January 26, 1977

The Natural Resources Committee convened in room 437, at 10 a.m., on January 26, 1977, with Chairman Shelden presiding and all members present (except Reps. Hirsch, Huennekens and Quilici who were excused) for an informational meeting. Mr. Bill Christiansen of the Montana Energy Advisory Council was the speaker.

MR. CHRISTIANSEN: I am not exactly sure what you wanted from me today. It was mentioned you might like the Montana Energy Advisory Council Report discussed. We had our share of trials and tribulations with the report as it was done without state funding. We came out with a product that I am personally willing to defend. I want to commend the staff for their contribution. When we first got the directive we decided to do a worthwhile job we should have a lot of public input; and that we would require a lot of back-up material to use if the policy is developed and expanded. On page 40 there is a lot of documents that I don't want to escape your notice. In this list we have the bibliography that is back-up material for this report. We picked the pockets of state administration. We did what we could in staff and supplemented from the outside. We pretty much relied on industry data and federal government data. We are not dependent on that now. We have a continuous data base that we can expand and make an important tool for the future. For the conservation effort by 1980 we are to guarantee a 5% reduction of our total energy consumption--and the figure we are working from in Montana is 3.74 billion BTU. In order to get federal monies we need to show this reduction.

Public participation--we have all campaigned and called at back doors. I am not going to tell you that our public participation was a howling success, but it was pretty good. We decided to put together an energy discussion paper and send it out to the public and let them react to it. We had a lot of review on this paper before we came to the final publication. We then circulated it to 1908 people--every legislative candidate got one. Our response to it was 10 in-depth evaluations of the policy. If you can tell me a way to get broad public participation I am willing to listen. The EACE which consists of 65 people from a broad base helped but even this didn't result in a lot of input. But it was a basis for our work. We sent out copies again to get the critique--made every effort to get public input into the document. There were times when we did a lot of inhouse work. You are looking at the guy responsible for this document and I would be pleased to go into specifics with you.

CHAIRMAN SHELDEN: We have been given a mandate to come up with an energy policy. In some ways it is an impossible job to make any major changes in the time we have before us. We had in mind if you would come up and discuss certain parts with us--just how we should attack this.

MR. CHRISTIANSEN: I am pleased that you are looking into this report. We fell short of the target of the bill in that we did not come up with a siting inventory. Some excellent work has been done by the Natural Resources of where plant sites should or shouldn't be. The best that we have given you is a structure siting inventory.

What siting might occur in the state is based on the requirements of the siting act. There is going to be plants. There should be funding placed in this area.

REP. NATHE: Have you set forth any broad siting regulations?

MR. CHRISTIANSEN: In Item 23--how it should be structured and how it should unfold, and in Item 16. These are two important tools to give the direction to putting a siting inventory on the road.

REP. NATHE: How much time are we looking at before we get into a crunch?

MR. CHRISTIANSEN: There is the Burlington Northern plant planned at Circle. Other than that I think we are looking at twelve years before we have to deal with the application of another facility.

REP. NATHE: Do you foresee a lot of coal going out of state rather than being used here.

MR. CHRISTIANSEN: Yes.

CHAIRMAN SHELDEN: What about coal going west?

MR. CHRISTIANSEN: I don't think we should be the power plant. You are going to see fossil plants in the west. Yes, there will be coal going west.

REP. NATHE: Do you see any in the Rocky Mountain area?

MR. CHRISTIANSEN: I think it is unlikely. Washington, Oregon, and upper California will be where plants are located, I think.

CHAIRMAN SHELDEN: Is there anything we might say in an energy policy about using railroads?

MR. CHRISTIANSEN: In our transportation sector I restructured my staff report. The capability of our railroads are finite--you may well have to look toward other means of transportation. You may have to look at slurry lines--maybe then can take our water and return it--maybe brackish water can be used. I am not necessarily in favor of slurry lines but it could come to this. This would be my order of priorities: send it out by railroad, then by slurry line, and then convert it if that would take more water than the slurry pipe lines. If you wanted to save Montana water--send the coal out with the water rather than convert it.

REP. HARPER: Isn't there some recent technology to send coal other than by water.

MR. CHRISTIANSEN: Use natural gas as a carrier--powder the coal--1 cubic foot 60 BTU and add 6 pounds of coal you would be talking about a concentrated 100 BTU. There are also other suggested carriers.

CHAIRMAN SHELDEN: There are three railroad lines going west. We have two parallel lines. How much upgrading would they have to do? Have you seen any figures of what kind of program this would take?

MR. CHRISTIANSEN: It would be a traffic hazard in itself. I can't quantify that thought if the numbers I see come to pass--tremendous problems. The FEA has a mandate to convert to coal 146 generating systems, and if 92 other planned plants get built, they will need 221 million tons of coal annually just to meet those conversions. The amount boggles you. Most of these plants are in the midwest. One in Maine bought Polish coal to offset the price when the price went up for which they are paying $22.50 a ton. We will be penetrating markets a long way off.

CHAIRMAN SHELDEN: Are we in competition with eastern coal?

MR. CHRISTIANSEN: The price of extracting eastern coal is more than our coal at the mine mouth. Utilities in the west found they could get eastern coal at $40 a ton and we are delivering ours for $19. The time will come when the western mines will reach capacity.

REP. HARPER: Validity of comparison--isn't eastern coal better?

MR. CHRISTIANSEN: $40.32 a ton for eastern coal which gives 11000 BTU with a 20% factor. Energy companies are buying energy. Our score would still be 21 or 23. The $19 for ours includes $6 at mine mouth and $12 for transportation--tax is also a line item in the price.

REP. KESSLER: Alaska has coal, too.

MR. CHRISTIANSEN: Their BTU is not much more than ours. I think their coal would have to get into the market for $25 a ton which would be competitive with eastern coal but not with ours.

REP. BENGTSON: With the eastern shortage of natural gas will we have to share our natural gas reserves and perhaps reduce our coal tax?

MR. CHRISTIANSEN: Don't think so. Ours is a better bargain. I don't think we are bringing people to their knees with overpricing coal. Companies with natural gas are not being asked to put their surplus into another line. If our system saves natural gas you can't take it away from us--what would be the point. There is also the capability of getting it into eastern pipelines. Natural gas you can save--you can't electricity.

REP. HARPER: How do we encourage people to stay in the state and look for gas?

MR. CHRISTIANSEN: A credit for deep drilling. I think the biggest incentive was when the gas went up. Deregulation would be a good stimulation.

REP. HARPER: There is still a lot of gas in the ground. If discovered would a lot of that go out of state--as much as 90%?

MR. CHRISTIANSEN: If we had some idea who had the leases and who was going to drill--we would be capable of knowing where it was going to go.

REP. NATHE: What about the concept of offering a reduction of gas tax for gas that stays in the state? What about having a production tax instead of on the net proceeds?

MR. CHRISTIANSEN: There might be a constitutional discrimination problem here if the tax relief is only for gas that stays in Montana. There is a dilemma with deregulation. The price is now $1.42 and will soon be $1.72. If by some quirk of fate this is tested in the courts and price is again lowered, how do the companies get their royalties back. The gas company is not comfortable with the price.

CHAIRMAN SHELDEN: How about some kind of tax incentive for gas found below 5000 feet--will it not be somewhat difficult to know from which level the gas is coming?

MR. CHRISTIANSEN: Good point.

REP. COX: For extraction of coal--how many seams should we require them to go down?

MR. CHRISTIANSEN; It throws the burden on the state and even though they are opposed to Western Energy taking one seam where Decker takes both, it must be salable. We sent to the market and tried to sell the McKay seam--without success as it is not compliance coal. I don't want to think of them coming back in 50 years and taking it.

REP. COX: Can we change the word to technically feasible?

MR. CHRISTIANSEN: Couldn't help in the practical application.

REP. HURWITZ: How come I am not reading about aquifers?

MR. CHRISTIANSEN: The single most disruptive thing we are doing is what we are doing with the aquifers. You take out the coal--the coal is the aquifer--and I think it will be years before we know what we have done to the underground aquifers in that area. I don't believe we really know what we are doing when we take out an aquifer and put back something else.

Rep. Metcalf: Are we getting compliance coal?

MR. CHRISTIANSEN: Our coal would be valuable in the marketplace even if they had to use wet scrubbers. If you have close to compliance coal you don't have the problems in the stack.

REP. FRATES: I read in the Gazette that Montana Power didn't put scrubbers in 3 and 4. What is the advantage of scrubbers?

MR. CHRISTIANSEN: It reduces the emission of sulfur and other elements. Basin Electric in Wyoming claims they can get 85% of the

sulfur out of the stack. You should do the best that the state of the art permits to get the sulfur out of the air.

REP. BENGTSON: What about conservation? Do you feel the state should be involved in providing help or incentives? Are we going to have a state-wide building code?

MR. CHRISTIANSEN: The state of Montana has not done an outstanding job in conservation. It is tough to do. Maybe some money could be moved around in the long range building program and used by the state to retrofit some of the buildings. If we don't support some such program we will be using general fund money for fuel. People are innovative--as prices go up they will find ways to save energy and reduce cost.

REP. CURTISS: What can we do on the state level to tighten up the building code inspections?

MR. CHRISTIANSEN: We found that FHA standards are lower than what is being done normally by our contractors. I hope they will have another look at this on the federal level.

REP. HARPER: Any legislation or study on alluvial floors?

MR. CHRISTIANSEN: We specifically outlined various drainages. We do not encourage a moratorium. We do have full authority to keep coal mining out of alluvial floors. Only 2% of the coal is under alluvial valley floors so we will not stifle the coal companies by keeping them off the floors.

REP. FRATES: Could we use a moratorium on future mining of second seams?

MR. CHRISTIANSEN: It could make them take a second look at what they are doing. It is difficult for me to understand their leaving a fifteen foot seam of coal when they could be mined together. But economics is a tough question but a practical one. They pay severe penalties for too much sulfur and not enough BTU.

REP. NATHE: How about reducing the severance tax on higher sulfur content?

MR. CHRISTIANSEN: Sulfur occurs in two ways--organic and pyritic. By washing you can reduce the pyritic about half. We have to be aware of what this would do to our tax base.

REP. METCALF: Coal contracts -- before or after the pyritic is washed out?

MR. CHRISTIANSEN: Coal is as received at the mine mouth. We may be able to take the coal and blend it with other sulfur coal.

CHAIRMAN SHELDEN: What about a generation station built near the source for the waste heat?

MR. CHRISTIANSEN: Montana Power told me they did a study of trying

to take the waste heat from Colstrip 1 and 2 and bring it into town. They said it was economically unfeasible. A manfacturing plant would need to be located close.

REP. FRATES: Why can't they recycle the water?

MR. CHRISTIANSEN: The new technology is recycling the water.

REP. ERNST: What about wind power?

MR. CHRISTIANSEN: Has a great potential. The University of Wyoming is funded for this. They are using a wind generator. They are trying when not using fuel to put it back into the system. As I look at the economics of that system they can probably replace $1200 of electricity if they sell the surplus. The thing that bothers me is that the windmill is going to cost $30,000.

REP. METCALF: What about the conversion of coal to SNG. ERTA is interested in establishing a pilot plant here? Should the state policy be to discourage rather to encourage?

MR. CHRISTIANSEN: This legislature won't need to make the determination but the judgement will soon need to be made. I sat on the coal gasification task force. They made it positive they couldn't get along without some other gas in the system. It takes a long lead time. We should not close the door to SNG.

CHAIRMAN SHELDEN: This committee is to try to come up with a legislative energy policy. What can the committee do with the time we have?

MR. CHRISTIANSEN: We studied for one and a half years. This is probably the most important single effort this legislature has ever undertaken.

Mr. Christiansen did a chalk talk in which he discussed the varying rates of efficiency in the different ways of utilizing coal for energy.

Meeting adjourned at 12 a.m.

Respectfully submitted,

Art Shelden

ARTHUR H. SHELDEN, Chairman

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