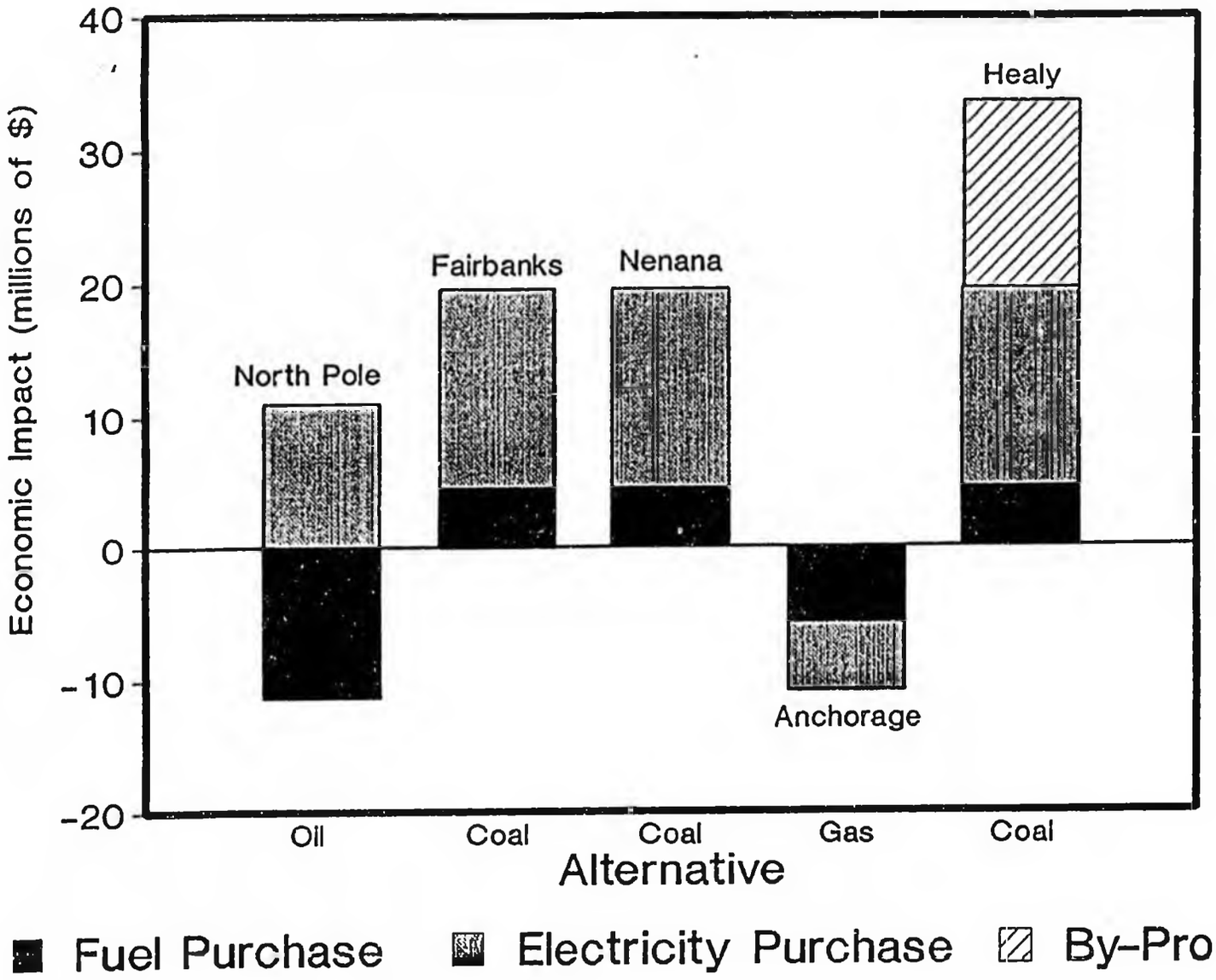
JOBS IMPACT BY RAILBELT ENERGY FUND

Interties & Healy Cogeneration Options



NORTHERN RAILBELT ECONOMIC IMPACT

50 Megawatt Addition 1995



Fuel Purchase Electricity Purchase By-Product Sales

DAILY NEWS
WEDNESDAY
3/30/89

GVEA chops request for intertie funds by half

By SAM BISHOP
Staff Writer

Golden Valley Electric Association has cut in half its request for state money to build a larger electric line connection to Anchorage.

"It was a first-class four-lane electrical highway," GVEA General Manager Mike Kelly said this morning of the old request, which was chopped from $120 million to $60 million.

"The facts are we had to cut back to a two-lane country road," he said.

GVEA wants the lines built with state money so it can import cheap gas-fired power from Anchorage and will not have to start up expensive oil-fired generators in North Pole. Even with the existing intertie line, the North Pole generators must be used whenever local temperatures fall to 10 below zero or lower, Kelly said.

GVEA wants the money taken from the state's $200-million Railbelt Energy Fund, which legislators and Gov. Steve Cowper may need to balance the budget.

Kelly presented the new plan to legislators as they gathered for the constituent teleconference held every other Tuesday from 7-9 p.m.

Legislators reacted favorably to the Kelly's revised plan.

"A revised proposal is more realistic, given the financial situation the state's facing, but I think everyone is being very cautious because we absolutely don't know the revenue situation," Rep. Mike Davis, D-Fairbanks, said this morning.

Until a few weeks ago, GVEA and other utilities had asked legislators to allocate $120 million for interties between Anchorage and Willow and Healy and Fairbanks. Another $80 million was requested to build a larger line between the Bradley Lake dam on the Kenai Peninsula and Anchorage.

The new plan would drop plans to build the higher capacity line between Anchorage and Willow. Instead, voltage compensation machines would be installed to increase the line's capacity, Kelly said. The proposed line between Healy and Fairbanks would be built, but on a smaller scale than previously planned. It would have the same capacity as the existing line.

Taken together, the lines into Fairbanks could carry roughly 200 megawatts under the new plan, down from 380 megawatts under the $120-million plan. At present, the line can carry 70 megawatts.

The 200-megawatt line would allow GVEA to import cheap power generated in Anchorage's natural gas-fired plants, Kelly said. It would also leave plenty of room for power generated at Usibelli Coal Mine's proposed plant in Healy, he said.

Kelly said Anchorage utilities also are attempting to pare down their request for the line between Bradley Lake and Anchorage. He said he expects they will cut $10 million to $20 million off the current price tag of $80 million.

Briefing review

GOLDEN VALLEY ELECTRIC ASSOCIATION INC. Box 1249, Fairbanks, Alaska 99707-1249, Phone 907-452-1151

March 30, 1989

TO: Representative Mark Boyer

FROM: Mike Kelly, General Manager, Golden Valley Electric Assn.

STATUS REPORT CONCERNING USE OF A PORTION OF THE RAILBELT ENERGY FUND FOR THE NORTHERN ELECTRICAL INTERTIE (ANCH-FBKS)

The Governor's Railbelt Energy Council recommended use of the Railbelt Energy Fund (1) to construct a 230 kV Southern electrical intertie between Soldotna and Anchorage (original APA-estimated cost - $80 million); and (2) to upgrade the existing Northern intertie system between Anchorage and Fairbanks by constructing new 230 kV lines from Wasilla to Willow and Healy to Fairbanks (original APA-estimated cost - $118 million.) These intertie lines are needed to increase electrical transfer capability between Alaska's major population centers thereby improving reliability and reducing costs by increasing economy energy transactions, reducing electrical losses, increasing reserve sharing, etc.

The purpose of this communication is to apprise you of a dramatic cost reduction in the utility request for the Northern Intertie System from $118 million to $60 million. This has been done with the concurrence of Bob LeResche, ARECA and the other Railbelt utilities. Why? Because we realize the financial crunch that the legislature is dealing with and have made a good-faith attempt to pare our request to a minimum. We have backed off from a request for a "four-lane electrical highway" to a two-lane country road. This, when combined with a reduced-cost Southern Intertie, will give over 75% of Alaska's population a reduced, but reasonable share of their energy entitlement and will still leave the legislature over one hundred million of the REF to dedicate to other energy and non-energy needs.

Here are a few technical points to help make clear what we propose:

(1) The original $118 million plan would have provided a 230 kV, 300 megawatt low-loss electrical intertie system between Anchorage and Fairbanks. This would increase transfer capability from the present 70 megawatts.

(2) Our $60 million proposal will (a) eliminate the request for a new Wasilla to Willow 230 kV line; (b) reduce the request for a new Healy-to-Fairbanks line from 230 kV to 138 kV (same voltage as the existing GVEA 138 kV line which the new line will roughly parallel); and (c) will add voltage compensation to the line. These actions will result in an Anchorage-to-Healy total delivery capability of 100 MW and a Healy-to-Fairbanks total delivery capability of 200 MW. This will substantially reduce Healy-to-Fairbanks electrical line losses; will increase transfer capability to-from Anchorage; will accommodate GVEA's existing 25 MW Healy coal-fired powerplant plus Usibelli's proposed 35 MW cogeneration plant and will leave room for addition of another 40 MW plant at Healy in the future.

(3) The dual transmission lines will substantially increase the reliability of future power deliveries from Healy to the Fairbanks load center.

(4) GVEA has retained Harza Engineering and Power Technologies, Inc. to fine tune our cost estimate and line configuration calculations. Decision Focus, Inc. will assist in calculating the benefit to cost ratio. The draft APA report demonstrated a base case expected BCR of .7 for the original $118 million plan. We are very confident that at one-half the cost our new $60 million plan will demonstrate a 1+ BCR.

I purposefully kept this short. Therefore it lacks detail. I would be happy to help clarify any questions by phone or can come to Juneau on very short notice to testify, etc.

GOLDEN VALLEY ELECTRIC ASSOCIATION INC. Box 1249, Fairbanks, Alaska 99707-1249, Phone 907-452-1151

March 2, 1989

Mr. John Sims
Vice-President, Marketing
Usibelli Coal Mines
122 First Avenue, Suite 302
Fairbanks, Alaska 99701

RE: Healy Coal-fired Generation and Coal Drying Facility

Dear Mr. Sims:

Thank you for the update at our February 27, 1989 board meeting concerning UCM's plans to construct the 50 MW Healy coal generation and 500,000 ton/year coal-drying project. GVEA is very interested in a Healy mine-mouth project supplying our next increment of base-load generation if it can be done at competitive prices. GVEA may even be interested in an ownership share in any Healy project and would want to enter into an operating agreement for any Healy power plant. As we have discussed and agreed, such a project is really only feasible if a new transmission line is built between Healy and Fairbanks. GVEA has been working for five years with AEM Corporation in relation to their plans to build a Healy coal-fired plant. Although not privy to any of the details, we understand AEM and Usibelli may be discussing fuel supply for AEM.

If AEM does not proceed with their plant and if the State funds the proposed Healy-to-Fairbanks intertie, we enthusiastically support your proposal to use private capital, Federal Clean Coal Technology funds and State funds from Railbelt energy funds that are surplus to identified southern and northern intertie needs, to construct the plant. We understand from UCM that such a funding plan would result in very competitively priced firm power in the mid-1990's.

Best regards,

Michael P. Kelly
General Manager

cc: Governor Cowper
Interior Delegation
Bob LeResche, APA
Borough Assembly Members
City of Fairbanks Council Members
City of North Pole Council Members
Dave Hutchens, ARECA
Board of Directors/Staff, GVEA

WHEREAS, upgrading the Healy-Fairbanks line would increase the transfer capacity and lower costs to Fairbanks North Star Borough residents; and

WHEREAS, there seems to be a feeling that if the funds in the Railbelt Energy Fund are not used for Railbelt energy projects in the near future the Railbelt region may loose those funds.

NOW, THEREFORE BE IT RESOLVED by the Fairbanks North Star Borough as follows:

Section 1. That the Fairbanks North Star Borough Assembly urges the Alaska Legislature and the Administration to ensure that the monies in the Railbelt Energy Fund are used for their designated purpose of energy development within the Railbelt, region where more than three-fourths of the state's population resides.

Section 2. That the Fairbanks North Star Borough Assembly supports the use of the Railbelt Energy Fund for the construction of the Anchorage-Homer intertie and the upgrading of the Healy-Fairbanks intertie.

Section 3. That copies of this resolution shall be sent to the Honorable Steve Cowper, Governor, State of Alaska; Senators Binkley and Ehrling, Co-chairmen of the Senate Finance Committee; Senator Ahrenkamp, Chair of the Senate Resources Committee; Representatives Larson and Hoffman, Chairmen of the House Finance Committee; Representatives Menard and Davidson, Co-chairmen of the House Resources Committee; and all members of the Interior Delegation.

PASSED AND APPROVED THIS 9TH DAY OF FEBRUARY, 1989.

Presiding Officer

ATTEST:

By: Walt Johnson
Chirs Birch
J.B. Carnahan
Paul Chizmar
Hank Hove
Don Lowell
Jerry Norum
Joe Ryan
Jeff Weltzin
Bonnie Williams

Introduced: 01/26/89
Postponed: 01/26/89
Amended: 02/09/89
Adopted: 02/09/89

RESOLUTION NO. 89-011

A RESOLUTION RELATING TO THE RAILBELT ENERGY FUND AND THE CONSTRUCTION OF AN ELECTRICAL INTERTIE

WHEREAS, the Railbelt Energy Fund was established by the Fourteenth Alaska Legislature for the exclusive purpose of financing energy development within the Railbelt Region including the Matanuska Valley, Anchorage, Fairbanks, and Kenai Peninsula areas; and

WHEREAS, in 1980-1982 approximately one billion, two hundred seventy thousand dollars was spent on various large hydroelectric projects, energy loans, rate stabilization and power generation and distribution facilities to rural Alaska; and

WHEREAS, the Legislature established the Railbelt Energy Council to recommend the best options of planning, financing, constructing and managing power facilities in the Railbelt; and

WHEREAS, the Railbelt Energy Council has determined that transmission interties are a necessary part of any Railbelt energy development program; and

WHEREAS, construction of electric interties would eliminate problems in the present transmission system which include limited capacity, transmission stability problems, and reliability throughout the Railbelt region; and

WHEREAS, the project sponsors are being encouraged to submit the HCP for possible federal funding under the Department of Energy Clean Coal Technology Program; and

WHEREAS, chances of obtaining federal clean coal funds, which could approximate $55 million for the HCP, will be greatly enhanced by the demonstration of strong political and financial support for the HCP from the State of Alaska; and

WHEREAS, the HCP is an energy producing project located in the Railbelt.

NOW, THEREFORE BE IT RESOLVED that the Greater Fairbanks Chamber of Commerce urges the Governor and Legislature to support an appropriation of $30 million from the Railbelt Energy Fund to enhance the opportunity of securing federal clean coal funds in 1989 for this very important economic development project.

Passed this _____ day of _____, 1989.

By_____ By_____

Greater Fairbanks Chamber of Commerce

709 Second Avenue (907) 452-1105 Fairbanks, Alaska

RESOLUTION #10-0389

RESOLUTION URGING THE LEGISLATURE TO SUPPORT AN APPROPRIATION OF $30 MILLION FROM THE RAILBELT ENERGY FUND TO ENHANCE THE OPPORTUNITY OF SECURING FEDERAL CLEAN COAL FUNDS IN 1989

WHEREAS, the Healy Cogeneration Project (HCP) is a prospective significant development in Alaska's economically depressed Railbelt Region; and

WHEREAS, the HCP, comprising a 50 MW high-technology coal-fired powerplant and a coal processing (drying) plant which will produce 500,000 tons of premium fuel per year, will bring major economic benefits to Alaska and the Railbelt region in particular; and

WHEREAS, the HCP will utilize and promote the increased and wise use of Alaska's most abundant non-renewable resource - Coal - in an environmentally sound and efficient manner; and

WHEREAS, the HCP will create at least 130 direct long-term quality jobs as well as numerous indirect jobs exclusive of a construction force which could peak at 300, and

WHEREAS, the HCP could be a prototype development leading to broad commercialization of coal-drying (beneficiation) technology to produce large volumes of premium low-sulfur fuel having great potential in export markets; and

WHEREAS, the electrical power to be produced from the HCP will be used in the Northern Railbelt to meet power requirements and support economic expansion in the region; and

WHEREAS, the Board of Golden Valley Electric Association is supportive of the HCP construction using federal, state and private financing to provide a long-term source of reliable and attractively priced electrical power; and

WHEREAS, the HCP sponsors recognize that a new transmission line from Healy to Fairbanks is essential to deliver HCP produced electricity to Fairbanks; and

Resolution _____
Page 2

NOW, THEREFORE, BE IT RESOLVED, that the Greater Fairbanks Chamber of Commerce urges the Governor and the legislature to support an appropriation of $60 million from the Railbelt Energy Fund to the Alaska Power Authority for construction of a new 138 kV line between Healy and Fairbanks and the addition of voltage compensation on the existing Anchorage-Fairbanks transmission system.

Signed this _____ day of _____, 1989.

By: _____
George Whyel
Chairman

By: _____
W. R. Cox
President and CEO

DISTRIBUTION:
Governor Steve Cowper
Members, Alaska State Senate
Members, Alaska State House
Robert LeResche, Alaska Power Authority
Dave Hutchens, Alaska Rural Electrification Assn.

Greater Fairbanks **Chamber** of Commerce

100 Cushman Street

RESOLUTION _____

A RESOLUTION URGING SUPPORT FOR INTERTIE CONSTRUCTION USING RAILBELT ENERGY FUNDS

WHEREAS, the Railbelt Energy Fund was originally appropriated to be used exclusively to meet the energy needs of Alaskans in the railbelt region; and

WHEREAS, Alaskans in other regions of the state continue to enjoy the benefits of state-financed energy projects and the Bush continues to receive annual energy cost subsidies through the Power Cost Equalization program; and

WHEREAS, the Railbelt Energy Fund is in danger of being diverted almost entirely to uses other than its original purpose unless it is appropriated for Railbelt energy projects this legislative session; and

WHEREAS, the Railbelt Energy Council endorsed use of a portion of the Railbelt Energy Fund to upgrade the Anchorage-Fairbanks electrical intertie system, including construction of a new transmission line between Fairbanks and Healy; and

WHEREAS, because of limited intertie capability between Fairbanks and Anchorage, Golden Valley Electric Association is currently required to operate oil-fired generation to meet load whenever temperatures are below -10°F; and

WHEREAS, a new electrical transmission line between Healy and Fairbanks will enable the Usibelli cogeneration project to deliver its full output to the Fairbanks electrical load center; and

WHEREAS, the original estimate for the Anchorage to Fairbanks 230 kV transmission upgrade was $118 million; and

WHEREAS, the utilities have been asked by key legislators to reduce their request for intertie funding in recognition of state financial difficulties; and

WHEREAS, the Golden Valley Electric Association, working with the Alaska Power Authority, has reduced their request for the Anchorage-Fairbanks intertie upgrade from $118 million to approximately $60 million by reducing design voltage from 230 kV to 138 kv and by eliminating the request for a new transmission line between Wasilla and Willow;

GOLDEN VALLEY ELECTRIC ASSOCIATION INC. Box 1249, Fairbanks, Alaska 99707-1248. Phone 907-452-1151

March 29, 1989

Mr. Brian Phillips
Manager, City of Fairbanks
410 Cushman Street
Fairbanks, Alaska 99701

RE: Railbelt Energy Fund

Dear Brian,

Attached are copies of:

1. The resolution I drafted which was approved by the Chamber Energy Committee which reflects GVEA's position regarding the Northern intertie construction. I expect Chamber Board approval on April 3, 1989.

2. A resolution which Kathy Usibelli-Pulp and I collaborated on which passed the Chamber Board on March 27 supporting the Usibelli power plant/coal drying facility.

You have indicated that Councilman Hayes may be interested in introducing similar resolutions before the City Council. I believe this would be an excellent idea. Last night I testified before the Interior delegation by teleconference concerning usage of the Railbelt Energy Fund for purposes reflected in #1 above. We discussed the fact that the Interior is far more united concerning use of the REF than the Southern railbelt. For example, we have delegation, utility, Borough, Chamber, labor, and hopefully the City, united behind the plans reflected in the attached resolutions. If I can be of any help, or Jim needs me to testify, please call.

On another matter, I was pleased to learn that you will soon be addressing long-range plans concerning FMUS. As I promised, I will send you a preliminary letter-proposal regarding FMUS power supply, Chena 8 purchase, etc. by April 10.

Best regards,

Michael P. Kelly
General Manager

cc: Bert Sharp
Ron Dupham

KENT DAWSON COMPANY

P.O. Box 20790 • Juneau, Alaska 99802 • (907) 463-2533

February 21, 1989

The Honorable Curt Menard
House of Representatives

Attached is an update of the Healy Project sent to Governor Cowper. The letter also clarifies some misunderstandings which may have resulted from a recent mailing by Mr. Kelly, General Manager, Golden Valley Electrical Association.

We are delivering this to your office for your information.

There should be hearings soon on the Healy Project. We hope you will be able to attend.

V. Kent Dawson

USIBELLI COAL MINE, INC.

MARKETING
122 First Avenue
Suite 302
Fairbanks, Alaska 99701
(907) 452-2625
FAX 451-6543

February 9, 1989

The Honorable Steve Cowper
State of Alaska
P.O. Box A
Juneau, AK 99801

Dear Governor Cowper:

Several months ago in your Fairbanks office I gave you a briefing on the Healy Cogeneration Project (HCP). The concept of the HCP is a state-of-the-art, high technology, coal-fired powerplant which would produce electrical power for the Railbelt and serve as a heat source for a coal processing plant which would produce 500,000 tons of product per year. This product would be a high quality fuel expected to rapidly gain strong export market acceptance and command premium prices.

In the briefing, I outlined a proposal for financing the project in part by using a portion of the Railbelt Energy Fund (REF) to collateralize an Alaska Industrial Development and Export Authority (AIDEA) loan to the project. Benefits of below-market-rate loan financing would be captured by Railbelt consumers in the form of lower power costs. This plan, in contrast with other proposals for the REF, focused upon utilizing the money to secure beneficial loan financing as opposed to spending it outright to build intertie powerlines or a natural gas pipeline.

Having revised the scale of the project downwards from a 150 MW plant to the present concept of a 50 MW size, the estimated overall cost is approximately $130 million. The project, of course, will provide up to 300 construction jobs followed by an estimated 140 permanent full-time jobs over the duration of the life of operations.

In your combined State of the State and Budget address to the Legislature in January, you are to be commended for the plan you outlined with respect to the REF. In suggesting that the REF be renamed the Railbelt Investment Fund to be invested in ways which lead to economic activity in the Railbelt and create permanent jobs, you are clearly talking our kind of language. I would suggest that the HCP meets these qualifying criteria admirably.

Usibelli Coal Mine continues to urge the prudent application of the REF or Railbelt Investment Fund to help with innovative financing for the HCP. Commitment by the State to support the project could significantly enhance opportunities later this year

to obtain major federal funds under the Clean Coal Technology III program administered by the Department of Energy (DOE). Certainly a demonstrated financial commitment by the State can be expected to carry some weight with the DOE selection process and enhance the chances of bringing federal dollars into play.

Finally, I wish to correct false impressions which may have resulted from a recent letter to you from Mr. Kelly, the General Manager of Golden Valley Electrical Association. Mr. Kelly's letter may have created the impression that Usibelli Coal Mine has no interest in the REF other than its use for the building of electrical interties. From the earlier content of my letter, you know that is not the case; however, Usibelli Coal Mine seeks genuine cooperation with Railbelt utilities. Usibelli Coal Mine certainly sees some merit in intertie improvements both in the short and longer term but will not support a position which seeks to spend the entire REF on interties alone. The HCP could spark and service needed economic expansion and diversification within the Railbelt and these are some of the credentials that we offer for your consideration and appropriate action.

Attached is a copy of "Railbelt Energy From the Ground Up," our recently printed brochure on the HCP.

At the convenience of you and your staff, I would welcome the opportunity to expand upon the merits of the HCP and appropriate strategies to help make it happen.

Sincerely,

John Sims
Marketing President
Usibelli Coal Mine, Inc.

JS/ps

Enclosure

HIGHLIGHTS

of the

U.S. DEPT. of ENERGY CLEAN COAL TECHNOLOGY PROGRAM

History

* The forerunner of the current Clean Coal Technology (CCT) program was begun by the US Congress in late 1985 as a way of boosting commercial prospects for coal. Round one of the program (CCT I) was conducted under that congressional guidance.

* During the same time period, special envoys from the US and Canada developed recommendations for an acid rain response program.

* US response to the recommendations was to expand the CCT program to a $5 billion program to demonstrate innovative clean coal utilization technologies. This commitment was to be shared 50/50 between government and industry (public sector participants are considered within the context of industry in CCT III).

* A total of 27 demonstration projects were selected under CCT I & II with a total of $975 million of cost share contributed by the US Department of Energy (DOE). CCT III is currently in the mill and will have $575 million in federal cost share.

Time table for CCT III.

* Draft Program Opportunity Notice (PON) - March 15, 1989

* Comments due on draft PON - March 31,1989

* Final PON opening date - May 1, 1989

* Proposal due date - August 29, 1989

* Proposal selection deadline - December 27, 1989

* Proposal acceptance period - one year
(ie. cooperative agreement end of 1990)

* Project duration - indefinite, previously selected projects varied from about two to six years.

CCT III PON objectives.

* Promote, through demonstration, the commercialization of innovative technologies which are potentially capable of;
    1. significant reductions of SO2 and NOX emissions in existing coal burning facilities and/or,
    2. provide for future energy needs in an environmentally acceptable manner.

CCT III program guidelines.

* Technologies should be ready for the demonstration phase of technological development. Basic research and deployment of commercially available technologies is not the intent of the program.

* DOE can share in the cost of the demonstration up to 50 percent of each of the three project phases; design, construction and operation. Industry (including any local public sector funding) is responsible for the remainder.

* Candidate technologies must be capable of either retrofitting or repowering of existing facilities. Technologies may be demonstrated at new facilities, provided the technology is capable of being used in retrofit or repowering applications.

  Retrofit technologies are those which reduce emissions of SO2 and/or NOX by modifying existing facilities, their feedstocks or by utilizing new fuel forms. New fuel forms are coals which have been altered with the objective of mitigating emissions of SO2 and/or NOX

  Repowering technologies are those where significant reduction in emissions is achieved by replacing a major portion of an existing facility.

* Technologies may have application for utility, industrial, commercial/residential or transportation markets.

* Repayment of CCT funds occurs as a result of subsequent commercialization of the technology through sharing in receipts on sales of equipment, product or licenses derived by the technology developer through commercial application of the technology. The demonstration facility and the products from the demonstration facility are excluded from the payback requirement.

CCT III project categories.

* On-site retrofit.
* Repowering.
* Processing of High Rank Coal.
* Processing of Low Rank Coal.
* Coal processing combined with retrofit/repowering.

How does the Healy Cogeneration Project fit into CCT III.

The Healy Cogeneration Project (HCP) is a proposal which fits into the last category of project types. Leading edge coal combustion technology which could be used to repower existing coal fired power plants will be demonstrated in the power generation side of the project. Advanced sub-bituminous coal drying technology will be demonstrated which can reduce transportation costs and improve quality, thereby making low sulfur coals a viable option for retrofit of existing facilities, through use of a new fuel form.

ALASKA RAILBELT ELECTRICITY

and the

HEALY COGENERATION PROJECT

The energy picture in the Alaska Railbelt is unique in many respects:

- The Alaska Railbelt is rich in energy resources and the cost at which that energy can be supplied to an electric generating unit is among the lowest in the United States.

- The wide spacing between electricity consumers in the railbelt makes transmission and distribution expensive and results in a relatively high delivered cost to the retail consumer of electricity.

- The Railbelt Energy Fund (REF) was created as a means for the State of Alaska to use its oil wealth to ensure long range stability of power supply in the railbelt and mitigate the geographic impediments to low cost supply of electricity to railbelt consumers.

- Whereas energy resources on the railbelt can be produced at relatively low cost, export of railbelt energy resources is far below its potential.

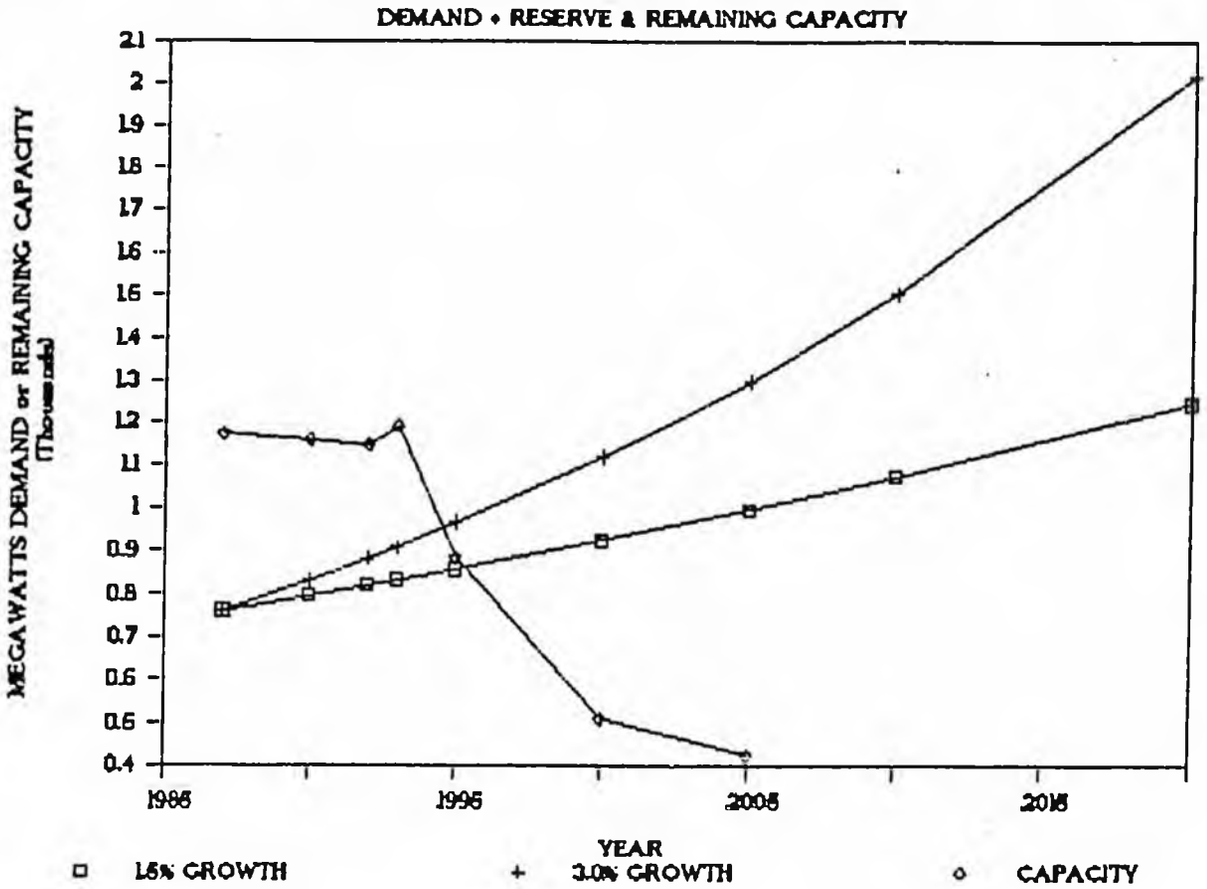
The Healy Cogeneration Project (HCP) fits the unique railbelt energy picture well, and provides the opportunity to use the REF in a manner that will benefit railbelt consumers for many years:

- Plans to use portions of the REF for transmission system upgrade are enhanced by the HCP, which will use the railbelt's most abundant energy source, coal, to provide low cost electricity, at a location that will improve overall system performance and is near the energy source.

- The HCP will demonstrate a coal beneficiation system, on a commercial scale, that could pave the way for large scale export of coal resources throughout the railbelt region.

- The HCP is a logical addition to the railbelt electric generation system which will provide low cost electricity for near term growth in the northern railbelt, and demonstrate the use of state of the art coal combustion technology for future electricity needs throughout Alaska.

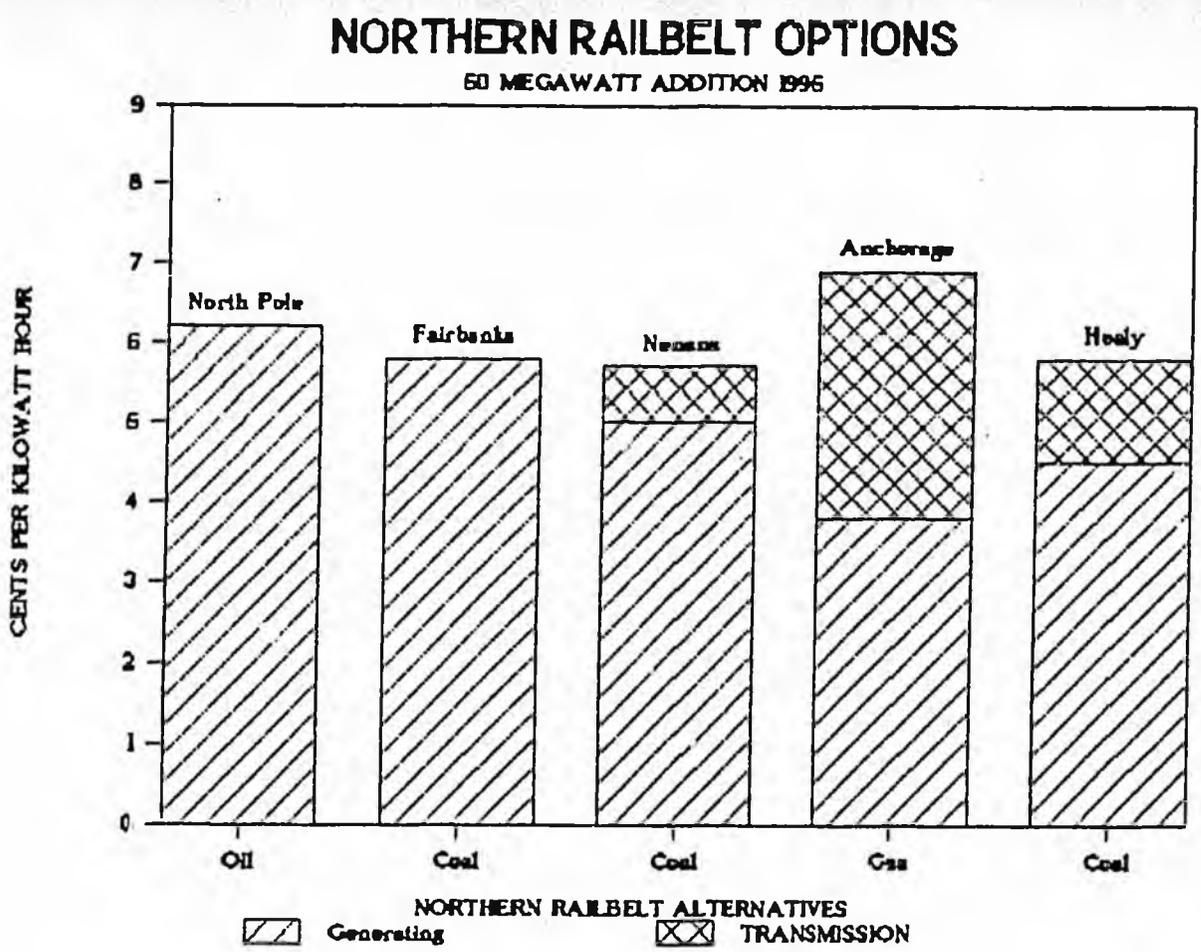
ALASKA RAILBELT ELECTRICITY



The above graph shows the peak load growth, plus 30 percent reserve, and the anticipated total generating capacity for the railbelt. The load growth curves are shown for both 1.5 and 3.0 percent total growth.

The steep drop in generating capacity after about 1994 is due to the planned retirement of existing generating units. It should be pointed out that life extension work can be done and is being performed on many of the existing units and therefore the point at which total serviceable capacity is less than demand will certainly be some point beyond that shown on the graph.

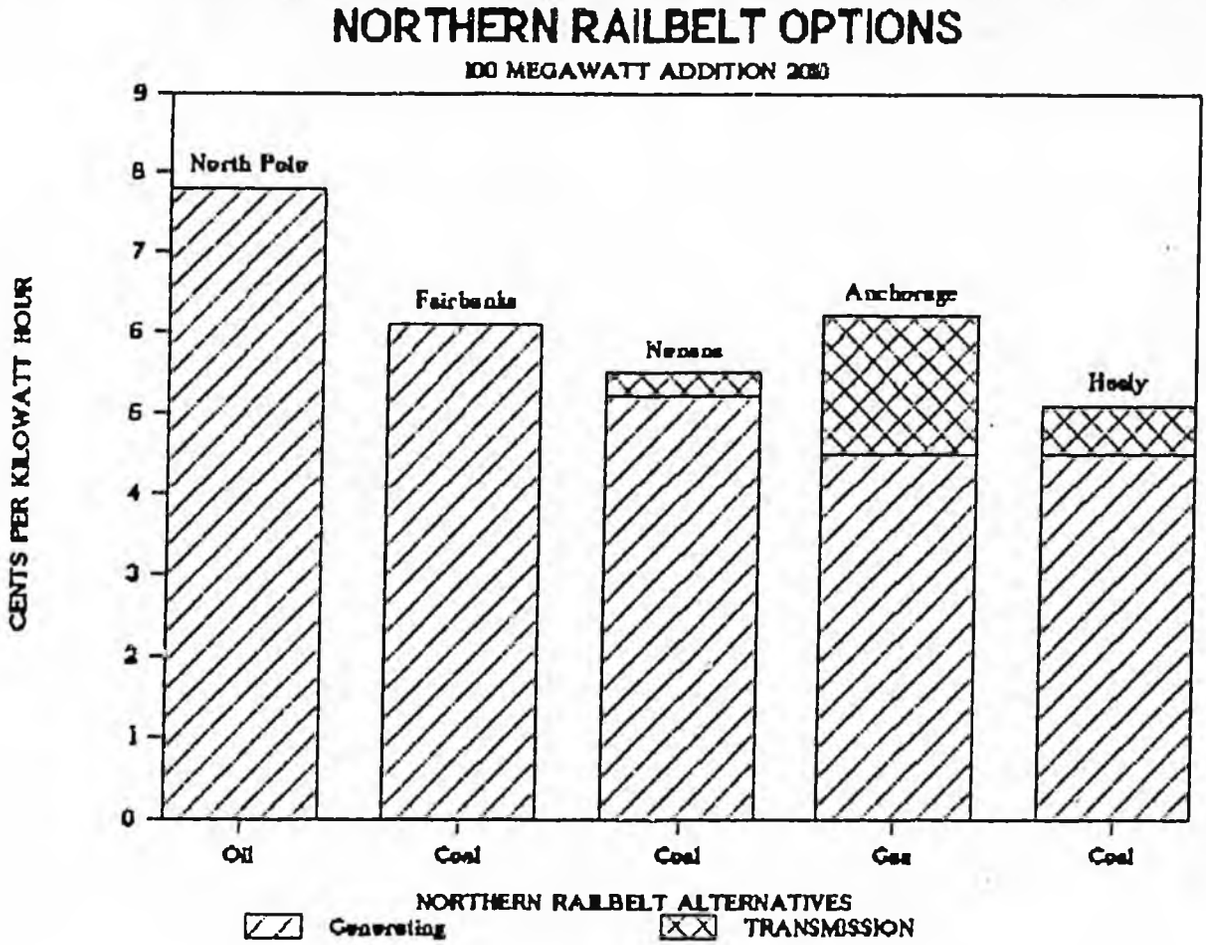
However, regardless of the assumptions one makes, major investment in the railbelt's base load generating capacity will be required by the end of this century. And, if one believes the 3 percent growth rate is a responsible number for energy planning, then new generating capacity will be required, even if current capacity is maintained, around the year 2001. Given the likelihood that a combination of moderate demand growth and some unit retirement will occur, the 50 megawatt addition planned for the HCP is an appropriate addition to the railbelt generating system in the mid 1990's.



As much as 60 percent of the peak demand of the combined public utility load in the northern railbelt is supplied by electricity generated south of the Alaska Range. Whether the primary load growth is in the south or the north, a logical place to install the next increment of base load capacity is in the northern half of the railbelt, in order to better balance the base load capacity distribution throughout the railbelt system.

The above graph presents the estimated Fairbanks substation costs for electricity delivered from five options for providing an additional 50 megawatts of base load capacity to the northern railbelt. The generating cost represents the "busbar" cost of the electricity at the generating station and the transmission cost represents the debt service and operating cost of upgrading the existing transmission system to 345KV from the generating station to Fairbanks. These costs are based on a mid range crude oil price forecast of $18 per barrel (1988 dollars).

As can be seen from the graph, the three coal options represent the lowest overall delivered cost per kilowatt-hour. Although the busbar cost of natural gas generated electricity in the Anchorage area is lower, the transmission cost to get the electricity to Fairbanks makes the natural gas option less attractive for the next increment of base load capacity for the northern railbelt.

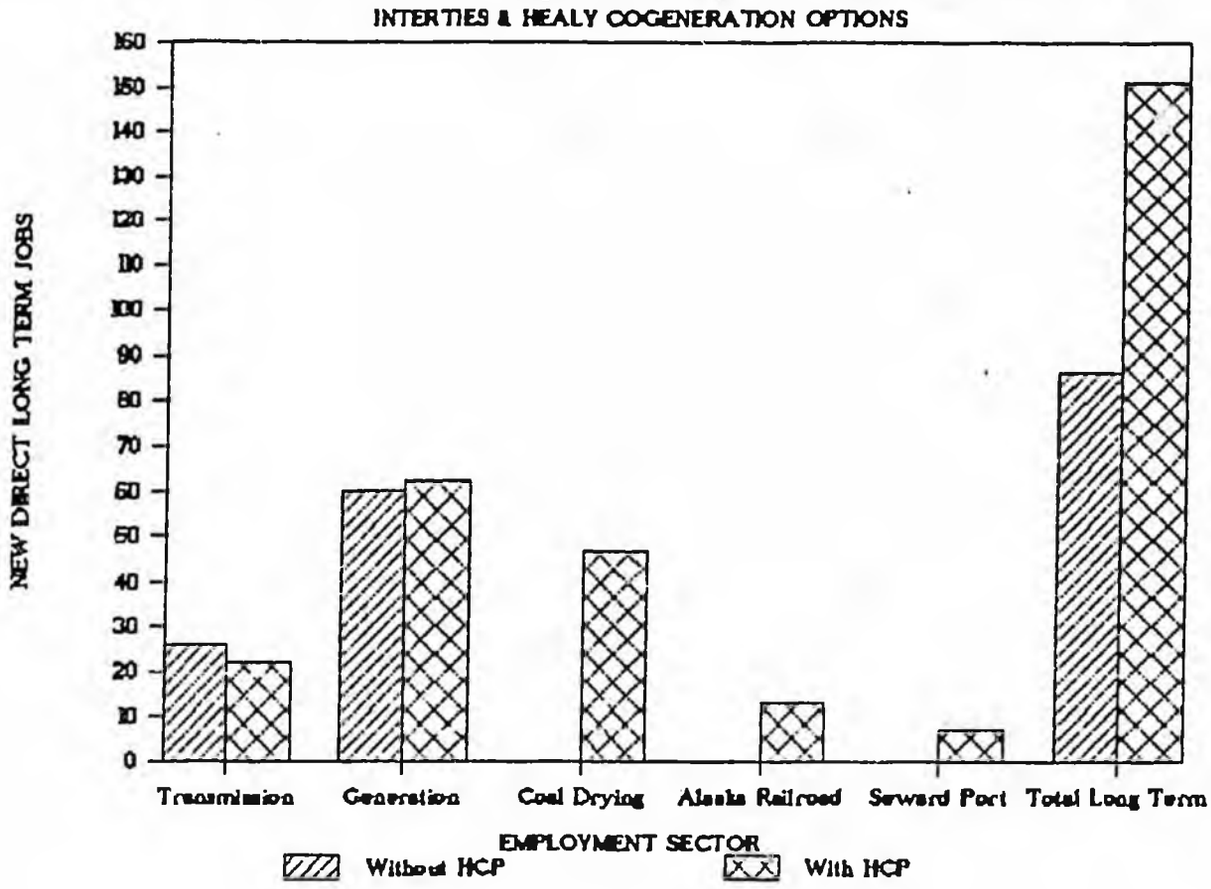


Looking down the road a bit further to the year 2010, the above graph considers the same options for a new 100 megawatt base load addition in the northern railbelt. This estimate of electricity cost to the Fairbanks substation is based on a mid range crude oil price forecast of $30 per barrel, with coal cost staying level in real terms.

In the year 2010, coal based electricity generation in the Healy area is the clear winner for future energy needs in the northern railbelt. A decision today to promote development of power generating facilities in the Healy area for the northern railbelt will ensure stable cost and adequate supply for northern railbelt electricity consumers for many years to come. The coal resources in the Healy area are adequate to provide the northern railbelt's energy needs for hundreds of years.

Development of the HCP, along with upgrade of the electricity transfer capability of the transmission line from Healy to Fairbanks, will give the best of all options to all railbelt electricity consumers. Both northern and southern railbelt electricity consumers will be able to continue enjoying the benefits of economy energy sales, which are transferred across the existing intertie. Overall system reliability will be improved by a better balance of generating capacity, both geographically and in fuel type. '

JOBS IMPACT by RAILBELT ENERGY FUND



Many proposals are, and will be, made for use of the Railbelt Energy Fund. If one assumes that the REF will be used for its originally intended purpose, transmission interties and the HCP are two options which deserve careful consideration. The above graph shows the long term jobs benefit if, instead of building interties only, $30 million of the REF is used to enable construction of the HCP. It is also assumed for the "without HCP" option that 50 megawatts of non-coal fired capacity would be constructed and result in long term jobs for power generation, which includes jobs in both the generating and fuel production sectors.

As can be seen from the graph, much more long term benefit is realized throughout the railbelt, and over a much broader economic base if the REF funds are used for the HCP, as well as intertie construction. In addition to the long term jobs which would be generated by the HCP, about 300 additional construction jobs would be created and approximately 20 million dollars per year of new export income would be added to the Alaskan economy. The multiplier effect of the added employment and export income to Alaska would translate into a significant economic boost for the entire state for many years to come.

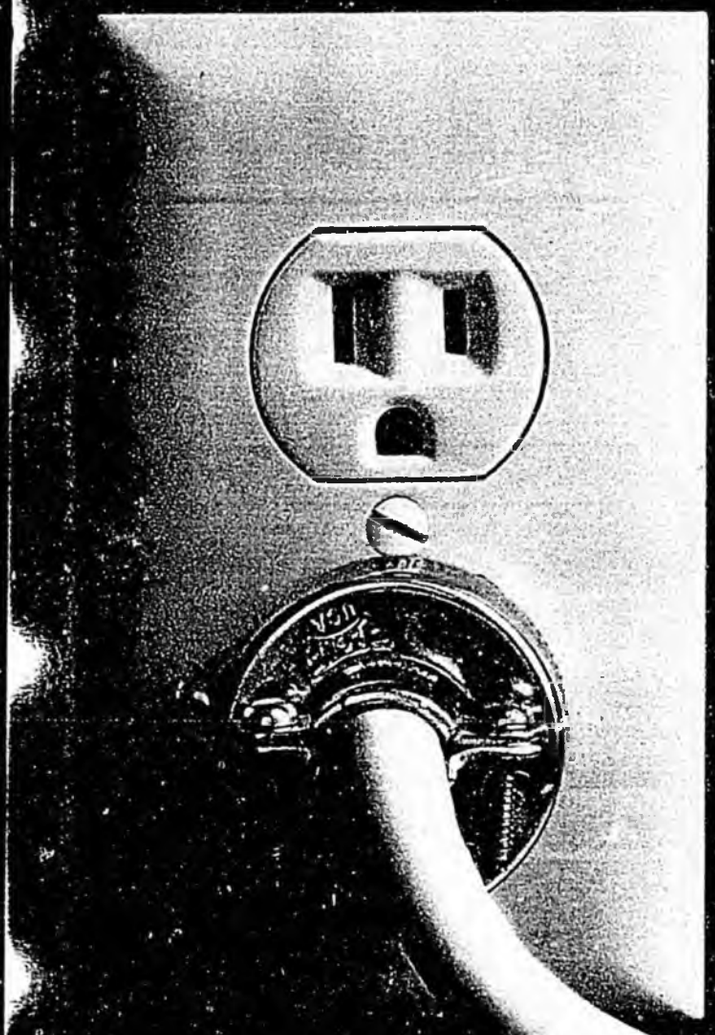
The time to make a commitment to the Healy Cogeneration Project is now. The U. S. Department of Energy (DOE) will be releasing a Program Opportunity Notice (PON) for round three of the Clean Coal Technology Program (CCT3) on May 1, 1989, and State commitment to the HCP will go a long ways towards Alaska's success in bringing CCT3 funds to Alaska.

The Clean Coal Technology Program is a cofunding program, by the federal government, designed to promote the commercial deployment, through demonstration, of clean coal technologies which show promise of yielding significant improvement in the environmental performance of coal burning facilities. CCT3 is the third of five PON's which ultimately will invest $2.5 billion towards demonstration of clean coal technologies in the United States. The U.S. Congress has appropriated $575 million for CCT3 and projects can be cofunded for up to 50% of total project cost. DOE has indicated that the CCT3 program will be the one that gives the greatest chance of success to western coal projects. The window of opportunity for Alaska to participate in this project is widest this year, and we cannot afford to ignore it.

Successful demonstration of the technologies planned for the HCP will reap benefits for all of Alaska. Alaska now has the distinction of being the sole exporter of sub-bituminous coal in the world, a distinction we should not only be proud of, but also one that should give us the edge on expanded U.S. coal exports to Pacific Rim countries. Demonstration of a coal drying technology that will make Alaskan coal more saleable in the export market would be a large step towards establishing Alaska as the leader in US coal exports to the Pacific Rim. The demonstration of clean coal combustion technology in an arctic environment may pave the way for expanded use of local coal resources throughout Alaska, where electricity production costs are very high. Combustion technologies envisioned for the HCP will produce far less pollutants than the diesel fired generating units currently in use at many remote Alaskan communities.

The HCP is an all win proposition for the people of Alaska. Total cost of the HCP is expected to be about $130 million. An investment from the REF of $30 million can potentially leverage over three times that much in federal and private investment. The opportunity exists today to take a giant step towards energy security for the railbelt and expansion of Alaskan resource exports to new Pacific Rim markets.

RAILBELT ENERGY FROM THE GROUND UP.



THE HEALY COGENERATION PROJECT

THE HEALY COGENERATION PROJECT

COAL: THE NEW, CLEAN FUEL FOR THE RAILBELT.

There is more coal in Alaska than oil in Saudi Arabia. Its price has historically been very predictable. Coal represents most of the domestic energy resource of the United States, and is the primary generation fuel for many other nations as well.

The need for affordable electricity in the Railbelt is currently being met by a combination of natural gas, coal, and hydroelectric generating stations. However, the Railbelt energy picture will change drastically in the next few years, as natural gas continues to become more expensive, and existing generating units are retired. Increased use of coal and hydroelectric power will be needed to maintain an adequate power supply. The Bradley Lake hydro project will fill part of this new requirement. Alaska's vast coal resources can provide the balance.

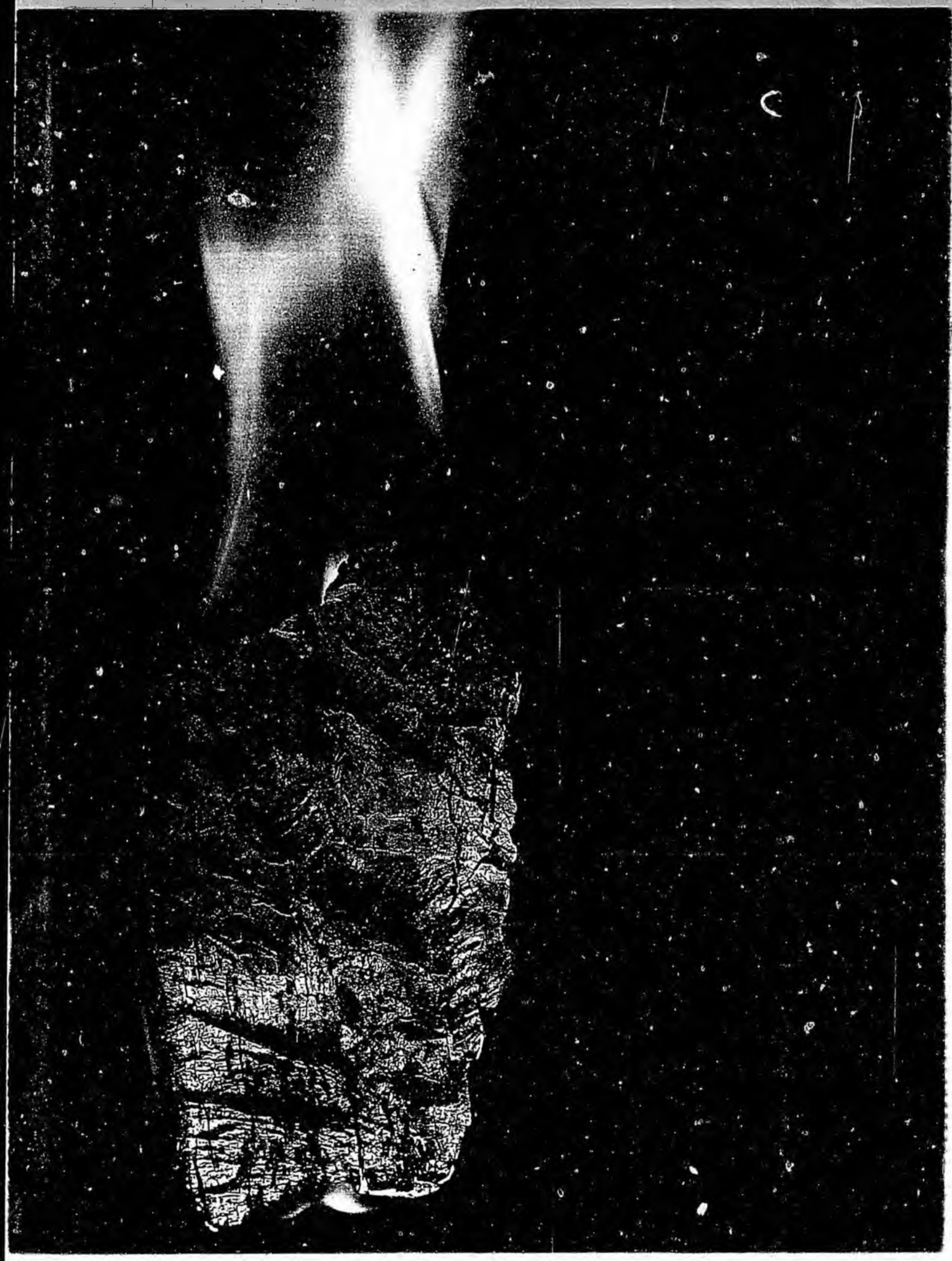
The challenge facing our state and nation is to incorporate clean coal burning technologies into our complex power supply network—to balance our generation capabilities with cost-effective coal, while preserving the quality of our air, water, and soil. Today, we can meet that challenge.

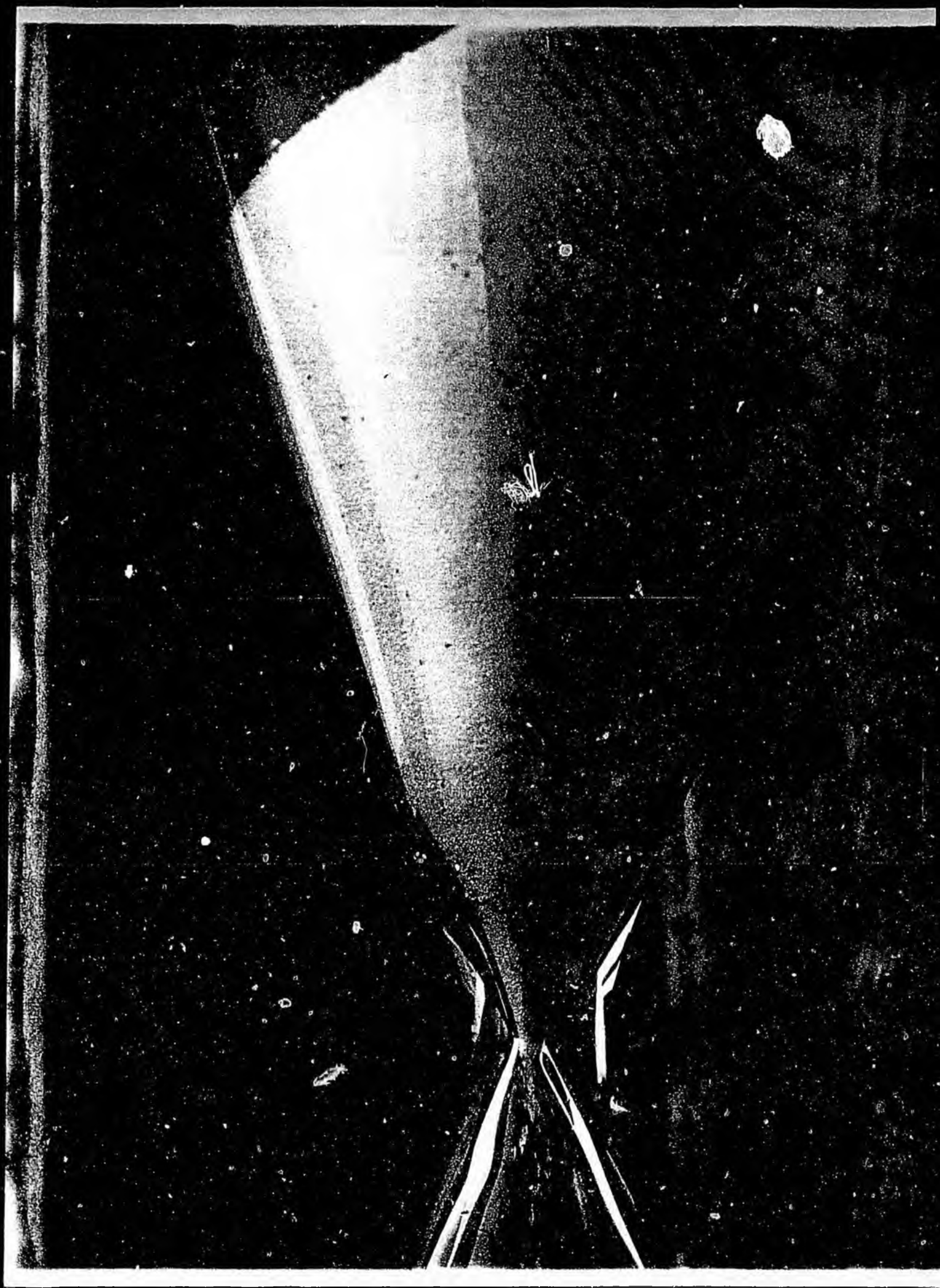
The Healy Cogeneration Project (HCP) is being proposed to produce electricity for the Railbelt through environmentally safe, efficient coal combustion. Thanks to recent advances in fluidized bed combustion, coal is now comparable to natural gas as a clean-burning fuel. The fluidized bed combustion process virtually eliminates sulfur dioxide and oxides of nitrogen in stack exhaust.

In a fluidized bed coal combustion plant, coal is burned in a boiler to produce steam, which in turn powers turbines to produce electricity. At HCP, waste heat from the boiler will be used by an adjacent drying facility to remove excess moisture from crushed run-of-mine coal. The improved coal can be exported for sale to overseas markets, and will be available for fuel uses in Alaska.

Alaskan coal is among the cleanest in the world, with an extremely low sulfur content. The pollution control technology planned for HCP exceeds California emissions standards—the most stringent in the United States. The exhaust from HCP will be almost entirely water vapor, and invisible most of the time.

The end result will be clean, dependable power from our most abundant, affordable, stable energy resource—coal.





WE MUST PREPARE FOR TOMORROW BEFORE IT BECOMES TODAY.

History has shown that for the past 20 years—through economic growth and recession alike—our energy demands have increased at an average of 9 percent a year. However, many long-range decisions are being made today based on forecasts which predict only about a 1½ percent annual demand increase. As can be seen on the following page, these forecasts fall far short of our true needs. A 3 percent growth rate is probably the minimum estimate needed for responsible energy planning.

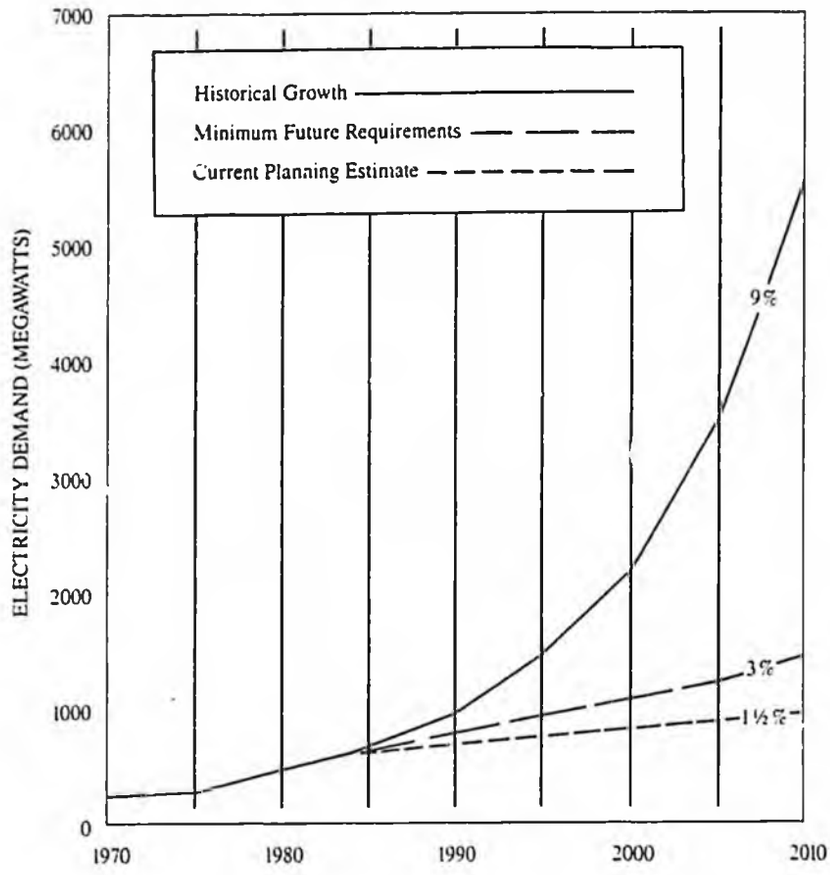
Negotiations are currently underway to tie the price of natural gas-derived electricity to the price of oil and gas by the early 1990s. Presently, about 80 percent of Railbelt generating capacity is natural gas based. Our continued dependence on this source of power will eventually result in dramatically higher electric rates for the consumer. Hydroelectric power is a reliable energy source, but hydro facilities are expensive to build and take many years to bring on line.

We must diversify into a clean, stable, efficient source, which can be brought on line quickly, be affordably built today, be expanded as needed in the future, and guarantee competitive energy costs for the Alaskan consumer long after natural gas-fired electricity has become prohibitively expensive. The Healy Cogeneration Project will provide this long-term stability and security, and create both short and long-term jobs for Alaskans in the process.

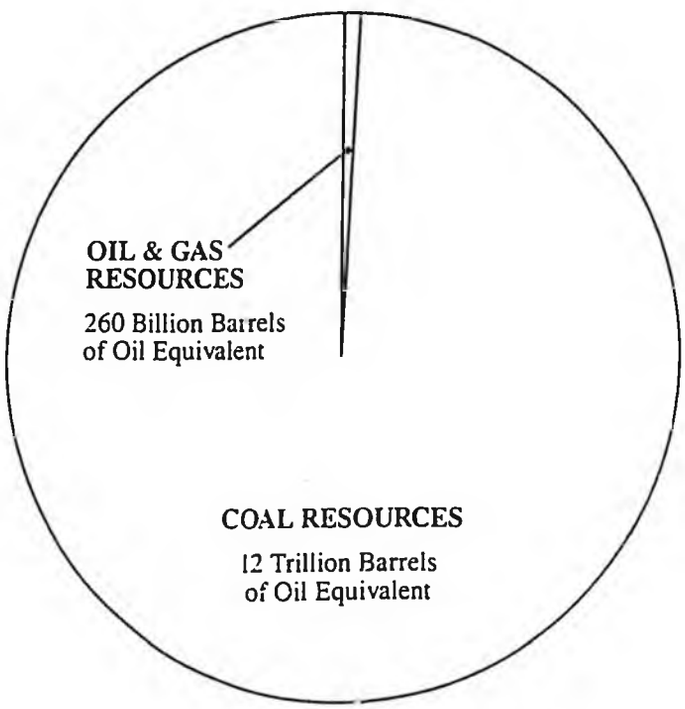
The Healy Cogeneration Project can be taken from permit issuance to power generation in just 30 months. It represents an affordable addition to the generation capacity of the Railbelt, at less than half the installed cost-per-kilowatt of hydroelectric generation. Locating the HCP between the two major Railbelt load centers will improve the reliability of the entire system.

Only HCP can insure environmentally sound production of low-cost, readily-available electricity into the future, at an affordable construction cost today.

RAILBELT POWER PROJECTIONS
1988–2010



ALASKA'S FOSSIL FUEL RESOURCES



COAL'S NEW BY PRODUCTS: JOBS AND EXPORTS.

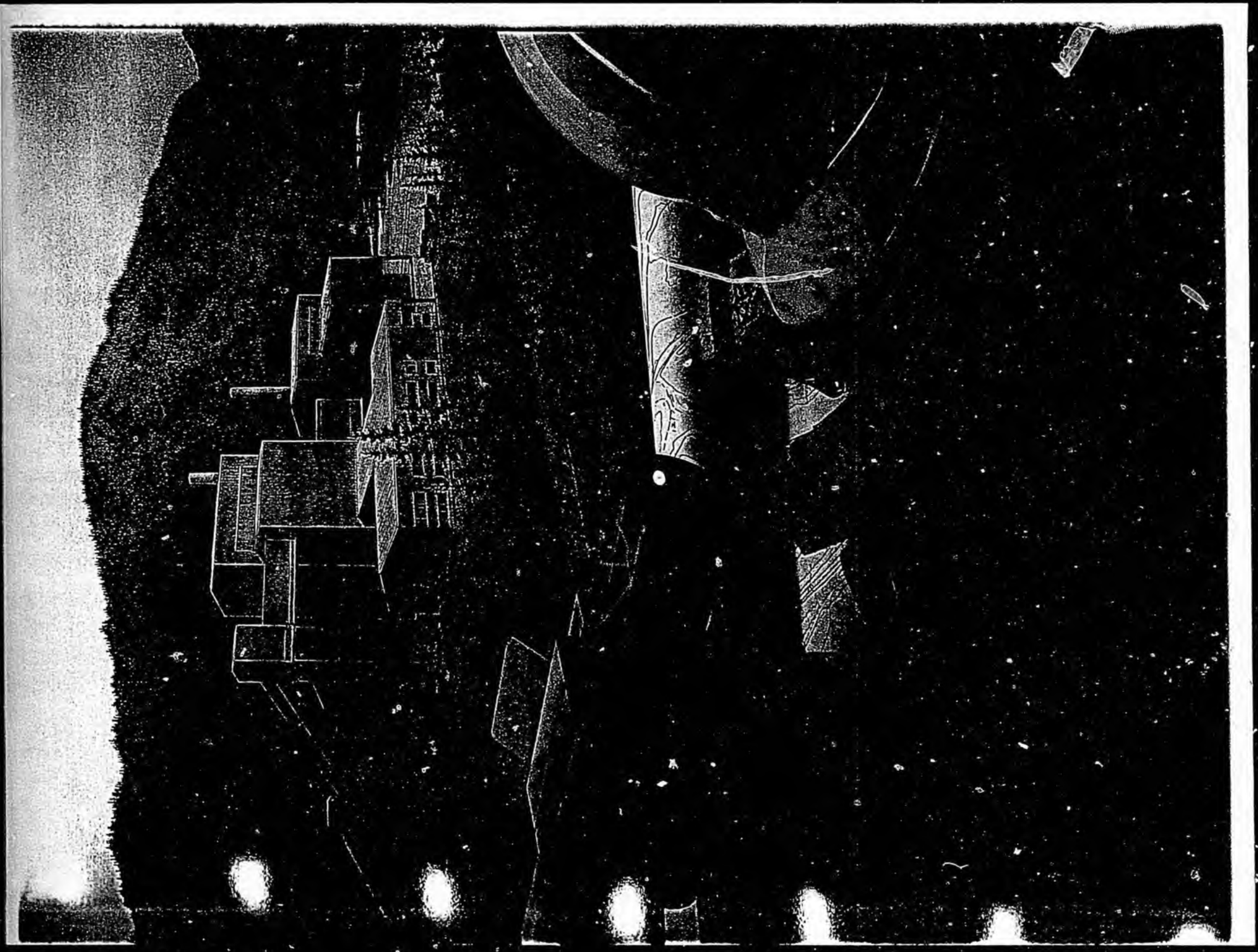
The Healy Cogeneration Project will create more than 175 permanent jobs for Alaskan workers. In addition, hundreds more jobs will be created in the short term in the construction, transportation and service industries. The benefits of stable, affordable power will be enjoyed by all Alaskans, and mirrored in every sector of the economy. Since business development is dependent first and foremost on a ready supply of power, we will be laying the groundwork for future growth through long-range energy planning now.

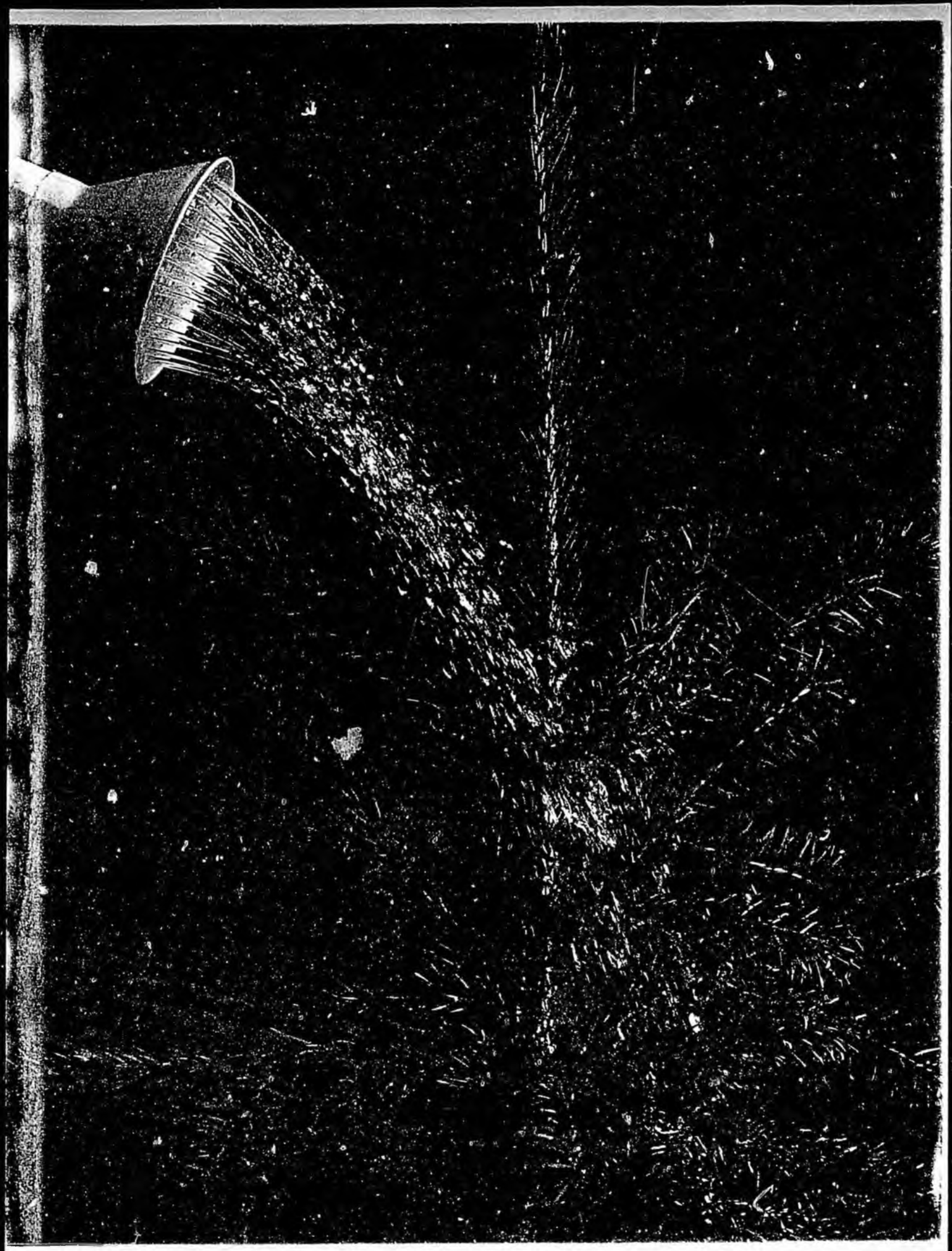
HCP will create an exciting new dried coal fuel product which will be attractive in world export markets. The beneficiated coal from HCP will also be available for use in our own state.

Coal is potentially Alaska's largest export, since coal resources far exceed our oil reserves. We are uniquely located within easy reach of vast new markets on the Pacific Rim. Already environmentally desirable due to its extremely low sulfur content, our coal needs only a drying process to become competitive with any coal in the world.

Alaskan export development has received the full commitment of the governor and the state legislature. HCP combines the advantages of domestic energy security with the benefits of foreign trade. It will allow us to use one of our state's great resources right here at home, while making us a key player in the energy export market. Just as importantly, HCP will provide a new, stable source of jobs for Alaskans.

HCP is the first step down a promising path toward stable energy and economic development. The project will generate additional revenues for the state treasury, and will likely stimulate the use of fluidized bed combustion in other areas of Alaska with local coal resources. All Alaskans will reap the benefits of the Healy Cogeneration Project, with electricity, employment, and exports from coal—into the 21st century and beyond.





LET'S INVEST THE RAILBELT ENERGY FUND—NOT SPEND IT.

The purpose of the Railbelt Energy Fund is to provide long-term energy security for Southcentral and Interior Alaska. Long after our state's current economic recession has given way to new prosperity, the energy policies we implement today will continue to affect every aspect of our lives. New, efficient, and stable energy sources will be a catalyst for growth – while a shortage of electrical capability will cripple our ability to build a strong economy.

The Healy Cogeneration Project proposes to use the Railbelt Energy Fund as collateral to obtain financing from the Alaska Industrial Development and Export Authority, and private sources. HCP is seeking a loan from the fund, which will be repaid through the revenue stream from beneficiated coal and electric power sales. This will benefit the Alaskan energy consumer in two ways: we will be able to bring HCP electricity on line at competitive rates, and the Railbelt Energy Fund will be preserved for future projects as they are needed. Of most projects currently proposed, only HCP advocates borrowing from, rather than spending, the Railbelt Energy Fund.

The Healy Cogeneration Project is a plan that makes sense for Alaska. It will increase the Railbelt's electrical generating capacity in logical increments and help to ensure a continuous supply of cost-effective energy for Alaskans tomorrow – yet is affordable to add today.

The Healy Cogeneration Project is being proposed to bring a long-term energy solution to the Railbelt. HCP will allow us to diversify away from our dependence on natural gas, balance the distribution of energy more evenly through the Railbelt, and build a secure energy future – from the ground up.

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February 27, 1989

Governor Steve Cowper
P.O. Box A
Juneau, Ak 99801

Dear Governor Cowper:

I want to bring you up to date on the Healy Cogeneration Project (HCP) and enlist your support in helping make it a reality. I would hope, having read this letter, that you can share my belief that the HCP represents the best economic development project currently under consideration within the Railbelt and as such deserves your political support.

As currently planned the HCP comprises a 50 Mega-Watt powerplant utilizing state-of-the-art, environmentally benign, coal combustion technology coupled with a coal processing (drying) facility which would use heat from the powerplant to produce 500,000 tons of stable, premium, beneficiated fuel per year. Electrical power from the powerplant would satisfy future base-load demand in the Northern Railbelt at a time when this increment will be needed both to satisfy normal growth and service economic expansion. Successful financing of the project, along the lines that I will propose, would ensure low-cost predictable firm power for the Northern Railbelt over the life of project. The coal drying facility will address the single greatest constraint to the marketing of sub-bituminous Alaska coal, its the high moisture content. By reducing the moisture content to produce a stable end product the resulting premium quality coal will command broad market acceptance in the Pacific-rim and within Alaska.

The HCP could be operational by 1993, however prior to then a workforce, which could peak at 300, would be engaged in construction. Once in operation the project would directly account for more than 130 permanent, quality, year round jobs at the mine, in the powerplant and coal processor and across the transportation system. Many other general sector jobs would be created as a indirect consequence of the HCP. The capital cost of the project is currently estimated at $130 million with the powerplant accounting for $100 million and the balance attributable to the coal processing plant.

Until recently (latter part of 1988) UCM had cooperated under a memorandum of understanding (MOU) with Brown & Root on a project concept which utilized a 150 MW powerplant. Our current

thinking is that this powerplant sizing is too large for anticipated electrical power demand growth in the early 1990's; hence the more conservative size. The MOU with Brown and Root is no longer in effect.

Convinced of the overiding merits of a downscaled project UCM's Board of Directors have recently approved a considerable "at risk" appropriation to move the project forward and in particular submit the project for Federal Clean Coal Technology III support. This "at risk" appropriation is quite apart from capital investments that the company will make in the project in the future. UCM is currently in the process of selecting a new engineering consultant for the HCP.

The Federal Clean Coal Technology III (CCT III) solicitation process affords a unique opportunity to bring major federal dollars into play for the HCP. CCT III, administered by the Department of Energy (DOE), will distribute $575 million to qualifying projects. The intent of the CCT program is to facilitate the demonstration, deployment and commercialization of clean coal technologies by sharing in the cost and hence the risks involved. Coal cleaning (processing), coal combustion and post-combustion clean-up facilities are expected to be candidates for the CCT III funding process. The HCP will utilize, in an integrated plant, coal cleaning technology in the coal processor and advanced coal combustion technology in the powerplant. This integrated approach has attracted favorable comment from the DOE resulting in UCM's decision to advance the HCP as a candidate for funding under CCT III. If successful, the chances are perhaps realistically 1 in 3, the CCT III program could provide between 40% and 50% of the HCP capital cost (say $55 million out of $130 million).

In earlier awards under the DOE administered Clean Coal Technology program significant weight has attached to financial commitments made by State governments in support of clean coal projects. The same will certainly be true for the HCP and Alaska.

It is with this in mind that we are asking your support for a conditional appropriation from the Railbelt Energy Fund (REF) towards the project of $30 million. The money could be appropriated to the Alaska Industrial Development and Export Authority (AIDEA) pending the outcome of the DOE CCT III award process late in 1989.

This request for a conditional appropriation is a departure from our former position which involved drawing upon the corpus of the REF to underwrite a low interest loan to the project. This would require changes in the statutory authority of AIDEA and would encumber much more of the REF than our current strategy. Since there are limited funds within the REF, UCM would be competing head-on with Railbelt utilities. Under the

conditional appropriation scenario there would be money available for major intertie projects as well as the HCP.

UCM is very cognizant of working closely and effectively with the Northern Railbelt utilities and to this end UCM would certainly support construction of the Healy to Fairbanks intertie as a needed component of infrastructure. Support for the HCP, including the $30 M appropriation from the REF, has been approved by the Golden Valley Electric Association Board of Directors. This will be reported to you by GVEA in a follow up letter.

Of the intertie scenerios UCM most vehemently resists the proposed expenditure of $38 million on the Willow end of the Northern intertie.

The $30 million that UCM is requesting from the state leverages another $100 million of project financing from federal ($55 million) and private sources including UCM ($45 million). I would certainly characterize a state financial commitment as a prudent investment. The best dollars to bring to Alaska at this time surely are federal match and private venture capital.

The HCP, in conjunction with the Wishbone Hill Project, could be a vital shot in the arm for Alaska's coal industry. Resolving the high moisture problem of most Railbelt coals by the use of drying technologies will pay-off in a big way in the future. In deploying these advanced technologies Alaska will attract global attention and demonstrate ability to penetrate overseas markets with a premium low sulfur coal.

The HCP is truly an exciting opportunity not just the Northern Railbelt but also for the entire State of Alaska.

I ask for your enthusiastic support for the HCP and look forward to working with you to help bring this project in all its complexities to fruition.

I will be calling on you in Juneau and are prepared, together with my UCM colleagues, to provide any information that you may request concerning the HCP.

Sincerely,

John Sims
Usibelli Coal Mine, Inc.
Vice-President Marketing

JS/me