

MINUTES OF THE MEETING
NATURAL RESOURCES
MONTANA STATE SENATE

February 28, 1979

The nineteenth meeting of the Natural Resources Committee was called to order by Senator George F. Roskie, Chairman, at 1:00 P.M., on the above date in Room 405 of the State Capitol Building.

ROLL CALL: Upon roll call all members were present with the exception of Senators Dover, Jergeson and Lockrem. Senators Dover and Lockrem arrived during the hearing on HB 605.

Mr. Jim Lear, Staff Attorney from the Legislative Council, was also present. See attached visitors' register for the names of visitors present.

CONSIDERATION OF HB 676: "An act to restrict the nature of the estate which may be obtained by eminent domain for reservoir and dam purposes; amending section 70-30-104, MCA."

Chairman Roskie called on Representative Dennis Nathe, District 1, to present HB 676 to the Committee. Representative Nathe told the Committee that the purpose of this bill was to restrict the nature of the estate which may be obtained by eminent domain for reservoir and dam purposes by allowing condemnation only up to the edge of the maximum pool of the reservoir. The landowner would then still own the shoreline and have the use of it.

Chairman Roskie then called for any other proponents to HB 676. Hearing none, Chairman Roskie called for any opponents to HB 676. Hearing none, Chairman Roskie opened the hearing to questions from the Committee and there were none.

DISPOSITION OF HB 676: Senator Story moved that HB 676 BE CONCURRED IN and Senator Manley seconded the motion. The motion carried unanimously with those present.

CONSIDERATION OF HB 431: "An act to provide that the Board of Natural Resources and Conservation may require meters on wells in controlled groundwater areas and proposed groundwater areas and wells with a maximum yield of 100 gallons per minute outside such areas; and amending section 85-2-113, MCA."

Chairman Roskie called on Representative William Day, District 54, to present HB 431 to the Committee. Representative Day told the Committee that HB 431 will amend the existing law to only allow meters on wells in controlled groundwater areas and proposed groundwater areas and wells with a maximum yield of 100 gallons per minute outside such areas.

Chairman Roskie then called for any other proponents to HB 431.

Mr. Ted Doney, Department of Natural Resources and Conservation, stated that he now supports the bill in its entirety since it was amended in the House.

There being no other proponents to HB 431, Chairman Roskie called for any opponents to HB 431. Hearing none, Chairman Roskie opened the hearing to questions from the Committee and there was some discussion as to whether the title was specific enough.

Senator Lowe moved to amend HB 431 by inserting "controlled" after "proposed" on line 8 of the Title. The motion carried unanimously with those present.

Senator Story then moved to amend HB 431 by inserting "in excess" after "yield" on line 9 of the Title. The motion carried unanimously with those present.

DISPOSITION OF HB 431: Senator Thiessen moved that HB 431 BE CONCURRED IN as Amended. The motion carried unanimously with those present.

CONSIDERATION OF HB 605: "An act to revise the definition of a facility under the Montana Major Facility Siting Act as it applies to geothermal resources; amending section 75-20-104, MCA."

Chairman Roskie called on Representative Kathleen McBride, District 85, to present HB 605 to the Committee. Representative McBride informed the Committee that the purpose of this bill was to exclude small geothermal facilities from the Major Facility Siting Act which would allow the development of some small scale projects without putting the people through undo hardships.

Representative McBride then called on Mr. Keith Brown to further discuss HB 605. Mr. Brown said he worked on the geothermal planning project with the Department of Natural Resources and Conservation. Mr. Brown explained to the Committee how the figure of 25 million Btu per hour was arrived at, and said he would answer any other questions the Committee might have.

Mr. Ray Breuninger, Department of Natural Resources and Conservation, also spoke in behalf of HB 605. Mr. Steve Perlmutter, Montana Energy Research and Development Institute, also spoke in favor of HB 605. Mr. Ronald Pogue, Alternative Energy Resources Organization, also spoke in favor of HB 605. He pointed out that 25 million Btu per hour is enough energy to heat 200 average insulated 1800 sq. ft. homes in the coldest part of the state and up to 500 energy efficient homes, and so he feels the 25 million Btu is a realistic limited at this time.

There being no other proponents, Chairman Roskie called for any opponents to HB 605 and there were none. Chairman Roskie then

opened the hearing to questions from the Committee. There was some discussion about the 25 million Btu per hour figure as well as the \$250,000 figure and whether or not they were suitable. It was felt by the Committee that those figures were adequate for the present time.

DISPOSITION OF HB 431: Senator Story moved that HB 431 BE CON-CURRED IN. The motion carried unanimously with those present. Both Senators Lockrem and Dover had arrived prior to this vote.

CONSIDERATION OF HB 230: "An act to provide that the slurry transport of coal is not a beneficial use of water; amending section 85-2-102, MCA."

Chairman Roskie called on Representative Daniel Kemmis, District 94, to present HB 230 to the Committee. Representative Kemmis stated that HB 230 would change Montana's water law which presently says nothing about using water to slurry coal around the state of Montana but does not allow water to be used for slurry to export coal from Montana. He said HB 230 would bring the law back into constitutional shape by also stating that water cannot be used to slurry coal within the state of Montana. Representative Kemmis stated that the present law is unconstitutional as it now reads and could be challenged in court. Representative Kemmis then cited a case in Texas where this occurred and urged the passage of HB 230 to avoid any law suits in Montana. Representative Kemmis also pointed out that the bill includes a statement of legislative intent of why we cannot use water for the slurry transportation of coal.

Senator Watt, co-sponsor of the bill, District 49, also spoke in support of HB 230. Senator Watt said he sponsored the bill that put into law what HB 230 is now trying to amend and gave some background information on that bill for the Committee's benefit.

Chairman Roskie called for any other proponents to HB 230. Mr. Joe Crosswhite, President of the Western Environmental Trade Association, spoke in favor of HB 230 but had reservations and hoped it would always pertain only to coal.

Ms. Charlotte Easter, Environmental Information Center, also spoke in support of HB 230 and submitted her comments in written form (see attachment).

Mr. Zack Stevens, Montana Farm Bureau, also spoke in support of HB 230.

Mr. Ronald Waterman, Montana Railroad Association, also spoke in support of HB 230, and submitted a list of other organizations that were also in favor of HB 230 (see attachment).

Ms. Jan Brown, Montana Association of Churches, also spoke in support of HB 230.

There being no other proponents to HB 230, Chairman Roskie called for any opponents to HB 230 and there were none. Chairman Roskie then opened the hearing to questions from the Committee. Several questions were asked about how this bill would affect deep deposits of water that are already polluted as well as questions about the need for the statement of intent. There were some comments made about considering the possibility of bringing the water back into Montana to be used over again if the law were changed to allow the use of water to transport coal out of state. Representative Kemmis reminded the Committee that this bill does not address itself to that situation. The law has already said that water can not be used to slurry coal out of state. This bill will just put the same restriction on the use of water to slurry coal inside the state.

Senator Watte closed by addressing the discussion that took place on recycling water to slurry coal out of state and said that this would not be possible because of Montana's elevation.

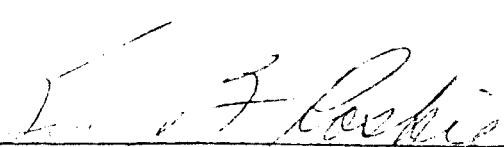
Representative Kemmis then closed by suggesting to the Committee that if they were concerned about whether or not we should have a law that prevents the use of water to slurry coal out of Montana, the Committee should consider a bill to repeal the present law. But at the present time Representative Kemmis felt we should put the present law into constitutional shape to avoid a law suit.

Senator Lockrem moved to amend HB 230 by inserting after "~~matter-~~" on line 24 of page 1, "A use of water for slurry to transport coal is not a beneficial use."; by inserting after "~~state-~~" on line 24 of page 3, "(1) The use of water for the slurry transport of coal is detrimental to the conservation and protection of the water resources of the state." and renumbering subsequent subsections; and by striking in their entirety lines 2 through 16 of page 4.

Senator Brown suggested that Jim Lear get a copy of the opinion Representative Kemmis referred to in his presentation of HB 230 to see if the amendments would still satisfy that decision.

Senator Thiessen moved that Senator Lockrem's amendments be accepted for the purpose of researching the constitutionality of the bill as amended. The motion carried unanimously with those present.

ADJOURNMENT: There being no further business, the meeting adjourned at 2:20 P.M.



SENATOR GEORGE F. ROSKIE, CHAIRMAN

ROLL CALL

Natural Resources COMMITTEE

46th LEGISLATIVE SESSION - 1979

NAME	PRESENT	ABSENT	EXCUSED
ROSKIE, George F., Chairman	✓		
DOVER, Harold L., Vice-Chairman	✓	ES	
BROWN, Steve	✓		
ETCHART, Mark	✓		
JERGESON, Greg			✓
LOCKREM, Lloyd C., Jr.	✓	AT	
LOWE, William R.	✓		
MANLEY, John E.	✓		
STORY, Pete	✓		
THIESSEN, Cornie R.	✓		

Each Day Attach to Minutes.

STANDING COMMITTEE REPORT

February 28, 19 79

MR. President

We, your committee on Natural Resources

having had under consideration House Bill No. 676

Respectfully report as follows: That House Bill No. 676

BE CONCURRED IN
DO PASS

RL

George F. Roskie, Chairman.

STANDING COMMITTEE REPORT

February 28, 19 79

MR. President

We, your committee on Natural Resources

having had under consideration House Bill No. 431

Respectfully report as follows: That House Bill No. 431,
third reading bill, be amended as follows:

1. Title, line 8.
Following: "PROPOSED"
Insert: "CONTROLLED"

2. Title, line 9.
Following: "YIELD"
Insert: "IN EXCESS"

And, as so amended,
BE CONCURRED IN
DO-PASSE

STANDING COMMITTEE REPORT

February 23, 1979

MR. President

We, your committee on Natural Resources

having had under consideration House Bill No. 605

Respectfully report as follows: That House Bill No. 605

BE CONCURRED IN
AND PASSED

George F. Roskie, Chairman.

BILL

VISITORS' REGISTER

DATE

Please note bill no (check on SUPPORT OR

NAME	REPRESENTING	BILL #	SUPPORT	OR
Ronald Pogue	Alternative Energy Resources Organization	605	X	
		431	X	
T. J. Dwyer	DMAP	431 605	X	
R. J. Hill		605	X	
Wills Hall	League of Women Voters			
J. L.			230
K. ...				
T. ...				
Charlotte ...	E & C	230	X	
Paul ...	EJC	230	X	
		605	X	
Ed	230	X	
Ray	605	X	
Keith E. Brown	Spencer - Spenser	605	X	
Kathleen McBride	Spencer HB #	605		
Don ...	DMAP	...		
Steve ...	MERDI	HB 605	X	
		1-323	X	

NAME: Charlotte Escater DATE: 2/28/79

ADDRESS: 1600 39th St Missoula

PHONE: 544-3070

REPRESENTING WHOM? E. J. C.

APPEARING ON WHICH PROPOSAL: 930

DO YOU: SUPPORT? AMEND? OPPOSE?

COMMENTS: _____

PLEASE LEAVE ANY PREPARED STATEMENTS WITH THE COMMITTEE SECRETARY.

NAME: Joe Conover DATE: 2/28/79

ADDRESS: Lincoln Hall

PHONE: 792-5055

REPRESENTING WHOM? WETA

APPEARING ON WHICH PROPOSAL: 230

DO YOU: SUPPORT? AMEND? OPPOSE?

COMMENTS: _____

PLEASE LEAVE ANY PREPARED STATEMENTS WITH THE COMMITTEE SECRETARY.

NAME: _____ DATE: _____

ADDRESS: _____

PHONE: _____

REPRESENTING WHOM? Western Industrial Union

APPEARING ON WHICH PROPOSAL: _____

DO YOU: SUPPORT? _____ AMEND? _____ OPPOSE? _____

COMMENTS: _____

PLEASE LEAVE ANY PREPARED STATEMENTS WITH THE COMMITTEE SECRETARY.

NAME: Steve Perlmutter DATE: 2/27

ADDRESS: 2255 Power Block

PHONE: 443-5653

REPRESENTING WHOM? Montana Energy Research + Dev. Ints.

APPEARING ON WHICH PROPOSAL: HB 605

DO YOU: SUPPORT? AMEND? OPPOSE?

COMMENTS: _____

PLEASE LEAVE ANY PREPARED STATEMENTS WITH THE COMMITTEE SECRETARY.

NAME: DAVID B. BROWN DATE: 2/23/79

ADDRESS: 5111 W. 11th St., U.S. ENV.

PHONE: 447-3780 (off.)

REPRESENTING WHOM? Dept. of Natural Resources & Conservation

APPEARING ON WHICH PROPOSAL: HR 605

DO YOU: SUPPORT? AMEND? OPPOSE?

COMMENTS: _____

PLEASE LEAVE ANY PREPARED STATEMENTS WITH THE COMMITTEE SECRETARY.

NAME: Ted W. Dacey DATE: 2/23/79

ADDRESS: 32 S. Ewing, Helena

PHONE: 449-3712

REPRESENTING WHOM? State Dept. Natural Resources & Cons.

APPEARING ON WHICH PROPOSAL: H.R. 431; H.R. 605

DO YOU: SUPPORT? AMEND? OPPOSE?

COMMENTS: _____

PLEASE LEAVE ANY PREPARED STATEMENTS WITH THE COMMITTEE SECRETARY.

NAME: JEFF E BACON DATE: 2/28/79

ADDRESS: Box 501 Canyon Creek MT

PHONE: 364-4176

REPRESENTING WHOM? MYSELF

APPEARING ON WHICH PROPOSAL: HB 605

DO YOU: SUPPORT? AMEND? OPPOSE?

COMMENTS: _____

PLEASE LEAVE ANY PREPARED STATEMENTS WITH THE COMMITTEE SECRETARY.

Re: Bill 250

Mr. Chairman and Committee Members:

My name is Charlotte Easter. I represent EIC as a proponent.

In order to endorse this bill, "that slurry to transport coal is not a beneficial use of water", it is necessary to compare some dollars and cents costs and some natural resource costs of railroads and pipelines.

According to Dr. Michael Rieber, of the Center for Advanced Computation at the University of Illinois, it costs much less to upgrade a railroad completely than it does to construct a pipeline. Railroads are more energy efficient. The diesel fuel expended by locomotives hauling coal is only 2% of the coal's energy content. Pipelines would use 3% of the coal's energy content. Railroads are more labor intensive than pipelines. Estimates for a 1000 mile pipeline showed that it would provide only 245 continuing jobs, whereas the railroad would provide 1800 continuing jobs. Railroads are also multifunctional and flexible and, because they are common carriers, they provide for the marginal customer.

Once a pipeline is in operation, it will be used. The coal burning electric conversion plants will be designed and situated with the pipeline in mind. Long-term contracts will be signed for pipeline coal. If the operating costs of the pipeline increase, the electric plant and the consumer will pay, even though it might be cheaper to ship by rail.

The use of water for transporting slurry is a waste of our most precious resource. The BLM statistics show that one ton of water is used in the Black Mesa Pipeline in Arizona to move one ton of coal. A 1000mile slurry pipeline would use 20,000 acre feet of water per year.

The Water for Energy Management Team of the Dept. of the Interior determined that the withdrawal of 20,000 acre feet of groundwater for an individual site would be greatly in excess of local annual recharge and would reflect extensive local groundwater mining.

If there happened to be a pumping station failure, the paste-like slurry from all the previous segments would have to be dumped into dump ponds in order to prevent deposition and plugging. A 1000 mile pipeline with an 855,000 ton hold-up capacity would require dump ponds with a capacity of 3,660,000 cu. ft., or the equivalent of seven football fields ten feet deep. Each pumping station would also need access to a 1.9 million gallon water reservoir in order to flush the segments of the pipeline during the dumping of the slurry.

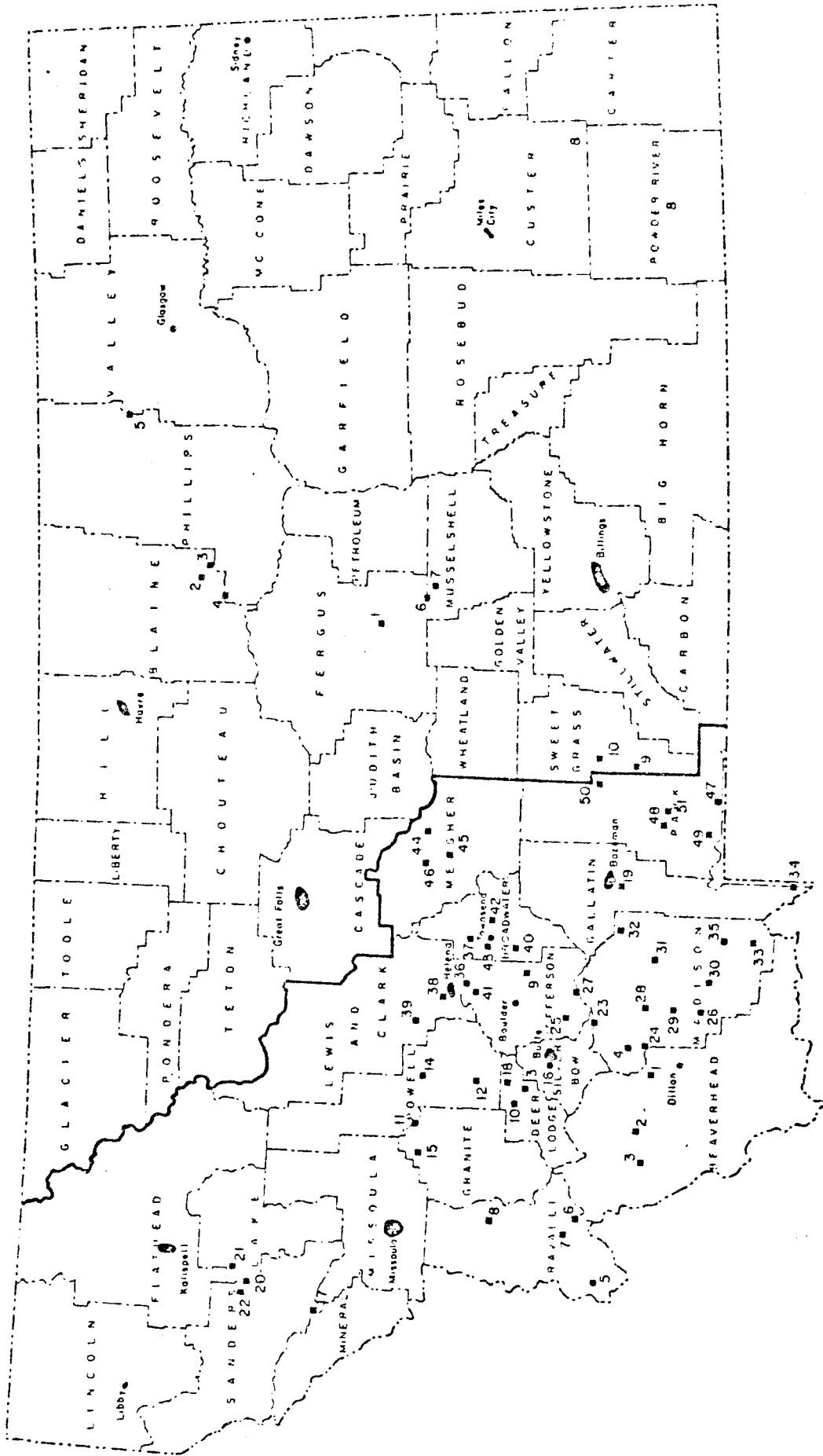
If this quantity of water was taken from the Madison Limestone Formation, which underlies Wyoming and parts of Montana, Nebraska and the Dakotas, the loss of water pressure would not be localized but would spread more than twenty-five miles. At this distance, the wells ^{that} have a static pressure level at ground surface would lose pressure until, after forty-five years, the static pressure would be 600 feet below the surface.

This heavy withdrawal from the pipeline wells would be likely to increase the mineralization of 'good' water and render it unfit for domestic and agricultural use.

Certainly, it is not the most beneficial use of our most precious resource to take it from an arid area, use it in an uneconomical slurry pipeline, and then to let it evaporate or to discard it at the end of the line.

It is interesting to note that one of the proponents for a pipeline has been the Energy Transport System Inc., which was formed by Bechtel, Inc., and Lehman Brothers Investment Banking House, Inc. Bechtel owns 40% of ETSI. Bechtel was hired by the federal government to do a study of the comparative costs of slurry transportation and railroad. This was a flagrant case of 'conflict of interest': Bechtel hired to study the need for a pipeline and Bechtel to construct the same pipeline.

We urge you to vote in favor of HB 230.



GEOHERMAL RESOURCES RELATIVE TO POPULATIONS DISTRIBUTION

MAP 1

POTENTIAL GEOTHERMAL USES IN MONTANA

Most of Montana's industry is concerned with extracting material from the earth with a small amount of secondary manufacturing using these materials. This applies to agriculture, mining and the timber industry. For this reason there isn't much demand for many of the possible uses of geothermal energy.

There are a number of important areas of use which should be noted. ^{PAGE —}

lists many of the uses which are suited to Montana. Many of these are energy intensive which allows very competitive marketing of products. A number of the listed uses are not currently practiced here. There would be excellent possibilities for new industry which would greatly benefit the Montana economy.

Energy is becoming a very important resource which is not limited to shipping of raw fuel resources. The near future will see manufacturers looking for energy rich areas in which to site new industry. Geothermal resource areas will be prime targets.

Some of the more ideally suited uses which could be usable now are crop drying and feed pelleting, greenhouse heating, sugar refining, aquaculture, individual and district space heat, pulp, paper and wood product drying. ~~THE ABOVE~~

• ~~LIST~~ — should not be construed as a complete listing, Any heat process which requires about 300 F or less is a candidate for adaption to geothermal heat. The majority of Montana's geothermal resources will be limited to the 200 F temperature range, however.

POTENTIAL GEOTHERMAL APPLICATIONS IN MONTANA

Agriculture

- Crop Drying (Wheat, Hay)
- Freeze Drying of Foods
- Fruit Dehydration (Cherries)
- Greenhouse Heating
- Mushroom Cultivation
- Seed Drying
- Soil Sterilization
- Soil Warming
- Sugar Refining
- Vegetable Dehydration (Onions and Potatoes)

Animal Production

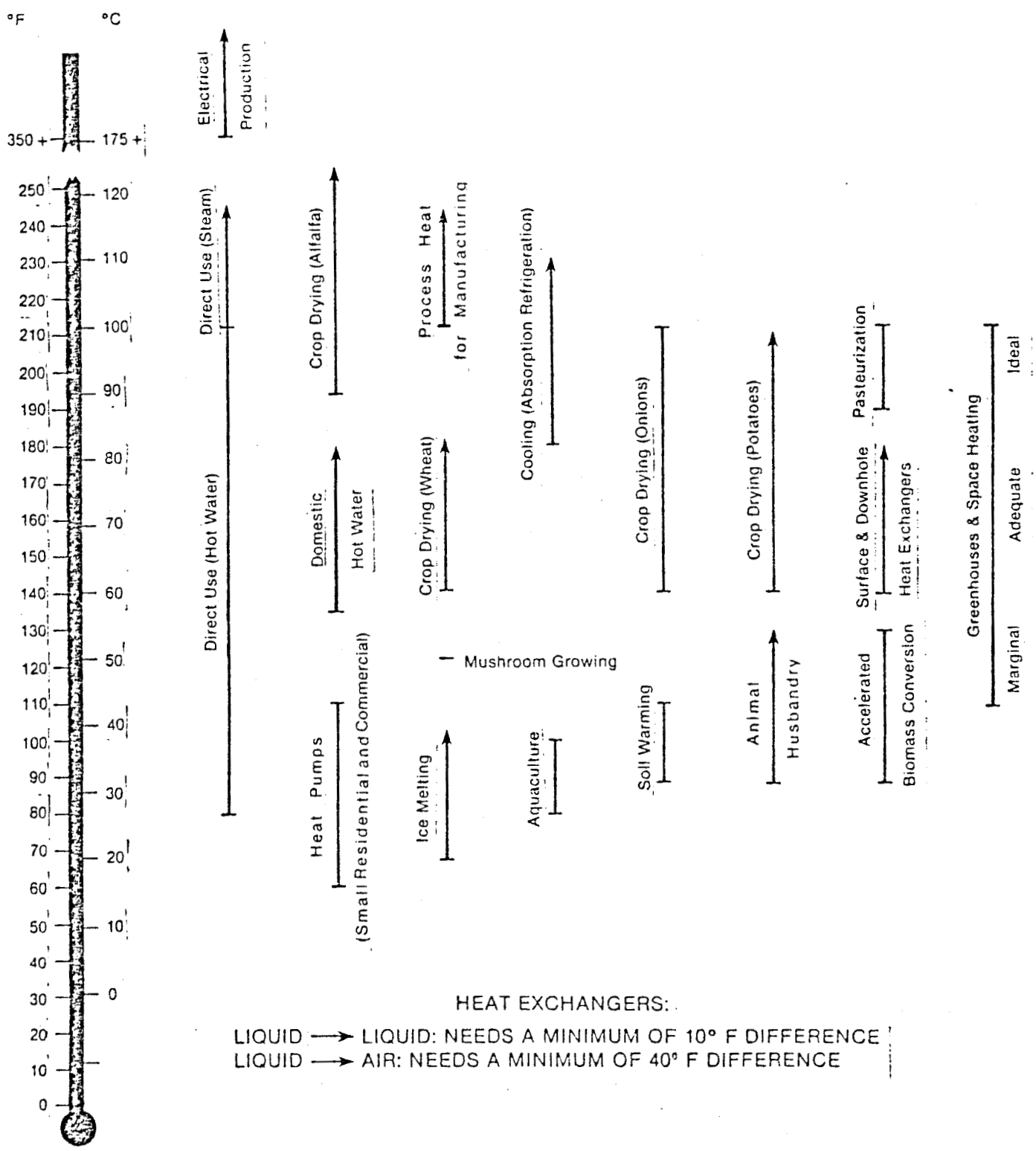
- Aquaculture (TROUT, CARP, SALMON, PERCH)
- Dairy Farming (Milk Cooling and Pasteurization)
- Feedlot Warming (Cows)
- Livestock Pen Warming (Poultry and Hogs)

Domestic and Commercial

- Accelerated Biomass Conversion (METHANE PRODUCTION)
- Electrical Power Generation
- Individual and District Space Heat
- Recreation
- Refrigeration
- Space Cooling
- Water Heating

Manufacturing

- Cement Curing
- Gasification of Coal and Other Carbonaceous Materials
- Mineral Oil Processing
- Products of Fermentation (Ethyl Alcohol, Butanol Acetone, Citric Acid, etc.)
- Pulp and Paper
- Recovery of Salts and Minerals
- Recovery of Trace Elements
- Textile Processing (Wool)
- Wood Chemical Production
- Wood Drying (Curing Green Lumber and Veneer)



NOTE: (1) These temperature ranges are not meant to be absolute, special applications can extend a use range higher or lower. An attempt was made to illustrate average temperatures in use.

(2) An open-ended temperature range is represented by an arrow, and a closed boundary is shown by a horizontal dash.

TEMPERATURES FOR GEOTHERMAL APPLICATIONS.

FIGURE 2

ORGANIZATIONS OPPOSED TO
COAL SLURRY PIPELINE LEGISLATION

FEB 14 REC'D

American Farm Bureau Federation
Farmers Union
National Wheat Growers Association
American National Cattlemen's Association
Association of American Railroads
Railway Labor Executives Association (includes 20 unions
representing ALL railroad employees)
Brotherhood of Railway and Airline Clerks - Freight Handlers,
Express and Station employees
United Auto Workers - Leonard Woodcock Testimony, 1975,
Senate Interior Committee (S. 740)
United Mine Workers - Arnold Miller Testimony, 1976, House
Science and Technology Committee, Fossil Fuels
Subcommittee, ERDA Authorization
Environmental Policy Center
Sierra Club (oppose federal eminent domain for slurry lines)
Friends of the Earth
Western Governors Regional Energy Policy Office, Inc. (includes
Arizona, Colorado, Montana, Nebraska, New Mexico, Nevada,
North Dakota, South Dakota, Utah, Wyoming)
Governors of the Old West Regional Commission
Midwestern Conference of the Council of State Governments
Northern Plains Resource Council
Northern Plains Region of Conservation Districts
Save Nebraska Water
Montana Stockgrowers Association
Montana Cattlemens Association
Montana Chamber of Commerce
Economic Development Association of Eastern Montana
Montana Democrat Party
Montana Republican Party
Montana Farmers Union
Montana Woolgrowers Association
Montana Association of Conservation Districts
Western Environmental Trade Association (Montana)
Nebraska Grain and Feed Dealers Association
Nebraska Association of Resource Districts
Nebraska Stockgrowers Association
Nebraska Farm Bureau
North Dakota Water Users Association
North Dakota Water Management Districts Association
Chamber of Commerce of: Columbia Falls, Sidney, Forsyth, Missoula,
Glendive and Wolf Point, Montana
Powell and Greybull, Wyoming
Williston, North Dakota
Laurel, Montana City Council
General Assembly, Commonwealth of Virginia (Resolution)

NAME: Ronald Pogue DATE: 2-28-79

ADDRESS: 226 Power Block - Helena

PHONE: 443-7272

REPRESENTING WHOM? Alternative Energy Resources Organization

APPEARING ON WHICH PROPOSAL: HB 605

DO YOU: SUPPORT? AMEND? OPPOSE?

COMMENTS: It only makes sense that small geothermal facilities should be excluded from the Major Facility Siting Act requirements, just like electric plants under 50 megawatts and gas facilities producing under 25 million cubic feet of gas per day are now excluded.

It should be pointed out that

50 megawatts = 170,500,000 Btu/hour

25 million Ft³/day = about 1 billion Btu/hr.

so that 25 million Btu/hr cutoff for geothermal facilities is indeed small by comparison

PLEASE LEAVE ANY PREPARED STATEMENTS WITH THE COMMITTEE SECRETARY.

On the other hand 25 million BTU/hr is enough energy to heat 200 average-insulated 1800 ft² homes in the coldest part of the state at -35°F. Up to 500 energy-efficient homes could be heated under the same conditions.