

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILES 8672

986 SCOMM44: HOUSE POWER ALTERNATIVES STUDY COMM. 1979-80 78

UNIFORM AIRBILL NON-NEGOTIABLE
Subject to Conditions of Contract on the Back of the Airbill

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1/ TO AK VIA WC TO JU VIA TO VIA 										☒ PREPAID ☐ COLLECT Wien AIR ALASKA WIEN AIR ALASKA INC. 4100 INTERNATIONAL AIRPORT ROAD ANCHORAGE, ALASKA 99502 TELEX: 090-25-317													
2/ CONSIGNEE'S ACCOUNT NO.										CONSIGNEE NAME POWER ALTERNATIVES COMM. STREET ADDRESS C/O REP. BRIAN ROGERS POUCH V CITY / STATE / ZIP CODE JUNEAU, ALASKA 99901													
4/ SHIPPER'S ACCOUNT NO.										SHIPPER NAME STATE OF ALASKA LEGISLATIVE AFFAIRS AGENCY STREET ADDRESS 101 COLLEGE ROAD CITY / STATE / ZIP CODE FAIRBANKS, ALASKA 99701													
3/ INSTRUCTIONS TO CARRIER: INCLUDE CUSTOMER REF. NO. & BILLING INSTRUCTIONS										5/ TO EXPEDITE MOVEMENT, SHIPMENT MAY BE DIVERTED TO MOTOR OR OTHER CARRIER AS PER TARIFF RULE UNLESS SHIPPER GIVES OTHER INSTRUCTIONS HEREON. 6/ RECEIVED BY CARRIER AT ☐ SHIPPER'S DOOR ☐ CITY TERMINAL ☒ AIRPORT TERMINAL													
NOTIFY ON ARRIVAL PHONE 465-4925										D. EXCESS VALUE G. SHIPPER'S C.O.D. H. C.O.D. FEE K. ORIG. ADV. CHGS. L. DEST. ADV. CHGS. F. OTHER CHARGES J. SHIPPER'S R.F.C. I. TAX R. TOTAL SHIPPER PAYS S. TOTAL CONSIGNEE PAYS													
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SHIPPER'S SIGNATURE X <i>[Signature]</i>																							
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8/ A WEIGHT CHARGES 19.80										PICK-UP ZONE XX		PICK-UP CHARGES		DEL. ZONE XX		DELIVERY CHARGES		ORIG. ADV. CHGS.		DESCRIPTION OF ORIGIN ADVANCE CHARGES			
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R SHIPPER PAYS \$ 20.79										ITEM PREPAID ALL		CONSIGNEE PAYS		ITEMS COLLECT		RECEIVED BY <i>John Hartle</i>							
FLIGHT/DATE										TO		AGT. INITIALS		IN GOOD ORDER EXCEPT AS NOTED ON THE BACK HEREOF									
EXECUTED AT BY FAI/ACC/DONS										DATE 07 JAN 80		TIME 1435		CARRIER 212		ORIGIN FAI		SERIAL NUMBER 0 050 7474					

ALASKA CENTER FOR POLICY STUDIES

204 E. 5TH AVE., SUITE #201, ANCHORAGE, AK 99501 (907) 272-6113

December 21, 1979

Rep. Brian Rogers
Energy Alternatives Committee
Legislative Affairs Agency
Pouch Y, State Capitol
Juneau, Alaska 99811

Dear Rep. Rogers:

Please consider this our billing for December under the contract with your committee. Good progress is being made on all components of the energy study.

This billing is for \$12,000 due the Center under Clause VI (C) for services under Clause I(C).

We appreciate your prompt attention.

Sincerely,



Alaska Center for Policy Studies by
Victor Fischer, Principal Investigator

OK to Pay
Brian Rogers

Sim Van der Ryn • Architect

November 14, 1979

House Power Alternatives Study Committee
610F Gruening Building
University of Alaska
Fairbanks, Alaska 99701

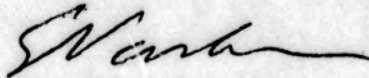
Attn: Glenda J. Straube

In Re: Professional consulting services for the
Alaska State Legislature's House Power Alternatives
Study Committee.

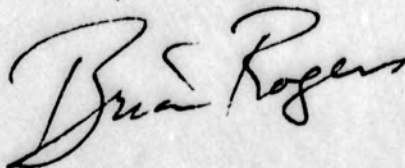
INVOICE

3 days consulting @ \$500.	\$1500.
2 days per diem @ \$55.	110.
Airfare SF/Anchorage & return	380.70

TOTAL DUE: \$1998.70


Make check payable to: Sim Van der Ryn
Drawer F
Inverness, Calif. 94937
IRS Identification
Number 94-2557289

OK to pay



Sally Kabisch
Sierra Club
545 E 4th Ave #5
99501

Thessig's
General

244.0

547.35
302.18

245.17

44.17
86.01
192.

302.18

15
7 1.01

31-92-1-208

WORKING BUDGET - F. Y. 1980
Legislative Affairs Agency
Power Alternatives

<u>Item</u>	<u>Amount</u>	<u>Budget</u>	<u>Expenditures</u>	<u>Encumbrances</u>	<u>Balance Available</u>	<u>%</u>
Personal Services		17,500	612		16,888	97
Travel		7,500	1,620		5,880	78
Contractual		175,000	32,540	142,585	(125)	-0-
Commodities			50		(50)	-0-
TOTAL - Component 09		200,000	34,822	142,585	22,593	11

Funding Source - General Fund

Chapter 76, SLA 79

\$200,000

V3109211	111279	WESTERN AIRLINES I	361	31921208	211	207595	04		226.25
V3109367	120379	SUNSHINE TRAVEL IN	361	31921208	247	215707	19		132.00
FW380309	112879	BRIAN ROGERS	362	31921208	248		14		165.00
AV008151		OCTOBER POSTAGE	362	31921208	314		21		10.30
AV008153		NOVEMBER POSTAGE	362	31921208	314		21		15.00
CC310318		GREGG ERICKSON GKE 834	250	31921208	389		13	14,000.00	
CC310319		BRADFORD TUCK	250	31921208	389		13	6,000.00	
CC310325		AIRLIN TUNING ART 525	250	31921208	389		21	5,000.00	
V3109279	111479	SIM VANDER RYN	371	31921208	389	207598	04	1,998.70-	1,998.70
V3109284	111679	AK CTR FOR POLICY	371	31921208	389	207602	04	15,500.00-	15,500.00
FW380357	112979	BRIAN ROGERS	362	31921208	481		26		50.00

(12)



DYNAMIC RESEARCH CORPORATION

THE ALASKAN THINK TANK

DATA GATHERING • ANALYSIS • RESEARCH • IDEAS
S. R. BOX 10612 - FAIRBANKS, ALASKA 99701 - PHONE (907) 479-8107

Susitna

December 12, 1979

Dear Representative Rogers:

Enclosed is a summary of hours and expenses used to evaluate the geotechnical portions of the three Susitna dam proposals, and for a trip to Anchorage to obtain necessary reports from the Corps of Engineers.

<u>CODE</u>	<u>DATE</u>	<u>HOURS</u>	<u>ITEM</u>	<u>AMOUNT</u>
SL-2-01	10/29/79	2	Memo to Brian Rogers	\$ 30.00
SL-2-02	11/23/79	3	Review and formulation of questions	45.00
SL-2-03	11/30/79	4	Met with Corps in Anch.	60.00
SL-2-04	12/6/79	2	Writing final report	30.00
SL-2-05	12/8/79	4	Writing final report	60.00
SL-2-06	12/10/79	2.5	Writing final report	37.50
SL-2-07	12/10/79	2	Writing final report	30.00
SL-2-08	12/10/79	7	Writing final report	<u>105.00</u>
			SUBTOTAL	\$397.50

EXPENSES

Round trip fare Anchorage- Fairbanks	\$130.00
Car rental	27.00
Purchase of Corps of Engineer reports	<u>4.00</u>
SUBTOTAL	\$161.60
TOTAL	\$559.10

Note: There are copies of time slips and receipts for expenses that will be furnished upon request.

LK:jg

OK to pay
Brian Rogers

ALASKA CENTER FOR POLICY STUDIES

204 E. 5TH AVE., SUITE #201, ANCHORAGE, AK 99501 (907) 272-6113

November 16, 1979

Rep. Brian Rogers
Power Alternatives Comm.
Legislative Affairs Agency
Pouch Y, State Capitol
Juneau, Alaska 99811

Dear Rep. Rogers:

Please consider this as our November billing under the contract with your committee. Phase II of the study is underway.

This billing is for \$15,500 due the Center under Clause VI(C) for services under Clause I(C).

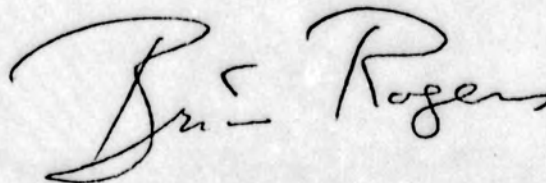
We appreciate your prompt attention.

Sincerely,



Alaska Center for Policy Studies
Victor Fischer, Principal Investigator

OK to pay on December 1, 1979



Chair, House Power Alternatives

Draft - Not yet
Agreed to by
legislature

Tentative Budget and Outline -- Susitna Alternatives Study

+ (at least 20,000 from APA)

40,000. Demand Update--ISER.

The Institute would develop updated economic activity and population projections, which would then be used to develop projected electric demand to the year 2010. The initial report would be completed by January 1980. The final report will incorporate a set of results from the conservation and renewable energy sources study, below.

60,000. Conservation and Renewable Energy Resources--Center for Policy Studies
(with a number of subcontracts)

This section will address the potential energy savings available from conservation and the use of renewable energy sources such as solar space heating, etc. After determining the potential for savings, a plan for achieving those savings in the Railbelt area will be developed, and a set of varying possibilities for energy savings efficiencies will be worked out for use in the second half of the demand study.

10,000. Downstream Environmental and Social Effects--AEIDC

The Center will produce a short paper describing particular environmental and social impacts that the dam might have, and suggesting that these impacts be included in the studies leading to dam construction.

10,000. Vulnerability to System Failure--engineer to be determined

This section would discuss the possibility of the transmission intertie being wiped out.

5,000. Critiques of Demand Projections--Brad Tuck, Energy Probe (?)

Short papers pointing out problems with the preliminary demand projections. Tuck's work would focus on the economic activity projections, while Energy Probe would address end use scenarios.

10,000. Criteria for evaluation of the Supply Alternatives

Two or three economists would provide papers reviewing existing material and describing what questions and problems an adequate study of the supply alternatives should cover.

20,000. Preliminary Study of Natural Gas as a Supply Alternative--G. Erickson (?)

Would review the Cook Inlet situation, and discuss the possible use of gas from the North Slope.

10,000. Preliminary Study of Coal as an Alternative Source of Supply

Would review existing studies, summarize potential for Beluga and Healy fields.

5,000. Misc. Consultants

Includes geotechnical review, possible seismic work.

15,000.--Coordinator (A.A.)

Would operate under the ^{direction} ~~advise~~ of the project co-directors, keeping ^{Chairman} ~~ta~~ on the various sections of the study, coordinating the efforts of the various consultants, ensuring that all studies are covering material ~~from~~ with common assumptions, etc.

5,000.--Misc. Expenses and Travel

This plan of study represents a policy determination to work with the APA Susitna study and attempt to provide guidance and questions for their consultants to address, as opposed to producing a separate, independent analysis of the same material. Such an analysis could be undertaken in late 1980 based on the APA work, with a greater degree of efficiency, if necessary.

The study will be coordinated with ongoing legislative work in related areas, particularly the Special Committee on Renewable Energy, the Gas Line Committee, & the House Resources Committee work on coal.

A draft report will be presented to the legislature in April 1980.

Draft - Not ~~yet~~
Agreed to by
legislature

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A draft report will be presented to the legislature in April 1980.

? additional \$:

' Small-scale Hydro

Financing possibility

Statement of Expenses

Energy Probe,
43 Queen's Park Crescent East,
Toronto, Ontario,
M5S 2C3.

To:

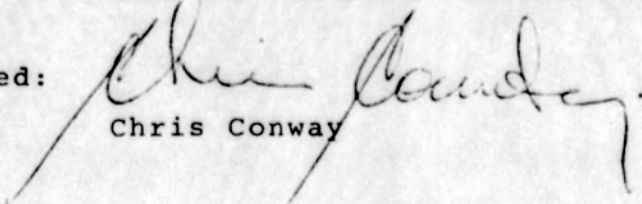
Representative Brian Rogers,
Co-Chairman,
House Power Alternatives Study Committee,
Alaska State Legislature,
Pouch V,
Juneau, Alaska,
99811.

Work Performed in Part (A) and (B) of contract:

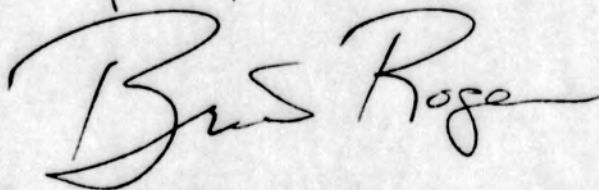
\$4,000 (US)

Detailed expenses and receipts available on request

Signed/Authorized:

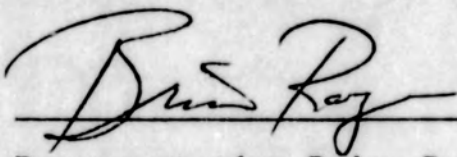

Chris Conway

OK to pay

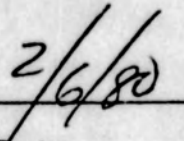


To: Legislative Affairs
From: Representative Rogers

I authorize the issuance of a warrant to "Hold That Line," for up to \$30., for the purposes of purchasing a subscription and other publications from that organization. Mark Wittow is authorized to handle the check.



Representative Brian Rogers



Date

Co-Chariman, House POver Alternatives Study Committee

ARLON R. TUSSING & ASSOCIATES / 2720 Rainier Bank Tower / Seattle, Washington 98101 / (206) 447-0321

May 23, 1980

Mr. Mark Wittow, Coordinator
House Power Alternatives Study Committee
Alaska State Capitol Building
Room 411
Juneau, Alaska 99801

Dear Mark:

Enclosed is a mailing list for your use in distributing the Electric Power Supply Planning paper. We may have some further additions in the future, but for now, this is it. Thank you for your assistance.

Sincerely,

A handwritten signature in cursive script that reads "Barbara Morse". The signature is written in dark ink and has a long, sweeping horizontal line extending to the right.

Barbara F. Morse

ALASKA
STATE LEGISLATURE
MEMORANDUM

Arlon Tussing asked that I send a copy of the enclosed report to you. I would appreciate receiving a copy of any comments you have on the report, at the following

address: House Research Agency
Pouch Y
Juneau, Alaska 99811
att: Susan Brody, Susitna Oversight



Mark Wittow, Power Alternatives Study Coordinator

SCOMM

#44.29

Electromagnetic Pollution

by Robert O. Becker
and Andrew A. Marino

High-tension wires
may be hazardous
to your health

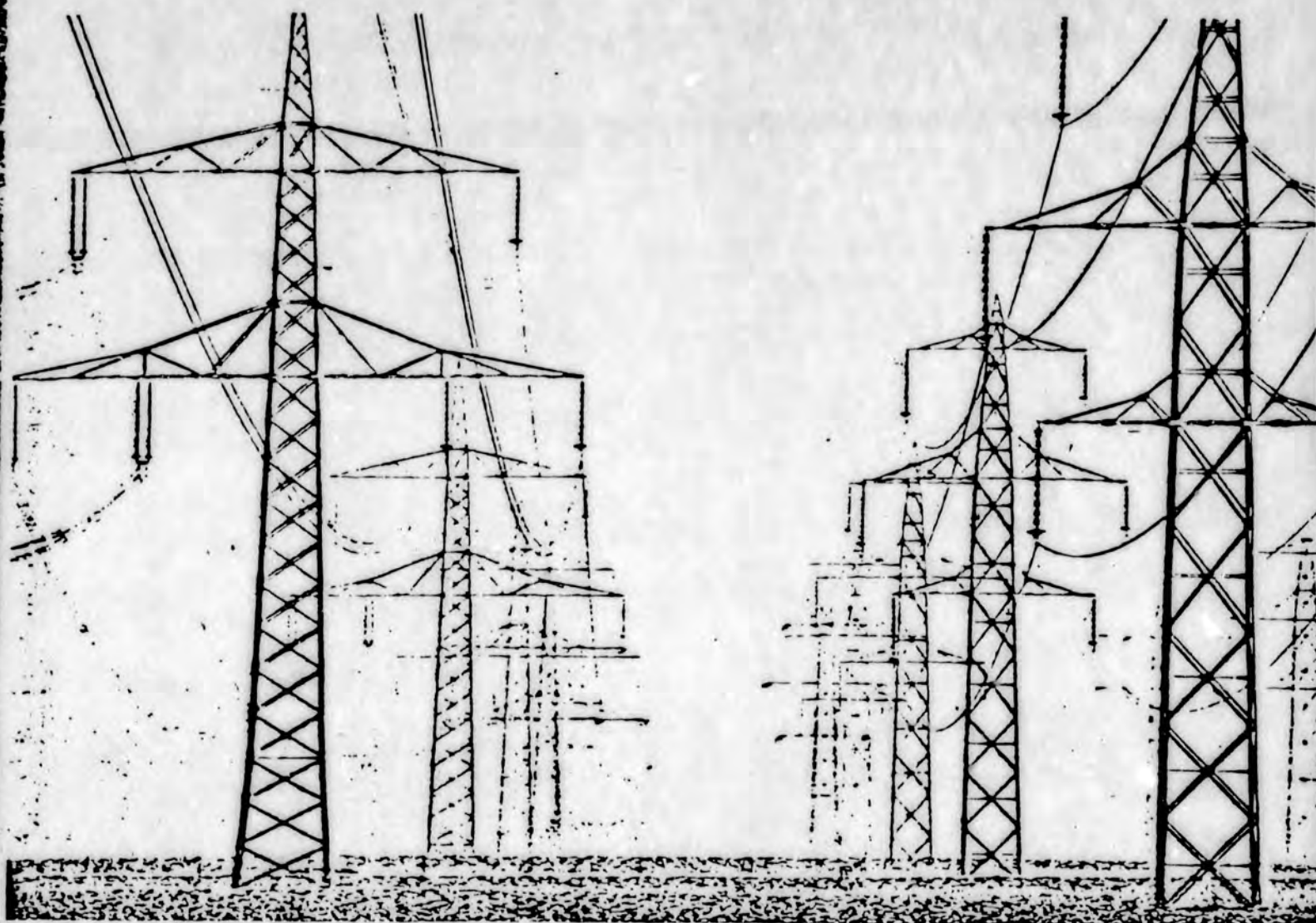


Photo by René Bunn (Magnum)

The American landscape would be unfamiliar were it lacking high-voltage transmission poles standing like metal skeletons strung with high-tension wires. These and other products of modern power and communications industries, such as radio, television, and radar, all operate in the electromagnetic spec-

trum—those waves present in our environment (produced both naturally and artificially) which we cannot hear, see, feel, or otherwise detect with our senses without instrumental intervention.

Until recently, scientists believed that electromagnetic radiation had no effect on life. No obvious diseases had been identified as having been caused by such energy. Expert opinion held that there was little or no connection in nature between electromagnetic radiation and biological tissue, other than gross heating effects from high doses. And so industry has gone ahead expanding its use of the electro-

Robert O. Becker and Andrew A. Marino are at the Veterans Administration Hospital and Upstate Medical Center in Syracuse, New York. Becker is chief of orthopedic surgery at the hospital and research professor at the medical center. Marino also holds dual posts. At the veterans hospital he is a research physicist and at the medical center he is an assistant professor.

magnetic spectrum with the assurance that no danger exists. We now live submerged in a sea of unperceived electromagnetic radiation.

What Is Electromagnetic Radiation?

The electromagnetic spectrum extends from wavelengths of millions of meters to ultrashort cosmic rays. Light is a special case. It is the only part of the spectrum which we can actually perceive directly. The others, like the long wavelengths used in seismic exploration, are masked from our direct perception. Clinical medicine uses the very short wavelengths in x-rays and industry exploits the largest share of the spectrum which lies between one hertz and one hundred gigahertz. The most commonly used frequency—sixty hertz—is used by electric power systems.

Only part of our electromagnetic environment occurs naturally—most of it is artificially produced. Naturally occurring long-wavelength electromagnetic radiation in the Earth's atmosphere primarily results from geophysical processes and from lightning. Extraterrestrial sources, such as radiation from the sun, account for the short wavelengths.

Human activities within the last hundred years have profoundly changed the natural electromagnetic background waves which have prevailed since the beginning of evolution. Power and communication systems have drastically altered the frequencies and the strength of the nonionizing electromagnetic radiation (NIEMR) in the environment.

Biological Effects

Recent research on the solid-state properties of biological tissue now offers us some new and troubling clues as to the interaction of life with very weak NIEMR waves. A number of scientists have begun to report biological effects due to exposure to these waves.

In some cases, investigators have succeeded in identifying the biological significance of naturally occurring nonionizing electromagnetic radiation, while other reports describe the nonthermal responses of organisms exposed to artificial radiation.

First, consider the findings that at least some birds use geomagnetic clues in their orienting processes and that disturbances in the magnetic environment disrupt this ability. Another link between life and electromagnetic energy can be found in the work of James D. Hays and Neil D. Opdyke of the Lamont-Doherty Geological Observatory. Studying oceanic sediments, they claimed that in those geologic periods during which the Earth's magnetic field reversed its direction, an unusually large number of organisms died and some species of marine life became extinct. Frank A. Brown of Northwest-

ern University has shown that living organisms exhibit changes in their behavior and physiology relating to corresponding periods in the Earth's electromagnetic environment. In still another series of experiments, this time on humans, Rutger Wever of the Max Planck Institute found that circadian rhythms are affected by the existing atmospheric electromagnetic environment.

Other laboratory experiments exposing animals and humans to artificially produced electric and magnetic fields further suggest the connection. In 1973, Dietrich E. Beischer of the Naval Aerospace Medical Research Laboratory, using ten subjects, reported that certain levels of artificially produced magnetic field exposure to humans result in elevated serum triglycerides, substances related to arteriosclerotic disease. James H. McElhany of West Virginia University showed that certain levels of low frequency electric fields can cause bone tumors in rats and Gordon Marsh of the University of Iowa found that even lower doses can interfere with the growth pattern of flatworms. James R. Hamer of UCLA reported that an electric field about one hundred times weaker than that employed by Marsh can affect animal reaction-time performance. In the microwave region, Milton M. Zarat of New York University and others reported that exposure to non-thermal intensity levels could cause cataracts in mammals.

In our laboratory, we found that rats exposed to a sixty hertz electric field for one month exhibited hormonal and biochemical changes similar to those caused by stress. The study employed an electric field comparable in strength to that produced at ground level by a typical high-voltage transmission line. In another experiment, we continuously exposed three generations of rats to the electric field and found increased infant mortality and severely stunted growth. Our results appear to indicate that the applied electric field primarily affects the central nervous system and activates the stress-response mechanism. Chronic stress can produce a wide variety of diseases and pathological conditions.

Health Hazards?

Now that abundant evidence establishes that both natural and artificially produced NIEMR can produce some biological effects, it raises serious questions of possible health hazards for humans. Nonetheless, the Environmental Protection Agency and state health or environmental agencies have not significantly supported the necessary research to establish safe exposure levels. Until now, on the assumption that the fields and energy levels associated with power and communication systems could not produce nonthermal biological effects, Western

(Continued on page 23)

Electromagnetic Pollution

Continued from page 15

nations have evolved no standards to protect populations from excessive exposure. Note, however, that the Soviet Union has stringent regulations governing human exposure at both the low and high frequency regions of the spectrum.

This odd discrepancy emerges in the current diplomatic squabble between the USSR and the U.S. over Soviet bombardment of the U.S. embassy in Moscow with microwave energy. The in-

tensity level being employed by the Soviets is less than the U.S. safety level (which is based solely on the possibility of inducing tissue heating), but greater than the level which the open Soviet scientific literature indicates can cause biological effects. As a consequence, the U.S. government has no formal basis upon which to claim embassy employees may be suffering hazards to their health.

A recently released Defense Intelligence Agency report suggested that nonthermal levels of microwaves might have offensive weapons applications. The report found that Soviet scientists are aware that chronic exposure to non-thermal microwave energy has great potential for development as a means of disrupting behavior patterns and for use as an interrogation tool. It has been reported that the Soviet bombardment of the American embassy which occurred between October 1975 and January 1976 was highest at 18 microwatts per square centimeter. In contrast, the American microwave oven emission standard is 1,000 microwatts per square centimeter and the American occupa-

tional exposure standard is 10,000 microwatts per square centimeter. The Soviet exposure standard is ten microwatts per square centimeter.

The use of electromagnetic energy in the U.S. continues to expand. The generation of high-voltage transmission lines currently being constructed will operate at 765,000 volts, as compared to the present maximum of about 500,000 volts. The electric utility industry has begun developing the technology to operate at more than a million volts. The U.S. Navy has proposed to build a gigantic antenna in Michigan which would radiate at very low frequencies. Communications facilities at all frequencies continue to proliferate.

Recent scientific evidence on the biological effects of nonionizing radiation requires that we know whether or not chronic exposure is hazardous to health. This may be the right moment to halt those technologies which may result in further electromagnetic pollution until scientific studies establish safe levels not only for humans but for the entire ecosystem. □



Susitna Power Now, Inc.

P.O. Box 7-4436 Fairbanks Alaska 99701 (907) 452-5272
P.O. Box 981 Anchorage Alaska 99510 (907) 276-7744

Mark
FEB 20 1980

February 14, 1980

The Honorable Brian Rogers
Alaska State House
Pouch V
Juneau, Alaska 99811

Dear Representative Rogers:

Legislation providing for funding and construction of the proposed Anchorage/Fairbanks Transmission Line Intertie justifies a position of highest priority early this session. Support documentation is contained in appropriate pages taken from the Anchorage-Fairbanks Intertie Supplementary Study conducted by the International/R.W. Retherford Engineering firm and an economic study performed by Anchorage Municipal Light and Power personnel in cooperation with GVEA and the Fairbanks Municipal Utilities System, copies of which are enclosed.

The figures speak for themselves. However, in the event you are not into engineering studies, we will summarize the results for you.

The following plan is recommended:

1. Build approximately 158 miles of new transmission line and connect to existing facilities at Healy and Willow at an approximate 1983 dollar costs of \$54,827,000.

2. The new section is to be built to specifications designed to ultimately transmit energy to both Interior and South Central Alaska supplied from the Upper Susitna Hydroelectric Project.

3. Once completed, the Intertie will be capable of providing for economy energy transactions, a pooling of reserve capacities, and emergency power support between the State's population centers. Further it will be used to supply energy for the Susitna Project once construction is underway.

4. The benefits are substantial. Following is a brief description of the several major ones:

Co-Chairmen
Bob Penney
Lee Wareham

Treasurer
John Spencer

Secretary
Dave Hutchens

February 14, 1980

A savings in direct fuel costs in excess of \$5,000,000 annually.

A savings in capital investment for reserve generator units of \$847,000 annually.

A savings thru displacement by electricity generated from high efficiency natural gas fired units rather than expensive oil fired generation of 425,180 barrels of fuel oil each year.

These are the major ones; there are many more.

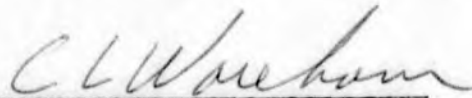
5. Financing. We propose the State appropriate \$54,827,000 from the general fund early this session and that said funds be administered by the Alaska Power Authority for the purpose of constructing the transmission line project in an expeditious manner. (SB No. 385 sufficiently addresses the funding issue.)

Further, that the utilities using said intertie be assessed appropriate wheeling and/or capacity charges sufficient to cover all operations and maintenance costs incurred by the APA following completion of the facility.

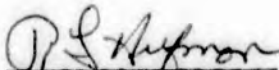
Principal and interest costs associated with the capital investment to be held in abeyance pending completion of the first phase of the Upper Susitna Hydro Project. At that time all capital costs for the line will be co-mingled with those of the prime project and amortized accordingly.

This project will benefit thousands of Alaskans and is therefore most worthy of your support.

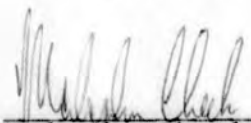
Thank you and best wishes.


Lee Wareham, Co-chairman
Susitna Power Now


Bob Penny, Co-chairman
Susitna Power Now


R. L. Huffman
Gen. Mgr.
GVEA


Tom Stahr
Gen. Mgr.
Anch. ML&P


Malcolm Cheek
Gen. Mgr.
MEA


Harold Gilliam
Gen. Mgr.
Fbks MUS

Enclosures

1. Portions of Engineering Analysis
2. Economic Evaluation

INTRODUCTION

In December 1979 the Economic Feasibility Study for a possible Anchorage - Fairbanks Transmission Intertie (Intertie Study) was completed by IECO-RWRA for the Alaska Power Authority. This Intertie Study reviewed alternative intertie designs that considered the railbelt requirements for generation with and without the Susitna hydroelectric project.

The study concluded that a feasible intertie was possible without the Susitna project as well as with it. The optimized designs for the alternatives studied were for the total line length (323 miles) and included the following voltage and conductor configurations:

Alternative Cases	Interconnection Description	Voltage kV-circ	Optimum ACSR kcmil-no.cond	Capability MW
W/o Susitna:				
I A & B	Anchorage - Ester	230 s/c	954 - 1/c	130
I C	Anchorage - Ester	345 s/c	795 - 2/c	380
I D	Anchorage - Ester	230 s/c	954 - 1/c	130
W/ Susitna:				
II A	Anchorage - D. Canyon	345 s/c x2	954 - 2/c	1200
	D. Canyon - Ester	230 s/c x2	1510 - 1/c	370

After study of the report it was suggested by the Anchorage Municipal Light and Power (AMLPP) and the Golden Valley Electric Association (GVEA) that it would be useful to analyze an arrangement that would use existing lines (including a pending extension of a Matanuska Electric Association (MEA) line from Willow to Sunshine) with new line constructed for the remaining portion -- such new line to be built according to the design criteria of Susitna (see II A in the above Table).

The Alaska Power Authority (APA) authorized a brief supplementary study to determine the approximate transfer capabilities and construction costs of such an arrangement. The following pages report the results of this study.

Genesis of This Report

The Intertie Study concluded that a 230 kV single-circuit transmission line with a line loading capability of 130 MW is economically feasible in 1984. This line design is smaller in capacity than would be required if the Susitna Project were constructed. A line design compatible with the Susitna Project was not found feasible by 1984 although the larger capacity circuit is deemed technically preferable for the Anchorage - Fairbanks connection. Further studies were recommended toward finding a way to support this larger capacity circuit.

The suggestion of GVEA and AMLP to study an interim arrangement that would maximize the use of existing lines (resulting in the least amount of new construction) was supported by the APA as a potentially practical way to accomplish the intertie at an earlier date and provide that new construction would be compatible with the larger capacity circuits suitable for the Susitna Project.

The purpose of the following pages is to examine the technical character of such an arrangement with a view toward maximizing the power transfer capability at minimum initial construction cost.

Technical Scope of This Report

The depth of technical review of the interim arrangement described above will include only steady-state analysis of several line configurations with an assigned limit of approximately 30 degrees of power angle between the buses at Pt. MacKenzie and Gold Hill. The stability of these configurations is not analyzed. No serious stability problems are anticipated with the power angle limit as stated.

Future Stability Analysis

If it is determined that an interim system configuration as described herein be implemented, it is important to make a complete stability analysis that would consider the characteristics of such intertie, the connected rotating machinery (generators, motors) and the control characteristics (governors, voltage regulators, relaying and switching, etc.) Such a study would provide the guidelines for selection or modification of control equipment, if necessary, and establish guidelines for operating the interconnected system.

Line Configurations Studied

Five general line configurations were studied to provide information regarding line transfer capabilities and related construction costs:

- I- Existing Lines to Willow and Healy
 New 345 kV s/c line with 2-954 kcm, Willow to Susitna Jct. - 72 miles
 New 230 kV s/c line with 1-1510 kcm, Susitna Jct. to Healy - 86.5 miles
 Operate lines as follows:

Pt. Mack - Teeland	230 kV
Teeland - Willow	115 kV
Willow - Healy	230 kV (add 32 MVAR Shunt Reactor)
Healy - North Pole	138 kV (add 28 MVAR Shunt Reactor)

 Use two winding transformers and no series compensation
- II- Same as I above, except:
 Use autotransformers and series compensation (20%, Willow to Healy)
- II-1 Same as II above, except:
 Existing lines to Sunshine and Healy
 New 345 kV s/c line with 2-954 kcm, Sunshine to Susitna Jct.-43.5 miles
 Operate lines as follows:

Pt. Mack - Teeland	230 kV
Teeland - Sunshine	115 kV
Sunshine - Healy	230 kV (add 32 MVAR Shunt Reactor)
Healy - North Pole	138 kV (add 28 MVAR Shunt Reactor)
- III- Same as II-1 above, except:
 Operate lines as follows:

Pt. Mack - Teeland	230 kV
Teeland - North Pole	138 kV (add <u>no</u> new Shunt Reactors)

 Use autotransformer at Teeland and no series compensation
- III-1 Same as III above, except:
 Use series compensation (20%, Sunshine to Healy)

Summary and Conclusion

Load Flow studies of 13 Cases with the five configurations previously described were made using the General Electric Company "CIFLO\$" program. The line and transformer data, and the worksheets for these cases are attached as Appendix-A.

The following Table-1, "Load Flow Summary Data" contains selected data from the load flow calculations and construction cost estimates for the various configurations. These estimates were developed from the cast data in the original Intertie Study. A sample calculation is shown in Appendix-B attached.

The load flow cases studied clearly show that an interim transmission intertie operated at 138 kV from an assumed supply point at Teeland substation to connect with the GVEA existing 138 kV system at Healy is a technically feasible connection capable of transferring up to 50-plus megawatts of power from Fairbanks to Anchorage and up to 35-plus megawatts from Anchorage to Fairbanks.

It is also shown that by constructing an additional 28.5 miles of new line to Willow an additional 5 megawatts could be transmitted. A more detailed review of the work sheets shows that the "weak" links of such an interim circuit arrangement are the existing 138 kV lines.

Such an interim arrangement is easily capable of transmitting at least 200,000,000 kWh of energy annually and providing reserve capacity as indicated. This could postpone other investments and provide an opportunity for exchange of the lowest cost energy alternatives available along the interconnected system.

If it is assumed that the energy exchanges possible are worth 3 cents per kWh (fuel cost differences now appearing in Anchorage and Fairbanks support this probability) a \$6,000,000 per year minimum saving in fuel

cost is possible. The added value of reserve sharing would increase the annual savings attributable to this intertie. Depending on financing costs, it would appear that the \$45,000,000 investment is attractive particularly when it is remembered that several million dollars of the cost is for future capacity related to the Susitna Project.

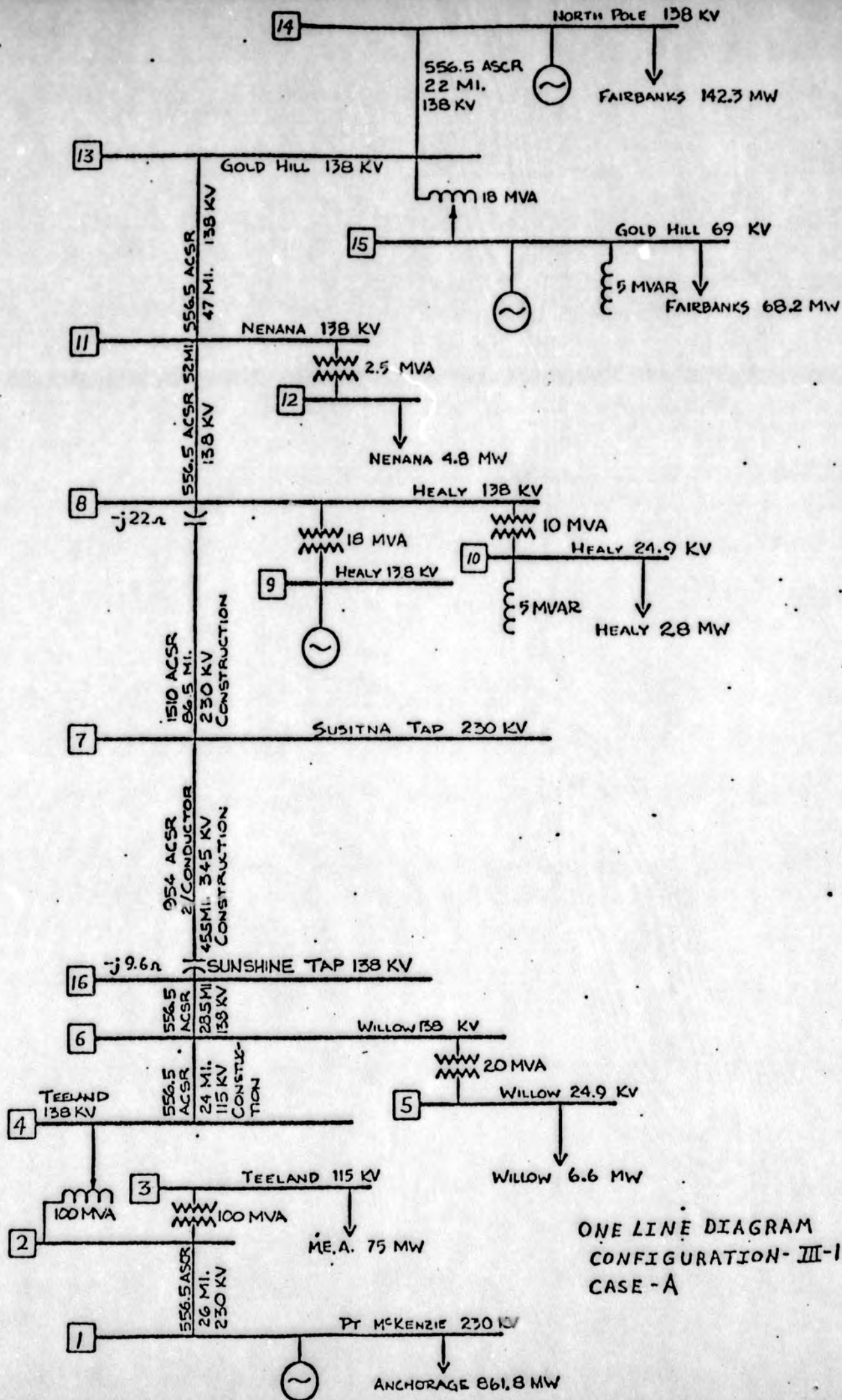
It is recommended that this interim arrangement is worth serious consideration particularly in view of the opportunity to accelerate the completion of an important segment of a renewable energy project. A decision to begin by mid-1980 would allow for construction to start in the winter of 1980-81 and for completion by mid 1983.

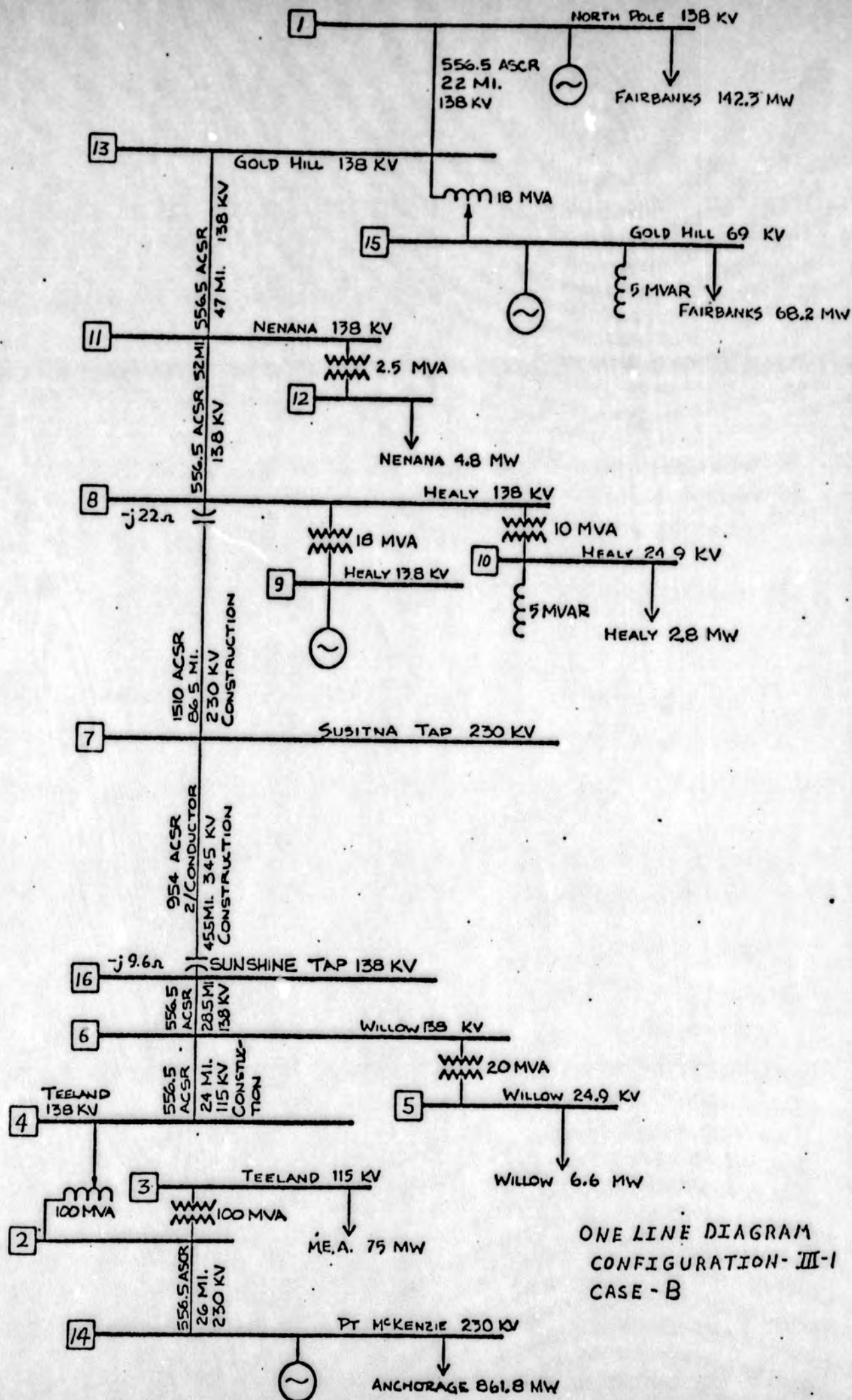
Additional specific studies to arrive at the basic details for design support and for negotiations of operating, wheeling and maintenance agreements should be implemented early in the course of action toward accomplishment of such a project.

TABLE-1
LOAD FLOW SUMMARY DATA

CASE	Load Flow Load Year	Line Section Power Transfer - MW	Line Voltage Range - %	Line Loss %/MW*	Power Angle - degrees Pt. Mack - N.Pole	Total Construction Cost**
I	CASE A Anch-Fbks 1984 Loads	Willow to Healy 35	102 to 112	$\frac{2.5}{3.4}$	33°	\$ 63,727,000
	CASE B Fbks-Anch 1984 Loads	Healy to Willow 50	99 to 108	$\frac{2.2}{2.0}$	27°	\$ 63,727,000
	CASE C Fbks-Anch 1984 Loads	Healy to Willow 16	99 to 105	n.a.	9°	\$ 63,727,000
II	CASE A Anch-Fbks 1984 Loads	Willow to Healy 39	102 to 108	$\frac{2.9}{6.5}$	28°	\$ 63,371,000
	CASE B Anch-Fbks 1990 Loads	Willow to Healy 31	98 to 104	$\frac{2.5}{6.5}$	30°	\$ 63,371,000
	CASE C Fbks-Anch	Healy to Willow 51	97 to 104	$\frac{1.6}{3.5}$	23°	\$ 63,371,000
II-1	CASE A Anch-Fbks 1984 Loads	Sunshine to Healy 36	102 to 107	$\frac{3.0}{4.1}$	31°	\$ 52,630,000
III	CASE A Anch-Fbks 1984 Loads	Sunshine to Healy 34	103 to 106	$\frac{2.8}{3.8}$	30°	\$ 44,587,000
	CASE B Open circ.-Healy 1984 Loads	Sunshine to Healy 0	104 to 112	---	3°	\$ 44,587,000
III-1	CASE A Anch-Fbks 1984 Loads	Sunshine to Healy 35	103 to 106	$\frac{2.9}{3.9}$	28°	\$ 45,032,000
	CASE B Fbks-Anch 1984 Loads	Healy to Sunshine 54	102 to 105	$\frac{4.5}{4.2}$	31°	\$ 45,032,000
	CASE C Anch-Fbks 1990 Loads	Sunshine to Healy 27	100 to 105	$\frac{3.0}{7.5}$	31°	\$ 45,032,000
	CASE D Fbks-Anch 1990 Loads	Healy to Sunshine 53	97 to 104	$\frac{2.7}{5.9}$	30°	\$ 45,032,000

* Line Loss is calculated as a % of the total Generation on line for each case. MW are also shown.
 ** Construction costs estimated using unit costs from Intertie Study (See Appendix B for sample).





ONE LINE DIAGRAM
CONFIGURATION- III-1
CASE - B

Report of
Technical Advisory Committee
on
Economics of Anchorage - Fairbanks
Minimal Transmission Intertie

Anchorage Municipal Light & Power
Golden Valley Electric Association
Fairbanks Municipal Utilities System

January 1980

Robert W. Retherford Associates' Anchorage-Fairbanks transmission intertie supplementary study for maximizing use of existing lines with new lines at Susitna Design capacity, completed January 24, 1980, demonstrated the probable technical feasibility of transmitting economy energy from Anchorage to Fairbanks and reserve generating capacity from Fairbanks to Anchorage over a minimal transmission line. This report examines the economics of such interchanges for Configuration III - 1 Cases A and B of the RWRA study.

ECONOMY ENERGY

From data in the supplementary study it was estimated that annual losses in transmitting 200 million KWH at economy energy from Anchorage to Fairbanks would be about 4% or 8 million KWH. 200 million KWH generated by AMLP would replace 192 million KWH generated by GVEA with simple cycle and regenerative combustion turbines averaging 13,000 BTU per KWH.

AMLP's fuel consumption to generate the economy energy was determined by using the General Electric HPROD production costing program to model generator operation. HPROD was run for AMLP's system load plus economy energy and for AMLP system load alone. The difference between the two amounts of fuel was the fuel burned to generate the economy energy for GVEA. The following table shows the fuel saved.

FUEL CONSUMPTION, MILLIONS OF BTU GENERATION BY

<u>YEAR</u>	<u>GVEA</u>	<u>AMLP</u>	<u>FUEL SAVED</u>
1984	2,500,000	2,200,000	300,000
1985	2,500,000	2,330,000	170,000
1986	2,500,000	2,560,000	-60,000

The 300,000 million BTU saved in 1984 is equivalent to about 52,000 barrels of fuel oil. The amount of fuel consumed by AMLP to generate economy energy increases each year; as AMLP system load grows, less efficient generating units must be operated to produce the economy fuel.

Monetary savings from economy energy, of course, depend on the relative costs of fuel in Anchorage and Fairbanks. To give an idea of the amounts of money involved without attempting to forecast fuel prices several years hence, fuel was priced at present values of \$2.85 per million BTU for GVEA and \$0.829 per million BTU for AMLP:

FUEL COSTS
GENERATION BY

<u>YEAR</u>	<u>GVEA</u>	<u>AML</u> P	<u>SAVING</u>
1984	\$7,125,000	\$1,824,000	\$5,301,000
1985	7,125,000	1,932,000	5,193,000
1986	7,125,000	2,122,000	5,003,000

The supplementary study showed that GVEA could provide 53 MW of reserve generating capacity to AMLP over the transmission line. Without this reserve capacity it would be necessary for AMLP to install a peaking combustion turbine to maintain firm generating capacity. Capital recovery costs of such a peaking turbine were estimated to be \$847,000 annually at today's prices. The value of 53 MW of reserve capacity furnished by GVEA to AMLP over the transmission line would thus be \$847,000 annually.

SUMMARY

Adding the value of economy energy to that of reserve generating capacity produced the following total value of the transmission line to AMLP and GVEA:

<u>YEAR</u>	<u>ECONOMY ENERGY</u>	<u>RESERVE CAPACITY</u>	<u>TOTAL</u>
1984	\$5,301,000	\$847,000	\$6,148,000
1985	5,193,000	847,000	6,040,000
1986	5,003,000	847,000	5,850,000

COST ESTIMATE (1979 Dollars)CONFIGURATION III-1

1.	<u>New Transmission Lines</u>		
1.1	Healy - Susitna Tap, 86.5 m. (sc, 230 kV, 1510 kcmil ACSR)	\$176,693./mile	15,283,945
1.2	Susitna Tap - Willow 71.5m (sc, 345 kV, 2 x 954 kcmil ACSR)	\$253,320./mile	18,112,380
Transmission Total:			\$33,396,325
2.	<u>Substations</u>		
2.1	Healy 138 kV Addition of Series Compensation	150,000	
2.2	Healy 138 kV Circuit breakers & property	243,000	
2.3	Willow 138 kV Addition of Series Compensation	150,000	
2.4	Willow 138 kV Circuit breakers and property 60 MVA Autotransformer 115/138 kV	1,243,000	
Substations Total:			\$ 1,786,000

CONFIGURATION III-1 (Cont.)

TOTAL COSTS (1979)

Transmission Lines	\$ 33,396,325
Substations	1,786,000
Control and Communication	3,300,000
Engineering/Design	<u>3,000,000</u>
	\$ 41,482,325

DISBURSEMENTS AND ESCALATION

		<u>Escalated @ 8% p.a.</u>
1981 (7%)	2,903,760	3,387,000
1982 (25%)	10,370,580	13,064,000
1983 (68%)	<u>28,207,985</u>	<u>38,376,000</u>
	41,482,325	54,827,000
		- <u>41,482,325</u>
Total Escalation		13,344,675

PROJECT COST SUMMARY

Project Costs	\$41,482,325
Escalation	<u>13,344,675</u>
Total	<u><u>\$54,827,000</u></u>

THE BONFIRE ROARED, throwing long shadows onto the steel and concrete base of an 800-kilovolt direct-current transmission tower in Stearnes County, Minnesota. Some 150 tough, weather-bitten farmers joked and sang around the blaze, thoroughly enjoying their wienie roast. The prairie air was sweet, and the black, rich soil was lush with corn, alfalfa and the fat, fertile Holsteins that are the backbone of the American dairy industry. Most of the men had already put in a long day and would have to be back at their barns by dawn to milk the cows.

But the farmers had more on their minds than beer and hot dogs. They were armed to the teeth with shotguns, slingshots and monkey wrenches. And they weren't a bit surprised when a group of Minnesota troopers roared up in a dozen cruisers and shouted through bullhorns that the "party" was on power-line right-of-way and would have to disperse.

The farmers yelled back that the cops could "forget it," then blinded them with high-powered lights, whipped out oversized slingshots called "wrist rockets" and opened fire using steel ball bearings. Within minutes, every window in the police cars was shattered and the officers were in hasty, undignified retreat.

The angry farmers then went to work with their wrenches. Soon afterward, two 150-foot-high transmission towers, worth at least \$100,000 each, had crashed to the ground, victims of what the farmers affectionately call "bolt weevils." The wienie roast was over, but it had cost the builders of the power line at least a quarter of a million dollars.

That "roast" last summer was just another battle in the farmers' war for solar energy and against a string of 800-kilovolt transmission lines being built across their land. The 420-mile line is due to begin commercial operation some time this month. The farmers don't intend to let that happen.

THE MINNESOTA POWER line is the \$350 million spine of a \$1.25 billion project that is a key element in the massive exploitation of Western coal. The package includes a North Dakota coal mine, a 1000-megawatt coal-fired generator near the mine mouth, two switching stations and the power line. The deal has been put together by two Minnesota electric cooperatives, the United Power Association (UPA) of Elk River and the Cooperative Power Association (CPA) of Edina.

Any scenario for America's energy future that includes fossil or nuclear energy is built on the idea that large central generators will send huge amounts of power long distances "by wire." The basic strategy is to burn the coal at the mine to avoid high shipping costs and then send the juice by wire to the cities where air-pollution levels are already far too high to consider burning more coal in or near them. Obviously, with as many as seventy new coal-fired generators being considered for construction throughout the West, reliable ultrahigh-voltage power lines will be needed.

HARVEY WASSERMAN's next book, *'Energy War: Reports from the Front,'* will be published this fall.

There are currently almost half a million miles of these power lines strung across the United States, involving rights-of-way equal in area to New Jersey. Without these channels for transmitting large amounts of current from source to user, the American energy picture would have to be radically revised. Which is just what some of the Minnesota farmers want.

One of the first acts against the power line was in June 1976, when an irate Stearnes County dairyman named Virgil Fuchs ran his tractor over some surveying equipment. Fuchs' chief gripe was that the line would rip his acreage into separate pieces. "We work as a family," he complained. "We paid to buy our land close together to operate as a family farm." The last thing he wanted was the "horrible predicament" of giant electric towers cutting up the family parcel.

Fuchs' neighbors and friends had similar feelings. Of 476 Minnesota landowners who had their property crossed by the line's route, only one-third willingly sold easements. The rest were forced to sell by the

Union in 1967 and 1968 on workers continuously exposed to electric fields. High blood pressure and various nervous disorders were common symptoms, as was decreased sexual potency.

Some parallel American studies have yielded similar conclusions. Dr. Andrew Marino, a biophysicist at the Veterans Administration Hospital in Syracuse, New York, and Dr. Robert O. Becker, an orthopedic surgeon, conducted studies in 1976 showing that mice born in electric fields, like those created by high-voltage power lines, grow to be just two-thirds the size of control

disease with electromagnetic radiation," Marino explains. "Instead, the field acts as a biological stresser. It imposes a physiological burden that the body must resist. When the body is overtaxed, general resistance breaks down. What results is disease to which the animal was previously prone."

In human beings, proven symptoms include hypertension and abnormal blood levels of serum triglyceride, an indicator of heart disease confirmed by the U.S. Navy's Beischer Study in 1973.

Industry reaction to Marino's and other scientists' work in the field ranges from

Revolt of the BOLT WEEVILS

courts. "They came in here and started pushing people around," says Gloria Woida of Sauk Centre. "They said, 'We're going to cram this power line down your throats.' So we said we'd cram it right back."

Since the resistance began, 200 farmers and their supporters have been arrested, eight towers toppled and thousands of glass insulators shattered—\$400,000 worth since January 1st, by company estimates. The Midwest prairie now rages with what is probably the most crucial energy confrontation in the United States today.

S WITH NUCLEAR POW-er, mass concern about the safety of high-voltage transmission lines is a recent development.

The first major challenges came in Ohio in the early Seventies, when farmers found 765,000-volt lines and towers to be an ugly intrusion. They also found themselves on the receiving end of heavy electric jolts, especially in wet weather. "You never know when you're going to get a shock," says Clovis Strausbaugh of Wilkesville, Ohio. "It depends on how much electricity they are sending through and the weather and various things, but you can't tell what to expect. The electric company calls that a 'nuisance.' I call it living in fear."

The Ohioans also complain about a constant humming and crackling noise that began to make them worry about possible health hazards. Their fears were partially confirmed by studies done in the Soviet

The prairies rage as farmers topple power lines in today's most crucial energy confrontation

BY HARVEY WASSERMAN

animals. "There's no question that people are justified in trying to stop these lines," Marino maintains. "The danger has been established beyond all reasonable doubt. If at all possible, people should not be exposed to the field created by these lines."

Marino says that at least seventy studies have been published in the past few years indicating, among other things, that mice, monkeys, humans, birds, fish, dogs, flatworms, slime mold and flowers exhibit various abnormal symptoms when exposed to the electric fields. "There's no signature

low-level outrage to shouts of "garbage." "We've been given a clean bill of health," says Bob Sheldon, a thirty-four-year-old public-relations man for the CPA. "There's no reason whatsoever to suspect any problems from these lines." Harry Kronberg of the industry's Electric Power Institute adds that despite "the best scientific methods to identify them," the electric fields cause no "biological effect of significance."

The staff of the New York Public Service Commission, however, disagreed. "People who work on or near the lines should be

RANDOM NOTES

accident in Sylmar, California. Guercio and his instructor (who is in critical condition with a broken back) had taken off from a 100-foot cliff when the wind suddenly died and their glider plummeted to the ground. . . . **Michael Murphy** met Geronimo's ninety-year-old grandson, medicine man Joe Sunhawk, in Taos, New Mexico, recently and played him an impromptu version of "Geronimo's Cadillac." Sunhawk responded by doing a tomahawk dance, and later said that his grandfather would have liked the song. . . . Director **James Bridges** has signed **Jerry Hall** for a small role in *The Urban Cowboy*, currently shooting in Texas. . . . Part-time pitcher **Meat Loaf** has been named to the Broadway Show League's All-Star Team, along with comedian **Robert Klein**. . . . **Linda Ronstadt** sings harmony on the title track of *An American Dream*, the upcoming **Dirt Band** album that also features a reggae version of "Wolverton Mountain."

When **Jimmy Buffett's** wife, Janie, gave birth to a seven-pound baby girl last month, the first-time father—"like any normal parent"—staged a welcoming wingding that lasted nearly fifteen hours. "Savannah Jane was born at

Is disco slipping in the disco capital of America? Maybe—if you're prepared to swear by the April-May Arbitron ratings for New York-metropolitan-area radio stations. All-disco WKTU-FM, which stunned the music industry when it toppled longtime Top Forty ratings giant WABC-AM last spring, remains number one, but has dropped slightly. Strangely enough, the number-two spot is now held by WOR-AM, an all-talk station, with the mostly disco WBLS-FM placing a very strong third. WABC remains at number four.

Disco-sucksters shouldn't leap to any rash conclusions, though. As WKTU station manager **David Rapaport** calmly explains, "There's always a statistical error in these surveys. WOR was probably underestimated before; and when WBLS changed to ninety-nine percent disco, a lot of the listeners who'd been listening to us probably went back." The bottom line: "There are two disco stations now, and they have a fourteen percent share of the market."

In other words, no relief in sight for rock loyalists.

Cheap Trick's road manager, **Kirk Dyer**, was sliced on the chest, ribs, forearm and thigh when he prevented a knife-wielding Trick fan from

twenty years ago. . . . **Graham Parker, Lene Lovich, Alan Price, Rita Hayworth and Tatum O'Neal** were among the celebs who showed up for a disco party at the City National Bank in Beverly Hills on June 21st. Guests of honor were the **Jacksons**, who were given their latest passel of platinum records and international awards in the bank's vault. . . . **Nigel Olsson** was injured in a car crash in Atlanta on June 26th, when he drove past a stop sign that was reportedly "hidden by vegetation" and collided with another vehicle, whose driver was killed. Olsson has been charged with unintentional vehicular homicide, a misdemeanor.

I thought I was havin' a heart attack, it was so emotional," says ex-Fug **Ed Sanders**, describing the first performance of his *Karen Silkwood Cantata* at the Creative Music Studio near Woodstock, New York, on May 20th. "I mean, there were people in the audience weeping."

Written for two guitars, piano, drums, violin and bass (and three actors), the two-hour *Cantata* traces the antinuke martyr's life "from cradle to crash, as it were," Sanders says. "It's half-Sixties, half-six-o'clock news, with vocals, jazz."

Until he can bring an expanded version of the *Cantata* to New York this fall, Sanders is concentrating on two other projects—a book about the Eagles ("The new record's real good") and a possible reunion of the fabulous Fugs. "It would take a certain amount of moola to get everybody together, but this is the year to do it—just do one set, and then fold it forever."

It's not fashionable, it's short," says **Frank Zappa** of his new haircut, the first in "hundreds of years. I used to wear these little rubber-band things in my hair, and when I'd lose them, all my hair would just fall into my face. Finally, I just said, 'Fuck it,' and had Gail [his wife] cut it."

Zappa has also "laid off" his band and canceled his late-summer tour. He is currently completing a book to accompany *Joe's Garage*, his upcoming three-record opera (which he eventually hopes to make into a movie). "Frank is extremely tired," says a source close to the composer. "He rehearses sixteen hours a day, non-stop. His wife is having a baby in August, and the studio he's been building in his home will be finished September 1st. He feels it's irrational to go on tour now."

Frank Zappa, sans band, shows off his new hairstyle and recording studio at home in California.



seven a.m.," Buffett reports, "and I cracked the champagne at 7:30. **Jack Nicholson** and **Angelica Huston** came over, and some other friends, and the party went on till ten that night. Then there was the coming-home-from-the-hospital party and a couple of others. It was really about a week's worth of parties."

The new arrival is said to look a lot like her happy dad—not that he cares. "She just looks like Savannah to me," Buffett beams.

running onstage during a recent concert at the Beaumont Civic Center in Texas. Dyer and a security guard, who was also cut during the scuffle, were both treated at a local hospital and released. . . . **Blackfoot** leader **Rickie Medlocke** brought his sixty-seven-year-old grandfather out onstage in Jacksonville, Florida, to play harp on "Train, Train"—a song the elderly musician had written for his own band, **Shorty Medlocke and the Florida Plowhands**.

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cautioned against chronic exposure to the electric field," the staff wrote in a 1977 report to commission officials. They also recommended that buildings and fences in the area be grounded, vehicles not be refueled nearby and children not be unloaded from school buses under the line.

New York's 765-kilovolt line was completed despite ferocious local opposition and the staff report. But if Marino and his colleagues are correct, those half-million miles of power lines crisscrossing the country are doing us no good.

Meanwhile, the farmers have other prob-

WHEN THEY WANTED TO bring the line in, they said it was safe," says Jackie Thurk of Villard, Minnesota. "Then, when they tested it, they put up signs around it warning people to stay away because it was unsafe."

A mother of three, Jackie was recently convicted of assault after demonstrating against cement trucks headed for the power line. "They've lied to us so often you get so you don't believe anything they say at all," she adds bitterly.

With her husband, Kenny, who milks

really just using the CPA and UPA as a front for expansion, and the power lines are not only destructive but unnecessary. The two cooperatives are tied to the Mid-Continent Area Power Pool, a Midwestern electric grid dominated by the Northern States Power Company, a large Minneapolis investor-owned utility. "The electricity will go to the cities," says John Kearney, a Minneapolis organizer. "The profits will go to the big privates."

The cooperatives say otherwise. "We have to supply our share of the system's

suited troopers fleeing. Right now he faces conspiracy charges stemming from a high-powered rifle bullet that found its way through the window of a tower guard's pickup.

The Woidas are key figures in the power-line resistance movement and work closely with urban activists like John Kearney and George Crocker, the latter a gangling, bearded pacifist who went to prison rather than Vietnam. Now Crocker works in Lowry, Minnesota, and helps publish *Hold That Line*, a lively newsletter for farmers. For a while, the state media tried to make a divisive issue of antiwar and antinuclear radicals working in the right-wing prairies. But it didn't work, and the farmers have escalated their campaign to include active opposition to the local Monticello and Prairie Island nuclear plants.

"The city people had a lot to teach us," says Gloria Woida, looking warmly at John Kearney, who is munching dinner at her kitchen table. "Now we sort of view them as family."

In addition to antinuclear activists, the power-line farmers have struck up an alliance with local Indians. Earlier this month, a power-line delegation joined native American and antinuke forces for a dramatic march through the Black Hills to protest the mining of uranium on Indian land. The power-line farmers now use the same legal team that defended Indian activists after Wounded Knee, and Clyde Bellecourt, leader of the American Indian Movement, has called the farmers "the new Indians."



lems. Cows are supersensitive to electric current, and the introduction of even small doses of it has brought about claims of decreased milk production and disease. The towers can also disrupt key plowing and irrigation patterns. Moreover, nearly all the national power-line rights-of-way are routinely sprayed with toxic herbicides to keep them clear of weeds and underbrush. In some cases, utility companies use close cousins of Agent Orange, the notorious Vietnam defoliant linked to cancer and birth defects. The stuff is often sprayed from helicopters, and lack of precision can be fatal.

In the early days of the confrontation, there was talk of putting the power lines underground, which Andrew Marino feels would eliminate most of the health hazards. But the companies balked at the cost, which they said could be ten times as great as building the towers. They also believed the environmental impact would be greater.

Despite the controversy, the Bonneville Power Authority, based in the Northwest, is moving ahead with plans for a gigantic 1.2 million-volt transmission system to carry juice 1200 miles, from Washington State to Phoenix. Near South Bend, Indiana, the American Electric Power System is testing a line designed for up to 2 million volts—two and a half times bigger than what has been run through Ohio and upstate New York, capable of carrying more than five times the electricity that has brought war to Minnesota.

Farmers protest power-line construction near Lowry, Minnesota.

thirty Holsteins, Jackie lives in a comfortable ranch house recently converted to wood heat. "Saves us a good \$500 a year," says Kenny, pointing proudly to the fat new cord burner in the living room. Like his wife, Kenny has been arrested and has the snapshots to prove it. "Knead me in the back and threw me over the fence," he says with a wry smile. "One of them did a real good job on the kidneys."

The Thurks, both in their late thirties, are troubled by the economics of the power lines. By company admission, the project will double electric rates by 1981 and, says Kenny, staring out at the giant tower crossing his property, "we won't get a thing out of it." He feels the power lines are for Minneapolis and Chicago, not for his family.

The CPA and UPA are actually federations of thirty-four smaller rural power cooperatives, and thus are technically the property of the very farmers who are determined to stop the power lines. Farmhouses ring with dark rumors of corruption at co-op headquarters and with angry charges that the big, urban private utilities are manipulating the management of the rural companies to get a shot at the cheap federal loans that are available through the Rural Electrification Administration.

The farmers charge that the "system" is

power," says the CPA's Bob Sheldon. "Every bit of power used by our customers has to be generated from somewhere. This project is just our share of the system."

IT WAS JUST A MIDDLE-class farmer's wife yelling about the boys who 'wouldn't go fight for their country' in Vietnam," says Gloria Woida. "If you'd've told me I'd be fighting the state like this, I'd've said, 'You're nuts!' But we've been invaded!"

Gloria is a blond, vibrant, wisecracking mother of four who dominates the kitchen of her family's farmhouse like the captain of a ship. Her husband, Matt, is a tough, wiry fifty-one-year-old with a pencil mustache and a fierce temper. In December 1977, the power companies had to call in eighty-six police cruisers to oversee the surveying of the Woidas' 320-acre dairy farm. The family had learned that the towers would obstruct their three-year-old \$60,000 irrigation system, costing them \$20,000 per year in damages. The companies offered the Woidas a one-shot \$17,500 payoff, plus a few hundred dollars a year in compensation. Matt never picked up the checks, and when the police came on his land and maced protesters, they responded the next day with an anhydrous ammonia spray unit, sending the maroon-

FOR SOME OF THE FARM-ers," complains Bob Sheldon, "there doesn't really seem to be any solution short of tearing down the power lines. I don't really know why they're fighting. I'm not even sure if the farmers know."

They know.

"We want solar energy," says Gloria Woida. "We want all our farmers to be energy self-sufficient. And there's no reason why we can't be. We don't need those damn nuclear plants or strip mining. You can make a solar collector out of junk and it won't look like much, but, by George, it'll work. We've got wind and methane and we can grow our own grain for alcohol, just like in the moonshine days. And I'll tell you something, if the people decide that solar energy is what they want, there's no way the government is going to squash it."

"I expect in a few years we'll be sitting here totally energy self-sufficient. And that power line won't be operating."

In its own way, the companies seem to agree. For a while they tried posting full-time guards along the route, but the damage level increased. Martial law was declared in Stearnes and Pope counties in the winter of 1977-78, but that didn't work. And now Minnesota's new governor, Albert Quie, has named "power-line vandalism" as the top priority for the Bureau of Criminal Apprehension.

"I'm confident the line will open," says Sheldon. "I'm not very confident how reliable it will be. There's virtually no way to provide twenty-four-hour protection for such a long line. It's the same everywhere in the United States. You have to admit, it's a vulnerable system."

Gore

Mark

Feb. 22, 1980
Fairbanks, Ak.

Honorable Members of the Legislature
State Capital
Juneau, Ak.

Gentlemen;

I am encouraged by the testimony before the Senate Resources committee, regarding the Foks. Anch. Electric tie-in. In my opinion, this project is not, as some say, ten years ahead of time, but ten years behind time.

I feel that the Fbks, Anch. Electric tie-in should be only the start of a State Wide electric grid which would utilize the most efficient electric producing resources of each area of the state, water, wind, coal or what ever is the cheapest and most abundant.

Rather than waiting until we are suffering a shortage before developing new generating facilities, and then building for only the present, utilizing the most expensive power generating facilities available, we should be building for years in the future and taking advantage of reasonable electric power rates for both domestic and industrial uses.

I feel that there is no question about the type energy suitable for the arctic and the semi-arctic; electricity. We have enough water potential in the state to furnish electric power for the state of Alaska, Western Canada and a good bit of the Western United States. We have enough wind in various sites on the coast to almost power the state on wind alone. With a state wide grid, the intermittent power from the wind could be utilized. If wind and water did not suffice we have enough coal to power the state for several generations. Coal fired generating plants located in remote areas where much of the coal lies should offer no pollution problems.

Cheap power is the answer to making a success of life in this state. We have a - once in a lifetime opportunity now to build a state wide power system with our overflow oil revenue. We can invest this money in any number of things which will eat it up, or we can invest it in a system which will benefit the whole state for several generations to come.

As for peoples who might be displaced by water back-ups, do not take a page from the Feds, book and just kick them off, with a token payment. Make moving attractive to them. Resettle them at a site of thier own choosing. Provide decent housing, power, sanitation and an industry which would provide for thier futures and thier self respect. The overall benefits to the state would pay for such moves and impose no burden on the state.

Respectfully

Jack V. Ferguson

DO NOT
ANSWER

D. System Expansion Plans

To determine the intertie's economic feasibility, alternative system expansion plans were prepared with and without the Anchorage-Fairbanks intertie. System expansion plans were developed to meet both the "probable" and "low" load demand projections.

To assume a nearly constant level of power generation reliability (LOLP Index) for all system expansion plans, a multi-area reliability (MAREL) computer study was performed. Annual load models for both areas were developed. The load models indicate that there is little diversity between the loads in the Anchorage and Fairbanks areas.

The 1984-1997 study period was selected to best suit system requirements. The earliest year when the intertie can be operational is 1984. Based on optimistic assumptions, the last generating unit of Upper Susitna Hydro-power Project will be on-line in January 1997.

E. Facility Cost Estimates

Cost estimates were developed for alternative system facilities to allow for economic comparisons. All costs were adjusted to January 1979 levels. Transmission line costs were calculated by using the TLCAP program. The same computer program calculated the line losses.

To provide a means for optimum economic dispatch of generating units on an interconnected system basis, costs for control and communication systems were included in the intertie cost estimates. Cost estimates for new generating plant facilities (gas-turbine units and coal-fired steam plants) were based on cost information in the Power Supply Study - 1978 report to GVEA, prepared by Stanley Consultants. Appropriate Alaskan construction cost location adjustment factors were applied to derive specific site cost estimates.

Construction power costs for the proposed Susitna Project were calculated. The results indicate a clear advantage for utilizing the intertie as a source of construction power.

F. Economic Feasibility Analysis

The economic feasibility analysis of the intertie was performed by discounting two cash flows (independent and interconnected systems) to a common year and then measuring the project benefits by the net present worth value. Facility costs for those new generating plants not affected by the introduction of the intertie were excluded from the analysis. The Transmission Line Economic Analysis Program (TLEAP), a computer program, was used to analyze the sensitivity of different escalation and discount rates on the capital costs of various alternatives. For principal investigations to establish definite feasibility analysis a 10% rate was used to discount cash flow in constant 1979 dollars.

G. Financial and Institutional Planning

A preliminary financial plan for implementation of the transmission intertie on a progressive basis was developed. The probable composition of institutions and participating utilities for ownership, management, and operating responsibilities is reviewed in this report, and present arrangements and possible future requirements are discussed.

2.2 CONCLUSIONS

The study shows that:

- The 230-kV single circuit intertie, having a 130-MW line loading capability (Case IA), is economically feasible in 1984, based only on benefits due to reduction of generation reserve plant capacity (reserve sharing). The net present-worth of the benefits are \$12,475,000. The benefits become marginal (\$945,000) if intertie costs are increased by 25 percent. In the case of "low" load forecast scenario the benefits are \$2,704,000.

- An increase in benefits is obtained if the 230-kV single circuit intertie (double circuit after 1992), in addition to generation reserve sharing, includes firm power transfer capability (Case IB). The benefits are \$24,054,000 or an increase of 93 percent over Case IA. Additional benefits due to supply of construction power to the Upper Susitna Project sites are \$5,579,000.
- The 345-kV single circuit intertie (Case IC) is not economically feasible in 1984 based on the two scenarios developed in this study: generation reserve sharing only and reserve sharing plus firm power transfer capability. In the second scenario the results are negative (\$-426,000). Further studies are recommended to pursue the economic feasibility of the 345-kV intertie because from technical point of view the 345-kV voltage is more appropriate for the transmission distance between Anchorage and Fairbanks.
- The 230-kV single circuit intertie with intermediate substations at Palmer and Healy (Case ID) is economically feasible in 1984. The benefits are \$20,344,000 including the power supplies to MEA system to Palmer and the proposed Upper Susitna Hydropower Project sites. If intertie costs are increased by 25 percent the benefits become \$11,656,000.
- The fully integrated interconnected system operation generates additional benefits which are not quantified in this study. These benefits could be due to:
 - Decrease in spinning reserve requirements by reducing the on-line plant capacity for the combined system.
 - Coordination of maintenance scheduling which would improve combined system security and provide cost savings.
 - Economies from optimum dispatch of generating units on the interconnected system basis. It is definitely recommended that a multi-area production costing simulation study be performed to establish these additional benefits.

- Expansion plans for the interconnected system with the proposed Upper Susitna Project were developed to determine the effect of this project on the interconnected system expansion plans, the displacement of thermal generating units, and intertie transmission requirements with Susitna Project.
- If an early 230-kV transmission intertie is constructed in 1984, due considerations should be given for constructing the Anchorage-Susitna portion of this intertie for 345-kV and operating it temporarily at 230-kV.
- The average value of energy transfer cost (1984-2015) thru the 230-kV intertie is 32 Mills/kWh at 55 percent load factor when financed by 40/60% REA/FFB loan package and municipal bonds issued by Anchorage and Fairbanks.
- This Intertie Feasibility Study is only a part of the over- all power system expansion plans for the Railbelt area. Further studies will be required to establish definitive characteristics for this transmission intertie. These studies should be closely coordinated with the future expansion plans of all utilities in the Railbelt area.

Mark - Here are some samples -

POWERLINE!

DEBORAH

I. Mismanagement

II. Health & Safety Effects



United Power Association and Cooperative Power Association have been working on the Coal Creek plant and powerline for many years. Two of the major points raised by citizens protesting the project have been (I) its costly mismanagement and (II) its health and safety effects.

I. Mismanagement

According to Cooperative Power Association's "Power Cost Study and Financial Forecast, 1979-1991", CPA members alone will have paid over \$1.4 billion just for debt service and interest expenses on this project by 1991. By then, only \$43 million will have been paid on the principal. Such costs have already caused bulk electric rates to more than double in the past two years. In 1977 CPA sold bulk power for 14.53 mills per kilowatt/hour, and it is up to 29.38 mills per Kwh for 1979. CPA projects rates will nearly double again by 1981, and by 1990 CPA aims to sell electricity for 80 mills per Kwh.

While UPA/CPA have been planning such rate increases for a long time, they have engaged in a massive advertising campaign during the summer of 1979 which claims that powerline protesters are the culprits responsible for rising

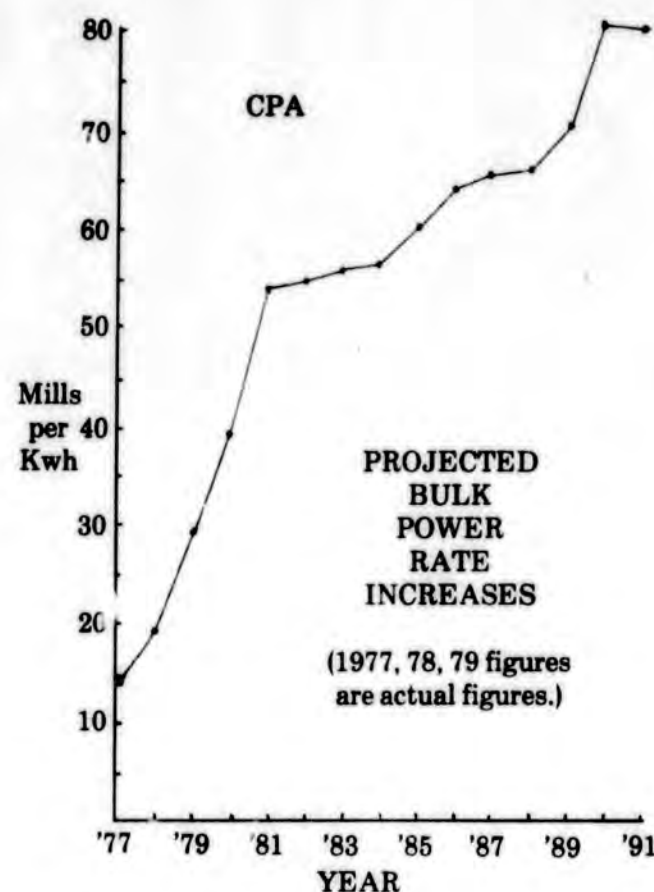
electric bills. UPA/CPA are using protesters as the scapegoat, but the only conclusion supported by UPA/CPA's own figures is that bad decision-making and gross mismanagement by UPA/CPA are the major reasons for increased costs to consumers.

Such a conclusion is documented by the CPA forecast, and by Theodore Barry & Associates, a consultant firm hired by CPA to find out what was wrong with this project. They concluded that CPA had been taken for a sucker by the Coal Company and that a mine-mouth plant should never have been built.

Such a conclusion is also documented by Booz, Allen & Hamilton, the consultant retained by UPA to figure out what to do about "schedule slippage and cost increases." In defining the problem, the consultant reported that material is being lost, work is done in the wrong order, engineering is sloppy, labor is inefficient, and so forth. Like we said, poor management and bad decision-making.

In the fall of 1978, UPA/CPA claimed \$140 million in damages due to the protest, a figure used by Governor Quie and other state officials to justify their misguided attempts to stamp out the protest. Of that \$140 million, \$90 million is 34 years' worth of interest, \$685,000 is listed under "security guards," and \$200,000 is actually called "vandalism."

All the rest, over \$49 million, is listed under such categories as hearings, data gathering, environmental protection costs, costs of re-negotiated contracts for accelerated work schedules, costs of additional material needed to meet required route changes and license requirements, additional supervisory costs, etc. As of the fall of 1979, the powerline protest is responsible for less than 1/2 of 1% of the increase in electric bills.



THE MORE IT COSTS, THE MORE WE USE?

According to CPA, the tremendous rate increases will somehow stimulate ever greater electric consumption. Even though CPA's demand peaked at 474 megawatts for both 1977 and 1978 (1976 wasn't far behind), they project a 1979 peak of 535 MW. By 1992 it is all the way up to 1237 MW. That is a projected peaking increase of over 8% per year, compared with an average national peak growth rate of 1-3% for the past several years. Another Minnesota utility, Northern States Power Co., experienced a summer peak electrical load for 1979 that actually *dropped* from the peak level in 1978.

The figures for total energy sales are almost as outlandish, with sales climbing from 2,259,000 Mwh in 1978 to a projected 5,500,000 Mwh in 1991. In a valiant attempt to meet their projections, UPA/CPA are pushing wasteful electric consumption, especially resistance heating.

With both rates and sales projected to increase exponentially, there is a violation of some very basic economic laws. Things are so far out of line that, according to CPA's figures, CPA is paying almost *twice* as much for the electricity they generate themselves as they pay for the electricity they purchase.

If we grant that this powerline will deliver 900 MW and that the investment for the project is \$1.24 billion, there is a cost of \$1,348 per kilowatt. The Barry Report states that \$450 is average for a fossil fired unit coming on line in 1980. There are 2 MW wind systems in operation at a cost of only \$360 per kilowatt, and wind is the most expensive alternative energy. Clearly, renewable sources already have a cost advantage over coal and nuclear facilities.

IF WE CAN AFFORD THIS ELECTRICITY, IT WILL KILL US.

II. Health & Safety Effects

The 800 KV DC powerline that runs through central Minnesota is a deadly means of energy transportation. The health effects of the line are every bit as dangerous as the radiation that leaked out of the Three Mile Island nuclear plant or the emissions of coal plants which form acid rains. The danger of the line comes from shocks, ionized gases formed by corona discharge, and from exposure to the electromagnetic field.

SHOCKS. Available literature indicates that shocks should be no more than "annoying inconveniences," yet there have already been dangerous jolts experienced under the line. While long-term problems created by repeated shocking should not be ignored, it is only a matter of time until a shock is the secondary cause of death or serious injury to someone working with machinery near the line.

AIR IONS. Air ions, or charged particles, are associated primarily with DC lines. The 1977 Minnesota Department of Health report, *Public Health and Safety Effects of High Voltage Overhead Transmission Lines*, views air ions with particular concern, stating, "In fact, it can be reasonably argued that the space-charge field [which forms the ion cloud]—from a public health and safety perspective—is the dominant DC effect.

The immediate effect of over-exposure to negative ions is similar to the effect of too much alcohol. Over-exposure to positive ions brings on headaches and a mental state of irritability and depression. Long-term effects of ion exposure are not well understood. Air ions also reduce the resistance of the atmosphere around the powerline, thus increasing the strength of the electromagnetic field.

CORONA DISCHARGE. The amount of corona discharge, or line loss, depends upon the line voltage and the diameter of the conductor. Any imperfection on the conductor, such as dust, scratches, corrosive pits, or water will cause an extremely high localized discharge. Corona discharge means that some of the electrons escape from the wire into the surrounding air, where they collide with the air molecules.

The split air molecules are chemically activated and can form new molecules, including ozone and nitric oxides. These chemicals are highly toxic to plant, animal and human life, even in very small concentrations. One ozone molecule per 12 million air molecules can be dangerous to

humans. Nitric oxides are ten times as toxic as ozone, and may combine with water in the air to cause acid rain to fall along the line route.

Preliminary calculations indicate that for every day the line is fully operational, each mile of line will produce 60 lbs. of ozone and 40 lbs. of nitric oxide! The line is over 425 miles long.

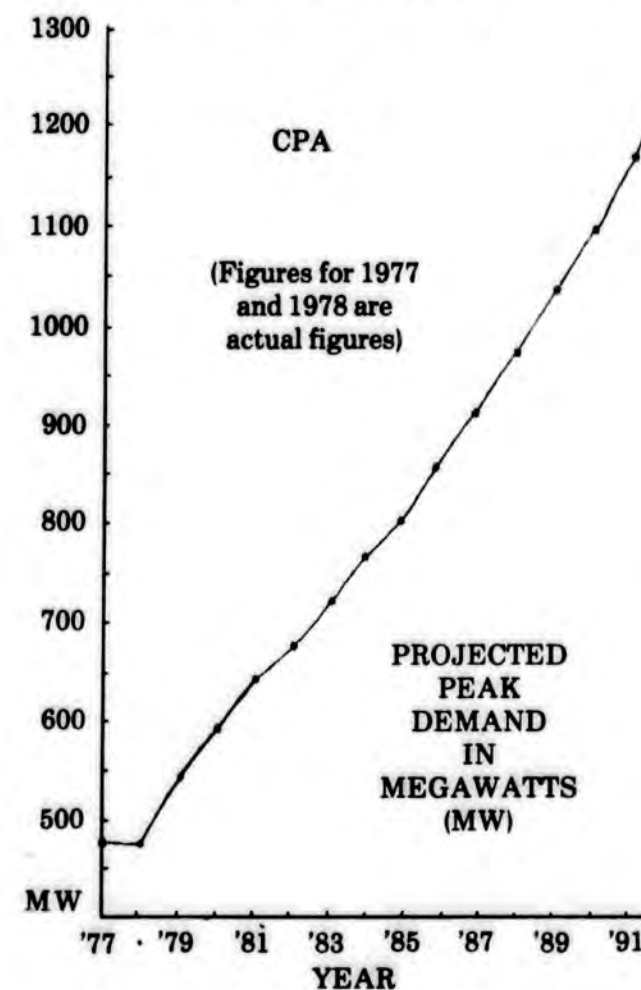
The symptoms of ozone and nitric oxide contamination are similar, and the initial effects include sinus trouble and the misery of an asthma attack. Other effects include chest pains, rapid heart beat, vomiting, coughing up blood, swollen glands, burning eyes, diarrhea, dizziness, and forgetfulness. Long-term effects include lung and heart damage and possible chromosome damage.

Corona discharge information source: Dr. Merle Hirsch, Physics Dept., University of Minnesota, Morris, authority on electrical discharges in the atmosphere.

ELECTROMAGNETIC FIELDS. The most subtle hazard posed by this powerline comes from exposure to electromagnetic fields, EmFs. Indeed, there is consensus throughout the scientific community that much more research needs to be done on the relationships between EmFs and life. Yet there is a substantial body of knowledge on the effects of EmFs. Just as the EmF is our most reliable information carrier (radio, television, etc.), living nature has used EmFs in the process of evolution to obtain information about changes in the environment as well as for the transmission, coding and storage of information within biological beings.

It has been found that in some cases the reactions of living organisms to EmFs occur only at certain "optimum" intensities. In other cases the effects increase when the intensity of the EmF is reduced, and in other cases the reaction to low and high intensities are of opposite nature. Cumulative biological effects produced by repeated exposure to EmFs at intensities well below the effective threshold for a single exposure have been observed. There is a virtually limitless number of variables which influence the effect of exposure on any particular living thing.

The informational aspect of the interaction of EmFs with biological organisms is very important, because these effects to *not* depend upon the *amount of energy* introduced into the system, but on the *amount of information* introduced



into it. This is known as the "trigger phenomenon," because very small amounts of energy can trigger major biological changes. Thus, in a 1977 document prepared for the utility industry and the Federal government by Battelle Pacific Northwest Laboratories entitled *Biological Effects of Static and Low-Frequency Electromagnetic Fields: An Overview of United States Literature*, it is reported that a 10 KV/Meter static electric field (which is exactly the same field permitted by the construction permit at ground level for this DC powerline) increases brain wave activity and decreases posterior-hypothalamic activity in rats. "Hypothalamic" refers to the brain's ability to control bodily functions. In their own ad campaign to convince people of the safety of the powerline, UPA/CPA admit that utility studies have found that EmFs cause delayed reaction times. That is admitting that the central nervous system is affected.

Additional biological effects of EmFs which have been noted experimentally include the symptoms of stress, decreased body weight from one generation of rats to the next, chromosomal abnormalities, glaucoma, and changes in blood chemistry; blood protein counts increased and the count of blood antibodies fluctuated, some decreasing and some increasing, depending on the field strength and the specific antibody. Impotence, sterility, and an increase in the incidence of blood cancers have been linked to long-term EmF exposure.

An excellent article covering the general subject of EmF effects on health was published in the Sept. 15, 1979 issue of Saturday Review.

A STRANGE COINCIDENCE

People who live and work along the line route have experienced the following effects from this powerline, with children being the most sensitive:

- Headaches
- Skin rashes
- Nosebleeds
- Fatigue
- Numbness
- Nervousness
- Respiratory problems
- Eye problems
- Tingling sensation all over the body.



UPA/CPA claim that all that may very well be, but it's all psychosomatic. Yet fish have abandoned streams under the powerline, wild life is gone from state-owned land near the line, and farmers under the line are having problems with their livestock which they have never had before.

Livestock under the line is skittish and jumpy, milk production has been reduced because cows have trouble letting down their milk, there has been some increase in livestock abortions and deformities at some farms along the line route, and cows pastured under the line come in for milking and shit all over the barn. Things were not like this before the powerline came, but these developments are also, no doubt, psychosomatic.

THIS POWERLINE MUST COME DOWN

Just as powerline protesters will not be the scapegoat for rising electric rates, neither will the inhabitants along the line route take on the role of guinea pig while the utilities experiment to see just how bad their line really is. This powerline is not safe; it costs too much; and we, the utility customers, simply don't need it. There is plenty of electricity already available to UPA/CPA. This powerline must come down. Please help us.

Powerline protesters mail a bi-weekly newsletter called *Hold That Line*. If you are interested in receiving the newsletter or any additional powerline information, contact: *Hold That Line*, Box 5, Lowry, Minnesota 56349.

POWERLINE PROTEST NEWSLETTER***PRESS RELEASE

* * *

The response to our newsletter reorganizing efforts has been good, thank you all for sending your cards, also, to all of you who sent contributions as well. For those of you who have not sent your cards back or dropped us a line, this is your last newsletter unless you do so. For those of you who live out of state, we understand the delay with the mail and will of course give you as much time as we can. Also, because of redoing our mailing list, the next issue of Hold That Line may be a bit later than usual, depending on how everything goes. Once again, thanks.

* * *

BOB SHELDON GETS THE BLUES FROM LOOKING AT HIS SHOES
WHILE LENNICK PLAYS HIDE & SEEK

How CPA and UPA have managed to mismanage \$1.4 billion of co-op money in the Coal Creek Project was the subject of the press conference held on the steps of CPA in Edina, Sept. 28. It's all reported in a book just released by the Environmental Policy Center called "Lines Across the Lands". (More on this book and how to obtain it in future issues of Hold That Line) The Minnesotans who participated in writing the book, Nancy Barsness, Dr. Wendell Bradley and John Kooiman set up the conference out in the cold because of course the doors to CPA are kept locked. Besides the press, there were some Dakota Electric Coop members who have been bitterly mad over their high electric bills. Bob Sheldon was there to do his cover-up job and there were those executives watching from inside. After all, this was a change from sitting and planning what kind of lounge chairs they'd have in the new \$8 million office.

That \$1.4 billion mismanagement is not because they failed to detect ravenous wire worms or glass eating blackbirds along the powerline. No, that cost is only a drop in the bucket. It's the unexplained things, of which more and more are being discovered, that add up - or don't add up. Like why is General Manager of CPA Ted Lennick also on the board of directors of Northwestern Bank Southwest which handles all of CPA's accounts including the money from REA in Washington. Why did the Barry Report say that the coops are paying dearly for their banking and that there are excessive bank profits?

Well, the purpose of the press conference was to allow Lennick to answer these and other questions, but he was nowhere to be seen. "He had a previous engagement", mumbled Boy Wonder Bob Sheldon, still looking at the toes of his shoes. (Rumor Control has it that he was to have met with coop general managers but made his excuses saying that he had to be at a press conference where his bank would be under scrutiny. He must have gotten lost somewhere between there and Mexico.)

Bumbling Bob continued saying all kinds of intelligent things like "No comment" and "I don't know" till an angry coop member insisted on being allowed in his own building, to which Bob replied, "I'd rather stay outside." This made the man even more angry, hopefully angry enough to go home and insist on some changes in his own coop. With electric rates quadrupling because of the Coal Creek Project there is going to be an ever increasing number of angry consumers and the Ted Lennicks, Bob Sheldons and other corporate executives might find themselves up a very Cold Creek!! (Without a paddle)

* * *

There's A Fight Going On Down In Kansas

Landowners in the path of a 345 KV Powerline down in Kansas are fighting back. While the project has been in the works for quite some time, up until a couple weeks ago the action pitted Kansas Power & Light against the Audubon Society because the proposed route went through some protected prairie lands. So Audubon got the line moved onto farmers, and with typical Utility arrogance

the landowners were left with 10 days to get ready for THE HEARING. (2)

Much was accomplished in 10 days. There were a couple organizational meetings which raised over \$2,000, and connections with lawyers were made, a steering committee was elected, and the groundwork was done on potential legal issues. But with the Hearing set for Oct. 3, what was most needed was more time. More time was got.

In their rush to get things started (material has already been purchased, etc.), it seems that KP&L and the State Agencies got so excited that the Hearing didn't have adequate Public Notice. So well over 100 Kansas farmers and ranchers got to watch the Agency wipe the egg off their face and listen to KP&L attorneys snarl contemptuously while venting their frustrations by stamping their feet and pulling their hair. It was great fun.

Anyway, the next hearing is a month or two away, and the issues are such that some angry Kansas farmers are likely to knock the socks off of KP&L. Developments like this are very encouraging to embattled Minnesota farmers, and we'll be watching closely . . .

* * * * *

LIVESTOCK MONITORING PROGRAM TO BEGIN

Since this Powerline has been in operation, farmers near the line have noticed more and more health problems with livestock. Busy farmers should not have to be responsible for proving that these problems are due to the line, but it is a job that needs doing and evidently the State and utilities are not interested in doing it. So a veterinarian and a family which runs a dairy operation made up a list of things to be checking on and keeping record for each cow. The list includes: exposure of the cow to the line, irregular heat cycles, cows being bred then coming around in heat again in 2 or 3 months, a drop in milk production, birth defects and abortions and other irregularities. These records are being verified by the vet.

It would be good if more farmers would contact their vets and set up a similar program, or contact Hold That Line for additional information. We will be covering this problem regularly, and would appreciate any information you could give us concerning affects you've experienced with the line on your animals and if there's a veterinarian willing to help.

* * * * *

PHIL MARTIN STEPS OUT

As General Manager of UPA, Phil Martin assumes a primary responsibility for skyrocketing rural electric bills, rapid environmental deterioration, and all the other blessings of the Powerline Project. On Sept. 29, Phil's neighbors got to find out a bit about the trouble Phil has been causing.

People were curious about the commotion in the neighborhood, and most of them politely took the leaflet and expressed some concern about the situation. Some didn't. "Don't bother the man at his own private home on his day off" they said. "If you have a complaint, take it to the office during business hours," they said. "This is terrible!" they said. So they got all excited and upset and called the cops. The cops turned the whole affair into a bona fide event. They were most careful to avoid aggravating protesters while reassuring the excited ones that "no crimes are actually being committed right now, but we'll keep a close eye on the situation." The big concerns of the Anoka police were "respect for private property", "everybody's (even yours) security", and "The Golden Rule".

Phil, of course, was nowhere to be found. Like we said last issue, he is noted for a special kind of courage. Phil was gone, but the kids he left behind knew that Protesters were coming. They did very well looking after Fifi, Phil's white poodle. On the 13th of Oct., we'll see if the General Manager of CPA, Ted Lennick has a white poodle, too.

FLASH ** FLASH ** FLASH ** FLASH ** FLASH ** FLASH ** FLASH

Remember that "Public Energy Forum"? Well, the buzzards from the Utility Industry and their assorted sycophants in government just backed out. They did not see fit to provide us peons with any reasons why - as if we don't know.

Nukes have been in the news every day in the past 2 weeks, but by far one of the biggest stories in that period of time took place right here in Minnesota.

At a little after 2pm on October 2nd, there was an accident at the Prairie Island Nuclear Power Plant at Redwing, Minnesota. Apparently a tube ruptured which produced a leak in the steam generator. This resulted in a release of radioactive gas into the atmosphere, what the utilities termed "a puff". At 2:30pm the governor's office was notified and at 2:45pm the Nuclear Regulatory Commission was informed. When did they inform the people living by the plant, you might ask. They didn't. Many heard about it on the radio hours later. Some farmers were working in their fields when they heard a huge pop and saw a large cloud rise above the plant. Northern Sun Alliance's phone was swamped with calls, many from Redwing people who wanted to get out or wanted to know what was going on or both.

Uncle Albert got on the news later in the day and said if he lived near the plant he wouldn't be worried and he's just quoting N&P statistics and "You got me!" He also said he didn't see any need for an evacuation, which is interesting since Minnesota doesn't have an evacuation plan. But N&P said everything was ok and not to worry. When asked whose electricity would be out as a result of the shutdown they replied, no one...we sell this electricity. The next day they said that they ran into "some complications" and it may be a little longer than we thought to get the plant running again. To top it off the day after that, they announced that 28,000 gallons of water from the damaged reactor will be "decontaminated" and dumped into the Mississippi River! What next????

* * *

It seems the Minnesota Energy Agency (MEA) spent \$50,000 to hire the (Ronald) Hayes Associates to do an environmental report which the MEA needs for its Certificate of Need this fall. The MEA will not release this report, saying it would be too much of a hassle! There is a copy available through the Legislative Reference Library at the Capitol. We should be obtaining a copy soon and will keep you posted.

* * *

YIPPEEEEE!!

Thursday, September 27, Southern Landowners Alliance of Minnesota (SLAM) won their court battle on the 345kV branch line. The Supreme Court gave for its reason that the landowners along the route should have had a better opportunity to argue against the line before their land was condemned. This means the court will appoint a 3 judge panel (sound familiar?) to hear many issues of conflict surrounding construction. Our congratulations goes out to SLAM, keep up the good work! In terms of the possible impact of such a decision, attorney Ken Tilsen summed it up in the Minneapolis Tribune when he said, "This indicates that the power companies have no right to run roughshod over normal procedures in determining these issues. And it means that at least part of the very unwise and unfortunate decision on construction of the powerline can be reversed."

* * *

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Because of the timing with mailing this issue of the newsletter, we are unable to give you an update on the Oeltjen trial scheduled to begin Oct. 9. We will have full coverage of the trial in our next issue of Hold That Line. Also, Tony Bartos comes up on his contempt charges Oct. 17 in Glenwood.

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Remember the next general meeting of GASP is scheduled for October 16th at 8:30pm in Lowry. Among other agenda items, we hope to have a guest from the farmers opposing a proposed highway down south. Also the new book put out by the Environmental Policy Center which many of you have asked about will be discussed. See you on the 16th!

BOOK REVIEW

~~This~~ is a continuation of a review we started last time on a book called ~~Shutdown....~~ testimony from an evidentiary hearing on a suit brought by a Nashville business woman, to ~~shutdown~~ the nuclear industry on constitutional, and health and safety grounds.

Dr. Ernest J. Sternglass was asked to testify on behalf of the defense because his research in the area of radiation was quite different from Dr. Gofman's. Sternglass did studies on infant mortality and leukemia and other cancer rates following the detonation of nuclear weapons during the '50's. The study began using 1945 statistics to present. This study deals with very small amounts of radiation given over long periods of time, which in Sternglass' words, "is precisely the kind of situation that we encounter in the peaceful nuclear cycle, where again we have very small amounts of radiation." From this information, Sternglass believes that "the present permissible limit will produce a significant increase in the number of deaths among babies, the newborn, and, of course, cancers at all ages." For example, before the first bombings on Japan, the average cancer rate of 100,000 5-9 year old males was 41 per year. There was significant increase in this number after each bombing took place, to the point where after the 2nd H-test and into the '60's, this number had increased 600%!

Sternglass has also done studies on mortality rates in areas near nuclear reactors in which the findings indicated cases of cancer increased much more than by what the NRC's projections would've shown. Sternglass went on to agree with Gofman's conclusion that the public hasn't been given a truthful picture of the health hazards from nuclear power. He goes on to say that the plaintiff Jeannine Honicker is actually damaged by the nuclear fuel cycle, as are "her children and their children for generations to come."

After cross-examination, which was pretty boring, Judge Morton gets rather confused and asks, "show me what kind of jurisdiction I have." He then tells defense lawyer Kachinsky that this complaint should be taken directly to an agency to which Congress has given jurisdiction, (sound familiar?) Also, that Congress has specified that it wants district court to stay out of this controversy. Kachinsky replies that action was taken with those agencies, but nothing's been done. Judge Morton takes the testimony under advisement, thus ending the testimonial part of the book.

Through the years, scientists have learned more and more about the related health hazards of the nuclear fuel cycle. During this period of time, the U.S. government, hand in hand with the utility industry, has time and time again been dangerously desparate in their attempts to deceive the public in the facts of what is going on. As this information has been gathered, the industry/government has also become more and more dependent on this same nuclear cycle as well as upon each other, in terms of cover-up after cover-up investment after investment. An example of this is the Book's siting of Pres. Eisenhower ordering the Atomic Energy Commission to "confuse the issue" during bomb tests in Nevada and Utah. So we have brilliant scientists who dared to challenge the government/industry, as Sternglass and Gofman testified, subject to censorship and repression. We have numerous accidents and health hazards the public and environment are subjected to all the time. We have hearings, suits, complaints and yet more hearings with no progress. Then we have 3 Mile Island. Now we have more people who feel as Jeannine Honicker - and like we do - that the utility industry is willfully killing us, by its very existence. It is noted in the book that on January 12, Judge Morton dismissed the Honicker case for lack of jurisdiction. There were appeals filed, and upon publication, the whole matter was still tied up in agencies and the courts.

Shutdown is a good book to be familiar with for many reasons. The intro, which sites past nuclear accidents, the testimony itself from the hearing, and the background and perspective on the nuclear cycle. Also, there is a good bibliography for your reference, a map of U.S. nuclear facilities, & a section on what we could do without nuclear power.

The end of the conclusion sums it up, "The overwhelming majority of the world's people still find their roots in the natural world. If the peoples of the world are to develop free and egalitarian societies, they must keep natur

free to support them. Modern peoples are sometimes proud of their scientific achievements; but even the most sophisticated technology rests on mere discoveries of the ways of nature. Ecological systems are a delicate balance of forces arrived at by a billion-year process of trial and error. With our cultural perspective of only a few thousand years, we upset that balance at our peril. Shutting down the nuclear power industry is one step in creating a world free of fear and intimidation, where men and women can walk the earth safely for generations, and children can be born into the world, grow up and develop normally. We must selflessly abandon the nuclear option for the sake of our children. We no longer have any viable alternative."

To order Shutdown, write to The Book Publishing Co., 156 Drakes Lane, Summertown, Tennessee 38483.

NEWS FROM ALL OVER

American Electric Power Co. (AEP) has been foiled again - at least temporarily - by a group of determined Virginia farmers fighting a 765kV power line in the southern part of their state. This March, the Citizens for the Preservation of Floyd County (CPFC) won what should be a 6 month delay in the construction of a 765kV line which Appalachian Power Co., an AEP subsidiary, is trying to put through Floyd County. The delay came when the National Park Service responded to a CPFC petition by announcing it will conduct an environmental assessment of the line's impact in crossing the Blue Ridge Park Way.

A full-blown environmental impact study could follow, and utility sources are saying that the line will not be completed until 1982, at the earliest.

THE POWERLINE, SEPTEMBER 1979

As we go to press, Wisconsin utilities are asking the Public Service Commission (PSC) for permission to pass on the costs of unbuilt nuclear plants to their customers. Northern States Power Company (NSP) wants to charge consumers the \$80 million that they spent on the proposed Tyrone plant which was rejected by the PSC last March. The Wisconsin Electric Power Company and its partners in the proposed Haven plant near Sheboygan are asking for \$37 million. This plant has been delayed 2 years partly because of questions raised from the accident at Three Mile Island and at this point haven't even received state or federal permits.

DEAD SERIOUS, VOL. 1 NO. 2

America's film hero, John "Duke" Wayne, died a victim of radiation from U.S. atomic fallout. His death and the deaths of his costars in the movie "The Conquerors", have been linked to an open-air atomic test explosion in 1953. The explosion took place shortly before the movie was filmed in St. George, Utah, the site of the nation's worst radiation fallout.

Wayne, costar Susan Hayward, Agnes Moorhead, Dick Powell, and the bulk of the top production people of the movie have fallen to forms of cancer following film work near the Nevada open-air testing range. The cancer and death rate is also very high for other people who worked on the film. The victims include members of an Indian tribe hired to work on the movie. The location of the movie was in the main fallout zone of one of America's first nuclear accidents - an explosion known as "Dirty Harry". "Dirty Harry" was one of 37 open-air nuclear tests conducted in the nearby Nevada test range between 1951 and 1962.

A sudden wind change before detonation at 5:05am on May 19, 1953 sent clouds of radiation over St. George and the cast of "The Conquerors". The radiation levels at St. George, were the highest ever recorded in a populated area, surpassing measurements in Japan after the delivery of 2 nuclear weapons during World War II. Although "Dirty Harry" was detonated atop a 300 foot tower, at 5:05am, documents show that test officials ordered no precautions for local residents until 9:25, hours after the fallout had settled in the area. Most people in the area were never warned at all because "it would create a disturbance" and "it would not take much to start wild rumors". The link to Wayne's death comes at a time when 700 longtime residents of St. George are filing lawsuits against the federal government over the effects of radiation fallout on their communities. NO NUKES NEWS, SEPTEMBER 1979

HOLD THAT LINE
LOWRY TOWN HALL
LOWRY, MN 56349

IS YOUR ADDRESS
CIRCLED??

If so, this will be
your last issue of
Hold That Line.
To have your name
reinstated on the
mailing list, all
you have to do is
write.

LETTERS

Just a note to thank you for
putting me on the newsletter mailing
list. I'm finally employed so shall
send some money in exchange as soon
as I am more solvent.

The nuclear industry is coming
down real hard on Saskatoon, which
has been honored with the name of
"uranium headquarters of Canada."
It's getting to be the truth. Just
recently the financial post organized
a prestigious and exclusive Resource
Development Conference here. Saskat-
chewan, you see, has just about every
kind of resource any multinational
corp. could ever dream of putting its
grubby little mitts on. And the gov-
ernment is investing in some of these
coops, and their activities and coll-
aborating in various development,
especially uranium, in the best inter-
ests of the people. One of the more
salient discussions at this conference
centered around a possible nuclear
power plant which would provide power
for the development of heavy oil. It
makes us feel real privileged to know
that we are being looked upon with
such rapacious favour. Anyway, it's
looking pretty scary, especially the
government's collusion in the whole
mess, and a lot of it is happening
up north where no one but the small
native population can see it and
they're being intimidated and pushed
into accepting it, even into wanting
it.

But people are starting to get
angry, and we're getting organized.
We don't have much choice. So while
things are looking terrible, they're
also looking hopeful.

I'm real glad I went to the
Black Hills. Learned a whole lot that
went pretty deep. Good luck to you!

Saskatoon, Saskatchewan, Canada

Dear Friend,

Your help is urgently needed.
Important developments are unfolding
on the energy front in Washington.
Some of the programs to speed the
development of synthetic fuels, now
before Congress, entail blatant dis-
regard for the environment and publi
health. Letters to your Senators and
Representatives can make the differ-
ence between an energy future based on
synthetic fuels and nuclear power --
or a future based on energy efficient
and renewable technologies. The Carter
Administration and Congressional lead-
ers have proposed the creation of an
Energy Mobilization Board and an En-
ergy Security Corporation to "cut red
tape" on "priority" energy projects.
Both proposals would place awesome
power in the hands of a few officials
in Washington. The Union of Concern
Scientists urges you to write immedi-
ately to your elected officials and
voice your opposition.

Washington D.C.

POWERLINE PROTEST NEWSLETTER OF CENTRAL MINNESOTA

By the time you receive this issue of Hold That Line, GASP's office will have its new phone! It was decided at the last November meeting of the Trustees that it's about time that GASP had a private line, so the phone will be installed the first week of December. Our new number is 283-5439. Do make a note of it so we can make the switch as easy as possible. Thanks!

MARK

You may remember that in our last issue we mentioned that GASP had sent a letter of support to Mark Hoium in Stillwater. Well, we just got a reply in the mail last week. Mark wants to thank everyone who signed the letter. He says, "I really am thankful for all of your support, you made my day today when I read your letter, it didn't make me feel so alone, deep down I mean. My support goes out 110% for all you people who stick up for your own rights, keep it up."

Mark also wishes all of you a very merry Christmas and a happy New Year. If you'd like to drop him a line, his address is: Mark L. Hoium, Box 55, #111509, Stillwater, Mn 55082. We also will print letters in the newsletter which Mark receives if you'd like to send it in care of HTL.

DECEMBER 14th

All of the state Senators and Representatives have received a letter which requests their presense at Lowry at 8pm on Friday, December 14th. From Lowry we will move to a site under the line a few miles west of town (out Pope Co. 28) on the Lida farm.

The purposes of this gathering will be to: 1) give the politicians an opportunity to listen first-hand to the experiences farmers have been having with this powerline; 2) provide the politicians and the media with visual demonstrations of the existance of the electromagnetic field; and 3) educate the politicians about existing scientific knowledge on the effects of the Extr High Voltage powerline on living things. See you on December 14th!!

COAL CREEK CAPERS

Intriguing developments continue to come out of North Dakota. Reliable sources working at the Coal Creek Station have informed our North Dakota contacts that when the Unit 1 generator is in operation at all (which is at irregular intervals) it is being run at 1/3 of its capacity, or less.

There are several possible explanations for this situation: 1) being as they're still burning a lot of oil out there (many tanker trucks are driving in and out of the plant), they're still fiddling around with their pulverizer, trying with less than satisfactory results to get their lignite to burn. 2) being as they tried to crank the generator up to capacity too quickly, things in the turbine and generator keep going kapoohy and they don't know how to fix it so it stays fixed. Or 3) they don't really need it anyway, maybe because the electricity is too expensive.

Equally interesting is the fact that when the generator is in operation, almost all of the electricity is being shipped into the grid through UPA's Stanton Station, rather than through our favorite powerline.

Either they're attempting an end run around the health/safety issues, or else the line isn't a very reliable source for electricity. It seems that more than a few insulators are missing out Dakota way. Problems, problems everywhere.

In a strongly worded statement released recently, Nancy Barsness of Cyrus the spokesperson for Determined Runestone Electric Association Members (DREAM) took sharp issue with reported vandalism figures on the controversial West Central Minnesota powerline. She also charged an aide of Gov. Al Quie with failure to release damage figures more favorable to powerline protesters.

Barsness said the cost of sabotage is a major issue because:

1. It is the issue most often used by United Power Association and Cooperative Power Association "in their attempts to turn public opinion against powerline protesters." The two organizations were partners in constructing the line.

2. UPA/CPA have been "very irresponsible in reporting the actual cost of sabotage, thereby attempting to use powerline protesters as a scapegoat for cost increases more related to management," and

3. Gov. Quie and his staff have "publically used the irresponsible figures put forth by UPA/CPA, but have remained silent now that more accurate figures from UPA/CPA have become available."

Barsness said that on July 6, 1978, the two companies released a statement blaming "West Central Minnesota protest activities" for \$139 million of "completely unnecessary" costs which would be added to consumer electric bills. In May of this year, she claimed UPA told the governor's office the cost had increased to \$142 million.

However, Barsness, who did research as a case study author for the Environmental Policy Institute of Washington, D.C.'s book, "Lines Across the Land," claims the real vandalism figure is actually closer to \$200,000. The book was released in September.

On Aug. 28, the governor released a widely circulated press release on the "serious and destructive situation" using the \$142 million figure, Barsness claimed. He added, "Quite obviously, the real victims in the matter are the consumers who will have to bear the increased costs. I am also calling on the public to cooperate with law enforcement officials to end the vandalism and eliminate the threat to public safety."

It was that report, says Barsness, that prompted her to set up a Sept. 13 meeting with Quie Special Asst. Robert Stevenson, "to clarify the 'vandalism' costs..."

Barsness says that Stevenson contacted UPA and CPA after their meeting and obtained a further report which was received by mid-October. That complicated report blamed most of the cost on "regulatory requirements," she says and that "even this report is questionable, as can be proven by other research and documentation which shows over \$2½ million in security costs are also included under another heading, included among "regulatory costs."

Stevenson, says Barsness, admits the report is a "mishmash and manipulation of public relations," but denies the governor's office has issued any powerline related statements since May. -----Prairieland, Thurs., Nov. 29 1978

* * *

On this note, also last week the GAO report was finally released. Different sources had warned protesters a few weeks ago that the report was indeed destined to be a basic whitewash, so we were prepared, but as always, hopeful as well. It is a good thing, however, that Rep. Nolan took the option of releasing the report himself, thereby giving notice to at least a couple of citings of mismanagement. If he had not released the report, the GAO would have and we all know what a disaster that would have been.

* * *

SLAM NEWS

The last hearing before the 3 judge panel on the southern line was moved at the last minute to Minneapolis from Mankato. HTL didn't receive a notice until the day of the hearing! Our friends from SLAM tell us that things are

frustrating as usual where court is concerned. Especially frustrating because SLAM has proven its case. The utilities have admitted that they don't need the line for anything but to fulfill their investment and wholesale plan for the CU Project. They've admitted that they didn't give landowners proper notice. Yet, they stand in front of the panel and say, well, ok, so we all make mistakes but you aren't going to block a large project like this just because we broke some of the rules.

Another frustrating aspect of this hearing procedure, is that the press is totally ignoring it. It's as if the whole thing were blackballed from coverage. So, our southern friends are worried that if they do lose the public won't even be aware of the many things exposed through this 3 judge panel. So it goes. The next hearing is scheduled for December 10th at 9am in Mankato. Unless ofcourse they change the local again. Good luck SLAM!

DREAM

There will be an organizational meeting for DREAM at the Barsness home on December 20th at 8pm, for anyone interested. Recently there was an advisor bill introduced to the House calling for an investigation of management practices and accountability of G & T electric cooperatives. John Muzik from Minnesota COACT Training will be there to give some organizing tips. There is no date set yet for the hearings on the bill, but DREAM will keep us informed. If you want more info on the meeting, call Nancy at 795-2708.

THE KANSAS CONNECTION

As you may recall, we've been in touch with folks down in Kansas who organized in the early fall to fight a 345 kV AC line that Kansas Power and Light wants to build. It seems that proposing that line is one of the worst things KP&L ever did - as far as KP&L are concerned, anyway. The initial proposal had the line crossing protected prairie lands, and the Bird Watchers called that to a screeching halt, so RP&L tried to move it onto farmers and ranchers. Things since then have been very interesting.

The first application had to be resubmitted due to improper notice of condemnation proceedings. But before that happened, a farmer filed suit against RP&L for having stockpiled material and started construction before the necessary legal procedures had been taken care of. Three KP&L attorneys in pinstriped suits (one very sad, one very nervous, and one very angry and confused) went up against a very well informed county lawyer. The angry and confused lawyer asked the court, "Well, just what constitutes a start?" The sad lawyer looked hurt and said, "KP&L just doesn't know what it can do and what it can't do anymore." The nervous one went outside and smoked cigarettes. The judge told KP&L that they couldn't build the line unless and until everything is in proper order.

Meanwhile, the people down there have a full head of steam. The lawyers are organized, regular meetings are being held which are attracting new people all the time from all along the line route, and nobody's signing easements. Not only that, but they're working with vets along existing line routes over health/safety issues and have successfully challenged and thus eliminated the late fees KP&L have been charging their consumers. Those folks have also got KP&L under investigation for their involvement in the Wolf Creek nuke, and are preparing for the day when KP&L next dares to stick its head above the muck. Such a deal!

LETTERS

Dear Folks,

Thanks for continuing to send the newsletter. I read it carefully every issue. I also want you to keep up the struggle you are leading, you are an example to the rest of us around the country and the world. It is becoming increasingly clear that the high power lines are the achilles heels of the centralized power systems. Barry

Commoner recently spoke at the University of Minnesota, in his talk he mentioned an interesting point which is, 70% of all the capital used to build a centralized power system goes for the powerlines. Please don't feel isolated, we think of your struggle constantly.

Mpls, Minn

Powerline protesters met in Lowry on the 4th, and the meeting was opened by reading and signing a letter which expresses our concern and support for the Scott Jenks family. Scott was killed in a tragic accident on his farm in late November. Scott provided powerline protesters with strong and courageous leadership during many critical and difficult times in our past. Our loss is great.

We also read the afore mentioned letter from Mark Hoium who sits and waits in Stillwater. Mark says to hang in there and keep fighting, and that's just what we plan to do. With that in mind, there are a few other activities coming up, besides the action out under the line on the 14th. So, mark your calendars and call your friends and neighbors!

December 20th at the EQB

The Minnesota Environmental Quality Board is responsible for many of the powerline problems we have been facing out here, and the EQB continues to demonstrate a malicious and bankrupt attitude as far as those problems are concerned. The only thing that changes are the donkey orifices. Naturally, the ones who originally cleared the way for this aerial sewer are long since gone. But it is a good idea to remind the board that we still remain.

And so this is the plan: as many folks from protest country as possible will meet up with each other at 10am on Thursday, December 20th in front of the governor's office in the capitol down in St. Paul. That's because the EQB moves its meetings around quite a bit, but by then we will know where it is. We don't plan to stay too long, but we will let them know a few of the things which are on our minds.

In the event that the EQB decides to temporarily disappear (the EQB bureaucrats are not noted for courage when faced with integrity) we will pay our honorable respects to Uncle Albert. Now doesn't that sound like fun?

January Rally/Conference

The third event in the works is the rally and conference scheduled for January 18-20, 1980. GASP is working with Northern Sun Alliance and the Black Hills Alliance to set things up, and GASP is responsible for organizing the program for the demonstration at the Health Department in Minneapolis at noon and the rally that evening. The conference part on the 19th and 20th will be organizing for the Survival Gathering in the Black Hills in July, 1980. The demonstration on Friday, the 18th, though, will be for powerline protesters to relate our struggle to a lot of new and concerned people, and to present the State Health Department with a list of demands which must be met if the Department is to fulfill its legal obligation to the people of this state.

To that end, a committee has been formed to draft that list of demands. It will then be brought before the General Assembly for ratification at our next meeting on January 8th, 1980. A committee was also formed to orchestrate publicity for the 18th along the line route, and to organize transportation down to the cities - a few busses probably. And the third committee is to set up speakers for the program on the 18th.

Most of the rest of the meeting was used to discuss the status of our work around the health/safety forms which are being filed by people who are hurting from the line. In the right circumstances, Dr. Marino from New York would be interested in testifying as our expert witness on the issue, and we are beginning to set up those circumstances.

There was also discussion of the GAO report, and what to do about the fact that NCP is running around to public schools talking about the virtues and blessings of nuclear power and other centralized energy schemes. We are now talking about the possibility of bringing an alternative workshop on energy into the schools. One such workshop is described in the enclosed issue of Northern Sun News.

Our next meeting of GASP will be in Lowry on the evening of January 8, 1980. This will be an important meeting since it will be our last before the rally, in most likelihood, so hope to see you there!

At the end of the GAO report there is a "Chronology of the Coal Creek Project" starting with 1972. We thought you might be interested in a few selected items from that chronology.

1976

- April 2 - Certificate of Need issued by Director Minnesota Energy Agency. Note: Need was determined about 6 months after the corridor had been approved.
- August 11 - District Court Order prohibited CPA/UPA from doing any work or contacting landowners in Stearns County.

1977

- March 16 - American Arbitration Association Vice President held his first mediation session with a delegation of powerline opponents and power cooperative officials. An impasse was reached.
- March 22 - The three judge panel met to hear consolidated powerline cases. The panel ordered a halt to all surveying and construction on the CPA/UPA project in Minnesota.
- September 30 - Minnesota Supreme Court ruled unanimously in favor of the power cooperatives in the consolidated powerline appeals.

1978

- January - About 50 powerline opponents were arrested or cited for obstructing legal process, damage to property, etc.
- January 5 - Minnesota Governor authorized sending up to 175 State Troopers to Pope County.
- March 9 - CPA/UPA flew more than 90 people to visit a similar powerline in Oregon. Although invited, scant interest was shown by protesters or Minnesota legislators. As of this date, over 70 people in Minnesota had been arrested as a result of protest.
- June 12 - CPA/UPA engage private security force to guard line and equipment. At times this force numbered about 300 people.
- August 25 - Minnesota Governor requested FBI assistance in investigating the attacks on powerline towers.
- December - Between August 1978 and January 1979, 5 transmission towers were toppled and over 900 insulators damaged.

1979

- January 10 - Minnesota Governor stated that the eminent domain law needs to be modified.
- March 1 - A total of 3,155 insulators on the transmission line have been damaged.
- June 28 - Commercial operation of the Coal Creek plant delayed a month due to faulty operation of coal pulverizers. As of this date, about 5,500 insulators have been damaged, mostly by gunfire.
- August 24 - eighth powerline tower toppled by vandals.
- August 27 - Ninth powerline tower toppled by vandals.
- November 5 - Tenth powerline tower toppled by vandals.

If you are interested in possessing your very own GAO report, chronology and all, write to:

U.S. General Accounting Office - Distribution Section
441 G Street N.W. Rm. 1518 - Washington D.C. 20548

HOLD THAT LINE SUPPORTS CPA!!!

(6)

A recent resolution adopted by the CPA Board of Directors has come to our attention, and we would like to go on record as being in full support of the proposed action.

Resolution R79-11-32

Vandalism - Tax Credit

WHEREAS, significant generation and transmission taxes are paid by electric utilities, AND

WHEREAS, transmission lines are passive structures requiring few government services, AND

WHEREAS, law enforcement is one of the few government services which utilities can expect for taxes paid, AND

WHEREAS, Cooperative Power Association and United Power Association have experienced millions of dollars of damage as a result of vandalism to the CPA-UPA +400 kilovolt direct current transmission line and other related equipment, AND

WHEREAS, law enforcement has been insufficient in many areas along the route of the transmission line in west central Minnesota,

NOW THEREFORE BE IT RESOLVED, that the Board of Directors of Cooperative Power Association supports legislation that would allow a tax credit, plus interest, for the cost of vandalism against high voltage transmission lines to be applied against taxes levied, AND

BE IT FURTHER RESOLVED, that the Board of Directors of Cooperative Power Association supports that such tax credits are continued until the vandalism damages plus interest are paid in full.

For more information on how you can collect your tax credit, contact your local hardware store or write:

Tax Credit
Box 30-06
Tuktoyaktuk, NWT
Canada

****PLEASE NOTE****

**THE ORIGINAL FILE CONTAINS AN OVERSIZED DOCUMENT THAT
IS UNSUITABLE FOR FILMING. PLEASE REFER TO THE ALASKA
STATE ARCHIVES TO VIEW THE ORIGINAL.**

Description:

NORTHERN SUN NEWS, DEC. JAN 1979-1980

Volume 3 Number 1

POWERLINE PROTEST NEWSLETTER OF CENTRAL MINNESOTA

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IN WHICH THE SOUTHERN LANDOWNERS ALLIANCE OF MINNESOTA (also everybody else)
GETS SCREWED, AND UPA/CPA ARE ENCOURAGED
TO SELL ELECTRICITY TO MILWAUKEE, KANSAS CITY, AND ST. LOUIS

Even the darkest clouds sometimes have a silver lining. Remember how much fun it was to chase surveyors all over the countryside back in the Winter of '78? Well, it seems 3 black-robed and licentious troublemakers remember those days with such fondness that they decided to do everything in their power to bring those exciting times to us once again. On December 7 the Scurrilous Honorables appointed by the Supreme Court found in favor of UPA/CPA and against S.L.A.M. in a most remarkable fashion. Maybe they even out-did the 1977 Supreme Court Powerline decision. It is the intention of S.L.A.M. to appeal this decision to the High Court too, and give that august body a chance to redeem itself a little bit. But we've all been there before and should the ruling be upheld, it will be curious to see how many fingers and thumbs, clamps, vices, and clothespins are used to plug the noses of the judges while they do their dirty work. Meanwhile, let us look at the ruling.

In their Findings of Fact, our 3 Muddle-headed Miscreants duely noted that notice of the Energy Agency hearings appeared in the St. Cloud Times, Lake Region Echo, Morris Sun, Independent Review in Meeker Co., Sauk Centre Herald, Pope County Tribune, Wheaton Gazette, Swift Co. Monitor, and the Benton News. Then they said "That notice was not published in the newspapers in counties along the 76 miles of the Wilmarth line, i.e. Wright, Carver, Sibley, Scott, LeSueur, and Blue Earth." They further noted that there was much official confusion between the E.Q.B. Corridor Hearings and the M.E.A. Need Hearings back then because of all the new laws being made by politicians

After citing vague and confusing news items tucked away in the back pages of the Crow River News, Rural Minn. News, Mankato Free Press, and Mpls. Sunday Trib., however, these Misbegotten Yahoos had the unmittigated gall to say, "That the landowners knew, or should have known, of the existance of the need hearings from newspaper articles published before, during, and after (sic) the need hearings." Bear in mind that they cite one article in each of those four papers between October and December, 1975, and the Trib article was on page 15, the Rural Minn. article on page 16, Crow River on page 39, and it was on page 41 of the Free Press. Ain't that something?

There follows a lengthy discussion, most of which is either meaningless or somewhere between amusing and absurd. The discussion is about who is entitled to what sort of notice when, and just what is "notice", anyway? "Notice", it seems, can be "actual express notice", or it can be "actual implied notice", or "constructive notice". Being as landowners along the Wilmarth line somehow had the above mentioned news stories "available to them", they had what you call "actual implied notice".

But these judges (for lack of a better term) say that none of that matters anyway. While the M.E.A. decides whether or not land will be condemned for these out-door facilities, the M.E.A. is not site specific. Therefore, they say, "Landowners would be entitled to no more notice at this stage than consumers of energy", whoever they are. (Somewhere in here it seems that the fact that the E.Q.B. has yet to establish an inventory of corridors, as is required by the 1973 law which created that batch of blathering Bureaucrats, somewhere that ought to enter in. It didn't, of course.) Anyway, even if the landowners hadn't received "actual implied notice", even if the only notice possible was one that was Divinely Inspired (as was the case), that would still be okey. As our Illustrious Idiots put it, "Only at the stage

at which there is a 'taking' is a vested right compromised; until then⁽²⁾ the exclusive enjoyment of the property rests in the owner. In the present case, therefore, due process is not violated even in the absense of any notice, since at the stage of a Certificate of Need determination, no process is due." Ain't that something? Might as well give your farm to Martin, Lennick & Co., thank them kindly for taking it off your hands, and head out for Tuktoyaktuk. But that's not the end of the fiasco. Not by a long shot.

Quite obviously, the issue of Need Hearing notice was important because if people would have known about the hearings, some very valuable information would have come out. Now, everybody knows that the public position of UPA/CPA is that the CU Project is to "supply energy to our consumer/members". But according to their own projections in Court, they could only document a load increase for the foreseeable future in that service area which could easily be handled by a 69 KV line. So why build a 345 KV line? There is simply no need for the thing.

Well, what do you think these Nobbling Nitwits went and did? They went and said, "That the Wilmarth line is an integral part of the whole facility, and no separte determination of need is required." The teeth are put into that little statement in the last paragraph of the Memorandum, where it says "...the Wilmarth line does provide a highly desirable link in the MARCA power pool grid to Kansas City, Milwaukee, and St. Louis..." Them consumer/members sure must move around with their irrigators and their barn cleaners an awful lot.

To add insult to injury, the three of them are currently trying to decide whether or not to give UPA/CPA a bigger easement for the line. Seems that 160' isn't quite enough considering some of the experiences UPA/CPA remember from out in this neck of the woods. (Tornadoes were also mentioned a bit.) UPA/CPA aren't asking for a additional 40' or 60' or even 100', however. They want the whole blasted farm. They want to be able to go anywhere they want, anytime they want, on any land contiguous to condemned easements. Curiously enough, none of the signed easements (some 40% of the affected lands) contain such provisions. That's only for those who choose to exercise their legal option of entering condemnation proceedings. None-the-less, our 3 Foolhardy Flunkies will surprise more than a few folks if, by some fluke, the easement is more restricted.

You and me, of course, are supposed to follow "duely established procedures" when we want to get something changed. And as far as easements for powerlines are concerned, that procedure is clearly defined as part of the job of the E.Q.B. But do UPA/CPA go to the E.Q.B. in their attempt to get the run of the place? No. They step right up there before a bunch of judges who can't tell the difference between a burro and their hole in the ground, and ask for the whole farm. Or the whole county, which ever is easier. Ain't that something? Oh well. Like we said in the beginning, even the darkest clouds sometimes have a silver lining.

* * * * *

DEVELOPMENTS AROUND THE HEALTH/SAFETY ISSUE

The following letter was sent to Representative Fjoslien on December 11 from Dr. George Pettersen, State Health Commissioner, and Rep. Fjoslien made it available to us at our meeting with State politicians on December 14:

I have reviewed some reports of our visit to the powerline and would like to correct any misinterpretation of statements I made at that time. I pointed out that the symptoms that were told to me were real symptoms, but I was careful to say that at this time it has not been established that the symptoms are in fact related to or caused by the power line.

I have met twice with the Environmental Health Division to discuss further studies which might be done. We have spoken with people in the

(3)

Energy Research and Development Agency of the federal government as well as with other scientists. At this time, a direction as to what should or can be done to gain answers to some of our questions is not clear. We are likely to pursue one of two suggestions. We will either convene a panel of scientists who would review facts which are known to this date regarding DC transmission or we would consult with recognized scientific experts on the same subject. Then, using this information as a base, panel participants or the expert consultants could help us design a future course of action necessary to address questions regarding the effects of high voltage DC current on humans and animals.

I would also like to remind you that in the spring we will be proceeding with the grounding studies as well as the electrical field studies as previously planned. Of course we will continue to monitor closely scientific literature on this subject of health effects of high voltage DC transmission lines.

Sincerely,

There must be a very urgent crisis to spur so much activity! Meanwhile, there are 201 Representatives and Senators in the Minnesota Legislature, and six of them were able to meet with us in Lowry on the 14th. We are grateful for their presence, but it was a struggle trying to figure out how to proceed with this issue. It seems that Dr. Pettersen isn't the only one from the realm of officialdom who is unclear about what to do next. A committee of people from G.A.S.P. was set up, however, to meet with interested politicians and our scientific expertise to discuss the possibility of some sort of legislative action. That meeting should take place within the next couple weeks, and the committee will report back to G.A.S.P. at the Jan. 8 meeting of the General Assembly about any possibilities which are before us.

It is interesting to note that after the meeting on Dec. 14, but before Representative Tony Onnen of District 22 B left that night, he said he had been instructed to do what he could to get protesters to cut out the sabotage. And he said going to the E.Q.B. on December 20 won't help at all, either. Those "instructions" help to explain some of the peculiar notions he kept sharing with us that evening. One wonders who gives the instructions in St. Paul. . .

* * * * *

DREAM NEWS

The organizational training session sponsored by CoACT has been rescheduled for Friday, December 28 at 8:00 P.M. at the Barsness home. Anyone interested in learning skills needed to run an effective organization is invited to attend.

The next meeting of DREAM will be held at the L & M Cafe, Lowry, on Thursday, January 10, 1980 at 8:00 P.M.

The two incumbent Runestone directors up for election this year refused to be nominated for re-election. DREAM member Glenn Bennett was nominated for District Four, along with two others. District One, northeast of Alexandria, has two unknown nominations. DREAM will be contacting all candidates. Good Luck, Glenn!!!

A reminder that the DREAM 1980 membership fee for Runestone members is \$5.00. (\$2.00 memberships through the mail were grand-fathered in.) All Runestone members supporting our efforts, though inactive, are urged to send their show of support (\$5.00) to:

Ardell Miller
Rt. 1 Box 111
Farwell, MN 56327

Or better yet, attend our January 10th meeting. All ideas and suggestions are needed!

A preliminary survey by Westinghouse of the utility industry nationally indicates that the summer of 1979 failed to bring growth in peak demand. Locally (Missouri) Union Electric experienced a peak only 4 megawatts (MW) - less than one tenth of one percent - greater than their 1977 peak.

This year was the first in memory, perhaps the first time this century in which peaks failed to grow, and in fact the Westinghouse study reported in Utility World found a 1.3% decline in peak. Coming at a time when the industry is severely overbuilt, this seriously undercuts utility expansion plans, which are founded on assumed growth.

Utilities traditionally experienced an approximate 7% per year increase in demand, doubling generating requirements every ten years. In the period 1973-78 this rate declined to about half, averaging 3.46%. Now analysts are questioning if - with a concerted effort to become more efficient and shave peak uses - demand need grow at all.

The industry had been expecting significant increases in 1976 demand with estimates ranging from Westinghouse's 2.6%, through Edison Electric Institute's 4%, Electric World's 5.4%, to National Electric Reliability Council's 7%. The Westinghouse survey is thus sending shock waves through the already shaken power industry.

Traditionally utilities have forecast future demand based on past demand growth patterns. These methods have proven unreliable. UE has, since announcing plans for Callaway, reduced their 1984 load by over 2400 MW, an amount greater than capacity of both Callaway units. Still UE predicts yearly growth rates of 3.4% to 4.1%.

The most sophisticated methods for determining future demand rely on dividing electric demand into its component parts - disaggregating - and attempting to analyze which specific uses might demand more or less electricity as the result of changes both in the economy and technology, and also conservation. While more challenging, because they involve actually going out and looking at what real people are doing in their homes and businesses, these studies are more accurate than statistical projections which merely extrapolate past growth rates or trends in growth rates on a base and thermally sensitive basis.

In 1978 utilities had nationally a 37% reserve capacity sitting idle at peak. This compares with the 15-20% reserve margin recommended by the Federal Energy Regulatory Commission, and was the largest surplus reserve experience since the Great Depression. The 1979 figures are not all in, but if the Westinghouse survey holds up, this year's margin will be greater than last's.

Besides calling into question growth, all this overestimating of demand and overbuilding of capacity is very costly. Literally billions of dollars in carrying charges are being expended on plants which are not "used or useful." Challenges are therefore expected by consumer groups in regions of the country where the excesses are most severe to exclude the costs of unneeded plants from the rate base. That's enough to make utility executives shudder.

-----Safe Energy News, Oct. - Nov. 1979

Commonwealth Edison, the nation's largest nuclear power company, has nowhere to deposit all its radioactive waste, but regulatory officials say that Com Ed has no one to blame but itself.

Due to the company's sloppy approach to packaging and hauling waste, officials said, Com Ed shipments have been banned in Nevada and South Carolina, two of the three states in the nation with "low-level" nuclear waste sites.

In the third state, Governor Dixie Lee Ray, former chief of the Atomic Energy Comm., ordered a total halt to nuclear waste burial on Oct. 4 after the state patrol stopped a truckload of waste from Com Ed's Dresden, Ill. plant and discovered radioactive gravel and "granular material" spilling out of a plywood box.

This predicament only dramatizes the crisis in radioactive disposal, facing not only the nuclear industry but hundreds of nuclear research labora-

tories, medical clinics, industrial users and the federal nuclear weapons (5) program.

The U.S. once had 5 "low-level" waste sites - Sheffield, IL, Maxey Flats, Ky, Beatty, NV, Hanford, Wa, and Barnwell, SC. All have been shut down, except Beatty & Barnwell. The state of Nevada is in the process of revoking the license for Beatty, and Barnwell is restricting out of state shipments.

Governor Riley, NV., cited unsealed drums and damaged casks of waste from Com Ed, and decided on Oct. 15 to bar any further shipments the same day.

No utility has a worse record for violating NRC packaging and shipping regulations than Com Ed, say South Carolina officials.

-----Bailey Alliance News, Oct. 1979

Current attempts at much-needed revision of the federal criminal code could end in a loss of civil liberties, rather than humanization of outdated and repressive laws.

Last year, Sen. Edward Kennedy introduced Senate Bill S-1437, an attempt at criminal code reform which was deemed so regressive that the House Judiciary Committee refused to vote out any revision of the criminal code. Despite the nation-wide protests of 1977 and 1978, Kennedy has reintroduced S.1437 into the present Senate as S.1722. Some alarming features of S.1722 are:

Criminal Contempt (1331): An individual would be guilty of an offense if he did nearly anything that would be considered to obstruct the administration of justice or resist any order of the court. The danger here is that a person could be considered guilty if he simply "resists" any order of the court; this could include anything from disagreeing with an order he felt was invalid, to physically resisting the order. This infringes upon the 1st Amendment right of free speech.

False Statements (1343): This section would make it a federal offense to make a false statement to a government official, whether under oath or not. Thus if a government official thinks a citizen has made a false statement, he can prosecute the person, and it's the citizen's word against the official's. There would be no presence of an attorney or oath given or similar safeguard for the citizen.

Mental Competency: By questioning your mental competence or by labeling you a threat to property, federal prosecutors can lock you up in "suitable facilities" without a trial during which time you will be subjected to psychiatric "treatment".

The bill could also make labor unions' strikes a criminal activity, and undermine our basic rights of the press, or free speech. Rights to demonstrate, to protest, to organize, and to criticize our politicians and military expenditures could be lost.

It should be remembered that S.1437 was rushed through the Senate before most of the Senators had even received copies of the book-length legislation.

The Greater Boston Coalition to Stop S. 1722 is urging everyone to contact their Senators as well as Sen. Kennedy, and demand that voting be delayed and regional hearings held. We cannot afford to risk tightening of already restrictive laws, and the loss of already precarious civil liberties

-----Boston Mobilizer, Oct. Nov. 1979

The "County Energy Plan Guidebook", by Jim Benson of the Institute for Ecological Policies, assumes the futility of waiting for a federal "soft-path" energy plan, assumes local citizens can do their own planning, and offers such citizens a practical manual on how to come up with a county-by-county energy plan. The two sections of the manual deal with topics such as, estimating county energy consumption and renewable energy. The IES sees this as the 1st step in a grassroots effort to build a national plan from the bottom up. For a copy, send \$7.50 to IEP, 9203 Christopher St., Fairfax, VA. 20031.

-----Powerline, November 1979

LETTERS

Here is a donation. Keep my
letter coming! Power to the people.
(Power to us).

Thorp, Wisconsin

Dear Hold That Line,

Enclosed is \$5 for a subscription
to your publication. I am proud of
your attempts towards making people
aware of the many issues of injustice.
United in solidarity, may peace and
justice reign on this earth.

Chicago, Illinois

Dear Hold That Line,

Please continue sending "Hold
That Line". We have been receiving
it for some time and appreciate all
the valuable information in it.

Ashland, Oregon

Friends,

Please enter my name on your
subscription list. Thank you and keep
up the good work.

Dent, Minnesota

Dear Hold That Line,

Please continue the subscription
to your newsletter. The Citizens
National Forest Coalition is behind
your efforts all the way and I hope
to be able to work with you more
closely in the future. Because CNFC
is so poor and I am a struggling
student I am enclosing only \$1 for
now and will try to send more later.

Chaska, Minnesota

Folks at Hold That Line,

I almost forgot to send you
this check - thank you again for an
informative paper. You are doing a
very good service for the community.
It is heartening to see a group of
people like you keep going in good
times and bad. I'm behind you!

St. Paul, Minnesota

Kind Folks at HTL,

From under a pile of paper and
mounds of books comes a muffled cry,
"Hurray for your work!"

Here's \$5 that I can afford now.

Grand Forks, N.D.

* * * * *

* A list of literature on the history of this powerline struggle, on health
and safety issues created by powerlines, and T-shirts, buttons and bumper-
stickers is available upon request.

* The book Lines Across the Land is available for rent or sale.

* The next meeting of the General Assembly to Stop the Powerline will be at
8:30 P.M., Tuesday, January 8, 1980, at the Barrel Inn in Lowry.

See you there!

MERRY CHRISTMAS!!

HAPPY NEW YEAR!!

AUGUST MEETING OF THE GENERAL ASSEMBLY

There was standing room only at the Barrel In in Lowry on the 21st of August as the General Assembly held its monthly meeting. It was the largest business meeting of powerline protesters (there have been bigger parties) since March of 1978. There were folks at the meeting from S.L.A.M., from the Twin Cities Northern Sun Alliance, and there were people from along the line route who haven't been involved with the protest before. There were also a couple self-proclaimed "peons" from the State Health Department named Larry Gust and David Grey.

The meeting started with Gust telling us that he know all about farmers seeing as how he has family out by Hoffman somewhere. Then the peons proceeded to describe the fabulous job our Health Dept. is doing to protect us from bad things all over the State, and all the studies and monitoring programs they have planned for us on this powerline. They kept saying things like, "We really don't have much knowledge about the biological effects of these things," and "We've got to make all our information good and scientific." They probably should have worded it a bit different, because it came out sounding a whole lot like "guinea pigs". While the peons, of course, wouldn't admit that they said any such thing (they had strict orders not to) even some of the calmer protesters became a little irritable. So people started talking about why they were upset. People talked about the terrible things they feel happening to their bodies which are new since the powerline was turned on last October. People talked about their livestock losing control of bodily functions, about wildlife disappearing from along the line route, about the extreme arrogance displayed by the Health Department when people call in to report problems (they've said things like "It's all psychological" and "You're probably just allergic to some weed"), and about scientific information that these bureaucratic peons have either been too stupid to know about or else have been ignoring.

Gust and Grey put on a brilliant display of shameless buck-passing. The Health Department in general and our pusillanimous peons in particular are able to do very little, it appears. They're willing to take your name and address if you have a complaint. They even volunteered to take our mailing list if that would help at all. But they aren't willing to go from farm to farm to check things out with people, or to distribute information to those who are being affected so they will know what to look for before it's too late. They couldn't call a press conference to say that powerlines cause health problems because "We don't do that." They couldn't do the necessary studies five years ago before the line went up. They couldn't pay for the transcript from the June 25 Sauk Centre Health/Safety Hearing which would provide them with plenty of complaints. They couldn't say what type of destruction must be wrought by the powerline before they will take action (but whatever it is the destruction must be "scientifically documented"), and even if they were to take some action, it would be of the grovelling sort. They couldn't shut the line down. What they would be able to do in that event would be to petition the E.Q.B. to revoke the permit. No kidding. The E.Q.B. has refused to do just that a few times already, most recently about a week ago. The Health Department is sitting right in the middle of a nice, neat Catch-22.

The peons took about an hour and a half of our time and it was the most educational 90 minutes they'll ever spend. After that folks took care of business. It was agreed to submit a proposal to host a Rural America Energy Conference next Spring. That proposal has been sent. The most important item was approving an election process and nominating people for the next G.A.S. Board of Trustees. Both were accomplished in fine fashion, and the list of nominations not only re-affirms the tremendous job the present Trustees have done for this Movement, but it also insures a very strong organization for the coming year. Nominated for the Board of Trustees are:

Russel Kvam
Wayne Anderson
Patty Kakac

Darus Ehlers
Sharon Pederson
Virgil Fuchs
Tony Bartos

Henrietta McCrory
Duane Vossberg
Kenny Thurk
Dwight Nelson

Gene Quinn (2)
Matt Wolda
Stephen Pederson

Think about who you want to be on the Board for the next year, and come to the September General Assembly meeting prepared to vote for seven of the above people. That meeting will be held on Tuesday, September 18 at 8:30 pm in Lowry at the Barrel In. Mark it down on your calendar!

Perhaps we can look at the August meeting of the General Assembly as sort of a turning point in this powerline protest. On the one hand, as far as the public knows the line is in commercial operation, and protesters have every reason to be tired and discouraged. After five and six years of fighting, we ought to be ready to roll over and play dead. But that meeting did not sound tired or discouraged! It sounded angry and ready to make some moves. There were more people together than we've seen for a long time. People were there because they will not be used and hurt like this without fighting back, and because they know we got a bit of organization here that is perfectly capable of fighting back. And we're gonna get a whole lot better at it. . .

SEPTEMBER 4 TRUSTEE MEETING

While we're on the general topic, the Trustees will be meeting Tuesday evening, September 4 to discuss (among other things) financial policy in deciding how the Trustees should be spending Defense Committee money. In short what is the defendant's responsibility, and what is the Committee responsibility for defending ourselves. Anyone with ideas to share about this question is urged to be present at that time.

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THE PRICE OF POISON AND THE ANTIDOTE

By 1991, CPA members alone are scheduled to have paid \$1,427,363,000.00 just for debt services and interest expenses on the CU project. By then, only \$43 million will have been paid on the principal. These costs have already caused electric rates to more than double in the past 2 years. In 1977 CPA sold bulk power for 14.53 mills per Kilowatt hour, and it is up to 29.38 for 1979. CPA projects rates will double again by 1981, and by 1990, they aim to sell electricity for 80 mills per Kilowatt hour.

According to CPA, the more they charge for their electricity, the more CPA members will use. Following such twisted logic, CPA tells us that those tremendous rate increases will somehow stimulate ever greater electric consumption. Even though there was virtually no increase in CPA's peak demand in 1978 over 1977 (489 Megawatts to 488 MW), and even though the 1979 peak is likely to be decreasing, CPA still project a total requirement of 593 MW for 1979! By 1991, it is all the way up to 1373 MW! That is a whopping 181% increase over a 13 year period! CPA's projections for total energy sales are almost as incredible, increasing from 2,259,000 MWh in 1978 to 5,500,000 MWh in 1991. While CPA's projections reach to the sky, the national average growth rate has already leveled off so dramatically that the manufacturers of centralized power generation equipment are severely depressed.

Beyond that, one method of measuring the efficiency of an electrical generation and distribution system is looking at the ratio between peak generation capacity and the total amount of electricity sold. In this day of "rapidly improving technology", it is surprising to find that this is one area in which CPA has actually planned for a 6% decrease. Using this ratio, CPA's system will be 6% less efficient in 1991 than it was in 1977. Quite naturally, the only ones who stand to benefit from this type of an energy development scenario are the few who already control the centralized sources of energy.

The source for most of the above numbers is CPA's "Power Cost Study and Financial Forecast, 1979 - 1991". Wonder what UPA and NSF have planned. . .

While the few stand to maintain their control and make a lot of money if the above scenario is played out, if the rest of us can even afford to participate in that grand design (and at 50 to 80 mills per KWh, that is not likely) it will kill us. The critical costs of centralized electrical systems are not measured in dollars. The continuing disaster at Three Mile Island is fresh in our minds. The Mpls. Star prints stories about the acid rains which are falling because too much coal is being burned. The rains are already killing the land and dissolving property in Northeast Minnesota. The immediate danger through Central Minnesota comes from the 800 KV DC powerline.

In 1977, Battelle, Pacific Northwest Laboratories prepared a report for the Energy Research and Development Administration, and for the Electric Power Research Institute. E.P.R.I. is the research and development arm of the electric utility industry, and E.R.D.A. is part of the Federal Government. The report is entitled "Biological Effects of Static and Low-Frequency Electromagnetic Fields: An Overview of United States Literature." In that Overview, the authors state, "There is currently a lack of unanimity by U.S. scientists as to whether or not 60 Hz electric fields associated with (A.C.) transmission lines produce any adverse biological effects. Results from earlier studies are somewhat conflicting and contradictory. The need for additional biological research to clarify the situation has been recognized."

Results from the experiments on plants, animals and people summarized by the overview include: 1) Decreased body weight, 2) A wide variety of blood chemistry changes, 3) Changes in the chemical compositions of many different types of cells, 4) Lowered levels of hormones which are essential for utilization of glucose and carbohydrates. The metabolism of the body is altered, and fatigue results, 5) The ability of the body to utilize proteins is altered, 6) A decrease in arterial and pulse pressure with increased heart rate, and 7) Reduced egg production in exposed hens.

The report also focuses on effects produced by a static electrical field the type of field produced by a DC powerline. The report states, "Little meaningful biological research has been conducted that simulates exposure to such a (DC) system. Factors in addition to the static electric and magnetic fields must be considered, such as ion currents, air ions, and possibly ozone. In the work which has been published on bioeffects of DC fields, there are similar reports of: 1) Blood and body chemistry changes, 2) Chromosomal abnormalities, 3) Secondary glaucoma (blindness), 4) Increased electrical brain wave activity, 5) A decrease in the brain's ability to control bodily functions, and 6) A depressed ability of the body to produce antibodies. The report concludes "There is a need for additional research on the possible bioeffects of exposure to static fields, particularly with respect to exposure to DC transmission systems. For the latter studies potential sources of bioeffects need to be identified and appropriate exposure systems need to be designed to stimulate in the laboratory the environment under an extra-high voltage DC transmission line."

Not included in the overview are bioeffects of air ions and the products of corona discharge, ozone and nitrogen oxides. It is common knowledge that overexposure to positive ions causes headaches and depression, while too many negative ions bring on a state of drunken euphoria. Symptoms of ozone and nitrogen oxide poisoning are similar to each other, but the oxides of nitrogen are about 10 times as toxic as ozone. The effects of poisoning from either are cumulative, which means that there will be long-term effects which will cause sickness and death in coming years. Columnist Jack Anderson is discussing "the potentially lethal effects of ozone poisoning" in the Aug. 25, 1979 St. Paul Pioneer Press-Dispatch, "The symptoms", he says, "include severe chest pains, shortness of breath, rapid heartbeat, vomiting, coughing up blood, dry throat, swollen glands, burning eyes, blurred vision, diarrhea, clammy skin, dehydration, nausea, dizziness, faintness, loss of appetite and forgetfulness. Long range effects include lung and heart damage and even, some scientists believe, possible injury to chromosomes that could cause birth defects." Sinus trouble, sore throats and conditions similar to an asthma attack are usually the first noticeable symptoms of the poisoning.

Anyway, this overview is not a back shelf dust-catcher. It was prepared to set the record straight for an exchange program between U.S. and Soviet scientists on the bioeffects of electromagnetic fields. It is both scientifically and politically important. Considering the importance of the overview, its content, and the fact that it is over 2 years old, only stupidity and incompetence could have caused it to be overlooked. While the people at UPA/CPA say things like, "The State licensed the line, the State wouldn't license it if it wasn't safe, so it's safe," it would be extremely charitable of us to conclude that they are just boobies who ought to be retired to nice soft padded cells before their blundering hurts any more people.

More likely, the overview was ignored. More likely, UPA/CPA personell knew very well that they would be subjecting people and animals along the line to sickness, long term biological damage, and an early death. More likely our ill-reputed public servants, from the bureaucrats in the MEA, MEQB, and the Health Department to the administrations of 3 governors also knew it. They knew it, but they all dance like puppets for the amusement of multinational energy corporate executives. In that case, our local boobies here have been putting up quite a smoke screen for a barbaric pack of lying cut throats. The whole lot of them are operating outside the limits of acceptable social behavior and have subjected themselves to trial for crimes against humanity. Perhaps they have already been convicted and sentenced. Perhaps they should be worrying about such possibilities.

They are worrying about their powerline which has already been tried, convicted and sentenced to fall. Part of it did just that sometime before 7:1 am on August 24th. It was a big juicy Stearns County corner tower, and everyone agreed that the job looked "very professional". By the time the BCA boys showed up, there were a couple of well travelled roads out to the worn out tower. Many local citizens wearing big smiles turned the affair into a gala social occasion, and the BCA boys got all excited because there were so many people right there for questioning. The agents even came up with three different ways to ask, "Who done it?" all by themselves without any help at all. They were real proud of the tricky way they figured out where one agent walks nonchalantly up behind one farmer and another agent sneaks up behind the suspect. The nonchalant agent whispers, "Pssst, did he do it?", out of the corner of his mouth and jerks his head in the direction of his sneaky partner who is pointing vigorously at the unsuspecting suspect. Then both agents watch to see if the first farmer nods "yes" or "no". When they ran out of farmers, they started in on the workers who were trying to anchor adjoining towers to keep them from being pulled over by the tension of the line. One agent spent the better part of an hour looking for yellow snow (he was kinda stupid and the other agents were just trying to get him out of the way), and Don Jacobson from UPA was trying very hard to hold back the tears and be on his very best behavior. He kept asking the agents in a hopeful sort of way if they caught anybody yet. But mostly he just babbled incoherently, something about his lost tractor or something and wondered about looking confused and lonesome.

That afternoon the sun came out for the first time in weeks. The score is now: Traverse Co.-1, Pope Co.-3, and Stearns Co.-4. No word from Uncle Albert yet.

All this tower business seems to have overshadowed the fact that the line was not in very good operating condition in the first place. The utilities say that they need to do about 10 days of "routine maintainance." What they need to do is patch up all the holes in the conductor cable. On this line, that job will continue to be about as routine as lice on a rat, and this horrat had better get used to itching. While we're at it, they say the power plant out in North Dakota is also shut down for "routine maintainance". But there is still no reason to believe that UPA/CPA have gotten their dirty, cheap, wet lignite to burn. What they are probably doing is chipping out the fire box again. When they speak of having "gone comercial" with the CU proje no doubt what they are talking about is the media commercials they're buying in an attempt to sucker people into believing protesters are responsible for electric rate increases.

There'll be a bit of action coming up on the court scene beginning Friday, Aug. 31 in Willmar when Bill Hansen of Wadena will be sentenced at 1 pm before Judge Lindstrom. Bill was convicted last June, and there will be an appeal to the State Supreme Court. Since the conviction, charges against one of his co-defendants, Matt Woida, has been dropped for lack of evidence. Charges will be dropped against another co-defendant, Tony Bartos by the end of the first week of September unless somebody walks into the judges office with some new evidence.

On Tuesday morning, Sept. 4, Mark Hoiium is scheduled for trial in Glenwood. Mark is facing 6 felony charges as a result of Burns Security running amok in Eastern Pope County about a year ago.

Not all the news is so depressing. The Wheaton 2, Darus Ehlers and Dwight Nelson were informed that their charges of Agg. Assault were dropped last Tuesday, only 2 days before the rescheduled omnibus hearing. We would like to give you a little info on what would have happened at that omnibus hearing if the State would have been foolish enough to press charges.

You see, the night D&D were so rudely and abruptly snatched by the BCA, there was a great deal of confusion on the part of the authorities as to why they were busted, and what to do with them once they were. It all started out rather suspiciously with the BCA running around the countryside spying on people through binoculars. That led to the agents freaking out and arresting D&D, who were eventually brought to the jailhouse, and the prosecutor was called down. The prosecutor told the agents that D&D would have to be turned loose for lack of evidence. The agents didn't like that idea at all, and before long they were screaming at each other. "You need some evidence before I can hold them!" yelled the prosecutor. "Tell us what kind of evidence you need, and we'll go find it!" shouted back the agents.

So the agents tried to figure out how to get some evidence, and our hero D&D groaned and rolled their eyes to the ceiling. "We need a search warrant" said the agents. "You don't have enough evidence to warrant a search," said the local judge. "That's why we need a search warrant," said the agents, "Maybe we should ask Judge Claeson." So they did. "You don't have enough evidence, and turn them loose," said Judge Claeson. Instead, the agents called up the Attorney General's office and asked, "What do we do now?" "Do whatever you want to do," said the Attorney General's office. So they did. The agents went and searched vehicles and fields until they found some guns. "Guess what?" said the agents to Judge Claeson. "We found some guns!" "Oh," said Judge Claeson, "\$5000 bail each."

Now it was time to get the story straight, which in the long run proved to be an impossible task for our fearless BCA boys. The first time through, the Traverse Co. Prosecutor talked to them one at a time. The agent who had the binoculars said he wasn't sure what he had seen out in the field, whether it was a shovel, a gun, a stick, or what. But the agent without the binoculars has very good eyes, and he said it was a gun. The second time through they were both together, and they pointed to each other and said, "He saw a gun." The Prosecutor told them to write up their statements. The third time through BCA squad leader Least Earnest got involved, and this time everybody agreed that everybody had seen a gun. It all got fixed up just by adding a little "what appeared to be a gun" on each of the statements so they would look good together side by side.

But the Traverse Co. Attorney became increasingly insecure with the idea of prosecuting a case that had the consistency of a very wet paper bag. He was also becoming increasingly insecure in the thought that he, himself was a witness to the BCA's shenanigans the night of the arrests, and the defendants knew about it. So, as we stated in our last newsletter, the Co. Att. resigned from the case in order to be a witness for the defense, and the Attorney General's office was thrown the proverbial hot potato.

Feeble Fabel, after reviewing the shady events surrounding the arrests, after reviewing 2 judges flat denials for a search warrant, the tampered statements of the BCA, the fact that the County Attorney wouldn't touch the

case with a ten foot pole, and after reviewing the fact that the only (6) convictions that would be forthcoming should proceedings continue through the omnibus hearing would be convictions of perjury against three (3) agents of the Bureau of Criminal Apprehension, after all that, Feeble label decided to send the case back to the County Attorney who inturn dropped charges. How about that? Perhaps a few cop types listening out there could at Least try to be a little more careful next time? Perhaps a few cop types out there aren't out of the woods yet. After all, we still have the sworn statements, you little liars.

* * * * *

PARTY

PARTY

PARTY

Dont forget the Party, Saturday Night, September 1 !!! 2 miles north and 1 mile west of Elrosa, sorta close to where that big corner tower went down early on August 24 (got to keep them streight!). Look for the bon-fire if you get lost. Bring your own instruments! See you there

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S.L.A.M. BANGS THE POWERLINE

The Southern Landowners Alliance of Minnesota was organized to stop the 345 KV AC powerline scheduled to run from Dolano to Mankato. S.L.A.M. has temporarily achieved its purpose!!! While condemnation proceedings went unchallenged in Wright County, the proceedings have been stopped in Blue Earth, LeSueur, Sibley, Scott and Carver Counties. Now everybody is waiting upon the Supreme Court to decide whether or not there should be a trial on 1) need for the C.U. project, 2) due process of law seeing as how there were no published notices of necessary public meetings, and 3) peoples' rights in regard to the Environmental Rights Act. The Supreme Court will hear the arguments at 2 pm on Monday, September 10. Ken Tilsen is representing S.L.A.M. in these proceedings.

The utility lawyers Miller and Draws are becoming less stable as time passes and more work crews are becoming idled because of their ineffectuality. They are slowly moving beyond the shouting, hair-pulling stage, which is good and are reportedly spending more and more time muttering incoherently to each other and giggling as they take turns counting the little holes in the telephone receivers. Between the two of them, they counted 37 receivers one day.

S.L.A.M. had a fundraising party down in Hanburg on August 24. There was something around \$1000 raised, and everybody was real happy to hear about the tower that fell over. There was some mighty fine music, spirits were high, a good time was had by all, and it is doubtful if UPA/CPA will ever get their powerline through that neck of the woods.

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ALCOHOL

Folks don't necessarily need more oil, what folks need is liquid fuel. Alcohol is a clean, safe, cheap(or) renewable liquid fuel, and there are a lot of people getting involved with producing it. Even some in Protest Country. The government has a few miles of red tape for anyone making the stuff, but the Feds told several local people to go ahead and put the still together, and then someone will come and check it out. The Sept. Northern Sun News has a good article on producing alcohol, and more information is available at:

Alcohol Information
Southwest State University
Marshall, MN 56258
1-800-622-5234

Ethyl Alcohol For Fuel Use
Dept. of Treasury Stock # 048-012-00045-1
Bureau of Alcohol, Tobacco & Firearms
Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

Department of Treasury
Bureau of Alcohol, Tobacco & Firearms
230 South Dearborn St. 15th Fl.
Chicago, Ill. 60604

Making Alcohol Fuel
Recipe & Procedure
Rutan Publishing
P.O. Box 3585
Mpls, MN 55403

The National Council of Churches, the nation's largest ecumenical organization, has called for a new national energy policy that would replace dependence on nuclear power with a shift towards conservation and renewable energy sources. By a 120-26 vote, the Governing Board of the NCC supported a deemphasis of nuclear development because of unresolved waste problems, the possibility of catastrophic nuclear accidents which would permanently contaminate large areas of land, and the possible "irreversible damage to the environment and to the human genetic pool."

The decision came only days before a similar vote by the National YWCA Convention held May 17-22 in Dallas. At that convention, overwhelming support was expressed for a ban on new nuclear construction until adequate safety precautions have been implemented, the nuclear waste problem solved, and transportation of such waste safely carried out.

While the council of 32 Protestant and Orthodox church bodies refrained from urging an immediate shutdown, NCC President William Howard sees the policy statement as a call for "serious moves beginning immediately" to achieve "the complete cessation of dependence on nuclear fission as a source of energy."

Though passage of the policy statement may not immediately effect the nation's nuclear programs, it should serve to build new safe energy constituencies and provide new forums for public debate. In fact the 11 page document ends with a call for all church members to "join with others to monitor utility and energy industry regulatory agencies" in order to "bring business practices into harmony with the values of sustainability, fairness, and participation."

Copies of the statement, The Ethical Implications of Energy Production and Use, are available from NIRS, 1536 16th Str. NW, Washington D.C. 20036 for 50¢. The National Council of Churches has also compiled an NCCC Energy Packet available for \$6 per copy. The packet includes seven publications of use to groups attempting to foster ties with religious organizations in their community. Orders should be sent to the NCCC Energy Project, 475 Riverside Dr. (Rm. 572), New York, NY 10027, (212) 870-2385.-----GROUNDWELL, JUNE, 1979

The Senior Citizen Coalition of Northeastern Minnesota has beaten back the third straight Minnesota Power & Light (MP&L) rate hike request in a row and won on lifeline and CWIP issues to boot. In an April decision, the state PSC granted only one-half of MP&L's requested \$52 million increase, decided to continue the 350-kilowatt/hour lifeline rate instituted in 1977, and excluded CWIP from residential rates. MP&L has tried for two years to include CWIP in the rate base; this year, they were allowed to assess the local taconite industry for half the requested amount. Significantly, the PSC also ordered MP&L to reimburse the Coalition for intervention expenses. The Coalition had requested this in their petition, basing their request on a precedential setting decision of the Colorado Public Utility Commission in November, 1977 and also on the requirements of the Public Utility Regulatory Policies Act of 1978 (PURPA).

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In the latest developments in the Black Hills we have Union Carbide making an entrance in all its destructive splendor. They've built a shaft in Craven Canyon that is 10x12 feet and 2000 feet deep. The only problem is that they did it illegally without a permit. Union Carbide thought a "gentlemen's agreement with the state was enough." Won't these guys ever learn? Well, the Black Hills Alliance has filed criminal charges with Union Carbide, so we'll keep you posted.

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FLASH***FLASH***FLASH***FLASH***FLASH***FLASH***FLASH***FLASH

The latest tally has just come in off the wire, the score is:

Traverse Co. - 1

Pope Co. - 3

Stearns Co. - 4

AND

Wright Co. - 1 !!!!!!!

* * * * *

LETTERS

Gee, another tower fell down. Isn't it awful? I wonder how many powerline towers Gov. Al Quie has on the fancy weekend property he just bought in Stillwater? I wonder how many powerline towers Gov. Al Quie has on his dairy farm near Rochester? Here's 10 bucks. Good work.

Crystal, Mn

Please keep me on your mailing list. Here's a little to help you along. Thank you.

Mpls, Mn

Dear Folks,

Please send me your Powerline Protest Newsletter for July 15-31. I have misplaced or given away that issue. I find your newsletter humorous, informative and supportive. Sincerely,

Milwaukee, Wis

Enclosed is a sustaining contribution. Kindly keep my name on your mailing list. Was very interested in your reprint on acid rains. Sincerely,

Detroit Lakes, Mn

Howdy,

Here's a change of address form. Your newsletters will be part of my high school curriculum this year.

Madison, Wis

Hi,

Am sending a small contribution for your newsletter I will try and do better next time. My wife and I stopped by the UPA/CPA generating plant at Underwood on August 5th as we were in the vicinity. It was very puzzling to see this large plant, which is now supposedly fully energized according to Bob Sheldon, and seeing not a trace of smoke or even the slightest haze from the top of the two high smokestacks. More puzzling yet was the fact that not a person was in sight. Being that the temperature was very hot that day, maybe they were having their siesta on the north side of the building in the shade and the north side is not visible to visitors from where we were allowed to drive. Boy they must have real sophisticated scrubbers to cut down totally the pollution from dirty lignite to the point that not even a wisp of smoke was visible. Is the electricity being transmitted and produced elsewhere? Possibly NSP. Draw your own conclusions. And if this line is causing health problems now what will it do in the future when the second of the two plants is activated and 550 more megawatts are pushed along by another 400,000 volts. Think about this.

Farwell, Mn

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Well, folks, the letters this time around were really nice, wish we had more room to print all of them. We know money's tight these days but we sure could use some if you got any to spare. Thanks!

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POWERLINE PROTEST NEWSLETTER****PRESS RELEASE

COURT CAPERS

On Thursday, August 31 at 1pm in Willmar, William Hansen Sr. appeared in front of our old friend Judge Lindstrom for sentencing. Bill was given 2 years on each count, to be served concurrently instead of 2 consecutive 2 year terms. The sentence is stayed pending appeal, so we have another crack at the case through the Minnesota State Supreme Court, to determine if Bill has to serve any time at all.

On Tuesday, September 4th the legal team showed up in Glenwood to see what they could see about just who was going to trial; Mark Hoium or Tony Bartos. Well, Tony Bartos' charges were dropped, making him the 2nd of the Villard 6 to have his charges dismissed for lack of evidence. 2 down, 3 to go.

Meanwhile, jury selection began for Mark Hoium that morning after preliminary meetings in chambers, Judge Willett presiding. Willette surprised us a little bit by giving the defense much more room to move in jury selection than any judge has prior to this case.

We went through 7 prospective jurors on Tuesday, each one taking anywhere from 5 minutes to 1 hour. The 5 minute ones were folks who never even made it past the judge's questions before they said they'd heard about the case, they made up their mind, they didn't see how they could change their mind and that all there is to it! Others talked for 1 hour when questioned before they'd say they couldn't be fair because of their feelings against the line. Looks like there're still deep-rooted feelings in Pope Co.

On the morning of September 5th, Mark was offered a deal. If he would plead guilty to 1 count of damage to property and 1 count of aggravated assault the 4 other felonies against him would be dropped. The defense team met for 3 hours discussing the pro's and con's of such an offer, needless to say it was a difficult decision for Mark to make. We know from prior experience, that guilt or innocence is not always a factor where the courts are concerned. We know the difference between the law of the land and the law of the state. We also know that our victories have never been in the state and corporations' playground known as the courts, but in the fields - and that it's dangerous to think in any other terms when you're talking about 30 years of someone's life. So, at noon that day, the decision was made to take the offer.

There will be a pre-sentence investigation, so the date for sentencing has not been set. The defense will be pushing for reducing the charges to misdemeanors. We'll keep you informed as to the date of sentencing, as soon as the defense is contacted.

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On Monday, September 17 at 8pm at St. Francis Catholic School basement in Benson there will be a meeting of the Minnesota Citizens Action group. This organization started out of the Power To The People conference which took place last May. It is a grassroots organization working for peoples' rights to have a say in the decision making process which will determine our energy future.

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SHOW AND TELL

The BCA is really getting around these days it seems. Rumor Control has it that agents are "just happening to be in the neighborhood, and thinking they'd drop in." So far most of those reports have told us that folks tell the BCA to take a walk. It's very clear that the BCA and the state are much more interested in spying on and threatening local people, than they are in watching their precious powerline. If approached by an agent, remember you have no legal obligation to talk with them and are completely within your rights to ask them to leave. If you have any complaints of harassment by the BCA, or questions concerning their activities, contact GASP.

On August 23, a crew was supposedly working on the downed tower in Stearns County and wandered on to Gene Bieringer's land; a neighbor. So, Gene thought he'd go see what they were doing on his land being as the downed tower was $1\frac{1}{4}$ miles away. Well, on his way out to see the work crew, the BCA stopped him on the road. So, Gene just told them that he wanted to know what those guys were doing out there and was going to have a talk with them. The BCA didn't see it that way, and told Gene that he couldn't go out into his field. But Gene went out there anyway, since all he was worried about was why these guys in hardhats were driving through his alfalfa. Seems simple enough. So anyway, Gene went out there, found out they were just anchoring the tower, attempted to leave, and got stopped again. This time the BCA said they wanted to have a little talk with him. Well, Gene didn't quite see it that way, so he told them, "I live in that house over there. I didn't come out here to talk to you and I'm not going to talk to you now. If you want to see me you go over to that house." And he left. Then the BCA showed up at his house and asked Gene to get into their car so they could have their little talk. Well, once again Gene didn't exactly see it that way and he told them that he wasn't getting into any car and what's more if they want to talk to him they can stand right there. Needless to say, the BCA didn't like that at all; they got huffy, said Gene would get something in the mail, and left.

Low and behold, a week and a half later Gene got a mail order arrest for simple assault and failure to obey. Wonders never cease!

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For those of you who haven't heard the bacon frying, the two downed towers are now up and running....they think. By the way, hats off to the Wright County farmers who have grinned quite a bit over the last couple weeks. What goes up, must come down!

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SLAM

SLAM has intervened through its lawyer Ken Tilsen in condemnation proceedings in 5 of the 6 counties along the 345kV powerline which branches off the CU project's 800kV line. In none of those counties has land been condemned. Condemnation has either been stayed or continued until there is a ruling of the Supreme Court of Minnesota on Sept. 10 at 2pm in St. Paul. The principal issues raised are:

- 1) Do landowners involved in an eminent domain proceeding have a right to a full hearing to contest the taking of their land as necessary and in the public interest?
- 2) Were the landowners deprived of their constitutional rights to due process of law through lack of notice which denied them a chance to be heard at the Need hearing for the line?
- 3) Did the State Agencies have the jurisdiction to Certify the Wilmarth line in light of irregularities in their proceedings especially lack of notice that denied public participation and orderly process?
- 4) Are landowners prevented from challenging a project because of a previous Court ruling which did not address the same issues now being raised?
- 5) Do landowners have the right to a hearing on the terms of the easement? For example, what worth are hearings on health and safety if the easement does not provide assurances commensurate with the findings of those hearings? Or, is it reasonable and necessary to grant the utility the unquestioned right to enter the easement from any place on the farm and use the whole farm in construction and repair of the line?
- 6) Where the issues are common to the 5 counties, should the hearings be

We believe that in order for the Supreme Court to deny SLAM a hearing on any of the issues would amount to a declaration that "The need for the line is so clear that people's constitutional rights to due process of law may be violated in this case"

With a full hearing on the issues, SLAM intends to put on a landmark case that will influence all future electrical energy projects in Minnesota. We will show that such projects are ill conceived and too costly both financially and socially to justify their possible benefits and do not represent an approach to the energy crisis that emphasizes general human needs and purposes above special interests and privileges in resource use. Our arguments are particularly strong in light of the changing energy projections and perspectives.

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IMPORTANT NOTICE

Over the years this Powerline Protest Movement has proven its ability to grow and change to meet new challenges and to take advantage of new opportunity. This ability has enabled us to survive, to grow strong, and to join with others all across this nation who are faced with problems similar to our own. Our ability to survive (along with the blundering of UPA/CPA and the State) insures our victory over the Powerline. It is becoming clear that we will win, but it is not quite so clear just how long it will take. Maybe a couple months. Maybe a couple years. Maybe more, but if we survive we will win, and the longer it takes, the stronger we are capable of becoming. That is why it is important that we look towards long-term organizing, particularly now, when several opportunities are before us.

With that in mind, the following developments are in the works:

1) Update the HOLD THAT LINE Mailing List.

After 1½ years of operation, it is time to sort duplications, out-dated and incorrect addresses, and people no longer interested out of the mailing list. This process will be started in the next issue of Hold That Line. A card will be included in that issue, and if you want to remain on the mailing list, you will have to return the card with your address on it to us. There will be a reminder of this process in the issue following the sending of the card, which will be mailed around Oct. 8, and we will mail only to the revised List starting October 22. Being as Hold That Line costs about \$5 per year per subscriber, we'll be asking for a donation at that time.

2) Working with the Northern Sun Alliance.

As you know, Hold That Line comes out every 2 weeks to about 1900 addresses, and the Alliance publishes Northern Sun News once a month and distributes over 20,000 copies. There is an idea on how to work more together with these publications after we get our mailing list sorted out. The idea is simply to put every other issue of Hold That Line into the Northern Sun News. So once a month Hold That Line will come to you as it has in the past and once a month it will be mailed to you from the Northern Sun Alliance as part of their newspaper. If we do it that way, we will keep many more people informed about the powerline struggle without losing much of the "local flavor". Such a change would also save some paper expenses, and save a bit of time and energy on mailing, too.

3) G.A.S.P. staff pledge drive.

The other thing we got going is a pledge drive. We are trying to raise enough money to pay a staff to do the work that needs doing without draining the Defense Fund. Already there is more work that needs doing than can possibly be done with resources currently available, and an office of some sort is quickly becoming a necessity, as well. Get in touch if you're interested in making a monthly pledge.

Environmental groups see in President Carter's proposed new energy supply mobilization policies a "centralization of power in the hands of a few" that threatens people's rights as well as their environment. These policies were condemned in such strong language at a news conference held by environmental leaders on July 20th that some reporters were left wondering if the environmental community might not be nearing a political break with Jimmy Carter, whom environmentalists generally supported in 1976.

At the news conference, Brock Evans, head of the Sierra Club's Washington office, presented a statement for 11 groups that included nearly all of the major national environmental organizations, plus the League of Women Voters. "We are here to warn you that the President's plan would, if implemented, pose the strongest kind of threat to the laws now protecting the rights of the public."

Another speaker, Richard Ayres, an attorney with the Natural Resources Defense Council, was more specific. He said that the President's proposal to establish an Energy Mobilization Board and an Energy Security Corporation were "the most extraordinary authoritarian measures." Ayres said that Carter was putting "very serious pressure" on his ties with environmentalists, adding, "If the President passes this (mobilization package), he will be remembered for his destruction of the environment." -----SCIENCE/VOL. 205 AUGUST, 1979

GENOA

The 5 Coulee Region Energy Coalition Members who were arrested on March 29 and April 2 went on trial last month in Viroqua, Wisconsin. The 5 were among the hundred or so demonstrators who were objecting 2 shipments of high-level radioactive waste from the LaCrosse Boiling Water Reactor (LACBWR) at Genoa, Wisconsin to a temporary storage facility in Morris, Illinois.

On March 29, 4 people stood in front of the police car that escorted the truck. The 4 were arrested. On April 2, 2 men, including one who had been arrested on March 29, tried to chain and padlock the gate. They were both arrested and charged with disorderly conduct.

The district attorney, Larry Seigar made a motion at the pre-trial hearing that testimony should be limited to the events of the arrests. He said no evidence should be admitted concerning health effects of radiation, the safety of the Genoa plant, or the safety of the transport. Stewart Richter, defense attorney protested the motion and argued with the judge, who refused to listen and upheld the motion.

Next, a utility lawyer made a motion to quash the subpoenas of the Genoa plant officials, even the subpoena of Richard Shishock, the plant manager who witnessed the arrests. The judge cut off Richter's protests and upheld that motion as well.

The judge also swept the defense of the Genoa 5 out from under their feet by not allowing the testimony from expert witnesses. At one point in the trial, attorney Richter asked the judge to allow the defendants to plead that they were acting in self-defense, and in defense of others. The judge did not allow the plea. The jury was out for 45 minutes and found the Genoa 5 guilty. The judge sentenced 4 of the members to 3 weeks in jail and handed down a 6 week sentence to the 5th member. None of the Genoa 5 had previous criminal convictions and all are residents of the area. In the courtroom, the people cried out appeal.

NATION'S WORST RADIOACTIVE SPILL

New Mexico Environmental Improvement (EID) officials estimate that approximately 100 million gallons of radioactive waste and 1,100 tons of tailings solids were released into the north fork of Rio Puerco when an earthen dam was breached leaving a 20 foot wide hole.

The earthen dam of the 18 acre United Nuclear Corporation (UNC) mill tailings pond was breached at about 5am on July 16, 1979 and remained open until 7:30am when UNC employees put up a temporary dike behind the broken dam

The mill was ordered closed after the accident by EID's acting director, Cuba Clayton.

Originally, EID said that 325 million gallons of radioactive water had breached both an earthen dam and a secondary holding area, and was headed down stream to the Little Colorado River and eventually to Lake Mead.

The figures were later revised and the flow stopped 50 miles down stream between Navajo and Chambers, Arizona. However, as Doug Barber of EID said, "We may never know exactly how much water and solids were released."

"At a pH of 3 or 4," Barber said, "heavy metals are dissolved in the water. We are most concerned about arsenic, selenium, vanadium, molybdenum, zinc and uranium." Barber forgot to mention thorium and radium, both cancer causing agents and likely contaminants. Robert Triviso of EID's Gallup office said samples taken of the spill showed radioactivity readings more than 6,000 times the drinking standard. EID has advised people to "not water their livestock, swim or use water from the Rio Puerco," because the Puerco's high acidity readings indicate a possible health hazard.

Over 1700 people live in the Church Rock area. While EID is monitoring all community wells within 200 feet of the Rio Puerco, United Nuclear Corporation will provide bottled water for human consumption and livestock to area residents affected by the tailings release.

Todd Miller, UNC's environmental director, said this will continue "until we see a reversal of contamination of the river."

Miller added, "this is not a free lunch." Every request for water presented by the chapter will be evaluated to insure the person is located in an area that might have water contamination.

"This is not an isolated incident," said a Church Rock resident. "We Navajo people are essential partners to nuclear development and power. The companies have an obligation to be responsible and accountable to the community," she said. -----excerpt from THE BRIDGE, SEPT-OCT, 1979

UPCOMING EVENTS

The following is a list of events coming up in the next week:

- | | | |
|--------------|---|--|
| September 10 | - | Initial arguments before the Supreme Court. |
| 11 | - | Press tour-along powerline route |
| | | Trustees meeting 8:30pm, Lowry |
| 12 | - | Demonstration in front of CPA at noon |
| | | Panel discussion on powerline, Burnsville high school, 8pm |
| 17 | - | Minnesota Citizens Action mtng, 8pm Bense |
| 18 | - | GASP general mtng, 8:30pm, Lowry |

GENERAL MEETING

GASP's September monthly meeting will take place on September 18 at 8:30pm. Among the items on the agenda will be:

- 1) A proposal by the GASP Board of Trustees dealing with financial guidelines and policy in distributing funds to those who need them.
- 2) A general discussion on the idea of an office and staff for GASP as well as sharing thoughts on where we want to go from here in our organizational work.
- 3) Further discussion of the election process followed by voting for the Board of Trustees. The list of nominees for the board of 7 are:

Russel Kvan	Darus Ehlers	Henrietta McCrory	Gene Quinn
Wayne Anderson	Sharon Pederson	Duane Vosberg	Matt Weida
Patty Kakac		Kenny Thurk	Stephen Peder
	Tony Bartos	Dwight Nelson	

See you on the 18th in Lowry!!!!!!!!!!!!

A FUNNY THING IS HAPPENING ON THE WAY TO A FORUM

We thought maybe we were going to have a Public Energy Forum on electricity sometime in November. During the August 10 meeting between the Coalition of Rural Environmental Groups (CoREG), and Utility and Government personnel, a format was agreed upon and a tentative date was set. The agreed upon format simply called for a few opening remarks by Uncle Albert and then the Minnesota Energy Agency (MEA) would tell us about their plans and policy. The Utilities would critique the MEA from their perspective and give us their plans and policy, and then representatives from CoREG would comment on the positions of the Government and the Utilities, and offer a few alternatives. There would then be time for rebuttal, questions from the floor, general discussion, and some provisions for follow-up work. Fair enough, don't you think?

But when our bureaucratic flunky friends and the Utility lackies reported back to their respective Masters about the things they had agreed upon with CoREG, you can believe that there was much consternation in the Great Halls of the Powerful. It is easy to believe that the wrath of these Masters of Deceit was high on boundless seeing as how they were threatened with a terrible scandal. The depraved whoring between corporate executives and public servants was about to be exposed. Something had to be done!

So at the September 7 Forum Planning Meeting, the State sent in the top-dog from the Energy Agency who simply had to buy more time, and the Utilities started blowing smoke while looking for a back door big enough for them to slither through without getting stuck.

The Utilities managed to find themselves a tiny little door out to the alley alright, but they haven't quite decided yet if they want to be left out in the cold should they actually survive the risks of leaving. You see, the Utilities are claiming that this Public Forum isn't public enough. Really. These demented perverts have had years to initiate such a forum, and obviously they have not chosen to do so. But now things are suddenly different. Now that a Forum is finally being forced upon them by concerned (enraged?) citizens, the Utilities have suddenly developed a remarkable interest in "the public". "We feel that the whole issue of public input has been passed over too quickly and must be discussed again", they say.

These Yellow-bellied Yahoos not only have the gall to say that this forum isn't public enough (even though everybody is invited to come and bring their cousin's aunt along), but they also have a nice list put together about just who "the public" really is. And such a Public! Names from this list, they suggest, should be put in a hat, and those that are drawn get to participate in the forum. Their list includes the Minnesota Rural Electric Association, Minnesota Chamber of Commerce, Minnesota Association of Science and Industry, Minnesota Urban League, National Association for the Advancement of Colored People, Isaac Walton League of Minnesota, Upper Midwest Council, and the Health Department. No Kidding. This nonsense was presented as a "new proposal", and everyone was actually expected to take it seriously because otherwise "we just might pick up our marbles and go home." Other than this "proposal", the Utilities had very little to talk about during the course of the meeting. It is becoming clear that the Utilities need plenty of their "friends" around for this kind of stuff, because they are very much afraid that otherwise things will be getting out of their control. The blind arrogance of these molting turkeys is exceeded, it seems, only by their cowardice. Not Public Enough. What a scream.

While the Utilities limited their participation to the issue of "public input", the smooth talking top-dog of the MEA named Johnson (but you can call him . . .) seems to be a great believer in the idea that it doesn't matter so much what you say, just so long as you keep on jabbering. Speech after stirring speech came out of this guy, and he was chock-full of disjointed platitudes such as "WE are a nation of LAWS", "It is criminal that there is no

national energy policy", "In Minnesota, we have a lot of plans, (7) but we have no policy. We are powerless and we have no control of the energy situation at the MEA", "It is a reactive process that we have here at the MEA", and "I certainly hope I don't have to go to jail for circumventing the Law." He also said that CoREG people have a poor understanding of the Law governing the Minnesota Energy Agency, but that he wasn't about to talk about those Laws because he isn't a lawyer. Uncle Albert picked a real winner here.

Then he got going on something about how CoREG "wasn't seeing the Forest for the trees", so he was politely informed that a tree here and there was on fire, and it might be wise for him to make a little note to himself that the fires just happen to be in his little forest. And he was also told that the things he had just been so eloquently stating were exactly the things the people of the State have a right to know about the MEA. Say that stuff at the Forum, Mr. Johnson, and we will all have a very constructive learning experience which will help us devise our energy policy.

Now that kinda shook old Mr. Johnson up a bit, because what he was supposed to be doing was buying time. So then he really started to blather on about how understaffed and over-worked and underfinanced the MEA actually is "Why, we don't even have a planner at the Agency," he said. Anyway, it seems that there is just so much to do and so few people to do it that it is not possible for the Minnesota Energy Agency to tell the people of this State in November how it decides whether or not to grant a Certificate of Need for a facility proposed by the Utilities. While they can't tell us how they make such decisions, they assure us quite adamantly that they will continue making decisions about such Certificates. This is a good spot for some more name calling. . . .

So this guy Johnson claims that he is not easily embarrassed, but the fact remains that he is struggling just as hard as he can to delay as long as possible before he has to walk out on stage with his pants down. "By January", he says, "But not in November." The Pollution Control Agency is taking bets on whether or not he can figure out how to dress himself in 2 extra months.

Where it stands now is that there might be some sort of a Public Forum in November as long as everybody promises that nobody will say anything about anybody else. Lawrence Welk will be host and tea will be served by the Daughters of the American Revolution. Bring your own instruments.

The next planning meeting for the Public Forum is supposed to be on Monday, September 17 at 2:30 pm in room 125 of the State Capitol.

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UNCLE ALBERT STEPS OUT (again)

Two towers went bump in the night towards the end of August, so Uncle Albert got sore and decided we were once again the Top Priority of the BCA agents who are now "blanketing the area". Chants of "We're Number One!" could be heard floating on the country breezes. But Uncle Albert really ought to be ashamed of himself. While people out here are literally frying under a powerline that isn't needed in the first place and is just too expensive in the second, this Knee-jerking dolt we have for a governor says in the Mpls. Tribune that he is, "calling on the public to cooperate with law enforcement officials to end the vandalism and eliminate the threat to public safety (sic) and the needless destruction of property." Maybe he should get some sort of a prize for that one.

But the Utilities simply decided to up the ante. Now there's a \$100,000 bounty. Add another \$150,000 to that and we're right in there with the IRA. But be careful, folks, that kind of money has attracted some bounty hunters, and they try to make up the rules as they go along. Maybe we should auction off Martin & Lennick just to keep things from getting too lop-sided..