BEFORE THE NORTHWEST POWER AND CONSERVATION COUNCIL

In Re:

The Sixth Northwest Electric Power and Conservation Plan

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PUBLIC HEARING
Tuesday, October 13, 2009

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MR. MEASURE: I'd like to call the hearing on the Sixth Northwest Power Plan Draft to order. This is the second to last day of the hearing. The actual last day of the hearings are tomorrow night in Idaho Falls, Portland and Boise, Idaho and Missoula tonight. We're glad we have such a great turnout here in Missoula. If there are any of you who have not signed up to speak, if you wish to speak, there's a sign-up sheet at the back of the room. We have two hours, from 7 to 9. We want everyone that wants an opportunity to speak to do so. We want anyone that has anything pertinent to say to express their position, even if it's not pertinent.

What I would ask you to do, is that we do have a lot of people here. I don't know how many of you are going to speak tonight. If you have a repetitive opinion, you might just want to say I agree with the previous speaker or agree with their position. That might help move things along. And try and limit your comments to 5

minutes, that way everyone can get through here. As I mentioned earlier, if you have something to say, we will let you talk pretty much as long -- not as long as you'd like, but as long as most people would like.

There are three members of the council here. Joan Dukes, from Oregon; Rhonda Whiting, a Montana member, and myself. I'm Bruce Measure, from the Montana contingent. We also have five staff members here starting with the Executive Director, Steve Crow; our Director of Public Affairs, Mark Walker, is at the door; Michael Schilmoeller, who is the analyst that's primarily responsible for much of the plan is sitting back there (indicating); and John Bushnell, our economist from the Helena office is here; and John Shurts, our general counsel.

MR. SHURTS: I'm the lawyer.

MR. MEASURE: So we have a statement to read

-- Rhonda is going to read -- regarding the comments that you make tonight. We also have a court reporter here, who will record all of your comments. So when you speak, you have a couple of different options: If you can come up to the

table, we want you to clearly identify yourself as to who you are. We'll read the name off the list in the order that you signed up. Clearly identify yourself before you speak so the court reporter can record your name. Speak clearly into one of the microphones, and you can either do it from your seat, if you'd like. John will bring the microphone around or you can come up here and state your comments clearly. Rhonda, do you want to go ahead.

MS. WHITING: I'm going to read an opening statement, and this is the statement that we introduce at every hearing. It kind of goes through the process itself. "Welcome to the public hearing held by the Northwest Power and Conservation Council on the Council's proposed Sixth Northwest Power Plan. The Northwest Power Act directs the Council to develop a regional conservation and electric power plan, and to review that plan every five years. The Council is now engaged in its latest five-year power plan review. As part of this effort, the Council released a draft revised power plan on September 3rd for public review and comment." "The Council will be taking written comment on the draft power

plan until November 6th. The Council will also hold public hearings like this one on the draft plan in all four Northwestern states between now and then." "If you would like to comment at this hearing, please sign in on a sheet provided for that purpose. If you haven't signed in, please do. Your comments will be recorded, placed in the Council's administrative record for the power plan review, and -- and most importantly -- considered carefully by the Council as it makes its decision on the final power plan later this year." "For more information on the proposed Sixth Power Plan, including the text of the draft plan itself, you can visit the Council's website at www.nwcouncil.org, or you can submit comments by using the "how to comment link" on the webpage devoted to the draft power plan."

And I'd like to say I'm glad and really pleased -- and not surprised -- to see this many people here in Missoula. Having been a Missoulian all my life and a Montanan all my life, I know that this is one area where people are very passionate and get involved in different issues around the state. Particularly, Missoula brings out a lot of people, which is a good thing.

We welcome the public participation, and we're glad that each one of you are here. And if we can go ahead, I think Member Measure is going to do a PowerPoint, and then we'll go to the testimony.

MR. MEASURE: Joan helped me with that. This has some of the primary issues in the Sixth Power Plan. The goal of the plan is to recommend a low-cost and low-risk strategy to assure the region of an adequate, efficient, economic and reliable power system while supporting implementation of the Fish and Wildlife Program.

What we found is that conservation is the lowest cost resource and can be about 85 percent the demand growth in the region for the planning period. It avoids the risks of volatile fuel prices that follow natural gas and contributes to meeting peak demand as well as annual energy needs, and it's really great for creating local jobs. When they put up windmills, that's a good thing.

Key findings-Renewable Generation: Wind is cost-competitive with other generating technologies, and is required to meet renewable energy standards in Montana, Washington and

Oregon. Renewables avoid the risks of volatile fuel prices and the variable output for wind creates an integration for the region, and in some cases those integration challenges are pretty significant.

We are probably going to need a good deal of natural gas generation in the near-term. Some utilities will need it to meet their capacity needs, others will need it for flexibility or both. It carries the fuel-price risk that I spoke of earlier, but it has lower carbon emissions than coal. The option on natural gas generation protects against high carbon costs and rapid-demand growth, and can even help with integrating wind.

As far as carbon risk, our existing coal plants provide only 20 percent of our electricity but emit 85 percent of the CO2. We're heavily dependent upon hydropower at this point in time. The plan illustrates scenarios that can reduce CO2 emissions from the power system. Significant reductions in CO2 will require reduced coal use, and reduced coal use would require additional natural gas.

Our five-year action plan is to develop

during that five years 1,200 average megawatts of conservation; develop renewable generation as required by renewable portfolio standards in the three states that have them; develop cost-effective new generation, if needed, for energy, firming capacity for the wind and flexibility and improve power system operating procedures to expand the ability to integrate wind power.

So, your comments tonight? As Rhonda said, if you've signed up, you get a chance to comment here tonight. Otherwise, please comment either by written -- it has to be either from the website or mail it to us. From the website you can get the address. That has to be done by the 6th of November.

That's it. So I, too, welcome your comments and appreciate the time that you've taken out of your lives to come and comment on this power plan. So Representative Sue Malek, there's a microphone up here. Or, if you choose to comment from your seat, just state your name first for the reporter.

MS. MALEK: I'm Representative Sue Malek, M-a-l-e-k representing the western section of Missoula in Montana's State Legislature. I

have followed the work of the Northwest Power Planning Council, now the Northwest Power and conservation Council, for many years. I am grateful for your work, grateful to know that four states work together to plan power generation and conservation on a regional basis.

I understand that Bonneville Power, under your guidance, is integrating wind power into its system, having generated 2,200 megawatts of wind in 2000, anticipating generating 4,500 megawatts of wind two years from now, 31 percent of its peak load by next year. I commend Bonneville and you for your good work.

There is much to be appreciated in the Sixth Northwest Power Plan. But this plan outlines our hopes for the next 20 years, and it does not do enough to reduce carbon emissions over the next five years, let alone over the next ten and twenty years.

Our states have established carbon-reduction goals for themselves. We need your help to achieve these goals and to achieve more. We need this plan to expect more conservation; to anticipate developing more alternative energy; to do more to ensure clean water and air to future

generations, more to provide good, clean jobs for our states.

Bonneville Power and the Council must strengthen plans to inform and educate customers about energy conservation. People will conserve as they become more informed. They will generate their own power when given the opportunity. As your plan says, conservation measures from 1980 to 2007 saved the equivalent of 3,645 average megawatt hours of new power generation. We know we can do more to conserve energy. Our citizens want you to do more. You must lead.

Because of Bonneville's demonstrations of what can be done with wind power and because of the untapped innovation of so many people in Montana with its big skies full of sun and wind, we know that we can generate more alternative energy. Lead us in demonstrating that alternative energy can work. But us, as a region and a participating state, limit carbon emissions and visualize and plan for a cleaner, more profitable future for ourselves and our families.

MR. MEASURE: Thank you, Representative Malek, and my apologies for mispronouncing your name. Ken Sugden. If you have written comments

leave them there at the table, and we'll put them in as part of the record as well.

MR. SUGDEN: Ken Sugden, general manager of Flathead Electric in Kalispell, Montana. Thanks for this opportunity to give testimony. I'd like to start out by saying that the draft plan is a good effort overall. I can't remember in any previous plan as much interaction as the Council and the Council's staff has had with the stakeholders in the region, and I appreciate that.

I know in going to the Pacific Northwest Utility Conference Committee every month there's usually a Council member and/or staff almost every month at those meetings. With the energy and the utility industry, we're going to carry out a lot of this plan.

We do support the draft plan's objective of affecting and enhancing the renewable, noncarbon-emitting hydropower system, and we think that we need more smaller scale hydro in the region and would like to see the plan have a little more emphasis on that.

We appreciate the fact that this plan recognizes the need for flexibility and resource development. Local conditions require particular

actions. Mark Johnson, who is next on the list from Flathead Electric, will talk to you about some of the particular things that we're doing at Flathead Electric in that regard.

We do think that the plan understates future resource costs and think that the public needs to know the effect of policy decisions on the costs of resources. We are always surprised and our members are surprised when we're at our annual meetings. We point out to them fish and wildlife costs are almost a third of our Bonneville Power bill. Most of the public doesn't realize some of that, that the policy decisions are tending to affect the cost of resources rather than the actual construction costs of resources.

We do urge you to use caution in your estimates of future carbon costs in the models, because the unknown future carbon regulation, we're not sure what the costs are going to be. And if you use too high a cost, that skews the analysis for future resources.

You've heard that the utility industry -- and we've worked with the Council staff on the conservation targets, and the utility industry thinks that the conservation targets are too high.

There are challenges for rural utilities to meet the goal, especially if it's based on the share of regional load. Many rural utilities only serve residential customers. And a lot of the residential customers don't have electric heat, so there's not a lot of potential in some of those areas. Plus, a lot of us have been doing conservation programs since the 1980s. So we think the bottom of the five-year range, 1,100 megawatts, should be 1,000 megawatts.

We do support the midterm review of energy efficiency targets. We support the adoption of building codes. But you need to be aware that building inspections are an issue in the rural areas of our services area.

The Regional Technical Forum needs to be overhauled. If I had my way, the Regional Technical Forum, we would tell them the measures we want to do, and they would tell us how many kilowatt hours savings it would be rather than getting into the cost-effectiveness of those measures and telling us, no, you can't do this one because it's not cost-effective.

Exhibit M, dealing with fish and wildlife costs, drastically understates those

costs. It uses the average imbedded cost to the system to estimate the cost of fish and wildlife, and we think it should use market costs. So we're urging the Council to throw out Exhibit M and redo those costs, because they drastically understate it.

Some of the specific issues raised by the Council in the request for comments, you ask about the rising prices of electricity over the next 20 years and the ways utilities can help reduce the effect on customers' monthly bills. We do agree with the Council draft plan that conservation programs are the least-cost resource. And we also know that load growth is going to cost more. As we look at future resources, the costs are a lot higher than the cost that we're paying Bonneville Power.

We don't have any issues with the Council's load-growth forecast. And I talked about the conservation targets. We're worried about how those targets are going to be apportioned to individual utilities. Thank you.

MR. MEASURE: Thanks, Ken. Mark Johnson, please.

MR. JOHNSON: My name is Mark Johnson.

I'm the assistant general manager of Flathead Electric Cooperative. Ken Sugden talked a little bit about the overall perspective on the plan, and I'd like to talk a little about Flathead Electric's -- what it means to Flathead Electric as far as the power plan and how to influence the decisions that we'll make at Flathead Electric.

As Ken mentioned, energy efficiency, obviously, we recognize that as a least-cost resource, that utilities recognize its importance moving forward. Flathead Electric has been progressively pursuing energy efficiency since the 1980s. We started with no-interest weatherization loans in the '80s. In the 1990s, we moved, making a big step for the utilities industry, into energy efficient water heaters, Super Good Sense homes, and geothermal heat pumps.

And Flathead Electric recognizing that, from 1980 to 2008 we saved, with our programs, almost 42.5 million kilowatt hours, which is enough energy to power Whitefish and Columbia Falls for a year. But that wasn't enough, and we recognized that's not enough. We did it as the least-cost resource. So in 2009, Flathead Electric and its board added three energy-

efficiency FTEs and four new energy-efficiency programs, including home-energy audits, which hadn't been done; high-efficiency window replacement rebates; insulation upgrades, rebates on a new Montana home construction design. And then we're also participating in a smart-grid program with 16 northwest utilities that's being led by Batel and Bonneville.

And the utility recognition of the importance of energy efficiency is not lost at all, and it's becoming very exclusive -- extensive in our region. I would echo Ken's point that the 1,100 megawatt lower-end range is a little high, based on the analysis that's been done by utilities and the organizations that implement the plans, and would echo his recommendation of 1,000 megawatts.

Flathead Electric budgeted almost nine million kilowatt hours of energy efficiency for our residential programs in 2009, and another nine million kilowatt hours of energy-efficiency savings from industrial and commercial programs. We are not going to meet those targets, and it isn't because we've not actively pursued them.

If you read our newspaper, you'll see

our ads. We've pursued a lot of advertising, direct mailings, all kinds of programs to try to attain those goals. But unfortunately, things outside of our control have influenced those, and I think that the plan needs to take into account that there are forces outside of just promotion that cause problems in meeting these targets.

The economy, obviously, has played a big issue. We had some -- obviously, some of our large industrial customers, where the rubber really meets the road relative to energy efficiency, they just have either closed some of their plants. They've curtailed operations. They've laid employees off, and they just don't have a desire to do -- to spend any resources at this point, which caused some of our losses in that particular sector.

I will also echo that the building codes are many times adequate, but the enforcement is not. And that makes it hard on us to try to put in energy efficiency. And so it makes our job that much tougher.

There also needs to be some consideration in the plan to the variation in loads and the geographic diversity of loads. By

not having an allocation or a stated allocation methodology, you're pitting utilities one against another. You're pitting the I-5 corridor utilities that have a lot of opportunity and statutory requirements to meet the loads, versus utilities in Western Montana that have primarily residential loads, and that makes it very tough.

When you're talking about a timber processor or any kind of large-scale industrial operation versus putting CFLs into a home, it makes it very complicated for those utilities to meet a load-based application of the target. So we need to make sure there's some direction on how those allocations are allocated to each of the utilities.

The other thing I think I'd like to mention is the plan making sure that consideration is given to all of the conservation and energy efficiency programs that have been done to this point. A lot of the low-hanging fruit has already been taken, and I agree that we need to pursue more options and more programs be in place. I think that's an important consideration.

As far as resource acquisition, I appreciate the fact that in the plan it does note

that Bonneville will need to acquire resources, that conservation and renewables won't be enough, and I think that's an important point. Flathead Electric has recognized that, and we have tried to move from purely a distribution utility -- which we had been -- to a utility that now, obviously, has a generation focus. Because it's in a tiered-rates world with Bonneville, that's where we need to be.

We did fire up this year a landfill gas project. We do have a congressional appropriation to do some geothermal drilling near Hot Springs. We're working with the City of Whitefish on a now-defunct small hydro project and revitalizing that project. We're working with some local timber mills on combined heat and power projects for biomass, and we're also working on a couple of projects within independent parties on some potential biomass options.

So I will echo, again, what Ken had mentioned as far as the cost of resources being substantial. If our members purely read the plan, I don't think the plan is going to tell them exactly what it's going to do to our rates. And it's really unfair that the plan tries to deal

with rates. Because it's so different, it depends on whether your utility is dense, if you have a lot of economies of scale, if you're spread out and aren't dense, it really matters. We have utilities in Western Montana whose actual wholesale rates are less expensive, but their rates to their consumers are higher because they don't have the density that we have, and they don't have the opportunities we have.

I would also echo an appreciation for the collaborative effort that the Council and the Council staff has put in, in spending a lot of time with all of the individuals that are impacted by this plan. I really appreciate that. Thank you.

MR. MEASURE: Thank you, Mark. Before we go on, we have 24 people who have signed up to testify -- or 26 total. If you intend to testify, and you haven't signed up yet, please do so. We're trying to judge the time pretty closely. I'm watching my cell phone up here, and if you go over, I'll probably give you a little wag with my finger. That just means to move it along, if you would.

Beth Schenk. Beth, why don't I give you

this decent microphone so you don't have to hold it.

MS. SCHENK: My name is Beth Schenk, S-c-h-e-n-k, and I'm speaking as a public citizen tonight. I'm a registered nurse, and I want to speak about our energy future that doesn't have wind enough in it and, in my opinion, is a health effect and adds to climate destruction.

First, I do totally appreciate the work that you're doing on the plan. I appreciate that you've addressed eliminating fossil fuels in the power plan -- it's needed -- and the general discussion about renewables and the discussion by others, that is confusing to me, about nonfossil alternatives to that generation.

In terms of health effects, this is an important issue. Of course, it varies according to where you are on the planet. Right here on the western front we had a welcome rest this summer from the fires, but we remember what it was like the last decade. I think, given that, we need to work a little harder than the plan suggests in our efforts in reducing carbon.

I'd like to see that -- even though we don't need new ones, I'd like to see that we

ratchet down the existing number of carbon power plants.

I'd like to also comment on energy efficiency. If the Department of Energy is correct in saying that 20 percent of current energy use in homes or businesses is wasted, perhaps we can go a lot further with energy efficiency in those costs. But I think overall we can probably achieve those costs. I don't think it's possible to expect or examine and achieve the costs of health effects, but we'd like them to do more research and more education more clearly.

I believe -- especially as evidenced by our prior speaker -- we can come up with many more solutions that might spare us in the future from worrying. I think we have that opportunity now. And I would like to thank you for the opportunity to make these statements on that. Thank you very much.

MR. MEASURE: Thank you. Thomas M. Power.

MR. POWER: Good evening. For those of you who are not, I'm from Missoula. Welcome to Missoula. I was raised as a good Catholic boy, who always tries to do what he's told, and was told

that I should limit my comments to 3 minutes. I'm also trying to save the economics or professorial profession from the usual claim that we can say nothing in less than 50 minutes. So I'm going to try and stick to the 3 minutes; although, I've burned up a couple already.

In any case, my name is Thomas Michael Power. I'm a research professor and professor emeritus in the Economics Department at the University of Montana, where I've served as a teacher, researcher and administrator over the last 42 years, a long time.

Since the mid 1970s I've been involved in electric utility planning, working with all of the public utilities commissions in the region and very directly with the now-defunct Montana Power Company -- I was not responsible for that, however -- and now NorthWestern Energy, primarily representing low income and other consumer interests.

I applaud the Council's and your staff's efforts to wrestle with the substantial uncertainties associated with impending national carbon regulation and its implications for the relative costs of the different ways of meeting

our electric supply needs as well as other uncertainties, including the future price of natural gas.

You have faced those uncertainties directly and sought to develop a regional electric plan that reduces risks, maintains substantial flexibility in the system, while keeping costs -- including environmental costs -- as low as responsible.

The most difficult and controversial issue, at least from my point of view, that you've had to deal with has been climate change, greenhouse gas emissions and the impending regulation of those emissions.

As I read the draft plan, the Council has not taken a position on the appropriate method or level of greenhouse gas regulation. Instead, your modeling has indicated how different levels of emission penalties are likely to affect greenhouse gas emissions of the electric sector in the Pacific Northwest.

On my reading, there's several clear messages that come through from that modeling and the discussion in the plan: First, without fairly rigorous nationwide regulation of greenhouse gas

emissions, normal economic forces may stabilize emissions from our electric sector but will not allow us to make progress in reaching Montana's and other states' targets to reduce those emissions.

Second, a fairly high penalty, in the 40 to $50 per ton range of carbon emissions, may be required to reach the emissions-reduction targets we as a state and a region have already adopted.

Third, reaching those reduction targets will require the reduction of generation from the region's coal-fired plants or the capture and storage of the carbon dioxide that's emitted by those plants.

Fourth, our emission-reduction targets in the electric sector can be met at a significant but relatively modest cost to households, businesses and the overall economy, quite modest especially compared to the potential costs associated with doing nothing about climate change.

Fifth, investments, as we're already heard and energy efficiency and renewable electric resources, and very importantly, major efforts to reduce the barriers to expanding both of these our

region's electric portfolio are the cheapest, least risky and most environmentally benign electric planning path for this region to be on.

To a certain extent, these messages are somewhat buried in your draft plan. But I still think that they come across quite clearly and will help guide utility energy planning in the region in the right direction.

Given that three of the four states of the region have adopted the goal of significant reductions in their greenhouse gas emissions, I think it's important for the final Sixth Plan to explicitly comment on what would be necessary in the region's electric supply decisions to contribute to the achievement of those goals to reduce, not just stabilize, our greenhouse gas emissions. Thank you.

MR. MEASURE: Thank you. Chuck Magraw.

MR. MAGRAW: Thanks, Council Member Measure.

Chuck Magraw representing -- speaking on behalf of NRDC on RNC. I'll simply read what I've written here: The draft plan is impressive in its scope, finding and conclusions. In particular, the draft should be commended for its finding that

northwest load growth over the next 20 years can and should be met by a combination of energy efficiency acquisition and renewable energy. But I also must say, that notwithstanding the achievement of the draft plan, it doesn't quite make it to the finish line.

First, it's important to note what the plan does. Very simply, the plan is a map to our energy future. It enables the northwest to anticipate what lies in store for us and to prepare for it by taking those actions and making decisions that will, when that future is realized, produce benefits to us: Economic benefits, social benefits and environmental benefits.

So what does the draft plan envision? Well, it's pretty clear. The draft plan says -- and this is a quote -- "that we are in a time of profound change." Indeed, the change the plan is talking about the form of carbon constraints that will fundamentally alter the way we produce, use and consume energy, envelops the draft plan and drives all of its findings and conclusions. But the plan stops short of actualizing its findings.

We know that we must reduce greenhouse gas emissions. The draft plan acknowledges that

this is our future. And to reduce greenhouse gas emissions, maybe not right now, maybe not tomorrow, but soon, we will have to begin to retire existing coal-fired generation and will have to transition to non and low-carbon sources of energy.

But the draft doesn't call for this, and so doing, it fails to enable the region the plan for the very future that the draft envisions. That is my overarching point here. But I want to emphasize that that issue does not negate the many, many good things that are in the plan.

So briefly I'd like to talk about some of these and some of the specific actions items. All of the conservation action items are sound. I want to call out, however, for special attention -- not because they are more important than any of the others, but because I don't want them to go unnoticed -- Action Items Nos. -- Conservation Action Items Nos. 5, 7, 8, 12, 13 and 18. These correctly, in my opinion, identify the importance of building codes and standards, the important role played by the Regional Technical Forum, the risk-reduction benefits from energy efficiency, the need to reduce barriers to efficiency

acquisition and the recognition of the special circumstances faced by electric cooperatives.

On the draft plan's generation items, I want to note and agree with the draft items No. 3 through 6. And those regard the importance of addressing balance service issues, or what the draft plan refers to as flexibility. Those are critical, and I think the plan is well advised to highlight those and identify those as items of high priority.

On the Bonneville action items, I simply wanted to observe -- and this is actually more in the nature of a question -- that no mention was made in the Bonneville discussion or in the action items about Bonneville's role in transmission development.

The federal power agencies, as you know, were given substantial resources in the way of increased power and authority under the Recovery Act. I think that it is an appropriate role for Bonneville to be addressing transmission issues. And, obviously, this is the central issue here in Montana with respect to development of Montana's renewable resources.

Finally -- and you'll forgive me for

ending here on a somewhat critical note -- I want to urge you as strongly as I can to strike, in its entirety, Generation Option No. 8. It suggests that there is a trade-off between energy efficiency acquisition and renewable energy. Nothing could be further from the truth.

The draft plan makes it clear that both of these resources reduce risk and are cost-effective and that we need both. Moreover, there is absolutely no evidence, either in this region or anywhere else in this country, that renewable energy acquisition has adversely impacted energy efficiency acquisition. Nor is there any reason for concern in this regard, because energy efficiency acquisition will be favored in any carbon-reduction strategy. Thank you very much.

MR. MEASURE: Thanks, Chuck. And as a side bar, you may want to talk to John Shurts on the way out the door about the transmission issue. Jim Maunder, please.

MR. MAUNDER: I'm Jim Maunder. I'm the Manager of Member Services for Ravalli Electric Co-op. I'm the Montana representative to the Regional Technical Forum and, also, been doing this for almost 25 years with utility conservation

programs. I appreciate you taking the time to come to Montana and to listen to what we have to say.

This marks the 75th year that Ravalli Electric Co-op has provided clean, 100 percent renewable hydro from Bonneville to our members. We started purchasing power from Bonneville in 1950, and we've just signed another 20-year, long-term contract. I'd like to thank them for that.

I'm going to speak mainly to the energy efficiency or conservation measures. Since 1980 through 2008 Ravalli Electric Co-op has been very active in promoting energy efficiency through Bonneville programs. We do promote, to our members, EnergyStar appliances, geothermal heat pumps. We work -- I've worked through the Regional Technical Forum for the standard for the Montana house, energy-efficient all-electric home.

Currently in Ravalli we have 8,000 members. We have about 10,000 meters. We're 95 percent residential. With this downturn in the economy, we've seen it hit really hard in our new services, but for potential for people, low-income in our area.

Weatherization is a big issue. What

we're running into, is we're going back to houses built five and seven years ago -- I handle high-build complaints -- but houses that were supposedly builder self-certified, built to code and they're not. I've been in a number of houses, including one built last year, that didn't even come close to the code.

Montana has a builder self-certification. In our area, it's builder no certification is what's going on. So if we're going to promote energy efficiency in this state and have a renewable energy portfolio standard, we need to have code enforcement. Otherwise, we're going back every year to weatherize homes that should have been built right in the first place.

One of the biggest challenges we see is that as new technologies come onboard -- having done this for 20 years -- Montana is an island surrounded by land -- what's driven by the I-5 corridor utilities is usually, easily 18 to 24 months before it gets adopted. We're the dumping-ground for water heaters and inefficient light bulbs that were pushed out in code in Seattle. We find them coming in here. So you, as a member, I don't know what we do, but we need to address

that.

I'd like to thank the Council members and the RTF members for coming to Montana, meeting with the five Western Montana Co-ops that purchase power from Bonneville to address some of our concerns this year, and look forward to doing it more next year. I want to thank you for your time.

MR. MEASURE: Thank you. Mark Hayden, please.

MR. HAYDEN: Good evening. My name is Mark Hayden. I'm the general manager of Missoula Electric Cooperative. I'm not going to revisit all the issues that were so well expressed by Ken, Mark and Jim, instead maybe focus a little more, again, on our energy-efficiency efforts at MEC and what we're seeing.

MEC is a full-requirements Bonneville customer that serves the needs of nearly 14,000 members here in Western Montana and Eastern Idaho. I would like to commend the Council on their efforts to put forth a plan that appears reasonable and thoughtful and addresses the notion that individual utilities may have needs different than the region as a whole.

Since taking over as general manager six months ago, I'm proud to report on the efforts MEC has made in the area of energy conservation. We agree that energy efficiency is typically the lowest cost resource, and it should be the first the region looks to as we move forward.

MEC has devoted the resources necessary to develop a robust energy-efficiency department devoted to areas that are most relevant to our member owners. As a result, we have implemented existing BPA sponsored programs targeted towards our residential, agricultural and commercial members.

One concern I have with regard to the plan relates to conservation targets. While initial interest in our program offerings has been strong, utilization has been slow, the low result, I believe, of the current economic situation and related uncertainty over conditions in the near-term.

Given this high degree of uncertainty and the results of research by the utility at BPA staff that have implemented energy-efficiency programs, we believe the lower boundary of the Council's conservation targets is too aggressive

and suggest that the Council adjust the conservation targets accordingly.

As general manager, it's also my responsibility to stress the importance of affordability when discussing future rate increases that the members will face. Discussion of future rate impacts deserves a prominent place in the plan. That being said, it's more important than ever to main the output of the existing hydro system. We appreciate the plan's recognition of the value of the existing hydro system, and that there will be heavy carbon-cost impacts to eliminating generation at any of the dams. It's important to maintain the output of this carbon-free, low-cost resource. Thank you.

MR. MEASURE: Thank you. Bob Baily, please.

MR. BAILY: I'm Bob Baily, Director for Ravalli Electric. I'd just like to reiterate my support for what has been presented by our other co-op members here tonight.

The only other area that you haven't -- nobody has addressed is to bring up other alternative power, what I refer to as almost green power. We haven't addressed nuclear as being an

issue. I'd just like to bring up, since we have a few Sierra Club members here, a member of Green Peace just recently addressed some of our co-ops at a national meeting, and made the statement that one of the worst things that they -- or one of the mistakes they made in the past was killing nuclear. That, of course, precipitated nuclear plants around the nation that coal was the only thing that we could bring forth.

You know, I want to thank you for your efforts on this plan. Being a board member for 30-some years, this is quite an advance over previous plans. I definitely support what you're doing with this present plan. Thank you.

MR. MEASURE: Thank you, Bob. Len Broberg.

MR. BROBERG: Good evening. My name is Len Broberg, and it's B, as in boy, r-o-b, as in boy, e-r-g. I'm here tonight as a private citizen. At my day job, I teach at the University of Montana. Thank you, Council Members, for holding this hearing here in Missoula. It's very nice to be able to come just for an evening and share my thoughts on the plan with you.

I think it's a very important piece of

work that will guide us into the future and will ultimately influence quite heavily how successful we are at meeting the challenges ahead of us. So I appreciate all the efforts of the Council and the staff to wrestle with these difficult issues and to help guide us into the future in a positive way.

For that reason, I'd like to applaud, first of all, your proposal to meet the new energy demand that will occur in this region with energy conservation and renewable energy. I think that's the direction to go. I think that's a good step that's outlined by the plan, and I think we can work together to address the kind of issues that are being raised by rural utilities here in Montana and structure the process of allocation of that energy efficiency attainment in a way that allocates those burdens fairly, but reaches the ultimate targets that you're projecting in the plan.

I would, though, encourage the Northwest Power Conservation Council to take the next step beyond meeting that new demand and actually to start ramping down the reliance on coal-fired generation within the region. And there are lots

of good reasons to do this, the measure of which will be touched on, I'm sure, by other folks and have already been touched on.

But I think a few that might be underappreciated are that taking these steps now has real merit. Many of the problems that we have now are caused by our delaying actions, which we perceived as having an immediate cost and that we thought perhaps somehow, in some kind of silver-lining future, we might avoid those costs or reduce them.

Well, I don't think that's likely, for a variety of reasons. If we take the steps to reduce reliance on coal-fired generation now in the northwest and reduce our CO2 emissions, I believe it will lead us to an advantageous leadership position. We'll be competitive at attracting industry that wants more of a carbon-neutral energy base to work from, plus will help us improve the job opportunities here in the region.

It will also reduce costs that would occur with an inevitable transition of phasing into different kinds of power modalities in the future. Those costs are probably best predicted

in the short term rather than in the long term.

At the university I've watched many times where they've started out with building projects and construction projects. And in the last decade, as they've moved forward with those projects, they had to go back and raise more because the costs of doing that have doubled or tripled.

I think we're likely to face the same scenario here. If we're going to put a different infrastructure in place, I suggest the costs are more likely to be lower in the short term than they will in the long term for many of the kinds of technologies you've been looking at.

Another point is I think it will reduce the dislocation of the northwest economy in this energy transition to start a ramp down now. If we have to start with a more drastic approach later, that will cause greater dislocation, greater disruption potentially of power sources and its collateral effects of the economy and the lives of people in the region.

I think also by taking this step now you begin to ramp it down and keep costs reasonable to consumers, another important focus of your

planning efforts, which I think is altogether appropriate. But I think the idea that the current uncertainty of the situation promotes a wait-and-see attitude works to the disadvantage of the consumer as well, ultimately.

And finally, I think you can better anticipate and project costs for near-term changes than for long-term changes, as I've already said. Energy efficiency and renewables provide energy sufficient to cover the initiation of the switching from coal-fired generation to more carbon-neutral sources, and I encourage you to take more aggressive steps in that direction.

Another point I'd like to raise is that I think we can reduce -- or remove, excuse me -- the state river dams and still cover the power needs of the region in a carbon-neutral way. So I'd like to incorporate that as part of your planning process and have that recovery of salmon runs, which will only work to bolster communities throughout the Pacific Northwest, into your planning as well.

Thank you again for your time and attention. Good luck in your deliberations.

MR. MEASURE: Thank you. Ralph Goode.

And there are also five or six good seats up front here for anyone that would want them.

MR. GOODE: Good evening. My name is Ralph Goode, General Manager of Mission Valley Power. We are a full-requirement Bonneville Power Administration customer. Our utility has purchased no power that has a carbon footprint to date. We have over 18,000 meters in our service territory, and over 14,000 of those are residential. So over 75 percent of our customers are residential customers.

We've had an aggressive energy conservation program since the '80s, but especially in the last eight years we've pushed hard on energy conservation. Many times we pay for incentives that we thought were important for our customers that was not credited towards the PTRs of planning, tracking, reporting because it wasn't on the system, available to credit ourselves. We did not get credit back from Bonneville, so it was not a Bonneville program. It was a utility program. We're very proud of that and continue to push for that yet today.

The challenge that I want to talk about tonight is Regional Technical Forum, the

experience that I pushed through with my energy conservation specialist on the Montana Energy Home. We at Mission Valley Power had not been able to convince our contractors to build EnergyStar homes. They weren't interested in that. They came off the Super Good Sense home. We've lost that label, I guess, and so EnergyStar was picked up.

So we developed a home that our builders were interested in building, and the utility started pushing that for two years. We called it the Montana Mission Valley Power Home. Now we call it the Montana Home.

So I took that before Bonneville as a customer proposal. They ran it through RTF, and it sat there for about six months before we got to go to the table and answer and present it.

It was approved. Some of the information that was processed there in the calculations was never made available to us. It's a black box that the energy-efficiency people told me we could look at. So it's controlled by one person, and it's not shared with the people that know about it. So that was hard for us to understand and to work through.

I went to the meeting in January. That was on the final tap of it. We sat through telephone calls before. We spent the money to go to Portland. And what I observed at that meeting was we had good support from -- a Washington person made the motion, from a small co-op, and it was approved. So we were tickled. We got it and were excited about it. We left.

The next meeting, Washington and Oregon were not allowed to participate, only Montana co-ops. So that was really alarming to me, and I never did find out all the reasons for that.

After that, then it took four months to get on the planning, tracking, reporting system because it doesn't flow. There's a process that works. So the Regional Technical Forum, we have to streamline it. And as Ken said, we need to have demeasures for whatever we're going to do and not worry about cost-effectiveness, because it's not the same throughout all the areas.

The utilities will decide what's cost-effective or Bonneville will. If we don't want to participate, then thank you. In 2011, we probably won't participate in Bonneville programs. We'll probably do it ourselves, because we're trying to

reduce our purchase requirements above the Tier 1 authorization. Those are some of the things I saw.

The other thing that I saw on the RTF is we had consultants do a presentation, sit down and vote on the presentation. That was alarming to me. I think the RTF should be made up of utility people only and other specialists that aren't doing work for utilities to promote business.

The last thing on the RTF is there's no demeasures for utility upgrades on distribution and transmission. We're losing a lot -- there's a lot of good things down there that we're not getting -- the northwest is not getting credit for the savings. We're using bigger wire and better transformers, those kind of trade-offs. We don't need to be paid for it, but we need to credit ourselves, especially if you're going to keep the target at 1,100. We think that's going to be a big challenge for us.

Future power choices for Mission Valley Power, we've worked hard on this for the past two years with RG&T. We were really excited about wind. But the last wind offer we got was four times higher than the hydropower, and it was brown

power. I never knew what brown power was, but it was offered without any green credits. And it was four times higher.

So the wind factor or opportunity here is very costly. So the customer is going to have to pay for that, and I'm real concerned about that. We are very much into renewable choices. But it also has to be cost-effective and reliable.

The other day I drove through the Cut Bank wind farm. There was about a 20-mile-an-hour wind, my estimate for western Montana. I'm not a wind guy, so it's my estimate. But half of them were turning. Sunday night I came through Great Falls, and the six outside of Great Falls, nothing was turning. I didn't stop in Great Falls to see what the wind was like. The trees weren't bent over anyways, so that was a good sign. There wasn't too much wind, I don't think.

I think the plan is a good start. I think we've got some challenges. I hope you look at those. And I thank you for the opportunity to speak.

MR. MEASURE: Thank you, Ralph. Kyla Wiens.

MS. WIENS: Hi. My name is Kyla Wiens,

that's W-i-e-n-s, with the Montana Environmental Information Center. The Montana Environmental Information Center is a nonprofit environmental organization that works to promote a clean and healthful environment for all Montanans. I want to thank you for the opportunity to comment and listening to our comments tonight, and also for developing a plan that sets stronger goals for energy efficiency and renewable energy in the region.

MEIC is supportive of the plan's proposal to acquire 5,800 average megawatts of energy efficiency to help meet the region's growing energy demand over the next two decades. This is an ambitious yet affordable and an achievable goal. Energy efficiency is the cleanest resource available, and developing this resource will save consumers billions of dollars and prevent them from being subject to volatile energy costs.

Energy efficiency and renewable energy are important, but they are only half of the clean energy equation. Gains in conservation and renewable resources of power must be coupled with a plan that sets goals for reduced greenhouse gas

emissions, phased out coal-fired power and account for likely future costs placed on carbon-based fuels and emissions.

Washington, Oregon and Montana have developed state policies or signed on to regional plans, such as the Western Climate Initiative, that sets significant greenhouse gas emissions reduction goals. The Council should set emissions reduction targets for the next 20 years that meet or exceed reduction goals set out in these plans.

Under the current policy, greenhouse gas emissions would only stabilize at 2005 levels. Without reduction targets, the full economic and environmental benefit of energy efficiency and renewable energy resources will not be realized.

The Sixth Plan should also create a road map for the future that phases out power generated from coal over the next 20 years. Coal plants provide 23 percent of the northwest's electricity, but are responsible for close to 90 percent of the region's carbon dioxide emissions.

In 2007, the Council recommended that the only way to reduce global-warming emissions in the region would be to end our reliance on coal-fired power. In a region where coal is not the

dominant power supply but the dominant carbon emission source, phasing out coal-fired power is both economically feasible and environmentally effective.

By transitioning away from coal, the projected greenhouse gas emissions 20 years from now would be 70 percent below 2005 levels. This is close to what is recommended by the Intergovernmental Panel on Climate Change Recommendations.

Finally, the Sixth Plan should also include a reasonable carbon dioxide price forecast. The cost of coal will increase in the near future; that is certain. Impending regulations for mercury emissions, advanced air pollution controls and coal combustion waste disposal will finally place the true cost on the price of coal.

Additionally, there will be a cost placed on carbon dioxide emissions. While the Council cannot control the future costs of carbon emissions, its Sixth Plan should contain a reasonable carbon dioxide price forecast for utilities to use for planning in their ongoing operations. Without a price indicator, utilities

are given a free pass to continue business-as-usual operations at coal-fired power plants. It is unreasonable to exclude a price forecast from a regional plan that will be operating in a carbon constrained future.

We encourage the Council to move forward and develop a plan that is not only strong in developing energy efficiency and renewable energy but recognizes the importance of reducing the region's global-warming emissions. Thank you for the opportunity to comment.

MR. MEASURE: Thank you. Whitney Byrd, please.

MS. BYRD: Hi. My name is Whitney Byrd, and I'm speaking tonight as a private citizen. I'm also a graduate student at the University of Montana.

I'd like to thank the NWPCC for this opportunity to comment on the draft of their Sixth Power Plan. First, I'd like to applaud the Council for demonstrating that through measures to conserve energy, there's no need to increase net greenhouse gas emissions or build new fossil-fuel burning plants to meet a growing need for electricity in the northwest region.

However, it is my understanding that our atmosphere will not stabilize by avoiding increases in greenhouse gas emissions alone, but rather, by reducing current greenhouse gas emissions as well. In terms of the action plan, this means to reduce the number of fossil-fuel-burning plants and to reduce our greenhouse gas emissions rather than keep the current system in place.

This can be achieved by harnessing more energy from renewable resources, such as wind power, to replace fossil-fuel-burning plants rather then supplementing energy supplied by the plants to reach an increasing demand.

Globally, we are currently already above the concentration of carbon dioxide in the atmosphere that the latest climate science determines to be a safe upper limit. To aid the most severe consequences of climate change for future generations, we have a duty to take more aggressive action by not only avoiding increases in burning fossil fuels, such as coal, but to also reduce our emissions by phasing out this practice as soon as possible. Thank you very much.

MR. MEASURE: Thank you. Nels Hefty,

please.

MR. HEFTY: I'll submit my comments in writing.

MR. MEASURE: Very good. Zack Porter.

MR. PORTER: Good evening. My name is Zack Porter. Thank you very much for allowing us to have this opportunity to speak tonight. As co-president of the University of Montana Climate Action Now and as a student at the University of Montana, I come here with a really special message for you, and that I hope you will listen to very carefully, because I feel that it's an issue that won't be addressed by many other people in the audience here tonight. So I hope that you will give me your full and undivided attention, despite that we're a long way into the evening already, and I know there's a long way to go.

First of all, I'd like to ask all the students who are in this room who are concerned about these issues, that they stand. Please come forward and show yourself, stand please. As you can tell, this is a high percentage of the people in the room. And there are a lot of other things on our agenda for the evening, I can promise you.

This is an issue that matters to us more

than I would say anybody else; us being young people. If there is anything that I can leave you with tonight, I hope it's a sense of urgency. And I'm not into scare tactics, but I want to even say fright, for ourselves and future generations. Because when it comes down to it, none of us in this room will even be feeling the impacts of climate change that our children will and their children. So I hope you'll take that message from us here tonight.

As previous speakers have said, this plan takes significant steps that are commendable and that are excellent first steps towards meeting our future energy needs and also reducing our carbon emissions. However, we can't simply stabilize emissions, as Whitney eloquently said just a moment ago. We have to reverse them.

Just next week we will have action on campus all week with the 350 Week of Climate Action. 350 being an international -- or nongovernmental organization headed up by Bill and Kevin and others with the goal of returning our level of carbon dioxide in the atmosphere back to 350 parts per million. This issue -- so this issue is something that we are addressing as we

speak.

I wouldn't go into much more detail about it here because people have said many of the goals that we hope you will consider already. Once again, we do commend you on what you have done so as far. These are important steps forward. But I hope that you will realize that 20 years is a long time, and that's the next time we'll be addressing these issues again.

We have to assume technologies will improve. We have to assume that we're able to do even greater things in five years than we can now. Let's aim high, and let's make sure that our kids have a better future than we do currently. Thank you.

MR. MEASURE: Thank you and your fellow students for placing this much importance on the process. Jeff Birkby.

MR. BIRKBY: Good evening. My name is Jeff Birkby. I'm a project manager with the National Center for Appropriate Technology, or NCAT, based in Butte, Montana. NCAT's overall mission is to research and demonstrate good ideas and new tools of sustainable energy and sustainable community development.

NCAT has more than 30 years experience in helping people learn about technologies and practices that save energy and resources in their homes, farms business workplaces and communities.

NCAT is also the main support contractor for NorthWestern Energy's Business Energy Partners program. Through this project and the partnership with NorthWestern Energy over the past two years, we have conducted more than 300 energy audits on commercial businesses in Montana, and we are on target to complete over 1,000 energy audits on businesses in Montana in the next two years.

Examples of small business energy audits we've conducted include a bowling alley in Twin Bridges, a small cafe in Anaconda, a church in Townsend, a carpet store in Bozeman and a grocery store at Red Lodge. We've also completed energy audits on middle schools in Helena, another at the courthouse in Havre, a car dealership in Great Falls.

We've conducted energy audits on some of the largest energy users in Montana, including large centralized warehouses for Safeway and Albertson's grocery stores, the Ironwood Manufacturing furniture factory here in Missoula, a number of

hotel and motel chains, and even cement production plants. These hundreds of Montana energy audits tell the same story: Energy conservation is the best option in our state for saving energy and avoiding the need to produce more power from fossil-fuel power plants.

Through our efforts at NCAT, we have helped to develop roughly $50 million in energy-conservation jobs in the state of Montana in the past two years, stimulating job creation from Red Lodge to Plains, Thompson Falls to Columbus, and Darby to Havre. The energy conservation retrofits completed as a result of these energy audits have led to the hiring of electricians, boilermakers, window installers, carpenters, maintenance engineers, architects and engineering firms statewide.

Implementing cost-effective energy conservation in Montana has proven to stimulate jobs, reduce energy consumption and have a tremendous payback. Often, the energy conservation measures, such as replacing old, inefficient lighting in a high school gymnasium, has a payback of less than two to four years. In many cases, we have found that 30 percent to 50

percent of the energy a business pays for is wasted through inefficient boilers, bad lighting and poor insulation, and we've just scratched the surface in Montana.

The Sixth Power Plan can do a great deal to shine on the tremendous benefits of investing more in energy audits and energy conservation. Energy conservation is cost-effective. It creates jobs and it can help reduce global warming through both reducing energy use and eliminating the need to build more fossil-fuel plants.

But even more aggressive energy conservation can do much more. The Sixth Energy Plan should clearly recommend that no new fossil-fuel plants be built in the region. Conservation and renewables can handle new growth. But the plan should also assert that existing energy use could be significantly reduced through more aggressive energy conservation, thereby eliminating the need for many existing fossil-fuel facilities, which would accelerate the reduction of carbon, save more energy and create even more local jobs for Montana's workers. Thank you.

MR. MEASURE: Thank you. Larry Keogh.

MR. LARRY KEOGH: Good evening. My name

is Larry Keogh; it's K-e-o-g-h. And this evening I'm here just to show support, not to rag. I'm kind of the every guy here. I'm a student. I'm also -- I pay my utility bills through Ravalli Electric Co-op, so I'm just a regular guy, a regular guy that started attending these meetings back in 1983 or 1984 with this Northwest Power Planning Council. So I really appreciate the work you folks have done. We in Montana have continued to enjoy relatively low rates. A large part of that is due to your work, so sincerely, thank you.

The carbon costs, they aren't internalized at present. We spew stuff into the air. That's just totally the way it is. And I know that since not all carbon costs are internalized, we don't pay them. That if I had to pay my carbon costs, I'd howl; I'd howl aloud. But sometimes you just got to nut up, and you've got to do what's right.

The direction we need to follow, the right path right now, is to reduce the amount of carbon we're spewing into the air. We need to pursue low or no carbon increasing as far as our production. Additionally, as we cowboy up or nut up to do what's right, we need to look at the --

we need to encourage -- maybe through BPA incentives and the like -- smaller, more regional power production that's either carbon neutral or low carbon. We need to scale back our carbon footprint that we're already putting out. And as far as energy processes go, we've got to cut back. We have to do what's right. So what's right now is that we've got to cut back our carbon footprint regardless of the cost. That's what's right. Thank you.

MR. MEASURE: Thank you, Larry. Next, the voice I only know at the end of the telephone, Bob Decker. It's interesting to see what you look like. I didn't realize you were so tall.

MR. DECKER: Thank you, and good to meet you, all of you. It's Bob Decker. I'm the Executive Director of a nonprofit organization in Helena called the Policy Institute, part of whose work is the development and practice of state energy policy.

The chairman of my board of directors is Ken Toole, Public Service Commissioner, one of five in Montana who is reaching -- or counties of his direction extend from Lewis and Clark in the south up either side of the Rocky Mountain front

through Teton, Glacier, Flathead and Lake, and I may have forgotten one. But Chairman and Commissioner Toole wanted me to emphasize his full support and enthusiasm for your focus on conservation and renewables. And our organization does the same good job. We support that wholeheartedly.

You've heard this evening about -- or some questions and some friction about the concept of conservation. You've heard several people say that you're not being aggressive enough, and you've heard, particularly from some co-ops, that the numbers you've set will be hard to reach.

I wanted to tell a very brief small-picture story about conservation and suggest how we might get at it a little better. And that has to do with building codes, another subject you've heard about this evening.

Our organization has been working for over a year now on the revision of Montana's building codes. And we're making good progress. Just a couple of months ago the Montana Building Codes Council, a committee appointed by the governor, approved several revisions and strengthening standards based on the 2009

International Energy Conservation Code energy standards, and did pretty good work to revise Montana's codes.

I and my allies in this effort have worked, as I say, for a year to make that happen. And what has occurred along the way is illustrative to me of why this conservation thing is hard to grasp sometimes. In organizing and calling labor unions, and utility representatives, and municipal building code officials, city commissioners and county commissioners and co-op people, I quickly bumped into -- from a lot of people -- cynicism about building codes. Because for many people in Montana, regulators, utilities, co-ops, it doesn't matter -- I oversimplify -- but it really doesn't matter what the codes say, because there is no enforcement.

So it's been estimated that when Montana adopts and exercises building code programs, it reaches perhaps 50 percent of the new structures built in the state. Now, of those 50 percent that it reaches, there's good enforcement; there's bad enforcement, but there's some sort of system at work.

For the other half of the new structures

in the state -- as was mentioned earlier -- it's a sticker on an electric box that has several boxes that you check off -- that works on the honor system -- that energy codes are followed. There is general agreement that that volunteer system isn't working, and it's resulted in cynicism about the adoption of new codes.

So what I'm telling you about this little sliver of conservation, what I'm telling you, this is for -- is to ask that the Council, when you discuss, when you look at one aspect of conservation, that is building codes. Using just this example of work in Montana, you can throw your institutional expertise and weight at the idea of enforcing -- enforcement -- of the things that are written on paper, which don't, by themselves, save any energy.

If you do that, if you throw your institutional strength in a new or a better way at enforcement, you give us, at least in Montana -- I'll presume the other states in the region -- a lot of help towards achieving what most people agree on paper that we should achieve. So thank you very much for your time. It's good to meet you, Mr. Measure.

MR. MEASURE: Good to meet you at this time. Thank you. Mary Hamilton, please.

MS. HAMILTON: Thank you for this opportunity. My name is Mary Hamilton. I am one of the owners of Solar Plexus, LLC, which is a solar installation business here in Missoula.

Father Henry Morrell (sic), who served the Avondale Parish (sic) in the late '70s and drowned in the Big Blackfoot River in a canoeing accident, once told me to always remember that small is beautiful. Coming from a man who was 6'4", it made an impression on me.

I think it's important to emphasize the importance of bottom-up over top-down reform. The reason for this is because of the power of corporate lobbyists on the top. Their interests are in maintaining the inertia of the systems that have brought great wealth to the companies they represent. We the people are much better served by bottom-up, grass-roots programs which answer only to the common sensibility of the American people.

Our retail store and solar installation business has been in operation for 16 years. We have installed one-and-a-half megawatts of renewable energy. Well over a half a megawatt of

that is solar PV. We've had a few different employees over the years, trained them into the field, providing them with health care and paid plenty of taxes into the general economy.

My point is that we -- if we can be part of job creation, fight global warming, provide health care benefits, promote conservation, efficiency and renewable energy and actually enjoy what we do, then perhaps the powers that be should incentivize this type of business. All new energy studies have shown solar PV to create, by far, the most new jobs.

Think of it like a huge field of wildflowers.

Each flower is like our business, and each one is spreading the solar energy that nearby homes and businesses need to bloom and be productive: Talk about distributed generation.

I think of all of our business as a test case. Can it work? Yes, it can. Will you become a millionaire overnight? No, you won't. Do you have to give it a great deal of commitment? Absolutely. Does it put meaning into your life? More than I ever imagined. It is the American dream.

This all sounds real good, but we still haven't figured out how to incentivize this activity, and America, so far, has it all wrong. We have a long history of offering tax incentives for solar based on the nameplate value of the system. These incentives have missed the mark because they're discriminatory in that you need a tax burden to be interested in or to profit from the incentive or even to qualify.

And the systems aren't based on production, which encourages all manner of fly-by-night installation and shoddy material, causing safety issues, unfair competition and giving solar a bad name overall as clients tell friends how their poorly designed and poorly installed system doesn't work.

Enter the feed-in tariff. If you hear about something working well somewhere else in the world, it makes good sense to go there and study the model. I recently wrote to the Secretary of Energy to ask that he send an envoy to Germany to study the feed-in tariff model there so we can begin to figure out how we can incorporate it into our energy program.

I received a very polite reply from an

office person with some engineering degree level who said we can't do a feed-in tariff because we're not set up for it. My gut reaction was, isn't that why we elected you guys, so you could set it up, so to speak? Anyway, back to the grass-roots level in a hurry.

The feed-in tariff is production based, so it requires separate meters to measure the power being delivered by the solar or wind system back to the utility. The owner of the system would then get paid more for their green power than they have to pay for the usual fossil fuel or dirty nuclear they would otherwise be using. All of the ratepayers share in the cost of the green-power purchase. In Germany, this has been implemented nationwide, and yet rates have only increased about $4 per month, per customer.

Until very recently Germany has been purchasing about half of the solar panels produced in the world each year. Other countries are following the

German example: Italy, France, Spain. Surprisingly, Germany started this program at the grass-roots level, and once it proved itself to be a good program in the outlying provinces, it was

adopted nationwide. They are still paying 43 cents a kilowatt on 20-year contracts for PV. We could live with that.

Gainesville, Florida, has a feed-in tariff, the first in the U.S. Now Vermont and Hawaii and just yesterday California have jumped on board. These programs vary on how they're operated, but nevertheless, there is strong evidence that they are fairer than tax credits and get better results. There is a strong incentive for the installer to do a good job because the system will be judged on production. There is a strong incentive for the customer, the owner of the system, to make sure the system is producing what the installer claimed it would, because if it doesn't, he won't get a check for his power.

Ontario's incentive rates vary from 10 cents a kilowatt to 80 cents depending on the type of energy. Solar is usually rated the highest, while wind, because if its need for transmission and its random production, gets a lower incentive rate.

Enough can never be said about conservation and efficiency. This means that there just needs to be some allowances for

smartening up the grid. I just don't see the need for big, new transmission from large centralized power plants of any kind as long as we have the on-site potential of solar PV.

In summation, conservation and efficiency are the cheapest and most successful energy resources available. Don't get carried away on new power lines. Smart substations? Yes. Power lines to nowhere? No, very expensive, wasteful, time consuming, political stuff.

Implementing the feed-in tariff from the bottom up is absolutely urgent if we are going to get solar off of the ground in the U.S. and beat global warming.

Number four, this is for my husband, who has a small hydroelectric plant. He's going to be certified as green by the Low Impact Hydro Association, recognizes green, also on hydro, recognizing the certified low impact hydro system. Thank you.

MR. MEASURE: Thank you, very much. Jim Morton, please.

MR. MORTON: My name is Jim Morton. I'm the Director of the Human Resources. And for over 35 years we have been offering energy

conservation, services and opportunities to lower energy in schools in our valleys and counties -- Missoula County, rather. We do that through a variety of funding sources including congressional appropriation, requests by our governor and incorporating our state legislature, contracts with Bonneville Power, Missoula Electric Cooperative, NorthWestern Energy as well.

I mention those funders and contracts to convey to you a widespread support that I have seen for energy conservation and energy efficiencies across many sectors of our economy and society. Therefore, I'm here to support the conservation section on conservation and encourage you to adopt it.

And as someone who has been involved in every plan that the Council has issued, I would also like to give you my appreciation for the dedication I have seen over the years to public involvement and to encouraging the citizenry of our states to get involved in this process.

I would also like to compliment the staff as well as the Council members for what I think is probably one of the most robust and sophisticated approaches to power planning in the

United States. As I travel around and talk to my colleagues in other parts of this country, I'm often congratulated because I'm there, on being from a region that takes so seriously energy planning. And I think that this high praise for you and your staff in something that all of us should be proud of because we do take this seriously. We do understand what happens to the end user as prices fluctuate. And I encourage you to go forward. Thank you.

MR. MEASURE: Thank you, Jim. Dan Spencer, please.

MR. SPENCER: My name is Dan Spencer. I'm here as a private citizen. I also teach at the university. I want to start by just, again, as others have, by commending you for the sound basis for a plan to move forward, particularly with a plan that meets new energy needs for the next 20 years with no net increase in greenhouse gas emissions and no new fossil burning plants.

I'll be brief, and I'll take you up on your invitation. Some of the other people have said the things I was going to say. I'll give you my written comments and just echo those.

I want to say one other thing: I'm really

inspired by the number of students who are here tonight. Several of them are my students. Some of them weren't in class this morning, but they're here tonight. It's probably their priority to have not.

I am deeply concerned about the impact on future generations, both human and animal, in this region here. I would just echo two more points again: You've got a very good start at stabilizing, but we really need to move beyond it by reducing CO2 emissions, greenhouse gas emissions, and particularly by aggressively moving to phasing out and shutting down our current coal-fired power on that. So I commend you for an excellent start. I appreciate your very hard work, and appreciate you listening to us tonight.

MR. MEASURE: Thank you, very much. We're inspired as well. Ross Keogh, please.

MR. KEOGH: Thank you, Councilman. I would first like to start out, my name is Ross Keogh, and during the day I'm an energy analyst for a small renewable energy company. My comments tonight are based on my own feelings about the power plan, not those of my employer.

I want to applaud your staff, many of

whom I've worked with at different levels and then talked to them about their expertise in this power plan. I feel like it truly represents a fantastic document that provides a guiding voice for how the northwest can achieve realistic conservation targets and CO2 reductions over the next 15 to 20 years.

That was going to be the extent of my comments until I spent all day with NorthWestern Energy in a session on how to identify how they can properly integrate wind into the transmission system. After that session, I am concerned that your power plan takes one thing as endogenous, which is the institutional design of our electrical grid in the Pacific Northwest.

And by this I mean specifically that we don't have a regional ISO. That term is going to sound a little bit long to the people in this room, but I think it's something that we really need to focus on.

California and other parts of the Western Interconnect have done a fantastic job of integrating their transmission systems, and this has allowed them to facilitate larger penetrations of wind at reduced costs and to reduce the cost of

moving power around that transmission system.

I want to stress this comment because your staff has the technical capacity to sit down and to quantify the benefits associated with moving to a regional ISO. We seem to not be able to get there with utility working groups. I think it's important that your plan, Council, investigate the situation and do what you can to try to put some pressure on those to move towards a regional ISO. That's all I've got. Thank you.

MR. MEASURE: Thank you, Russ. Commissioner Gail Gutsche.

MS. GUTSCHE: Good evening, Council Members, folks. I am Gail Gutsche, and I am a member of the five-member Public Service Commission. I represent this district, which is District 4, which is Granite, Powell, Ravalli, Lincoln, Mineral, Sanders and, of course, Missoula County. And I welcome the opportunity to make a few comments. And I will be brief because I'm not going to repeat what so many people have already said tonight.

Unlike so many folks who have already spoken before me, I'm pretty new to the regulatory business and to the power business. And so this

has been a great learning opportunity for me tonight. I want to specifically thank Mary Hamilton from Solar Plexus for a crash course on how to incentivize solar PV. And I think it's great so many folks have turned out tonight to speak.

The reason I think that this power plan is so important -- and I just barely got through learning the Fifth Power Plan and now we're on the Sixth -- is because it gives guidance to the Public Service Commission on what the energy mix should look lie, what it might look like. It's helpful to have this thorough analysis as I engaged in decision-making on how utilities are -- investor-owned regulated utilities move forward, operate and potentially expand.

This guide to utility energy planning and electric supply decisions is hugely important as a map to our energy future. We need you folks to lead. We will help lead our utilities through your leadership.

The conclusion that was constant and that so many folks have already mentioned in your plan, that the most cost-effective and least risky resource for the region is improved energy

efficiency of electricity use couldn't be more germane. It couldn't be more important at this time. It's heartening, and it's humbling.

The goals are lofty, but I think they're achievable. And beyond that we must achieve them if we are going to reduce our carbon footprint. If we're going to reduce our need to produce more energy, we have to do so much more with the energy resource. It's heartening to have a plan that says that between energy efficiency and renewables, we can, in fact, meet our load growth over the next 20 years. Energy efficiency is our first and best resource, and as several folks have said, our least-cost resource. And that's the most important thing to remember, is that it's our least-cost resource.

I appreciate a couple things specific to regulatory goals in the plan. One is that you did not place specific conservation targets on regulated, investor owned utilities, such as NorthWestern Energy, but instead leave that up to individual public service commissions or public utility commissions. I think that's really important. As other speakers have alluded to, it's not a one-size-fits-all map, and we're going

to need to work with our individual utilities as best as we can.

I applaud the Council's plan to develop and implement measures that are commercially viable but relatively new. But I urge continued diligence in monitoring and achieving maximum CFL penetration and savings consistent with that market transformation. Yes, a lot has been done, and that is low-hanging fruit. But I don't think that we have maxed out on CFLs yet.

And third, I applaud the conditioned funding for energy management companies such as the Northwest Energy Efficiency Alliance and its supported market transformation, because it's essential to achieving the Council's overall conservation goals to fund these kinds of organizations.

And then I'd just like to make a couple of comments about the regulatory scheme and the fact that I believe the plan needs to consider the external regulatory environment, and that includes Congress but also the EPA. Clearly, it is an uncertain time. There are profound changes, and we are moving forward with those uncertainties. But to not take into consideration that we are

going to be living in a carbon-constrained world and what that will do to energy prices, I think is a mistake.

I think it's important that we realize that the EPA is moving forward with a host of regulations that will make carbon, coal specifically, cost a lot more than it does now. So I hope that you will consider those thoughts when you are improving and working on your plan. And the Public Service Commission will be making formal comments on this plan, as a unity, before the deadline. Thank you.

MR. MEASURE: Thank you, Commissioner Gutsche. Alex Taft, please.

MR. TAFT: Hi. I'm Alex Taft. I'm the vice-chairman of the Missoula Chapter of the Montana Conservation Voters. We have 500 citizen members in our chapter in Missoula, and Montana Conservation Voters has 3,000 citizen members throughout the state.

The Montana Conservation Voters seeks candidates for public office who are conservation-minded. We support their election, and when elected, we monitor their actions in their new jobs in promoting conservation.

I have four specific comments on the plan. First is the plan fails to establish a CO2 emissions price that utilities should use for planning and operating their systems. Two, the draft plan would stabilize global warming emissions but not reduce them, as many have said already. Three, we applaud the Council for showing we need no new fossil-fuel power plants. And, four, the conservation targets in the draft's five-year action plan are too low. Thank you very much.

MR. MEASURE: Thank you. Patrick Rhea.

MR. RHEA: My name is Patrick Rhea, that is R-h-e-a. I'm a student at the University of Montana. I'm centered with the Associated Students of the University of Montana, and I'm here speaking on behalf of U of M Climate Action Now with my co-president Zack Porter.

I really want to echo some of the things that have been said tonight about reducing CO2 emissions, on a whole, across the region. I think that is something that's extremely important, and I'm afraid that it's overlooked. I'm afraid that it's also just going to be considered another part of the plan if it is included. I feel that it

should be a priority.

The affects of climate change have been reported upon extensively by many scientists around the world, and we're finding out, even now, that maybe those predictions are too conservative and that we're going to see effects that are a lot worse than what we thought we had coming, and we thought we had some pretty bad things coming.

So I'm concerned that if we don't put a focus on climate change with this plan, it will be overlooked, and we won't do what's necessary to make sure that the northwest is doing its part.

What I want us to do is make sure that CO2 emissions are a priority, and we need to make sure that we're reducing those to a level that is safe and healthy. I want to make sure that efficiency is done, as well, but done in a way that basically works with reducing our CO2 emissions at the same time.

I want to echo the fact that we can increase efficiency with our systems currently and still use different forms of power generation. I think that those two can work together very well. It's my opinion that if we do not ensure that we reduce the CO2 levels, we are letting down not

only ourselves, but we're letting down our future generations. I want to make sure that's something that does not happen. I hope you will consider this a central focus with the plan, and I thank you for being here tonight. Thanks.

MR. MEASURE: Thank you, Pat. Zack Brown, please.

MR. BROWN: My name is Zack Brown, and I come to you as a private citizen, as a college student. I'm 19 years old. I come to you also as a future father and hopefully a future grandfather. And lastly, I come to you as a native Montanan.

I was raised fishing Montana rivers in the Gallatin Valley, and it's a huge part of my identity. I say fishing because that's the most immediate ramifications of burning coal that comes to mind for me. Climate change can become an abstract issue. But as far as your plan, I say that you need to address not only eliminating -- if you say there will be no need to generate or create new fossil-fuel power plants, but I say we need to be deassembling those and eliminating them from there.

But going back to fishing, there was

recently a study done by the USGS that found that mercury found in fish was a way -- was a much larger problem than ever before recorded or thought. And they found mercury levels at dangerous levels all across the board in the United States, in pristine environments everywhere. And they also stated that the main source of that mercury is from coal-fired power plants.

So I remember vividly when I was 10 or 12 years old my father took me on the Gallatin River. And he raised me as a catch-and-release fly fisherman. That's still something that I practice. But the first time I caught a nice, good-sized brown trout on a catis fly, we took that fish home, and we fried it up and ate it. And that is something that I can vividly remember, to this day, and it's a huge part of my identity, just that love for that fish and that love for that river.

And if you're telling me that you're not willing to address that in its entirety -- and my opinion, it needs to be a priority to eliminate coal. It should never be burned. Because if you're telling me that in 50 years I can't take my

son or grandson on the Gallatin River and eat the trout out of that river because it has high levels of mercury in it, that breaks a part of my soul. I don't know, I mean, that is an inalienable right, in my opinion. And mercury is a neurotoxin. So to me, that needs to be an incredible priority. To me, maybe that's a personal issue, but that's an incredible priority to me.

We -- I would like to leave you with one -- I would also like to address one thing. I seem to be noticing a trend in the energy cooperatives saying that conservation targets are too aggressive. I would say that that is a concern that has in mind their economic well-being in the immediate future, and that should not be a concern that comes into this plan.

When in three generations people are not going to look back and say, was that a good economic choice? Was that -- did that make or lose profit or was that -- that won't even come to mind. What will come to mind is if we left them with clean air and clean water to breath and drink. That needs to be the ultimate, top priority above all else. So, thank you.

MR. MEASURE: Thank you, Zack. Vicki Watson, please.

MS. WATSON: Hi. I'm Vicki Watson, and I am a professor of environmental studies at the university. But I'm here speaking as a Montana citizen and citizen of plant earth. I want to start off with a big thank you to the Council, particularly for pursuing a plan that you say will require no new coal-fired power plants. That's very good news. And I'd like everyone here to use the wind power available to you and blow some kisses to the Council, a little bit of wind power to thank you for a very important first step.

As everyone else has said, we need to go beyond just stabilizing our global warming emissions. We need to actually reduce them. The climate scientists have identified as a safe level of carbon dioxide in the atmosphere at 350 parts per million. We're already at 385 parts per million, so we are violating a global, environmental health standard. All of us together collectively are doing that. And when you're violating what's already been identified as a safe standard, it's time to take really aggressive action to get back down to that safe level.

That means closing coal-fired power plants, the best way to do that. Coal -- the best place for coal is in the ground and not being burned. How do we go about achieving an even-more aggressive conservation schedule than you guys have proposed? I think that we -- obviously, such a more-aggressive conservation program would create green jobs; that's a good thing, but we have to pay for it.

And one possibility, perhaps one you considered, is a revolving loan fund for energy conversation could be used by small businesses and homeowners for their conservation needs, and also for communities that are pursuing serious plans to go carbon neutral and become energy self-sufficient. There are some communities actually working on that. Missoula is doing some talking about it as well.

Where do we get the money for the revolving loan fund? Well, we might pay for it through a pricing structure for energy that identifies that a certain level of energy use is a reasonable level, and that would have one price. And then energy use above that level is excessive and not meeting reasonable conservation standards,

and that should be charged at a much higher price.

Back in the 1970s we realized that we weren't going to clean up the air and water unless we put in place certain treatment standards. The Clean Water Act and the Clean Air Act called for what was called "best available technology." This was a level of treatment that was identified at well-operated industries, whether they were pulp mills or cement plants, or whatever, to produce a given -- to produce a ton of pulp or ton of cement, you shouldn't produce more than X amount of air pollution and water pollution.

We wrote down those treatment standards. They were industry specific. They also applied to municipal sewage treatment plants. We required that those treatment levels be met. We need an energy efficiency act at the national level that also identifies what constitutes best available technology with respect to producing a ton of pulp with a certain amount of energy. And above that, if we were following the model of the Clean Air Act and the Clean Water Act, that they would be fined for using higher amounts of energy to produce a given amount of product. So that would be nice to have national legislation like that.

But perhaps the Council could be a leader with your highly knowledgeable technical staff to research industry specific standards with respect to best available technology to produce a given amount of product with a given amount of energy. And if you do have some powers with respect to pricing systems to, again, charge the lower price for the reasonable amount of energy used and the higher price for the excessive energy use, and use that to fund a revolving loan fund for energy conservation measures in homes, small businesses and communities, again, that are pursuing this idea of being carbon neutral and energy self-sufficient.

Lastly, I just want to mention in connection with our tough economic times, certainly the question gets asked, can we afford to reduce carbon emissions? And the companion question is, can we afford not to reduce carbon emissions?

The Council has analyzed various -- done an analysis of the cost of carbon emissions. Those are real costs, not just speculative costs. So they should be put into the decision mix. I think we need to use those analyses in guiding

utility planning. We need to put the carbon emission cost beside the cost of reducing carbon emissions to show that reducing carbon emissions does make good economic sense.

We're all concerned about the impacts of rising energy costs on low-income users. But the best way to help low-income energy users is to finance conservation measures for their homes and transportation systems, not keep energy prices so low as to discourage serious conservation by middle and high-income users and business users. So those would be my suggestions.

And let's blow kisses to the Council again.

MR. MEASURE: Thank you, Ms. Watson. It's 8:55, and we have four people left on the agenda. Are you okay to go for another 15 or 20 minutes? Thompson Smith.

MR. SMITH: Thanks for having this hearing. Thanks to the Council. My name is Thompson Smith. I'm from Charlo, Montana. I'm a member of the Flathead Basin Commission recently reappointed by Governor Schweitzer. I'm speaking tonight on my own behalf.

Serving on the Flathead Basin Commission

we experience the threat of coal in a different way, a more direct way perhaps. The Flathead Basin Commission has existed for 30 years primarily because of the threat of coal mining and other industrial development in the headwaters of the North Fork of the Flathead River in British Columbia. And the continued demand for coal is, of course, what drives that continuing threat.

So far, we've survived that threat mainly because of the changes in the market, but that's an entirely unstable way to preserve the water quality in the Flathead basin. We continue to search for a solution to that. But, of course, the main solution for coal in Montana, in the Flathead and worldwide, is to leave it in the ground. That's what I'm here to encourage.

I join other speakers in encouraging the Commission not only to seek to stabilize fossil consumption in the region, which I applaud the conservation measures in this plan. It's really admirable. But again, I join other voices in calling for reductions and eventual elimination.

When we say "eventual," I think all of us have to try to put our heads around the kind of threat we're facing. Even people eminently

involved in the study of global warming can fully imagine the threat that's upon us and how quickly it's coming upon us, how short a period of time we have to really deal with this, the urgency with which we have to act.

James Hanson spoke to the University of Montana a year or two ago and said that directly or indirectly that 80 percent of the global-warming threat is due to coal, directly or indirectly. And that's since been backed up by other studies.

Another speaker mentioned that 23 percent of the energy in Montana is produced by coal. 90 percent of the global warming emissions are produced by coal. A recent article, I think in the current issue of Science, the Journal of Science, has now incontrovertibly proven that we're now at CO2 levels that are higher than at any time in the last 15 million years, before ice caps -- permanent ice caps -- existed on the plant. So we may be on the verge of quite dramatic change.

I would call -- join other speakers also in calling on the plan to allow not only for dramatic changes in the regulatory landscape that

Commissioner Gutsche mentioned astutely, but also to at least be able to respond minimally to possible rapid changes in the actual physical environment in relation to global warming. Things may be changing even more quickly than we think. Another one of the young speakers mentioned that seems to be coming through in every scientific report we receive.

I would also add one cautionary note. This has not been mentioned yet tonight. That in the rush to wind energy, which is renewable energy, clean energy is what, of course, is the second priority after conservation. But there really hasn't been mention that there continue to be real problems with birds and bats associated with development of wind energy. That should not be trivialized. It's obviously not as great a problem as global warming.

But in the Judith Gap wind development project a couple of years ago, a ground survey indicated that 1,100 birds and bats were dead underneath that project. That has to continue to be a real concern. Hopefully, there will be better technical solutions to it.

Again, I just want to applaud the

Commission for its focus on conservation, on the development of a far more sophisticated plan than has ever existed and to really join other voices in urging you towards a more urgent, faster reduction in our contributions to global warming. Thank you very much.

MR. MEASURE: Thank you. Steve Loken, please.

MR. LOKEN: My name is Steve Loken, and I have two hats today. One hat is for the Alternative Energy Resource Organization. We have over 850 members in the state, and I have kind of a thing -- I appreciate you guys coming to the outback, by the way. It's not often that you come to rural Montana, so I appreciate your listening to us. And the other hat I had is I'm a citizen and a builder of energy-efficient homes here in the Missoula area.

This first hat will be to testify on behalf of AERO and our membership and how we appreciate the work that you've done in the conservation of movement in this plan. AERO has been advancing many of the things in this plan with conservation and renewables throughout workshops and conferences throughout the state

over the last 28 years. While we applaud your work in proposing the conservation efforts, we think that there is more work on energy efficiency and conservation as well as renewables and decentralized energy production in the state. So that kind of caps what AERO wanted to say to you tonight. We appreciate what you're doing, and we think the conservation plan is a strong one. And we'd like to compliment that by continuing our efforts in the state to let citizens know what's going on. Okay, that hat is off.

Now, I'm putting my hat on as a citizen and a builder. Vicki Watson was trying to blow you guys kisses. But I think -- and you've been applauded a lot for the efforts that you've been doing. But I think more importantly is this region of the United States uses more electrical energy per capita than any other region in the United States, by half. And we do that because the price point and the price stimulus that you've given us in the Pacific Northwest isn't as cheap, and we haven't been able to pay for the true costs of this cheap power.

So while you're trying to promote energy conservation, I'm on the ground every day with my

company and 12 employees trying to do energy conservation retrofits, new superinsulated passive solar construction. And what I see is not very many people geared to understand how to do conservation, builders hungry for the information and not knowing what to do, the public asking and not getting a response, colleges of technologies and University of Montanas around this state not training people to understand how to do audits, energy analysis or on-the-ground, green-job stuff.

Everybody is talking about green jobs, but I'm not getting called by people wanting to working for my company to be able to do that. So the conservation aspect of your plan is a hugely important one. And somehow the state, this state -- by the way, I hope you tell the governor that he needs to keep the coal in the ground and try to train the next generation of people in this state to be able to meet the conservation challenges that you're putting forth, because they're huge. Personally, I don't think they're huge enough. 5,800 megawatts is peanuts; it really is. When you look at how houses and buildings in this state hemorrhage energy, it's unbelievable.

We had a conference and a tour in Helena

two weekends ago in a wastewater treatment plant in Helena. In that wastewater treatment plant -- thank you, by the way, for your demand-side charges. We love those things. When all of those pumps and motors go on at the wastewater plant in Helena, for 15 minutes that peak surge of power, which has to be provided by the utility company, that wastewater plant pays the peak charge for the whole month. I love that, because they get dinged.

And the utility company sees this peak surge and they go, oh-oh, you better be able to provide that amount of power for a long time, not just for 15 minutes. So that penalty charge for the peak power incentivizes the City of Helena has to hire people to come in and do simple retrofits on their pumps and motors: Soft-start motors, variable-speed motors. They save Helena $7,000 a month in energy costs, because it was the incentive of cost, the incentive of peak demand that did that.

So outside of the training and field confirmation of what's going on -- Montana is a unique state. Bob never talked about -- we only have five -- six jurisdictions in Montana that have building codes. And one of the jokes among

the building community here in Montana is, what's black and brown and looks good on the building inspector? It's a Doberman.

But we do not have the infrastructure in this state to do energy codes. Idaho even beat us in energy code legislation, for crying out loud, Idaho. Do you believe this? We can't even get basement insulation in the state up to R-13 for below grade. Idaho beats us out on this. We're not behind the eightball on this one.

But what I'm thinking, is if rural electric co-ops can't get their new buildings on their grid certified -- and by the way, the minute the paint has dried in new housing in Montana today, they're obsolete from an energy perspective. That's just the way it is. We have primitive codes with no certification.

So if there's a way that Bonneville or the utility companies can have a hookup fee, and in that hookup fee new buildings and new business are penalized for the load that they're putting on the grid, if they're not built to a conservation standard, that's one of the ways that we can start today with new construction. And that penalty charge, upon hookup, can go into a fund -- as

Vicki was talking about to help incentivize the -- and, Jim Morton, you might confirm this -- but the last time I heard you say there was 70,000 low-income qualified homes in Montana, I think last year you weatherized 1,800 of them. So there's a huge demand for people on the low end to get better. And the only way to do that is to try to penalize the people that hook up that don't meet decent standards for energy efficiency. Those buildings are going to be there for 100 years. As I said, when the paint is dry, they're already obsolete.

So I would put it to the utility companies that while you're saying you're our provider for juice in this state, we're wanting to buy 1,500 megawatts of conservation power. You need to really put up a stick to that and figure out how to make sure it's done and train -- help train the people.

I, personally, have trained about 12,000 architects, builders and engineers in the region for the Super Good Sense Program, RSTP and RCDP back in the the early mid '80s. I'm too old to remember. But there is a whole bunch of young people that are in the building trades now that

don't have a clue what energy conservation is. I know that program was incentivized early on, and the results of those programs were fielded throughout the region. We need to get that information back out into the hands of the building and construction community. Again, thank you.

MR. MEASURE: Thank you, Steve. Bill Flanery.

MR. FLANERY: My name is Bill Flannery. I want to thank you for giving us the opportunity to speak and also commend your patience in listening to so many of us, but we do have concerns about this plan.

I do think it's a very well-thought-out plan and certainly very good so far as it goes. I too feel that we need to have a more-ambitious goal of reducing carbon emissions and achieving real reduction and not just maintaining the present level.

I'd like to say something about the misconception that some people have about global warming. Because in recent years we seem to have entered a phase of cooling as compared to the increasing global warming that was taking place

there for so long.

But I think we need to recognize that as with most statistical analyses, there will be fluctuations up and down, and we're just in a down phase now. But the long-term trend continues to be up. And as other speakers have pointed out, the level of carbon dioxide in the atmosphere is 385 parts per million, and that is too high. We need -- we, as a nation, as well as a region, need to set an example for the rest of the world. If we expect China and India and other developing countries to get on the global-warming bandwagon and reduce their carbon dioxide emissions, we need to set a good example here. And I hope we can do so.

I would like to make a couple of suggestions. One is that in addition to emphasizing renewable energy sources, we need to also consider some nonrenewable sources that are also free of carbon emissions. I'm thinking, for example, of nuclear power. I think you give rather short mention in the document to nuclear power. I would hope that this would be given more serious consideration.

I was troubled by the suggestion in

there that we want to wait until some other part of the country first develops new nuclear power plants before we try to do that in our region. I don't think we have to wait for others. I think we should go ahead. And while it has taken a long time in the past to get nuclear power into operation, with the new modular designs and simplified designs of nuclear power reactors, that can be done much more efficiently and expeditiously as was the case in previous years.

I also think some of the other potential power sources should be given greater consideration, such as geothermal power, tidal power and others that present very interesting possibilities and are not given perhaps enough emphasis in the plan as it exists.

Again, I do applaud the Council for the plan insofar as it goes, but I do think it would be possible to increase our conservation targets and to make use of other sources such as nuclear and geothermal to complement the renewable sources. Wind and solar, after all, are weather dependent. And to have power sources that are not weather dependent to complement those would be real advisable. Thank you.

MR. MEASURE: Thank you, Bill. Dick Barrett, please, Representative Dick Barrett.

MR. BARRETT: Thank you. I am Representative Dick Barrett. I represent House District 93 here in Missoula. In having survived many legislative hearings, I will be mercifully brief, because I know you're probably about at the end of your rope right now.

You've heard a lot of people urge you tonight to plan not just for no new coal-fired power plants but for a reduction in coal-fired power plants into the future, and I second that. But to be realistic about it, I don't know whether it's really in your power through the planning process to achieve that.

I think probably we all know that ultimately there's going to be -- we're going to need legislation. We're going to need political will and legislation at the state level and at the national level, and even internationally, in order to achieve reductions in carbon emissions at the level that we need to achieve in order to stabilize the climate. We're not there yet, and it is a highly-contested process, a very highly-contested process.

If you think of nothing else, just imagine what you would be hearing in Miles City tonight about coal as opposed to what you're hearing about coal in Missoula. It's going to be, as I say, a highly-contested process. And I think that the role of planning in that process is to give us some kind of a road map, so that as we struggle with these issues in the public policy arena, in the legislatures, with the governor or with the great multiplicity of interests that are involved here, that we know how we can get where we need to be. And I think that you can provide an invaluable service to us by planning, by creating that road map, by showing us how, indeed, we get to where we need to be. Thank you.

MR. MEASURE: Thank you for your comments, Representative Barrett and your sympathy. But I can assure that these meetings are scintillating as compared to an actual Council meeting.

Do we have anyone else that wants to comment tonight? Is there anyone else that's signed up? Is there anybody who would want to speak that isn't signed up who would want to sign up?

We greatly appreciate your coming tonight. I think I can speak on behalf of my fellow Council Members that we are very excited about the students who have come and testified. We're really glad that you have shown an interest in this process. And we're glad that you've all shown an interest in this process, so thanks for coming.

Again, we will consider all of your information that you have given us. And remember that your comment period closes on November 6th. Thanks again.

(Thereupon, the hearing concluded at 9:15 p.m.)

C E R T I F I C A T E

STATE OF MONTANA) : SS. County of Missoula)

I, David E. Hix, ASCR, Freelance Court Reporter and Notary Public for the State of Montana, residing in Missoula, Montana, do hereby certify:
That I was duly authorized to and did report the testimony and evidence in this cause;

That the foregoing pages of this public hearing constitute true and accurate transcription of my stenotype notes.

I further certify that I am not an attorney nor counsel of any of the parties; nor a relative or employee of any attorney or counsel connected with the action, nor financially interested in the action.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this the 26th day of October, 2009.

David E. Hix, ASCR
Freelance Court Reporter,
Notary Public, State of Montana
Residing in Missoula, Montana.
My Commission expires: August 1, 2013