

48TH LEGISLATIVE SESSION
MINUTES OF
NATURAL RESOURCES COMMITTEE
MONTANA STATE SENATE

February 9, 1983

A regularly scheduled meeting of the Senate Natural Resources Committee was called to order by Senator Harold L. Dover, Chairman, on Wednesday, February 9, 1983 at 12:30 p.m. in Room 405, State Capitol, Helena, MT.

ROLL CALL: Roll was called with a quorum of members being present, Senator Manning excused.

SENATE BILL 294: Chairman Dover opened the hearing on SB 294, calling on Senator Hazelbaker, sponsor, of District 41. Senator Hazelbaker stated this bill deals with assessments against irrigation district lands. This bill is a compatible bill with other irrigation bills the committee has already heard. It would remove the \$5 limit for minimum fee on lands not receiving water, would provide for the district to contract with the state, and would permit a group of landowners to install a gravity system, without cost to the remainder of the district if the system didn't benefit others. There are not many gravity systems in operation, however there is no power payment for sprinklers, which saves thousands of dollars. He stated he would ask Mr. Ellis and Mr. Kennedy to speak on the bill as well.

PROPOSERS: Larry Ellis, Montana Water Development Association and Helena Valley Irrigation District spoke, stating that the subdivision areas do not allow for conveying water from an area that doesn't require the water. This bill would clarify that and allow contracting with the state as well.

Dick Kennedy, East Bench Irrigation District, stated in one case of subdivision, there hadn't been any provision for easement from the canal to the lands where small parcels were sold, and later persons who purchased property wanted easements. This bill would help in that situation. He stated the \$5 assessment charge is not sufficient for contacting each water account 5-6 times per year as needed, and they need to be able to increase this fee.

There were no other proponents, and no opponents.

Senator Van Valkenburg inquired when the \$5 minimum charge was put into law? Mr. Kennedy stated it had been four years ago.

Senator Mohar stated it seems that the subdivisions in the Helena valley are attempting to solve their problems through legislation, but that it may set precedence for other irrigation districts. Mr. Ellis stated other districts in Missoula

SB 294 (cont.)

have also had similar problems, that the districts are willing to supply water if the method to be assessed can be worked out. Hearing was then closed on SB 294.

SENATE BILL 340: Chairman Dover opened hearing on Senate Bill 340 and called on Senator Galt, sponsor. Senator Galt stated this bill is to amend requirements for eligibility for examination and registration as a land surveyor. The bill would amend requirements for registered land surveyors to allow a person who desires self education to be allowed to take the examination, that this applies in other professions and should apply to land surveyors also.

PROPOSERS: Chairman Dover inquired if there were proponents. Ken Kuzara, Roundup, spoke in support of SB 340, stating it would allow experience to substitute for education toward the examination for land surveyor. Other states, numbering 28, now allow that type of substitution. A land surveyor could obtain a license in another state and transfer to this state under those qualifications, under reciprocity. Montana should allow this substitution to its own residents as well.

OPPOSERS: Morris Guay, member of Board of Professional Engineers and Land Surveyors, stated he would like to present history of the present requirement. The major change in the law was made in 1975, prior to that a person could become qualified as a land surveyor if they had six years of land surveying experience under a registered land surveyor and they passed an 8 hour examination. In 1975 the law was revised, to include two years education of 90 credit hours plus six years experience. In 1979 due to a lawsuit, the legislative audit committee reviewed and compared to others, and found that Montana is a leader in these combined requirements to include education. At the present time three schools in Montana offer the education requirements and these courses also can be challenged by paying the required fees. No. '1'

Bob Custer, MARLS, stated he supports the education requirement, and at the time the law was changed, had even been asked to support a four year degree requirement. No. '2'

Charlie Wright, MARLS, stated he is a member of Montana Association of Land Surveyors, and is chairman of the continuing education program, and supports the education requirement. No. '3'

Mike Foley, stated he obtained his registration through the process that is being proposed by substituting education, and has been playing catch-up since. He spends much of his time on studying law, and considers it a necessary part of the registration. No. '4'

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SB 340 (cont.)

There were no other opponents.

Senator Lee inquired as to requirements before the 1975 change in law. It was stated it had been six years experience, with a four year degree able to substitute for experience, along with two years experience under a surveyor, and in addition a person could qualify with six years experience under a registered land surveyor and passing the exam.

Senator Story inquired if the purpose of updating the law had been to protect the public, and whether the public had been hurt, or if there were people practicing who were not qualified. It was answered that a lot of people had obtained their license strictly under the experience, and then after they learned at the expense of the public.

Senator Van Valkenburg inquired as to how many that were not surveyors were on the board? Mr. Guay said there are two public members on the board; an electrical engineer, a mechanical engineer, a structural engineer and two land surveyors, and a city engineer who is a registered land surveyor also.

Senator Galt stated the registered land surveyors have a closed society at present. The 90 credits requirement should be removed, as many times a person can do more by studying for themselves, and to challenge the credits, schools charge \$25 per credit. Hearing was then closed on SB 340.

SENATE BILL 350: Chairman Dover opened hearing and called on Senator Tveit, sponsor. Senator Tveit stated he would remove himself from the committee for purposes of this bill. It is proposed to alter the requirements for plugging seismic shot holes, relating to firms hired by the oil companies for the purpose of filling the holes. He is Director of the Mineral Association, and the members are concerned that these holes are not being filled properly. He has talked to members of the oil and gas industry and the seismograph people through being a member of a task force that was assigned for this problem. There are rules for identification of seismograph crews, many are not identified at present. The problem of proper plugging of shot holes with bentonite is addressed. There is also a change of having the holes capped within 30 days after drilling. There had been concern that other things were being put down the holes to plug them rather than proper filling with bentonite. The idea of plugging them is to save the groundwater quality and holes are to be capped with an impervious material of at least one foot, an identifiable tag is to be attached, and the plug is to be of sufficient depth to allow cultivation. The bentonite is to be installed through a hose. Senator Tveit stated there were proponents present to speak.

SB 350 (cont.)

PROPONENTS:

Don Allen, Montana Petroleum Association, noted Senator Tveit had spoken of a task force related to this problem, con- a representative of his association, the EQC, the Bureau of Mines, staff and Board of Gas, and that several meetings had been held. The industry has been concerned about this problem as well, and in 1977 there was a tightening of rules. The basic concern was keeping water from intermingling. The set of rules came about over a period of months, however everything couldn't be accomplished by rulemaking. He endorses the bill.

Don Garrity, Board of Oil and Gas Conservation, stated he is also concerned, The Board is a regulatory agency of the state, , and as expressed through the task force, this bill would allow them to adopt rules for identification. The second part would allow ruling on no seismographic holes could be closer than 1300 feet to a spring and 600 feet from a dwelling or residence. The depth rule would allow enough for cultivation. SB 350 #'1'.

There were no opponents to the bill.

Senator Mohar stated he was pleased to see the oil and gas industry involved in this problem.

Senator Manning inquired as to whether the lengthof time for plugging the holes was sufficient, or whether it should be shortened. Senator Tveit stated this length of time would allow some time for bad weather, The idea was to have the holes plugged immediately, when possible.

Senator Shaw inquired as to what they do with tailings? Senator Tveit stated there are no cuttings to be removed, but if the surface owner desires they can be spread, such as on pasture. Artesian water is to be plugged immediately, as well as alkaline, and they are recommended to stay away from saline seep areas. Hearing was then closed.

SENATE BILL 356: Chairman Dover opened the hearing and called on Senator Mohar, sponsor. Senator Mohar stated this bill is at the request of the Department of Natural Resources, that there had been a request to change the program to allow research to remain the property of the person or firm doing research under the alternate energy grants. Grants would be allowed to exceed one year except for funds encumbered in the year the grant is applied for. Patents from the grant program would become the private property of the grantee, as the department felt people were not applying for assistance because of not wishing to lose their patents.

SB 356 (cont.)

PROPONENTS:

Bob Robinson, Deputy Director, Dept. of Natural Resources said that his department had been asked to look at the entire program, that there is a need to get more information out to the public regarding the grants and loans. That the number of grants has been reduced and more loans are currently being made. There are passive solar projects that require assistance in installation. There are grants that could have been made but people are not willing to turn over information that they would like to retain. The bill would assist the staff in better utilization of the program.

Ron Portch, Director, Montana NCAT, Center for Appropriate Technology, Butte, stated they have installed insulation in a house which shows a savings on \$25,000 projected costs on energy. There was less than \$30 for heating costs in the year 81-82. They support conservation measures and their organization is actively involved in this research. His testimony is attached, Exhibit '1'.

Tim Stearns, Northern Plains Resource Council staff stated they are concerned with conservation, energy and resource development, and energy independence. This bill would help small inventors and hobbyists to develop their ideas. His testimony is attached, Exhibit '2'.

Karen Strickler, Montana League of Women Voters stated their organization has had an energy conservation position since 1975, they support the bill.

Don Reed, Montana Environmental Information Center, stated they support innovation in energy conservation and support renewable energy systems. His testimony is attached, Exhibit '3'. He stated he knows of a gentleman that has developed a timer for engine heaters that does not want to submit for a grant because of losing his patent, and there are others as well.

Jim McNairy, Alternative Energy Resources Organization, stated this would help decrease the state reliance on non-renewable energy resources. Grants for worthwhile projects take more than one year to complete, and they support the extension of time as well. His testimony is attached, Ex. '4'

OPPONENTS: There were no opponents.

Senator Halligan inquired further into the extension to more than one year for grants, Mr. Robinson further explained that section of the bill, stating it assists persons with more complicated projects.

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SB 356 (cont.)

Senator Eck' inquired of Mr. Portch if there were many companies in Montana doing super insulating on very many homes. Mr. Portch said there are a few contractors doing insulating, and the success of the trial in Butte was due to adding interior and exterior covering.

Senator Lee inquired of Don Reed how he would define new or innovative projects, and that superinsulating homes would not fall under that category. Mr. Reed stated perhaps the definition between renewables and conservation would help the program, and his request to amend the bill to include conservation would help development.

Senator Keating inquired of Mr. Robinson whether he thought there is still an energy shortage at the present? Mr. Robinson said he doesn't believe there is a shortage of natural gas, there appears to be more than there was 5-6 years ago. Senator Keating inquired if there was much private research in conservation and alternate energy. Mr. Portch said there is some at MSU. Senator Keating inquired of Mr. McNairy of AERO as to his statement that a person with an invention can't get a private loan. Mr. McNairy said if a person has an idea, then chances of financing at a bank would be less than if you had an idea which has been proven through research.

Senator Story stated he believed the bill needs a letter of intent, that he wouldn't want grants for wood stoves and other things of that type, and this should be clarified. Mr. Robinson stated that was one reason he had not requested that conservation be included in this act. They want to make sure the grants go to things that are not proven.

Senator Dover inquired further regarding the patents, where the bill says the information from research should be made available to the public, and that if this was concern to inventors, this bill does not take care of that portion. Mr. Robinson stated that there are many things being researched that are not patentable and that research needs to be made public. The public could have the information pertaining to a patent but they couldn't go into competition with that person. Senator Dover asked if another person could run off with a person's information if they didn't know until the project was completed whether their invention would be patentable? Mr. Robinson stated they would need to file for protection through the patent office.

Senator Lee then inquired if the idea is all that is then necessary to start the patent process. Mr. Robinson stated that is true, and the department would have no objections to that.

Senator Keating stated the patenting process shouldn't be

SB 356 (cont.)

paid for through public funds. Senator Story stated perhaps there should be inclusion that if they do obtain patents through the grant, that there be a provision for pay back. There was a short discussion regarding these points.

Senator Mohar stated he sponsored the bill because of his support for the energy program, and that people who don't have funds to develop renewable energy should be encouraged to research their projects. Hearing was then closed. It was requested that Senator Mohar work with Howard Johnson of EQC for a statement of intent for the bill.

ACTION ON SENATE BILL 275: Senator Keating stated he would like to propose amendments to SB 275. Page 4, line 16, following "time of" delete "proposed construction of" and insert "the acceptance of the application under 75-20-216 (a) for". The section would then read "(8) 'Cost' means the estimated cost in dollars at the time of the acceptance of the application under 75-20-216 (a) for a facility or associated facility located in Montana." Senator Keating moved this amendment. Senator Van Valkenburg inquired if this would reduce the fee paid to the Dept. of Natural Resources. Senator Keating said it wouldn't, but if there is a delay to construction, if this amendment is not made, there is no way of knowing cost of construction. Senator Eck inquired further about delay in construction time of possibly ten years or so. Senator Keating stated delays are granted from time to time, Montana Power received a delay. Vote was called on the amendment above. A majority of those present voted 'aye'. Senators Van Valkenburg, Halligan and Mohar voted no. Motion carried.

Senator Keating proposed amendment on page 9, line 11, to insert "(iii) a statement explaining the need for the facility if a utility;" and renumber the following subsections, stating that in other parts of the bill it is deleting the requirement that a private facility has to prove need for its product, but this now states that a utility must prove need for its product. Senator Keating moved this amendment, vote was called, a majority present voted 'aye', Senators Halligan and Eck voted no, motion carried.

Senator Keating proposed amendment on page 13, line 21, following "million" insert "up to \$1 billion". The section would then read "(v) .125% of any amount of estimated cost over \$300 million up to \$1 billion; plus", and moved this amendment. Vote was called, all present voted 'aye' and motion carried.

Senator Keating proposed amendment on page 21, line 19, to delete "all or a portion of". Senator Eck stated she didn't see the relation of this amendment. Mr. Mockler was asked to explain, and stated that there wouldn't have to be an

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SB 275 (cont.)

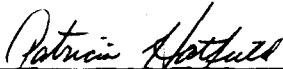
application process again for moving a tank such as within a facility site. Vote was called on this amendment, all present voted "aye" and motion carried.

Senator Keating proposed amendment on page 29, line 13, to insert "if a utility", to comply with the other amendments just made. Vote was called on this amendment, a majority of those present voted 'aye', Senators Eck, Van Valkenburg, Halligan and Mohar voted 'no', motion carried.

There being no further business the meeting was duly adjourned at 2:25 pm.



SENATOR HAROLD L. DOVER, CHAIRMAN
SENATE NATURAL RESOURCES COMMITTEE



Patricia Hatfield
Committee Secretary

ROLL CALL

SENATE NATURAL RESOURCES COMMITTEE

48th LEGISLATIVE SESSION -- 1983

Date 2-9-83

NAME	PRESENT	ABSENT	EXCUSED
ECK, Dorothy (D)	✓	<i>ht</i>	
HALLIGAN, Mike (D)	✓		
KEATING, Thomas F. (R)	✓		
LEE, Gary P. (R)	✓		
MANNING, Dave (D)		✓	✓
MOHAR, John (D)	✓		
SHAW, James N. (R)	✓	<i>ht</i>	
STORY, Pete (R)	✓		
TVEIT, Larry J. (R)	✓		
VAN VALKENBURG, Fred (D)	✓		
ETCHART, Mark (R) Vice Chairman	✓		
DOVER, Harold L. (R) Chairman	✓		

2-9-85

NATURAL RESOURCES

[illegible]

(B) I have reviewed statement (A) and

DATE _____

COMMITTEE ON

RESOURCES

VISITORS' REGISTER

[illegible]

(Please leave prepared statement with Secretariat)

2-9-83
Sen. Not. Rec.

February 8, 1983

- S. B. 340

Phone call from Bob Hafferman to Maury Guay for the Board of Professional Engineers and Land Surveyors:

These are just some general thoughts and considerations.

1. In any profession, the question should be asked "what should be recognized as the minimum level of formal education necessary to begin traveling the road towards professional competency?". Among the required educational courses for land surveyors are The Principles and Practices of Land Surveying, college-level mathematics, surveying fundamentals, drafting and written and oral communications. Individuals, who through their own initiative, have mastered these courses without attending an institution of formal education, can challenge these courses at colleges where they are taught. Successful passing these challenge courses is accepted as satisfactory evidence that the individual has knowledge of the subject.
2. Montana was one of the first states to adopt formal education beyond the high school level as one of the requirements for registration. Many other states have followed. If we now eliminate the education requirement, our Montana registrants will be at a disadvantage for reciprocity with other states.
3. Education is just one of the demanding requirements of any profession. The others are experience and testing related to field conditions. Can the public best be served by eliminating any one of these requirements?
4. What is "in charge" as stated on page 3, line 14, Senate Bill 340. The party chief or crew boss is often an individual who has demonstrated leadership abilities and uses the knowledge already gained to run the crew for an employer. Prime function of the party chief is not to learn from the crew, but often to teach the crew.

P.L.R.
2-7-83
Nat. Res.

5. In the working world, at today's salaries, is an employer going to take the time to teach an employee the basic knowledge required to do a common job for the public? Each credit of education requires about 10 hours of classroom. At an employer's cost of \$8 an hour, that's \$80 per credit. 90 credits are required, under our present law, for land surveying registration. What employer is willing to pay \$7,200 for education time plus the cost of training time already absorbed by the employer. Then after all this expense and training, the employer has no strings attached to the employee for pay back of the investment and training.

NAME: Bob Custer DATE: 2/9/83

ADDRESS: PO Box 3416 Missoula MT. 59806

PHONE: 728-1880

REPRESENTING WHOM? Montana Association of Registered Land Surveyors
MARLS

APPEARING ON WHICH PROPOSAL: SB 340

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

COMMENTS: _____

in Poll of MARHS Board of Directors 2/7/83
we support the Current Education Requirements
in order to obtain Registration as a
Professional Land Surveyor

In fact MARHS would support and will work to that end, to require a 4 year degree ~~as~~ in Land Surveying as a requirement for Registration

MARLS is Committed To upgrading
our profession in order To better protect
the public Interest.

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Nat. Res.

NAME: Charles Wright DATE: 2-9-83

ADDRESS: Rte 2 Box 7 Stevensville, mt 59870

PHONE: 777-3669

REPRESENTING WHOM? Montana Ass. of Registered Land Surveyors

APPEARING ON WHICH PROPOSAL: S.B. 340

DO YOU: SUPPORT? AMEND? OPPOSE? ✓

COMMENTS: ① - Education is Necessary For A good Base

PLEASE LEAVE ANY PREPARED STATEMENTS WITH THE COMMITTEE SECRETARY

BEFORE THE BOARD OF OIL
AND GAS CONSERVATION

In the matter of the amendment)
of Rule 36.22.502 pertaining)
to plugging and abandonment)
procedures for seismic shot)
holes.)

NOTICE OF PROPOSED
AMENDMENT OF RULE
36.22.502 PLUGGING
AND ABANDONMENT

NO PUBLIC HEARING
CONTEMPLATED

TO: All Interested Persons

1. On July 29, 1982, the Board of Oil and Gas Conservation (Board) published Notice of a proposed amendment to ARM 36.22.502 concerning the procedures for proper plugging and abandonment of seismic shot holes. The notice was published at page 1460 of the 1982 Montana Administrative Register, issue number 14.

2. The Board amended the rule as proposed except for the following changes:

36.22.502 PLUGGING AND ABANDONMENT Unless otherwise agreed to between the surface owner and the company, firm, corporation, or individual responsible for the drilling of seismic shot holes, all such holes shall be plugged and abandoned as set forth below:

(1) The seismic company responsible for the plugging and abandonment of seismic shot holes shall notify the Board in writing at its Billings office of its intent to plug and abandon, including the date and time such activities are expected to commence, the location by Section, Township and Range of the holes to be plugged, and the name and telephone number of the person in charge of the plugging operations. A copy of this notice shall be sent to the surface owner at the same time.

(2) All seismic shot holes shall be plugged as soon after being utilized as reasonably practicable; however, in no event shall they remain unplugged for a period of more than 30 days unless, upon application, the Board or its staff grants an extension which may not exceed 90 days. All holes shall be temporarily capped during the period between drilling and final plugging.

(3)(a) When drilling seismic shot holes, and artesian flow is not encountered at the surface, the shot hole shall be

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New No.

filled with bentonite-water slurry by hose injection and displacement ~~from-the-bottom-up~~ upwards from the maximum depth attainable. The slurry mixture shall have a marsh funnel viscosity of 60 seconds or greater per quart (subject to field verification on site) and shall contain a minimum of 28 pounds of commercial plugging bentonite per 42 gallons of water. ~~Cuttings-shall-not-be-added-to-the-slurry-mixture-except-with-the-approval-of-a-representative-of-the-Board-where-the-hole-is-drilled-with-air-~~ Except where the addition of cuttings or other solid or coagulating additives to the slurry mixture is required to form an effective plug, cuttings shall not be added to the slurry mixture where the hole is drilled with air. The hole shall be filled in all cases to approximately four feet from the ground surface. A commercial plug shall be set on top of the bentonite with a permit number or the name of the contractor or plugging subcontractor either imprinted on the plug or on a plastic or metallic tag securely attached to the plug. The remainder of the hole shall be filled with cuttings and soil, and a ~~small~~ sufficient mound ~~no-more-than three-inches-high~~ shall be left over the hole to allow for settling.

(3)(b) Seismic holes that penetrate artesian water deposits shall be stabilized with a cement slurry to a level not higher than four feet below the surface of the ground level. The cement slurry shall be of sufficient density to contain the waters to their native strata. The remainder of the hole shall be filled with native surface material. When alkaline or saline waters are encountered, the hole shall be plugged immediately as set forth in (3)(a) except that a heavier slurry mix must be used with the addition of inorganic drying or stabilizing chemicals such as calcium chloride, sodium bicarbonate, or soda ash to assist in the effective plugging and stability of the bentonite column in the hole.

(3)(c) Seismic shot holes that tend to crater or slough at the surface after being shot shall be plugged as set forth in subsections (3)(a) or (3)(b) insofar as those procedures are reasonably possible. However, deviations for those procedures are permissible as circumstances may dictate, provided the procedures are designed to accomplish the primary objective of containing waters penetrated by the hole to their native strata and restoring the surface as near as practicable to its original conditions. The Board and surface owner shall be notified of such deviations.

(4) The surface area around each seismic shot hole shall be restored to its original condition insofar as such restoration is practicable and all stakes, markers, cables, ropes, wires, primacord, cement or mud stacks, and any other debris or material not native to the area shall be removed

from the drill site and deposited in a convenient sanitary landfill or other approved site or disposed of by an approved disposal method. Appropriate seeds shall be planted when required to restore the surface to its original condition.

(5) A seismic shot hole may be left unplugged at the request of the surface owner for conversion to a fresh water well provided the surface owner executes a release furnished by the Board of Oil and Gas Conservation relieving the party otherwise responsible for the plugging and abandonment of the hole from any liability for damages that may thereafter result from the hole remaining unplugged. This release will cite the date, location, surface elevation, depth to aquifer or gas emitting strata, and any action taken. This information shall be furnished by the geophysical operator.

3. The Board changed the language of paragraph 3(a) in three respects. First, it deleted the words "from the bottom up" concerning filling seismic holes and used the term "upwards from the maximum depth attainable." This recognizes the fact that detonation will cause the hole to partially cave in. The Board also changed the language concerning adding materials to the slurry mixture to delete the requirement of Board approval because that would be impractical. The Board also deleted the requirement that the mound left over the hole to allow for settling be no more than three inches high as unduly restrictive.

4. No request for a public hearing was received but the Board received comments and testimony from several interested persons.

5. The authority of the Board to make the proposed amendment is based on Section 82-1-104, MCA, and the rule implements Section 82-1-104, MCA.



Richard A. Campbell, Chairman
Board of Oil and Gas Conservation



Dee Rickman
Assistant Administrator
Oil and Gas Conservation Division

Certified to the Secretary of State October 18, 1982.

Ncat the National Center for Appropriate Technology

P.O. Box 3030 Butte, Montana 59701 (406) 494-4572

STATEMENT BEFORE THE MONTANA STATE SENATE NATURAL RESOURCES COMMITTEE ON SENATE BILL 356

My name is Rod Portch. I am the Director of the Research and Development Division at the National Center for Appropriate Technology (NCAT) in Butte, MT. I am here today to present testimony to this Committee in favor of Senate Bill #356 to add energy conservation research and demonstration to the charter of the Department of Natural Resources and Conservation (DNRC) renewable energy grants program.

Since 1976, the National Center for Appropriate Technology (NCAT) has been dedicated to researching, developing and transferring the technologies that help promote energy self-reliance in the United States. Headquartered in Butte, Montana, NCAT's principal goal has been to promote the application of conservation and renewable energy technologies in order to assist individuals, organizations and communities confronted with escalating energy costs. NCAT specializes in sharing its technical expertise with consumers, state and local governments, private industry and a variety of federal agencies.

Conservation of energy, presently and projected, for use in commercial and residential heating and cooling, is the most cost effective method of energy saving options I know of at this time. Weatherization and insulation of the existing housing stock conserves energy and lowers the outflow of dollars for fuel sources. These techniques are site specific, but generally demonstrate a payback on investment, not projecting increased costs for energy, of from three to ten years depending on the project -- AN ECONOMICALLY SOUND INVESTMENT.

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The resources that would be made available under this program would enhance the research, development and commercialization of conservation techniques in Montana. This research needs to be done -- NCAT, under its review of grants given in renewables and conservation by the Department of Energy and in administering its own \$3 million grants program in years past, is well aware of this fact.

Another means of conserving energy is to alter our need for heating in new construction with the use of "superinsulated" housing. Superinsulated houses and businesses can be found in nearly every state along the Northern Tier. To date, an estimated 1,500-2,000 superinsulated homes have been built in the United States, while about 1,000 have been built in Canada. Research has shown that a residential house, such as the one NCAT designed (three to five bedroom, two baths) can be heated in an area such as Butte for UNDER \$100/year. Montana lags behind other localities in using this technology -- other states such as Minnesota, Wisconsin and South Dakota have programs stressing this valuable energy conserving technique. At constant energy dollars, a superinsulated house will show a savings of over \$25,000 for the projected life cycle of the home. The Bonneville Power Administration (BPA) has projected 40,000 new housing starts in Western Montana by the year 1990. Energy savings by using superinsulation techniques in building could save a significant amount of energy in Western Montana alone. A working example of this technology, a home in Butte, MT. with over 9700 degree days, was monitored as using less than \$30 for heating in 1981-82.

Less information is available on superinsulation retrofits, but this technology has been found to be cost-effective if a significant

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renovation or expansion of an existing building is being planned, and should be researched further.

Energy conservation is the "lowest-cost" energy available in the near term. I urge you to consider the proposed amendment for adding conservation strategies to the charter of DNRC's program, favorably.

I applaud the DNRC for their efforts in this field and remind you of the Bonneville Power Administration's mandate, through the Northwest Regional Power Commission for conservation efforts. This program will help Montana respond to this mandate.

Thank-you.

SB 356

Mr. Chairman and members of the committee, my name is Tim Stearns. I work on the staff of the NPRC, a public interest group made up of farmers and ranchers concerned about energy and resource development and how it affects agriculture.

We have long supported the portion of the coal tax earmarked for Alternative Energy Research Development and Demonstration account. It is funding directed toward economic development, toward development of ~~non-finite~~ ^{renewable} resources in addition to helping ^{America} attain energy independence.

NPRC believes that an essential goal of a productive economy is the efficient use of resources. SB 356 will allow coal tax funds to be directed to the development of one of America's cheapest and biggest potential resources, that of saving energy so it can be ~~used~~ ^{freed up for use} in other areas of the economy.

However, many of these efficient ways of saving energy are not developed and may be somewhat expensive to test and demonstrate. Some will require extensive research. Recent articles have stated that a major problem with our economy is the low amount we dedicate to research and development; the Reagan administration has thus provided some new incentives for businesses to invest in R & D. This bill will ^{help} little inventors and hobbyists to develop their ideas also. Innovation will help our economy diversify and decentralize our energy resources.

More efficient use of our resources will help us get the biggest benefit for the least cost. This bill will make funds available for R & D in an area of great potential.

THANK YOU

PLEASE LEAVE ANY PREPARED STATEMENTS WITH THE COMMITTEE SECRETARY

SB 356

Presented to Senate Committee on Natural Resources
By the Montana Environmental Information Center

February 9, 1983

SB 356 would encourage innovations in energy conservation consistent with Montana's support for renewable energy systems. It will encourage inventors to pursue ideas that may save consumers money in the future, further reduce our dependency on finite fossil fuels, and promote economic development in the manufacture of conservation devices.

This bill would remove the artificial and ambiguous distinction between "renewables" and "conservation." Ultimately, both serve to reduce our energy costs. If someone has an idea for making tractors use less fuel, we should allow that person the support to develop their idea into a saleable product. The same should be true of increasing the efficiency of such commonly used devices as headbolt heaters, irrigation systems and hotwater heaters.

This bill would encourage further development of such devices as heat pumps, which the Bighorn County Hospital has installed to "scavange" heat from used hot water. It would allow others to get seed money for such development and research.

The chief criticism of this bill is that it does not allow the department to loan money for commercializing conservation devices. There are many products which are at the stage where they can be developed commercially with minor financial assistance.

Therefore, we propose an amendment to include conservation in the commercialization loan program as well.

The commercialization loan program was added to the program to move the technologies beyond the reseach, development and demonstration phase and into the marketplace. New, and innovative conservation devices deserves the same sort of treatment.

Support for this bill is support for Montana's future economic well-being through increased employment, increased business activity, and reduced energy expenditures for consumers.



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TESTIMONY BEFORE THE SENATE NATURAL RESOURCES COMMITTEE IN SUPPORT OF SB 356

AERO supports the expanding of the Department of Natural Resources and Conservation's grant program to include conservation. We frankly feel that this has been long overdue. The stated goal of this program is to help decrease the state's reliance on nonrenewable energy sources. Grants for the purpose of supporting the research, development and demonstration of energy conservation technologies are certainly consistent with this goal.

A BTU of energy saved is a BTU of energy saved, regardless of whether it's done through using alternative energy or conservation. Conservation is recognized as being the cheapest way to produce energy, simply by using the energy supply we currently have more efficiently.

We also support the proposal on page 4, line 18 to allow the department to give grants for projects that will take longer than 1 year to complete. Grants for worthwhile projects that involve a considerable amount of construction or information gathering may well be more realistically completed in 18 to 24 months, rather than in the current 12-month limit.

We do have a problem with this bill, however. We feel that it doesn't make any sense to include conservation in the grant program but to leave it out of the loan program. The last line on page 1 and the first line on page 2 specifically limit commercialization loans under the program to alternative renewable energies. We don't see any justification for this.

Grants under the program are going to be awarded to new or innovative alternative energy and conservation projects. We think that it makes good economic sense for the loan program to be offering commercialization loans to those new and innovative conservation technologies that have a promising future. Helping with the commercialization of new energy-saving technologies will help promote local economic development in Montana by creating new businesses and accompanying jobs, as well as saving energy. These results seem to be an ideal use of this loan money. And remember, we're talking about commercialization loans, which implies at the money that will be paid back to the state.

We would therefore like to propose an amendment to the bill that will allow

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AERO's Testimony in Support of SB 356

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new or expanding businesses that manufacture and/or sell new or innovative energy conservation products to be eligible for loans under this program. It is not our intention to make this loan money available to businesses that manufacture or sell conventional conservation products, such as fiberglass insulation or weatherstripping.

Thank you.

Amendments to SB 275

Page 4, Line 16: Following "time of"
Delete "proposed construction of"
Insert "the acceptance of the application
under 75-20-216(a) for"
The section would then read:
"(8) "Cost" means the estimated cost
in dollars at the time of the accep-
tance of the application under
75-20-216(a) for a facility or
associated facility located in Montana."

passed,

Page 9, Line 11: Insert "(iii) a statement explaining the need
for the facility, if a utility;"
Renummer following subsections.

passed,

Page 13, Line 21: Following "million"
Insert "up to \$1 billion"
The section would then read:
"(v) .125% of any amount of estimated cost
over \$300 million up to \$1 billion; plus"

Passed,

Page 21, Line 19: Delete "all or a portion of"

Passed,

Page 29, line B.

insert: if a utility