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NORTHWEST POWER AND CONSERVATION COUNCIL



Public Hearing on the draft Sixth Power Plan
Eugene, Oregon
September 28, 2009, 6:00 p.m.

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APPEARANCES

Board Members

Melinda Eden - Chairperson
Joan Dukes - Council Member

NWPCC Staff

Terry Morlan
Gillian Charles
Sandra Hirotu
John Harrison
Steve Crow
Leann Bleakney

Public Testimony in Order of Appearance

Samantha Chirillo

Citizens For Public Accountability

Roman Gillen

Consumers Power

Bill Welch

Eugene Water & Electric Board

Mark Robinowitz

Private Citizen

- 1 Brenda Kameenui
- 2 **Private Citizen**
- 3
- 4 Mike Shiner
- 5 **Private Citizen**
- 6 Pam Hewitt
- 7 **Emerald People's Utility District**
- 8
- 9 John Steele
- 10 **Friends of Dorena Dam**
- 11 Joan Ernst
- 12 **Eugene Water & Electric Board**
- 13
- 14 Sandra Bishop
- 15 **Private Citizen**
- 16
- 17 Tom Bowerman
- 18 **Policy Interactive**
- 19
- 20 Ruth Duemler
- 21 **Private Citizen**
- 22 Nick Engelfried
- 23 **Private Citizen**
- 24
- 25

- 1 Liz Veazey
- 2 **Private Citizen**
- 3 Roger Hamilton
- 4 **Private Citizen**
- 5
- 6 Katherine Philipson
- 7 **Power Shift West**
- 8 Zachary Stark-MacMillan
- 9 **Cascade Climate Network**
- 10
- 11 Cat Koehn
- 12 **Private Citizen**
- 13 Greg Gardner
- 14 **Blachly-Lane Electric Cooperative**
- 15
- 16 Karl Mueller
- 17 **Private Citizen**
- 18
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1 **Public Hearing on the draft Sixth Power Plan**

2 **Eugene, Oregon**

3 **September 28, 2009, 6:00 p.m.**

4

5 **MS. EDEN:** It's a little bit after 6:00,
6 so let's get started. This is a public hearing on
7 the draft Sixth Power Plan that has been put out by
8 the Northwest Power and Conservation Council. My
9 name is Melinda Eden. I'm one of the two Oregon
10 members of the Council and chair of the Power
11 Committee as well. My other Oregon colleague, Joan
12 Dukes, is on my right. We have some staff members
13 here from the Council. Terry Morlan is on my left.
14 He is the power planning director. Gillian Charles
15 runs the power planning division for all intents and
16 purposes. Our legal representative, Sandra Hirotsu.
17 And in the back in the blue shirt is John Harrison
18 from our public affairs division, and next to him is
19 Steve Crow who is the Council's executive director.

20 So I want to welcome you all here this
21 evening. We appreciate your interest in the draft
22 Sixth Power Plan, and the purpose of this meeting,
23 of course, is to hear what you have to say about it.
24 I have a statement that must be read at the
25 beginning of each of these series of public

1 hearings, so bear with me just for a moment.

2 Welcome, again, to a public hearing held
3 by the Northwest Power and Conservation Council on
4 the Council's proposed Sixth Northwest Power Plan.
5 The Northwest Power Act directs the Council to
6 develop a regional conservation and electric power
7 plan and to review that plan every five years. The
8 Council is now engaged in its latest five-year power
9 plan review. As part of this effort, the Council
10 released a draft revised power plan on September 3rd
11 for public review and comment.

12 The Council will be taking written comment
13 as well as these public hearings on the draft Power
14 Plan until November 6. The Council will also hold
15 public hearings like this one on the draft plan in
16 all four Northwest states over the next six weeks.

17 If you would like to comment at this
18 hearing, please sign in on a sheet at the table
19 outside provided for this purpose. You may also
20 leave written comments with us if you wish. Your
21 comments will be recorded, they will be placed in
22 the Council's administrative record for the power
23 plan review, and, most importantly, considered
24 carefully by the Council as it makes its decisions
25 on the final power plan later this year.

1 For more information on the proposed Sixth
2 Power Plan itself, including the text of the draft
3 plan itself, please visit the Council's website at
4 www.nwcouncil.org. You may submit comments by using
5 the "how to comment" link on the web page devoted to
6 the draft Power Plan. Thank you very much, again,
7 for coming.

8 On the agenda this evening, besides your
9 testimony, is a brief overview of the power plan
10 which is about 600 pages long. The overview is not;
11 the power plan is. And Terry Morlan will give that
12 brief overview, and then we will take testimony from
13 those folks who have signed up. At the end, I will
14 ask if someone would like to testify who has not
15 signed up if we have enough time. We have until
16 8:00. So, Terry, would you give us the overview,
17 please?

18 **MR. MORLAN:** Good evening. I would like
19 to add my welcome to all of you. Thanks for coming.
20 This is a very brief overview. And the computer has
21 gone to sleep, but it will wake up, hopefully,
22 shortly. Here we go.

23 The goal of the Council's power plan is to
24 recommend a low cost and low risk future for the
25 power system, and we're trying to provide an

1 adequate, efficient, economic, and reliable power
2 system that -- the words in the Northwest Power Act
3 that guide our work in trying to plan and provide
4 that in the future, while at the same time,
5 supporting the implementation of the Council's fish
6 and wildlife program.

7 I'm going to very quickly go through some
8 of the key findings. First, energy efficiency.
9 That's really the big -- the big news in this plan.
10 Energy efficiency is the lowest cost resource, and
11 this plan can potentially meet about 85 percent of
12 the region's electricity needs in the future. And -
13 - we've got a droopy microphone here. And
14 conservation also has the advantage of being a low
15 risk resource because it doesn't have risk
16 associated with potential carbon, pricing policies
17 or effects, it doesn't have fuel price risk
18 associated with it. And so it has a lot of
19 advantages in terms of avoiding risk. It also
20 contributes both to energy needs and to peaking
21 needs, and it creates local jobs and economic
22 activities. So that's the big finding.

23 With renewable generation as the second
24 source of energy, the plan recommends that wind is
25 competitive in cost with other resources. It's

1 required to meet the state Renewable Portfolio
2 Standards, and maybe there will even be some
3 national ones someday, I don't know. They avoid the
4 risk of fuel prices, renewables, and they avoid
5 carbon risks, so they have those advantages as well.
6 But wind itself is variable in output, and it
7 creates difficulties in operating the power system,
8 so we have to understand what the overall
9 requirements are for a variable resource like wind,
10 and there's a lot of actions in the plan that try to
11 deal with that and improve our ability to integrate
12 wind.

13 Natural gas up here would be the third
14 alternative that may be needed in some future. And
15 it has price risk, but it also has lower carbon
16 emissions than coal, so it's the next most
17 attractive thing, at least in the near-term, until
18 we can identify some other opportunities, new
19 resources, change in technology that might allow us
20 to avoid even that use of natural gas.

21 A little bit behind on the clicker here.
22 In terms of carbon risk, we spent quite a lot of
23 effort in this plan to address carbon risk and what
24 that means for the region. Some of the key findings
25 are that coal plants, for example, provide in this -

1 - in our Northwest region about 20 percent of our
2 energy supply, but, on the other hand, they produce
3 over 85 percent of the carbon emissions, and so it's
4 pretty clear they're a major concern -- major
5 contributor to carbon emissions. We illustrate
6 several different approaches to how you can reduce
7 carbon in the region in the plan, and we provide
8 that information and the information about what the
9 cost of those approaches are and how effective
10 they'll be. So, basically, we understand that if
11 you're going to reduce carbon emissions
12 significantly from the power plan -- the regional
13 power system, it's going to involve less use of
14 coal, and that means probably -- if we replace coal
15 quickly, it would mean you would have more gas-fired
16 resources in the short-term at least.

17 So the five-year action plan calls for
18 acquiring a significant amount of conservation,
19 1,200 megawatts over the next five years of
20 conservation; developing renewable resources that
21 are required to meet the Renewable Portfolio
22 Standards; and if there's additional generation
23 needed to provide capacity or flexibility to
24 integrate wind, natural gas appears to be the best
25 alternative at this point. At this point we also

1 have actions in the plan to address ways to improve
2 the power system so that it can integrate more wind
3 and it can meet peak loads, and it can provide the
4 kind of flexibility you need to integrate
5 renewables.

6 We also call for research and
7 demonstration on new technologies, things related to
8 Smart Grid, for example, that have potential for not
9 only improving the way the power system operates,
10 but will help integrate wind and may help bring the
11 customers into the solution to the power system, as
12 opposed to it all being done by utilities from up
13 above.

14 So that's a very brief overview. You know
15 that you can comment at hearings because that's why
16 you're here, but there's a link to the Council
17 website. And so now it's time for us to hear from
18 you.

19 **MS. EDEN:** Terry, thank you very much.
20 With that, I will call the people who have asked to
21 testify in order of their sign-ups. And would you
22 please spell your name and help me with the
23 pronunciation because some of these are -- I'm sure
24 I'm going to mispronounce, so I appreciate you
25 correcting me. And, also, we have a court reporter

1 who would appreciate the spelling. She will get
2 these sheets as well. We want very much to hear
3 what you have to say. We appreciate your interest.
4 We hope you will not be repetitive with one another,
5 and we would like to hear all of your ideas.

6 And with that, I will begin with -- and,
7 I'm sorry, I can't pronounce the first one --
8 Samantha Chirillo. How did I do with your name?

9 **MS. CHIRILLO:** Chirillo.

10 **MS. EDEN:** Chirillo. Would you spell it,
11 please, when you begin your testimony, for the
12 record?

13 **MS. CHIRILLO:** Sure. It's C-h-i-r-i-l-l-
14 o. And I live at 3930 East 17th Avenue, Eugene,
15 Oregon 97403. Did you say three minutes?

16 **MS. EDEN:** About five minutes, I think,
17 judging from the number of folks we have signed up.

18 **MS. CHIRILLO:** Okay.

19 **MS. EDEN:** Thank you.

20 **MS. CHIRILLO:** I'm here this evening
21 representing Citizens For Public Accountability.

22 And what I have to say is that any energy
23 plan must put conservation first, and, I would
24 argue, even more so than the plan currently does, as
25 well as making drastic reductions in greenhouse

1 gases even more so than is proposed currently. We
2 don't have another five years to wait on this, and
3 we know that from all the climate science that has
4 come out telling us that we could already be past
5 the point of having catastrophic climate events.
6 That means not only do we need mitigation, but we
7 need to take steps that are enabling us to adapt.
8 That includes not jumping from fossil fuel sources
9 to other sources that may have very adverse impacts
10 to our local climate like forest biomass burnings.
11 I'll come back to that.

12 While we support the goal of a coal-free
13 Northwest, we -- as I said, we oppose the
14 substitution with either other fossil fuels such as
15 natural gas, liquified natural gas, or with biomass
16 burnings. It's important to have -- to be a leader,
17 I think, in becoming coal-free. I was reading an
18 article today that -- from the early '80s, and it
19 was a time when the Boardman Plant was shut down,
20 and the article was concluding that it wasn't a
21 problem that people didn't have power at that time
22 in Oregon as a result. The problem was that we
23 weren't, like, meeting our agreements with
24 California. And so I think it's really important
25 for us to think about what we want for energy future

1 to be renewable -- really renewable, and not to go
2 over the cliff with other states that are less
3 willing to really take a hard look and put
4 conservation first.

5 We oppose forest biomass burning for
6 energy because it relies on unacceptable forest
7 practices such as clearcutting and the use of toxic
8 pesticides which poison rural residents. Forest
9 biomass burning also pollutes the lowest income
10 communities, it's an environmental justice issue,
11 and it threatens to accelerate deforestation.
12 Forests die off that is caused by climate change and
13 also decades of unsustainable logging practices. We
14 already see in the Northeast that timber companies
15 are harvesting mature trees to burn in these
16 facilities. We already see the impacts of air
17 pollution. And I understand your report more than
18 really pushes forest biomass, makes -- kind of puts
19 it out there for local communities to consider, but
20 I do not think that it should be -- it should be
21 viewed as an acceptable substitute.

22 We really need to make a real concerted
23 effort, and we have the technology, we know what it
24 takes. We need community-building. We need
25 motivation. We have the technology. We have a

1 crisis. Let's do it together -- the rest together.

2 **MS. EDEN:** Thank you. Next, I believe, is
3 Roman Gillen. And our first witness has reminded me
4 that I would like you to introduce yourself again,
5 please, and identify any group that you're
6 representing, and then spell your last name for the
7 record.

8 **MR. GILLEN:** Sure. Thank you.

9 **MS. EDEN:** And please correct my
10 pronunciation.

11 **MR. GILLEN:** No, that was right. Roman
12 Gillian with Consumers Power in Philomath, an hour
13 north. I represent Consumers Power, and also PNGC
14 Power in Portland. That's our wholesale power
15 manager. I don't remember if I gave you the
16 spelling of my name.

17 **MS. EDEN:** Sure.

18 **MR. GILLEN:** G-i-l-l-e-n.

19 **MS. EDEN:** Thank you.

20 **MR. GILLEN:** Just a couple of comments.

21 We feel that the draft plan is a good effort overall
22 and accomplishes a great deal of things,
23 incorporates a lot of different viewpoints. One
24 concern that we have is the heavy reliance on
25 conservation. We're pleased that the Council

1 included in there a range of conservation targets,
2 and it is admittedly an aggressive target for the
3 region to reach, and one concern is that an
4 overreliance on any particular resource can lead to
5 some problems. So even in terms of renewables, a
6 lot of mention of wind resources. And while wind is
7 certainly a popular one and one that is in abundance
8 and can meet a great amount of our need for power,
9 we encourage the Council to consider and include a
10 wide variety of renewable resources which are what
11 we have in the Northwest. You know, any gas that we
12 bring in tends to be imported, so reliance on
13 resources that we have within the region, but I
14 guess the thing I'm wanting to stress is the
15 diversity of those resources, too. So thanks.

16 **MS. EDEN:** Thank you very much. Next is
17 Bill Welch. I think I got that one right.

18 **MR. WELCH:** That one's tough. But you'll
19 be amazed how many people get it wrong. So I'm Bill
20 Welch, and that's W-e-l-c-h. I'm the manager of
21 EWEB's energy and management services department,
22 and I'm here representing EWEB.

23 So I just want to thank you for allowing
24 us to comment on the power plan, and we'd like to
25 thank you two in particular for supporting the

1 conservation targets in the last meeting, and, you
2 know, it didn't quite make it through. And we'd
3 also like to acknowledge and thank the Council staff
4 for creating a plan that makes conservation the
5 highest priority resource.

6 So like the Council, EWEB's current and
7 past energy resource plans have placed conservation
8 as the highest priority resource, and that's been
9 followed by renewables and cogeneration. We've been
10 at the forefront of acquiring energy conversation
11 for many years. We've had conservation programs
12 since the late 1970s, and our conservation programs
13 have spanned all of the power plans from the very
14 first one. We've acquired about 60 average
15 megawatts of conservation in a relatively small
16 service territory. Our average load's about 320
17 megawatts, so we think that's pretty significant.
18 Like the Council, we think it offers the lowest cost
19 option for our customers, and it saves them money.
20 We have programs for low-income people who really
21 need that money to be saved from their energy bills.
22 It reduces the cost -- the exposure to power
23 fluctuation, and it gives us local jobs and keeps
24 the money in the community. We've had comments from
25 local contractors that our programs have kept them

1 alive and in business through some of the economic
2 downturns. So I think it's good testimony for the
3 power of conservation, but also is probably the most
4 direct way of reducing greenhouse gas emissions, so
5 it's hard to find a downside to going after
6 conservation as the primary resource.

7 Despite that being obvious to all of us,
8 it hasn't always been easy. We have had to go to
9 our past boards and our current board and ask for
10 them to approve budgets that include significant
11 expenditure for conservation. In the past dozen
12 years, we have expended over 5 percent of our gross
13 revenues on conservation each year, so we think
14 that's probably unprecedented, pretty much, anywhere
15 in the country. We've also maintained a really large
16 energy management staff to help our customers for
17 the last three decades, and right now we have almost
18 40 people in a conservation department in a staff
19 that's slightly less than -- in a company slightly
20 less than 500 people. So it's a significant
21 investment in conservation.

22 We agree with the staff assessment that
23 there's a large amount of conservation in the
24 region. Our experience in our own service territory
25 tells us it's there, and we believe that the

1 Council's role is to set an aggressive target, so
2 just as we have done, the various regional agencies,
3 organizations, and utilities will set equally
4 aggressive targets and fund the programs and staff
5 the programs.

6 There's been a lot of discussion and
7 debate about the conservation targets for the sixth
8 plan. I don't think that EWEB is in a position to
9 say whether there's a 1,000 average megawatts,
10 1,100, 1,200, 1,400. We know there's a lot of
11 conservation out there. We're currently in our
12 current plan, our conservation potential assessment,
13 and we're aware of the uncertainties, and Council
14 staff has expressed the uncertainty of that. We
15 appreciate that the Council acknowledges the
16 uncertainty and is willing to take a time-out
17 midstream in the five-year action plan to reassess.

18 While we support the overall direction and
19 the targets, we have an area of concern for EWEB.
20 Because of our long history of aggressively
21 implementing conservation even when others didn't,
22 we're concerned about how our 60 average megawatts
23 will be accounted for when Bonneville allocates
24 targets for us in the post-2011 conservation
25 program. We have seen in some of the discussions

1 leading up to the post-2011 work that they're going
2 to rely heavily on the conservation -- on the
3 Council's calculator to do the allocation, so if the
4 calculator doesn't adequately account for past
5 conservation like the conservation that we've done,
6 we're concerned that it's going to possibly unfairly
7 disadvantage us and penalize us for doing the right
8 thing over all those years. It's also going to make
9 it difficult to reconcile the bottom-up approach
10 required by post-2011 in Bonneville's plan with the
11 topdown approach that the Council has taken. So we
12 think there's significant resource remaining, but
13 we're already pretty deeply into our resource stack.
14 We heard testimony from someone, a utility in
15 Washington, they had three paper mills and they had
16 gotten about 5 average megawatts from them, and they
17 didn't think there was any more, and we've gotten 5
18 average megawatts out of one. So that's -- I mean
19 that's not that -- you know, to be smug, but it's
20 saying we're sort of deeply into this. We don't
21 want to be unfairly disadvantaged for our leadership
22 role over the past 30 years, so that's our main
23 concern.

24 And, otherwise, we support the targets
25 and, again, support your support as Oregon council

1 members for sticking with that aggressive target.
2 We are planning on submitting written comment as
3 well, so we'll provide more details in that comment.
4 Thank you.

5 **MS. EDEN:** Thank you very much. Next is
6 Mark Robinowitz.

7 **MR. ROBINOWITZ:** And you've got the
8 pronunciation right.

9 **MS. EDEN:** Thank you.

10 **MR. ROBINOWITZ:** Mark Robinowitz, M-a-r-k
11 R-o-b-i-n-o-w-i-t-z, and I'm representing myself.

12 As a user of solar electricity for nearly
13 two decades, I have a few perspectives to share.
14 The only magazine I still subscribe to is Home Power
15 which is published in Ashland, Oregon which talks
16 about how to encourage local use of renewable
17 energy, but I'm not a member of any environmental
18 group anymore. I'm sympathetic with their concerns,
19 but not their math.

20 Coal is, of course, the dirtiest burning
21 fossil fuel that there is. We're blowing up whole
22 mountain ranges for it. The tailings poison
23 countless streams. The digging of fossil carbon
24 that took eons to accumulate is bad for public
25 health, climate stability, and shows a

1 shortsightedness that is causing mass extinction of
2 life. That said, there are no simple substitutes
3 for burning coal if we want the electric grid and
4 overconsumption. The reason we use fossil fuel is
5 not that these companies are callus, but that fossil
6 fuels are more concentrated than alternatives. Coal
7 runs half the western grid, the eastern grid, and
8 the Texas grid.

9 Solar and wind are great. I use them.
10 But their intermittent nature makes it difficult to
11 balance the demand on the grid, and it would help
12 for the environmentalists to study that in their
13 rhetoric. The Sierra Club, in particular, has long
14 supported increased use of natural gas for
15 electricity even though the peak of U.S. natural gas
16 production was 1973, shortly after the peak of U.S.
17 oil extraction in 1970. Natural gas in Alberta is
18 peaking now, so we're not going to be able to
19 increase natural gas for anything, let alone
20 electricity. Alberta is a lot colder than the rest
21 of the U.S., and they're concerned about export of
22 fuel that heats their cities in the winter. And
23 Alberta is diverting a lot of their own natural gas
24 to fuel tar sand extraction which is the world's
25 largest strip mine. New natural gas projects in the

1 U.S., called shale gas, are providing a short-term
2 boost in U.S. natural gas supplies, but at tremendous
3 environmental cost. Huge amounts of toxic waste are
4 injected into ground towards any groundwater.
5 That's not acceptable.

6 Biomass combustion for electricity is
7 inefficient, toxic, and threatens to accelerate
8 deforestation. Despite the promises of the
9 industry, burning trees for electricity threatens to
10 liquidate millions of acres of forest owned by
11 timber barons who cut land faster than forests can
12 regenerate, and it would provide new efforts to
13 clearcut now that real estate markets for building
14 condos in the desert have collapsed. Some
15 promoters, paid and unpaid, for burning trees for
16 electricity claim that the northwest is the Saudi
17 Arabia of wood, which is true because Saudi Arabia
18 is passing its peak in production, just as the
19 Northwest peaked in wood production many years ago.
20 What remains is fragmented.

21 Conservation and efficiency is not the
22 resource, but it is the best way to temporarily
23 reduce stress on the grid and resource depletion
24 issues. Why is it still legal to light billboards
25 at night? Why do we still aim lights up into the

1 sky? Why is that legal? Why is that not a felony?
2 Even this building does that. That's crazy. People
3 are going to look back in the future and ask what we
4 were thinking. And if our local utility, EWEB,
5 really took these issues seriously, they would not
6 have spent \$85 million in public debt to pave over
7 the west Eugene wetlands with a new edifice complex
8 that they're building, and they would not be
9 planning to relocate their headquarters, built at
10 great expense, also to the wetlands. Now, EWEB does
11 do more for conservation than most utilities, but
12 the scale of the energy crisis is far greater still,
13 and EWEB's new support of clearcutting forests for
14 low-grade fuel is a giant step backwards for the
15 utility, and it leads many to question the integrity
16 of their green power program.

17 We need to include both issues of carbon
18 emissions and resource depletion, since trying to
19 solve one without the other makes them both worse.
20 Trying to deal with resource depletion led us to tar
21 sands, liquid natural gas, shale gas, and
22 mountaintop removal for coal. But if we're not
23 honest about the reduction of concentrated fossil
24 fuel resources and ways to greatly reduce
25 consumption, we're not going to be able to gently

1 reduce it. There's a mean floating out there that
2 we need to reduce fossil fuel use over the next few
3 decades for a stable climate. We're going to do that
4 whether we plan for it or not because we cannot burn
5 fuel that does not exist. A study I would like to
6 submit for the record from the Energy Watch Group of
7 Germany estimates that peak for coal globally is
8 somewhere in 2020, maybe 2025. We do not have 200
9 years of coal, just like we don't have 200 years of
10 natural gas.

11 And, finally, a comment on nuclear power,
12 which is still legal at Hanford, Washington. What
13 is the best documented way to cause cancer?
14 Radiation. The byproducts are lethal for centuries
15 and millennia, and we are no closer today to
16 figuring out how to detoxify them than we were
17 during the Manhattan Project. Future generations of
18 people are going to have to be nuclear baby-sitters
19 to safeguard our generation's nuclear trash. And
20 the real health threat is not even cancer, but it's
21 long-term genetic damage for future generations of
22 human beings and other species.

23 Whatever energy plans are made after peak-
24 everything, they need to consider a consideration of
25 a contracting economy, both regionally and globally.

1 After decades of warnings, we have finally reached
2 the limits to growth on a finite planet. Mitigating
3 overshoot is likely to be the greatest challenge the
4 human race has ever faced, and the efforts for
5 efficiency and renewable energy are admirable, but
6 it is reasonable to conclude that circumstances are
7 going to unfold much faster than these plans can
8 assume. So if you want to turn off the coal and the
9 natural gas, I agree. Let's stop lighting the
10 skyscrapers at night. Let's change the way we live.
11 Let's tear up the parking lots and grow food so that
12 when the fossil fuels are gone, we have a stable
13 society, rather than a collapse.

14 **MS. EDEN:** Thank you very much. The fifth
15 is Brenda Kameenui. Help me with that, please.

16 **MS. KAMEENUI:** Brenda Kameenui, K-a-m-e-e-
17 n-u-i.

18 **MS. EDEN:** Thank you.

19 **MS. KAMEENUI:** I'm a citizen. I'm
20 interested, first, in having the Council launch a
21 very rigorous scientific study about biomass before
22 launching wholesale into that industry. I'd be very
23 careful to not step too quickly into it. I'm also
24 interested in compensating businesses and
25 individuals for conservation in such a way that

1 encourages skyscrapers to turn off lights, to turn
2 off lighting of billboards -- we can name any number
3 of things, but the compensations given may produce
4 greater savings than must be expended. I think EWEB
5 has done that in many cases. And encourage the
6 acceleration of coal -- stopping coal plants sooner
7 than later, and perhaps the conservation efforts
8 could help that -- help balance that more quickly.
9 Thank you.

10 **MS. EDEN:** Thank you very much. Mike
11 Shiner.

12 **MR. SHINER:** You said it correctly. My
13 name is Mike Shiner, S-h-i-n-e-r.

14 Just quickly, I moved here probably a
15 little more than a year ago. I think a significant
16 thing that needs to be included as we look at the
17 plan -- I came from Tennessee, by the way, not very
18 far from where the disaster was from the coal plant
19 that was there. I think what we lose -- in some of
20 the price models that we put in, we always include
21 risk in those models, and the risk that we miss is
22 the cost that it -- the cost for us to clean up
23 things that happen like that disaster. So I would
24 submit to you that the renewables and the costs for
25 renewables are far more worth the expenditures and a

1 higher rating on the risk chart for us to spend
2 money to resolve those solutions than submit to what
3 might be a potential risk and turns into a long-term
4 expense for us. And that's all. Thank you.

5 **MS. EDEN:** Thank you. Pam Hewitt.

6 **MS. HEWITT:** Pam Hewitt with Emerald
7 People's Utility District here in Eugene.

8 Overall, EPUD, who has also been very
9 active in both the conservation and the renewable
10 acquisition realm over the last 25 years, supports
11 the plan and supports the Council's priorities in
12 the order in which they are identified;
13 conservation, renewables, and the firming of the
14 federal system in order to support further
15 integration of conservation and renewables.
16 However, we share the same concern as expressed by
17 some of the other utilities here this evening which
18 is ensuring an adequate allocation of the
19 conservation goals and objectives from the regional
20 level. We too have a strong history of achieving
21 conservation at a relatively high cost and at a high
22 staffing and investment level from the -- from our
23 consumer's perspective, and we wish to be adequately
24 compensated for that in the setting of goals into
25 the future. In other words, our customers have

1 already paid above and beyond the regional share of
2 achieving that resource, and we're willing to
3 continue along in that effort, but must do so
4 protecting our customers in the future. So we
5 appreciate the balance and the diversity identified
6 in the plan in specifying both the supply and the
7 demand side resource. We too have a history of
8 dedicating 3 percent of overall revenue towards the
9 pursuit of both conservation and renewables, and we
10 have done this in light of a lower cost resource
11 which was Bonneville's federal system, and so we
12 just need to protect our customers' investment in
13 that effort moving forward.

14 Just to put it in perspective, I think
15 that the conservation goals identified in the plan
16 are very aggressive and call for achieving over
17 1,000 average megawatts in a four-year period when
18 we have not been able to achieve that in the past
19 ten years, so that's something that's going to take
20 an effort, not only by the utilities and by the
21 third-party contractors that'll be required to
22 achieve that resource, but also our customers. And
23 our customers, we're going to need to build broad
24 consensus among the region in order to achieve that
25 level of conservation, achieve that level of

1 behavior modification, not only in the short term,
2 but in the long-term, so it's going to take nothing
3 shorter than an effort to get there, but we're on
4 board.

5 I want to talk a little bit about base-
6 load renewables. I think the plan tends to,
7 perhaps, underestimate the public consensus that
8 might be required in order to achieve a conversion
9 and an adoption rate on some of the more
10 controversial renewables. You have heard this
11 evening some concerns about biomass. They're not
12 limited to biomass. We see some public outcry
13 regarding the ocean resource, geothermal resources.
14 And so I encourage the Council to embrace these
15 issues and to assist the region in coming to a
16 better understanding of not only the benefits, but
17 the risk associated with these resources so that we
18 can clearly quantify them, address them, and get
19 beyond them.

20 Lastly, I just wanted to mention the plan,
21 I believe, has, in some regards, underestimated the
22 cost associated with integration and transmission of
23 the renewable resources, and as we move -- as the
24 plan adopts a more aggressive stance towards carbon
25 -- the cost of carbon and the more carbon-emitting

1 resources are taken offline, I think we'll see a
2 replacement with much more intermittent renewables,
3 and the costs associated with firming those
4 resources and transmitting those resources, I
5 believe, is -- might need to be examined a little
6 more closely. So, with that, thank you very much.

7 **MS. EDEN:** Thank you. Next is John
8 Steele.

9 **MR. STEELE:** You caught me busy writing
10 notes down with that. John Steele, S-t-e-e-l-e,
11 Friends of Dorena Dam.

12 My concern is several. I too recognize
13 the efficiency and the extreme that this plan has
14 been pushed -- and reduction of carbon emissions and
15 pushed towards renewables, but with any plan,
16 there's hidden costs that are not seen and hidden
17 advantages that are not known. For example,
18 conservation in the past has been based upon the
19 cheap price of electricity. There was little
20 motivation. The motivation we have today, I have a
21 friend that's building a zero-energy house. There's
22 no -- there's not going to be any energy in it for
23 heating. It's a house design that's very prevalent
24 in Minnesota. So that is possible. What is
25 difficult is if a person can afford it. But there

1 is no plan for the consumer to know, you know, can I
2 get reimbursement for that energy saved? Can I get
3 reimbursement for all the less CO2 that I'm going to
4 produce in the future? If he dies and sells the
5 house, how long does it live? Etcetera, etcetera.

6 The other problem -- or concern I have is,
7 currently, I am in the process with the State of
8 Oregon over a proposed hydroelectric project on
9 Dorena Dam, and this looks green, but as a person
10 who has a biology degree and lived on the river for
11 20 years, what has happened is -- as you go to these
12 green resources, a word of caution is make sure that
13 the numbers have been done correctly. It turns out
14 mercury that's being released by this dam, according
15 to the Department of Environmental Quality, in one
16 year actually happens in three and a half days.
17 Five miles downstream is the Cottage Grove drinking
18 facility for their water, their sole source. So you
19 -- and so you've got some problems about going to,
20 "Oh, that's green. Let's just jump on board." So
21 there's those kind of issues that you are not
22 foreseeing, perhaps, yet at the same time, you have
23 these efficient houses being built.

24 Another problem is you notice that you're
25 going to adhere to the current management plans of

1 fisheries. This particular project ignored the
2 Northwest Power Planning Commission's recommendation
3 of the full mitigation of reestablishing the salmon
4 run at this dam. There is no -- the trigger that
5 was supposed to take place did not take place. The
6 dam was not even going to consider -- or the
7 construction of the refit of the hydro is not even
8 going to consider the fish passage issue which
9 should have been an automatic trigger. So it
10 essentially was going so fast to green, it didn't
11 look at the mercury, it didn't follow the rules, it
12 obstructed or ignored three management plans with
13 the salmon involved, so there is a lot there.

14 Let's see. What else has been bothering
15 me. I'd like for you to stay with the analysis that
16 you're using. I think you need to broaden it. I
17 think if you look at, again, this future cost to
18 prioritize the CO2 emissions, perhaps natural gas is
19 not the answer, but is a stopgap that would hold us
20 away from coal until we do things like Kendall
21 Toyota. The whole building is wired in solar.
22 They're off-grid. I have several friends that are
23 off-grid. I think that will do it. Thank you.

24 **MS. EDEN:** Thank you very much. Joann
25 Ernst.

1 **MS. ERNST:** Joan Ernst. That's E-r-n-s-t.

2 And although I am an EWEB commissioner, I'm here
3 this evening speaking as a citizen.

4 I'm very encouraged by this plan and the
5 bold steps it takes to move away from coal and into
6 the use of clean alternatives and recognizing that
7 conservation can meet almost all our future growth
8 in the region. I applaud the Council for their hard
9 work on this plan. I do agree with the Northwest
10 Energy Coalition, though, that the results from
11 their two reports, the "Bright Future" and "The
12 Power of Efficiency", should have been included in
13 this draft; specifically, results that show it would
14 cause very small increases in rates to retire
15 regional coal plants and remove the lower four Snake
16 River dams to enhance the fish recovery.

17 Also, I'd like to see the plan address a
18 reduction in greenhouse gases, and not just
19 stabilization. I say this because the plan does
20 include the possible use of all available resources,
21 including nuclear, and advanced coal, and liquified
22 gas, and others. If these options are not removed
23 and end up being used, it will not stabilize
24 greenhouse gas emissions, but could conceivably
25 drive them up. So I would like those removed from

1 the plan.

2 In Chapter 4 on Page 1, you define
3 "conservation" in that plan, and it says, "The
4 Council defines conservation as improved energy
5 efficiency. This means that less electricity is
6 used to provide the same level of services." Well,
7 that's all good in the way that we are currently
8 living in our society, but what I would really like
9 to see in the plan is something about reduction of
10 energy use, and I'd like the plan to expand on what
11 that means, that conservation could mean using less
12 energy, and what a cost estimate would look like to
13 go along with that.

14 In the summary part on Page 1, the plan
15 states, "The Council expects that there are small-
16 scale resources available at the local level in the
17 form of cogeneration or renewable energy
18 opportunities." As Pam pointed out -- Pam Hewitt
19 pointed out a little while ago, this is the only
20 place in the plan that I really see mention of that,
21 and I would like to see this expanded on in the plan
22 with a better understanding of how much the Council
23 actually expects the small-scale resources to be and
24 maybe some cost estimates and other things that go
25 along with what those alternatives are. And I am

1 against the continuation of biomass, burning of
2 wood, being in -- continuing to be in these plans
3 and cutting our forests down to generate
4 electricity.

5 And, lastly, although it is a -- I think
6 it's a very good idea to review the progress of this
7 plan at the two-and-a-half-year midpoint. I ask
8 that the Council not consider lowering the
9 conservation targets for utilities at this point.
10 If they haven't met those targets, I think the plan
11 should expand on what needs to be done with these
12 utilities that have not met those conservation
13 goals.

14 So, again, thank you for the opportunity
15 to give public input and for all your hard work on a
16 forward-thinking plan.

17 **MS. EDEN:** Thank you very much. Next is
18 Sandra Bishop.

19 **MS. BISHOP:** Thank you. Good evening, my
20 name is Sandra Bishop. I'm a former Eugene Water &
21 Electric Board commissioner. I served on the board
22 from '97 to 2006. I'm here tonight as a citizen.

23 It's remarkable in this plan -- I'm going
24 to try to just really summarize my remarks. It's
25 quite remarkable that energy efficiency and new

1 renewables are expected to meet the full new load.
2 That is very significant. Thank you to the staff
3 and thank you to the council members for getting
4 there. We've been waiting, and you finally got
5 there. But I have to say that, although you
6 recognize that you can meet the demand that way, I
7 think that I'm going to spend most of my time
8 tonight talking about two things that really haven't
9 been done in this plan.

10 There's nothing in the plan that really
11 will result in the reduction of carbon emissions or
12 greenhouse gas emissions. And I know that's
13 difficult, but I think the staff has done the
14 analysis, but I think the Council hasn't quite
15 gotten there. And I could be wrong. Maybe there's
16 more staff work to be done. But in order to
17 stabilize global greenhouse gas emissions, we've got
18 to do something, and just simply not increasing them
19 really isn't enough; it's just not sufficient. So
20 the plan does not help three out of the four states
21 who have very strong goals, and that is for carbon
22 reduction, and that is Oregon, Washington, and
23 Montana.

24 So, essentially, what you're saying is
25 that you're telling utilities that it's okay to

1 continue to get, in some cases, a substantial amount
2 of their power from the coal plants, so I think that
3 the next step that's really got to come about rather
4 quickly is that we need to find a way to really
5 phase out the coal plants. And, you know, other
6 people who have a lot more experience than I have
7 talked about this, and you may end up with interim
8 bridging strategies, but those coal plants have
9 really got to go.

10 The third point is that there's no price -
11 - and this is really my most important point, is
12 there's no price of the cost on carbon in the plan.
13 And the staff talks about analyzing the carbon price
14 scenarios ranging anywhere from \$0 to \$100 per ton.
15 There's an understanding in the region that a carbon
16 tax or a carbon cost is going to come into play at
17 some point, and I think -- I think -- if it's been
18 relayed correctly, I think what's happening is that,
19 based on long-term energy efficiency targets that --
20 I'm sorry, that those long-term energy efficiency
21 targets are based on something like \$45 to \$47,
22 maybe \$49 per ton. So given that, I think you need
23 to take a real leadership role here, and you need to
24 -- and my utility friends are going to disown me for
25 this. You really need to put a carbon cost on the

1 utilities so that the utilities could plan into the
2 future knowing what it is that they're going for.
3 You know, waiting for a \$47 or \$49 per ton cost or
4 price to be set coming in 2029, it's just simply way
5 too late. So please find a way to get to that
6 leadership position and really put a price on
7 carbon. Thank you.

8 **MS. EDEN:** Thank you. Next is Tom
9 Bowerman.

10 **MR. BOWERMAN:** Thank you. Tom Bowerman,
11 33707 McKenzie View, Eugene, 97408.

12 I'm going to wear two hats, testify with
13 these different hats on. First, I'm going to talk
14 as a project manager for a nonprofit research
15 project called Policy Interactive. The purpose of
16 the project is to explore the disconnect between
17 what science is saying about climate change and
18 what's policy and failure of policy to do something
19 about climate change.

20 Now, specifically with respect to the
21 subject before you, I've given you a graph of a
22 question in public opinion surveying that our
23 organization has done. I will say before I get to
24 that that we are members of the American Association
25 of Public Opinion Research. We subscribe to their

1 standards and ethics and practice. That ensures
2 that the research is done to the highest degrees of
3 objectivity as possible, and that there is full
4 disclosure in terms of how the method is done, and
5 the full question sets in every survey is available.
6 In anything that we are going to release, any
7 questions about this methodology is fully available
8 at any time.

9 I want to draw your attention to the
10 graph, and there are 12 items there that are
11 focusing on questions having to do with consumption
12 taxes and fees, generally considered to be an
13 unpopular subject with the general public. You will
14 note that the one that shows the greatest degree of
15 agreeing -- or the greatest degree of agreement is
16 utility inverted rate structures, and you'll see
17 that the level of agreement is pushing 80 percent
18 which, in opinion research, is kind of a home run.

19 One of the things that I'm going to -- now
20 I'm going to take my hat off for a moment -- or I'll
21 just say what the question is here for the audience
22 that doesn't have this. The question -- this is one
23 question out of 12 different options that we pursued
24 in terms of a variety of consumption issues in the
25 culture. This one on utility fees was, "Require

1 utilities to have inverted rate structures so that
2 people who use less energy gain lower electric rates
3 than those who use lots of energy to ensure
4 conversation." That was the question that was
5 asked. 80 percent agreement.

6 And now, then, taking off -- so that's
7 just findings. I want to take off my research
8 directorship hat and just talk as a citizen, one
9 who's spent many years involved in committees, and
10 public meetings, and working groups with the BPA and
11 with several public utilities in the area working on
12 energy conservation issues and different resource
13 availabilities. I want to say that I think that in
14 order to achieve or exceed the targets that you have
15 set for yourself, you need to build in market
16 incentives to get there, that is the driver from the
17 public to make good choices, as well as conceivably
18 help to raise revenue to pay for the extra cost.
19 We've heard some testimony about how difficult it is
20 for some utilities who are exceeding the rest of the
21 pack, and it seems to me that we need to be able to
22 build in the pay structure in order to invest in
23 really good choices, and we find that, overall, the
24 general public really supports this concept.

25 In our opinion research on climate change,

1 we've found that the material throughputs, we call
2 it consumption, trumps climate change, and it
3 especially trumps climate change in the sectors of
4 the public who see climate change as a nonissue or
5 see it as a diversionary or non-supported
6 scientifically come across from minority positions
7 to majority positions on, "Our country would be
8 better off if we all consumed less." And so
9 thinking through that tool a little bit, looking at
10 the drivers to obtain the targets that you set or
11 hopefully to exceed those targets, we need to build
12 in the drivers from the consumer side, and the
13 evidence that we see suggests that that can occur.

14 Let me only close with the idea that -- I
15 saw something about cost effective rates on the
16 slide show. Low rates are a blessing and a curse.
17 They're a blessing because we all enjoy getting
18 something for nothing. However, the truth of the
19 matter is that all types of energy has its costs.
20 We've talked about biomass. They have their cost.
21 We've talked about coal. Obviously, a big cost.
22 But virtually every form of energy we're using is
23 going to have a cost. I can guarantee you that
24 there will be some issues involved that will be
25 adverse issues, and what we need to do is figure out

1 a way to conserve. I applaud the idea that we're
2 going to achieve it through efficiencies and
3 conservation, but we have to do it, and we have to
4 have that driver underneath. So thank you very much.

5 **MS. EDEN:** Thank you very much. Ruth
6 Duemler -- Duemler.

7 **MS. DUEMLER:** Duemler.

8 **MS. EDEN:** Duemler. Thank you. Got it
9 right the first time.

10 **MS. DUEMLER:** It's difficult. Ruth
11 Duemler, D-u-e-m-l-e-r.

12 I've been out of town, so I'm really not
13 prepared, but I will present something in writing.
14 I do want to mention, though, that I'm very pleased
15 with what we have had from EWEB as far as
16 conservation. They have made a great effort to see
17 that homes are weatherized, and I think it's made a
18 big difference in the thinking of the people here in
19 the community. I would like to see more though.
20 People still leave their window open on a cold
21 winter night and heat the house, and heating outside
22 is not conservation. I just had two roomers come to
23 my home, and they're in the habit of leaving the
24 windows open on a cold night, and they cannot
25 understand why I don't want to put up the furnace.

1 But it's an education that has to start, I think,
2 with the very young, and I understand EWEB, our
3 local utility here, has a good educational program
4 for our schools, and I would encourage all of us to
5 learn more each day.

6 Aside from that, though, I'm quite
7 concerned about the health effects of some of the
8 renewables that have been mentioned, especially the
9 biomass. We had experiences last week, a lot of
10 smoke in our community, because of the forest fires,
11 but I remember when we burned -- our utilities
12 burned wood, and I remember the odor and the
13 pollution from it. I also know the Lung Association
14 -- the American Lung Association has put out a 2009
15 report saying that our county here has one of the
16 highest percentages of lung problems because of our
17 air quality. Our air quality here is -- the end of
18 the valley where the pollution gathers, and we have
19 a growing population of people that have asthma,
20 over 11 percent of our population here in Lane
21 County has asthma, and that counts -- you know,
22 along the ocean, they don't have it. They breathe
23 the fresh, salt air. But that being said, here in
24 our community, we have a much higher than 11-percent
25 population with asthma. Over 50 percent of our

1 population is affected here by air pollution. The
2 largest percentage of the health effect is on our
3 heart, heart problems, and I'm concerned with any
4 further increase in pollution, especially for those
5 people who live downwind from the biomass plants.
6 Biomass plants are very inefficient when they make
7 electricity, one of the lowest in efficiency, I
8 believe, and we are also afraid of having our forest
9 cut and the loss of carbon in our forests. So the
10 overall carbon count, I think, is misleading when we
11 say it's a renewable source that would help with the
12 carbon situation and our climate change.

13 And I am also -- I know living in Los
14 Angeles and southern California, the air quality was
15 very poor. But on many days here lately, I have
16 seen that the brown haze comes into our valley, and
17 it's hard to breathe. And I was just -- I just
18 returned from southern California, and the energy
19 conservation certainly isn't considered by part of
20 the population in southern California, and I'm glad
21 I escaped. They're going 80, 90 miles an hour, using
22 up oil as fast as they can, and the air is
23 continually brown. And we don't want that here. I
24 don't want that here. And I'm so glad that our
25 pollution levels have gone down, but we don't want

1 to reverse now. And if we have one plant, we think
2 we'll -- two, three, four plants are being talked
3 about. And our forests, we don't need to lose our
4 forests to biomass plants. Thank you.

5 **MS. EDEN:** Thank you. Next is Nick
6 Engelfried.

7 **MR. ENGELFRIED:** Hi. I'm Nick Engelfried,
8 E-n-g-e-l-f-r-i-e-d. I'm a volunteer for the Oregon
9 Sierra Club.

10 I am 21 years old right now, and in 20
11 years, the timeframe during which the NWPC current
12 draft plan will influence energy policy, I will be
13 about 41. In five years, the time between the
14 drafting of this NWPC policy and the next one, I'll
15 be 26. By that time, our country needs to be well
16 on the road to a future powered by renewable energy
17 and free of coal. That time encapsulates a critical
18 window of opportunity when we need to begin shifting
19 off of fossil fuels if we're going to stave off the
20 worst effects of global warming, and if we can't
21 start by doing it right here in the green Northwest,
22 I don't know where is a better chance to start.

23 I feel that my generation, the young
24 people of this country, we are already trying to do
25 our part to facilitate this shift. I myself am

1 working with about nine college campuses in the
2 Northwest on a program called Fossil Action Fall
3 2009 where we are trying to shift communities away
4 from fossil fuels and towards renewable energy.
5 Later on this fall, hundreds of young people from
6 across the western United States will be converging
7 in this city at the University of Oregon for Power
8 Shift West Coast, an immense gathering of young
9 people designed to help facilitate the transition to
10 a renewable energy future. However, we young people
11 can't do this alone. We need the help of the NWPC
12 and other regional decision makers.

13 The current draft plan does have some
14 great stuff in it already. It's my understanding
15 that the current plan says we don't need any new
16 coal plants because we can -- largely because we can
17 meet most of our new energy demand through
18 conservation and efficiency. That's great.
19 However, the great danger for my generation is that
20 even while taking some of the steps that we need to
21 reduce greenhouse emissions and stave off global
22 warming, we won't go all the way and really root out
23 fossil fuels from our economy. It isn't,
24 unfortunately, enough just to say we don't need any
25 new coal. We need to get rid of existing coal.

1 There is clearly a national and regional trend away
2 from fossil fuels and towards renewable energy, at
3 least to a degree, but we need to make sure that
4 that trend really gets us to where we need to be. I
5 will submit that we need a plan that not only curbs
6 new coal plants in the Northwest, but phases out
7 existing coal plants and our importation of coal
8 energy from other states as quickly as possible. We
9 need to do this in order to protect the future that
10 me and my generation is going to inherit. Thank
11 you.

12 **MS. EDEN:** Thank you. Next is Liz Veazey.

13 **MS. VEAZEY:** Veazey.

14 **MS. EDEN:** Veazey. Thank you.

15 **MS. VEAZEY:** Hi. I'm Liz Veasey. The
16 last name is spelled, V-e-a-z-e-y.

17 And I, as someone else who spoke earlier,
18 also recently moved here from Tennessee, so I've
19 learned and seen a lot of the human and
20 environmental impacts of coal from cracked home
21 foundations to destroyed forests and mountains to
22 poisoned water, children with asthma, and I've also
23 met people with whom I work who are losing their
24 homes and their livelihoods to global warming and
25 rising sea levels, and a host of problems. But I'm

1 really excited about the plan's strong focus on
2 efficiency and conservation, especially with no new
3 large plants proposed at all, and I'd like to thank
4 the Oregon reps who helped create the plan and the
5 local utilities who are already, you know, working
6 on this track. To be honest, it's much better than
7 anything I've seen in the Southwest where I've been
8 working and fighting coal plants and nuclear plants
9 for a long time, so I think that's exciting.

10 However, there's still -- there's still
11 room for improvement, and I would like to echo some
12 of the earlier comments about the need for
13 substantial greenhouse gas emission reductions,
14 including a coal-free Oregon and Northwest by 2020
15 as the Northwest Council staff study showed is
16 possible. I think this has to done, as has been
17 mentioned earlier, without increased use of natural
18 gas, or burning trees, or nuclear power. If Oregon
19 and the Northwest did this, it would set an
20 incredible example by becoming, I think, the first
21 state and region that I know of to kick their
22 current coal habit, so I'd encourage the Council to
23 do that. Thanks.

24 **MS. EDEN:** Thank you. Daniel Wilson.

25 **AUDIENCE MEMBER:** He's gone.

1 **AUDIENCE MEMBER:** Yeah, he's not here.

2 **AUDIENCE MEMBER:** He had to leave early.

3 **MS. EDEN:** Okay. Thank you. Next is
4 Roger Hamilton.

5 **MR. HAMILTON:** Thank you. Roger Hamilton,
6 H-a-m-i-l-t-o-n. Former Oregon public utility
7 commissioner, and formally Kitzhaber's energy
8 advisor. Old energy advisor, not new energy
9 advisor. I'm going to make my comments specifically
10 to the only part of the plan that I've actually read
11 word-for-word, and that is Chapter 10 on Climate
12 Change Issues, 6A on Transmission, and Chapter 11 on
13 Capacity and Flexibility Resources, partly
14 reflecting that I'm representing the Western Grid
15 Group affiliated with the Council for Energy
16 Efficiency and Renewable Technologies, that I have
17 to admit is a California-based organization, but we
18 do grid improvements, enhancements, and advocacy for
19 wind transmission for large-scale levels of
20 renewables, the kinds of scale that we need to
21 reduce greenhouse gas emissions.

22 I want to reiterate some of the things
23 that have been said about explicitly in the plan. I
24 hope the commission will at least adopt the staff
25 average of from \$0 to \$100 a ton at \$50 a ton as an

1 explicit carbon cost. The studies that I've seen
2 seem to indicate that we may not be able to replace
3 coal on a market basis. We may have to take more of
4 a restrictive regulatory action with a \$50 a ton
5 carbon cost, and the IPCC, the Intercontinental
6 Panel for Climate Change, indicates that a damage
7 cost assessment of climate change and carbon dioxide
8 emissions is probably \$100 a ton. So be that as it
9 may, at least if we can get to \$50 a ton, we can
10 move on the trajectory we need to get. According to
11 the IPCC scientists, we have to reduce the impacts
12 of climate change -- the temperature impacts of
13 climate change. On a global average, we have to
14 keep them at a 2-degrees centigrade increase from
15 the current levels of temperature to avoid runaway
16 climate change. To do that, we have to reduce
17 carbon emissions by 80 percent to 95 percent below
18 1990 levels by 2050. And I know the staff has been
19 arguing that we're on the trajectory that has been
20 adopted by the state which is, I believe, 75 percent
21 reduction of carbon emissions by -- at below 1990
22 levels by 2050, so -- I haven't done the analysis
23 myself. So that's good, but we certainly can't do
24 that without decommissioning existing coal plants to
25 a large degree, and so I want to reemphasize that

1 and agree with some of the comments made about that.
2 I will not comment on biomass. At least it's not in
3 my written testimony.

4 To further underscore the need for
5 immediate and concerted action to reduce carbon
6 emissions, I want to refer you to a study that an
7 organization I'm also affiliated with, Climate
8 Leadership Initiative at the University of Oregon,
9 contracting with ECONorthwest, a Eugene and Portland
10 based economic analysis firm, "The Potential
11 Economic Cost of Climate Change in Oregon 2008." I
12 recommend that study to you. We've found that on an
13 annual basis -- these are pretty stunning figures --
14 climate change will cost the economy of Oregon about
15 -- a total of about 10 percent, but it will amount
16 to about a \$5.4 billion hit on the statewide economy
17 on an annual basis by 2030. That amounts to \$2,745
18 per household. Compare that to the cost of energy
19 efficiency and conservation that you have as 5
20 percent or Portland General Electric's 3 percent,
21 and it's a real bargain to engage in these
22 mitigation measures.

23 Reduced wasted energy, from our analysis -
24 - I won't go into this in detail, but I handed it to
25 you at the table. Wasted energy simply means that

1 if we don't do conservation and efficiency, this is
2 what it's going to cost us in our energy bills.
3 That annual hit on the economy is about \$1.7
4 billion. Reduced salmon populations, \$1.5 billion.
5 I can go on and on. Increased health. Cost related
6 to ozone, almost a billion dollars, and so forth.
7 Firefighting costs and wildland fire losses, \$315
8 million. But among other results, the study is
9 really compelling in suggesting the high economic
10 value in capturing energy conservation and
11 efficiency measures as proposed by the state's plan,
12 and I really am delighted, as Sandra Bishop and
13 others have said, that we are there. At least we
14 are there in terms of a plan. It also reflects the
15 high cost of the region due to salmon losses, the
16 preservation of which has been a high cost to
17 electricity consumers over the past decade,
18 particularly EWEB as a Bonneville Power
19 Administration consumer.

20 Finally, on behalf of the Western Grid
21 Group, on wind integration issues, I would commend
22 the sixth plan for recognizing the important role of
23 new transmission investment and coordinated regional
24 transmission planning in bringing wind, solar, and
25 geothermal technologies into the grid. Columbia

1 Grid and the Northern Tier Transmission Group are
2 the two regional transmission organizations in the
3 Northwest. They have both been very proactively
4 engaged in planning for new transmission to access
5 wind resources to meet RPS requirements and to
6 better integrate -- which I think is really more
7 important because, yes, I will have to admit as a
8 wind advocate, even wind has its greenhouse gas
9 footprint, particularly when we put up more
10 transmission lines and you put steel and concrete in
11 the ground for wind turbine towers -- but to better
12 integrate intermittent wind into the electrical
13 system. This is, again, cited in several of these
14 staff comments in the staff reports -- assertions in
15 staff report.

16 The plan recognizes the importance of
17 changing system operating procedures and business
18 practices to better utilize the inherent flexibility
19 of the existing system, a flexibility that we rarely
20 get to because of contracts and because we simply
21 manage the system for the benefit of the utilities
22 that own the system and not for the consumers of the
23 global energy. As the plan notes, these include
24 improvements in wind forecasting into our
25 scheduling, and in order to respond to the problem

1 of very rapid wind ramps which we recognize in the
2 industry is a problem. System planners need to
3 recognize the need for wind plant location diversity
4 and utility demand response programs, as well as, I
5 hate to say it, at least in the near term, rapid
6 response natural gas generators. We recognized back
7 in the 1990s when I was at the Public Utility
8 Commission the need to get off of coal, get the
9 dirty stuff off the grid and the clean stuff on, but
10 that our best ally in the interim, until we can
11 integrate wind well and until we have storage
12 facilities that would work, and all sorts of stuff
13 that may simply be still being worked on in
14 somebody's garage, we were going to need natural gas
15 which, with its lower carbon emissions, as a means
16 of load following wind integration to get to the
17 ideal state that we all aspire to. Thank you very
18 much, and thank for a great start on the draft plan.

19 **MS. EDEN:** Thank you very much. Katherine
20 Philipson. Philipson? I can tell I butchered that
21 one.

22 **MS. PHILIPSON:** My name is Katherine
23 Philipson, K-a-t-h-e-r-i-n-e P-h-i-l-i-p-s-o-n, and
24 I reside at 1817 Emerald Street in Eugene, Oregon.

25 So I'd like to keep my comments brief

1 because everyone has done such a wonderful job this
2 evening, but especially to join with my friend Nick
3 here in speaking for the youth movement in our
4 region. I'm a part of the planning committee for
5 Power Shift West which will be held at the
6 University of Oregon in November and will bring
7 hundreds of students to learn about climate change
8 issues and also the solutions, and I want to mention
9 to you that the Power Shift West steering committee
10 and many of the people that are a part of this
11 planning process have chosen moving beyond coal and
12 phasing out coal in our region as one of our top
13 campaign concerns. Like the person who just spoke
14 before me mentioned, we must reduce carbon emissions
15 on a global level in the most failed countries by 40
16 percent below 1990 levels by the year 2020 in order
17 to avoid catastrophic climate change above 2
18 degrees. And the science recognizes that above that
19 level, we'll be setting feedback loops that will
20 result in the worst kinds of climate impacts for the
21 people who are least responsible for these emissions
22 such as more extreme weather, flooding, changes in
23 rainfall patterns, and an increase in vector-borne
24 disease. And so, to me, it seems that -- I greatly
25 appreciate your efforts for conservation and your

1 focus on that. I really appreciate these aggressive
2 targets, and I would ask that you do as much as you
3 can to scale up planning for renewable energy in our
4 region, and the phase-out of coal, as well as taking
5 into the account the true price of carbon.

6 And I want to bring to your attention a
7 figure that I read here from a study by the
8 Northwest Energy Coalition called, "A Bright
9 Future," and they -- according to their study, a
10 complete phase-out of coal by 2020 in our region
11 would cost as little as six-tenths of a cent to
12 wholesale rates, so, to me, that seems a pittance to
13 avoid the worst impacts that will be seen in my
14 generation. So thank you for your time.

15 **MS. EDEN:** Thank you very much. Zachary
16 Stark-MacMillan

17 **MR. STARK-MACMILLAN:** Hi. My name is
18 Zachary Stark-MacMillan, S-t-a-r-k, hyphen, M-a-c-M-
19 i-l-l-a-n, and I'm a member of the Cascade Climate
20 Network which is a group of students at campuses all
21 up and down the coast in Oregon and Washington
22 working for climate solutions and a just future for
23 everybody, another planner for Power Shift West, and
24 I'm a student senator at the University of Oregon,
25 although I'm not speaking for the senate.

1 I would just like to echo what everybody
2 has said about moving forward and reducing our
3 overall carbon output. I think we have a great
4 opportunity with your plan with your already
5 aggressive targets to lay a blueprint for the whole
6 country. By phasing out coal in the Northwest, we
7 can show that it's possible for everyone to move
8 beyond coal. That's all. Thank you.

9 **MS. EDEN:** Thank you very much. Cat
10 Koehn, K-o-e-h-n. Help me.

11 **MS. KOEHN:** I'm looking for a guy named
12 Joe Smith. That's my ex-husband's name, and they
13 pronounce it "kane", although it's "koon". Ich bin
14 Deutsch sprechend. And I'm here to talk about
15 salmon. I live in Fall Creek, and Catherine is
16 pronounced with -- I mean Catherine is spelled with
17 a C, and it's K-o-e-h-n.

18 I'm here advocating for salmon and hope
19 that you will take all necessary steps to protect
20 them while you're trying to balance this delicate
21 act about power generation. You have made a good
22 start, and you're definitely going in the right
23 direction. And I'm very glad to see that you've
24 taken a review of the Snake River dam removal and
25 added that in because salmon really are on the brink

1 right now. For 50 years, the power generators have
2 not taken the needs of salmon into account. For 50
3 years, we've watched those numbers decline, and
4 they're truly at the point of near extinction right
5 now. And I'd like to point out that it's relatively
6 easy to take down the four dams on the Snake River
7 because, apparently, they need to reallocate 600 or
8 700 megawatts of power to affect that change, and we
9 do need a carbon-free future as so many folks have
10 said coming up here. I'm glad that you are starting
11 to advocate renewables and energy efficiency. And a
12 quote from "Trout Unlimited" here, from one of those
13 studies, shows that it is affordable for us to be
14 able to shut down coal plants.

15 So I support the market incentives that
16 somebody was talking about to reduce power usage,
17 and I'd like to bring up the case of Tucson as an
18 example. Many years ago, Tucson was faced with a
19 dire water shortage all of a sudden because of some
20 esoteric argument about a canal there as a project.
21 But, anyhow, they didn't know what to do, so they
22 decided to double the rates for water in Tucson.
23 And, lo and behold, what happened is that, within a
24 year, the average power consumer cut in half their
25 consumption of water. So we may have to actually

1 educate some of the public about conservation
2 measures, but we should understand the power of
3 energy conservation.

4 And, also, speaking of energy conservation
5 on those dams again, in the news today, Obama has
6 ordered the Army Corps to consider blowing up those
7 four dams on the Snake. They have to do a workup on
8 it. And a quote from that article I read in the
9 paper was -- the Director of the American Rivers
10 talked about the Snake River dam problem, and they
11 said that -- pointed out that they generate 3
12 percent of the grid's power, and that the bulk of
13 those four dams' power generation comes at a time
14 when we have energy surpluses because it's in the
15 spring.

16 So I want to end with two things. One,
17 the public realizes that you face a difficult
18 challenge, but you have to somehow find a way to do
19 whatever it takes to protect salmon because they
20 don't have much time left. Extinction is forever,
21 and the loss of our salmon fishery would be
22 unacceptable, and the economic repercussions of this
23 loss of a fishery like this would reverberate
24 throughout the Northwest and the whole country, and
25 public support has always been behind saving salmon

1 in the Northwest. And I would like to submit a
2 quote from the Washington State Department of Fish
3 and Game who did a public opinion survey some years
4 ago, and the quote is, summarized, "Polls both in
5 Washington and in Oregon have consistently shown
6 that the majority of the public is willing to pay
7 increased electric rates to save salmon."

8 And, lastly, the climate change that all
9 of these young foresighted people -- good luck with
10 that, guys -- are facing makes it imperative that
11 the salmon have to be addressed. They can't be put
12 off any longer. So had we listened to the lesson of
13 the salmon, the canary in the coal mine, before
14 this, we wouldn't be in this tight jam right now.
15 We would have started to invest in renewables and do
16 the things that it takes to have real conservation.

17 So thanks for letting the public testify.
18 I hope you guys will stand up for the salmon. Thank
19 you.

20 **MS. EDEN:** Thank you very much. And the
21 last person that I have who has signed up to testify
22 is Greg Gardener.

23 **MR. GARDNER:** Thank you. My name is Greg
24 Gardner, and I am here on behalf of Blachly-Lane
25 Electric Cooperative. Last name is G-a-r-d-n-e-r.

1 I think it's great that -- the youth that's here.
2 We'd like to find a way to get that kind of youth
3 participation in our annual meetings, so let me know
4 what you're onto there. We just have a few brief
5 comments -- or I will on behalf of Blachy.

6 We'd like to thank the Council for their
7 work, and we feel that it's been a good overall
8 effort. We think the draft plan does what it's
9 supposed to do. It provides guidance and
10 information to help the region meet its future power
11 needs in a cost-effective and reasonable manner. In
12 general, the plan appears to be reasonable and
13 thoughtful. We appreciate the fact that it has
14 provided for some flexibility. The plan addresses
15 region-wide resource needs, but individuals --
16 individual utilities will face unique local
17 conditions that might require us to deal with these
18 issues separately, individually. And the plan
19 explicitly allows resource acquisitions that meet
20 utility needs, so we appreciate that.

21 The last point I think we wanted to make
22 was that we think that the conservation targets may
23 be difficult for a small rural utility like ours to
24 meet. We're not too far off, but we have some
25 concerns given the -- you know, the current economic

1 conditions that affect our members and some of the
2 industrial customers that we serve, and so we'd like
3 you to take that into consideration and think about
4 those target levels. Those are the only comments I
5 have. I appreciate your time. Thank you.

6 **MS. EDEN:** Thank you very much. With
7 that, Mr. Gardener was the last person to sign up to
8 testify.

9 **MR. MUELLER:** He's not. I signed up to
10 testify, and you haven't called on me.

11 **MS. EDEN:** I'm sorry.

12 **MR. MUELLER:** And I thought there might
13 have been a few others.

14 **MS. EDEN:** I don't have any other names on
15 the sheet.

16 **MR. MUELLER:** There was a sheet at the
17 door, and I signed in with my name and address on it
18 -- my address and all that, so --

19 **MS. DUKE:** This is the opportunity for the
20 people who haven't come up yet that want to, so
21 you're --

22 **MR. MUELLER:** Great.

23 **MS. EDEN:** Sorry, I was about to say that.
24 So go ahead.

25 **MR. MUELLER:** So, with that, I guess I get

1 to go. And my name's Karl Mueller, K-a-r-l M-u-e-l-
2 l-e-r.

3 **MS. EDEN:** I apologize, because your name
4 is on the first sheet.

5 **MR. MUELLER:** Oh, okay.

6 **MS. EDEN:** I skipped over you
7 inadvertently.

8 **MR. MUELLER:** Well, I appreciate -- I
9 appreciate knowing that for the record. I also
10 appreciate your advice to avoid undo repetition.
11 Being one of the last speakers, it becomes a little
12 more of a challenge. I also appreciate seeing all
13 my fellow citizens out here on what's kind of a
14 wonky and dense subject matter, but very, obviously,
15 urgent for the future of our region and the
16 biosphere generally.

17 Kind of the echo of what a lot of other
18 persons have said, is that one of the things I most
19 appreciate about the plan is the findings with
20 regard to efficiency -- that we will be able to meet
21 future need through efficiency. That's something
22 that conservation groups and environmental groups
23 have been saying for quite a while, and it's good to
24 see that assertion vindicated. I thought I was
25 going to be able to avoid repetition on the salmon

1 issue, but I just barely got beaten to it.

2 One of the things that I do appreciate
3 about the plan is the review of the costs that would
4 be associated with replacing the power that's
5 generated on the lower Snake River dams. If my
6 raccoon eyes kind of don't give it away, I'm a
7 fishing guide here on the south end of the valley
8 and also on the midcoast, and to a certain extent,
9 like my colleagues on the Columbia and the Snake, my
10 job is directly related to having an abundance of
11 salmon and steelhead to fish for. Unlike those
12 folks up there, the rivers that I fish on, at least
13 for salmon, aren't choked with hydropower dams.
14 Even so, even with that, it's been a tough couple of
15 years out there as I think a lot of people are aware
16 of. The recent increases on the Snake and on the
17 Columbia have seemed to take, maybe, a little bit of
18 the public's eye off that issue or kind of put a
19 salve on it to make it appear to be okay, but I do
20 want to point out that those gains have been in
21 hatchery fish, and those aren't counted for the
22 purposes of the Endangered Species Act or fish
23 recovery, so it's largely irrelevant. It's nice
24 that they've had good fishing for those, but it's
25 largely irrelevant from a conservation standpoint.

1 The guides and the anglers on the Columbia
2 and the Snake has seen people making the decisions
3 on the management of those dams place their needs
4 subordinate to those of hydropower generation and
5 big ag, as well as, you know, transport. There are
6 very few people who are going get rich guiding or
7 being commercial fishermen, but those pursuits do
8 pay a living wage, and you get to do something that
9 you love, and despite my beef with some of the
10 things that happen on the high seas, I assume that's
11 the same for commercial fisherman -- or fisher
12 people. It's particularly sad to see the interests
13 of the fish and the interests of the people who
14 depend on them subordinate to those other interests
15 I mentioned when there are easily -- not easily. I
16 shouldn't say easily, but there's clearly better
17 ways to manage that resource and still provide a
18 secure power supply, and it's really a shame that,
19 you know, the solution's there, and the steps just
20 aren't being taken to implement that solution. So
21 to that end, I do appreciate the Council's review of
22 the costs of replacing the power due to the removal
23 of the four lower Snake River dams. I would like to
24 see that analysis remain in the plan as it moves
25 forward.

1 I'd also like to point out that the
2 estimates of the costs of taking those actions and
3 the estimates for the amount of power the average
4 megawatts for new resources that would need to come
5 online to reliably run the system are the same -- at
6 least in the same ballpark of the numbers that
7 salmon and clean energy advocates have been
8 articulating for many years. They most certainly
9 are not the nameplate capacity numbers or the cost
10 estimates that the BPA has been trumpeting to anybody
11 that would listen, most recently the Obama
12 administration. The Council staff analysis confirms
13 what we in the conservation community have been
14 saying for many years, that we can affordably shut
15 down coal plants, we can start to electrify
16 transportation, we can restore endangered salmon on
17 the Snake through Snake River dam removal, develop
18 clean energy resources, and revitalize our economy
19 in the process. This Council needs to ensure that
20 the power system fulfills both its climate and its
21 salmon responsibilities while also meeting our
22 needs. I think it's a good start in that direction.

23 Naturally, I don't agree with everything
24 that's in the plan. I share a lot of the concerns
25 that other folks have articulated with regard to

1 biomass. I believe that we do need to get off coal
2 immediately. That's an urgent matter. I do fear
3 that if the plan is implemented without some of the
4 actions to get off existing coal plants, that will
5 do nothing more than stabilize our greenhouse gas
6 emissions, and it's apparent that we need to do more
7 than that. As I stated, I believe we need to get
8 off coal immediately, and this counsel can and
9 should chart a course towards a carbon-free future
10 that's based on more fully developing energy
11 efficiency, as recommended, and renewable energy
12 resources. Since I'm at the microphone right now,
13 my preferred sources are wind, solar, and
14 geothermal, just in case you wanted know.

15 The sixth draft plan is a good start. I
16 believe that we can and should do more for salmon
17 and steelhead, the people that depend on them, and
18 for our climate. Thank you for the opportunity to
19 testify.

20 **MS. EDEN:** Thank you very much. And you
21 would have been the first to talk about salmon if I
22 called you, so let the record reflect that. I'm
23 going to check very quickly to see if there was
24 anybody else I inadvertently skipped over. But with
25 that being said, since we've come to the end of our

1 list, is there anyone else who would like to give
2 public testimony on the power plan? Now's your
3 chance. I'm hearing none and seeing none.

4 I want to thank you again for coming, and
5 we very much appreciate your thoughtful comments.
6 They will be transcribed, as well as the comments of
7 every other hearing. They will be distributed to
8 council members, and they will be considered as we
9 move toward a final plan. And the deadline is
10 November 6th.

11 **MS. DUKE:** If any of you want to submit
12 your comments in writing, either you can send them
13 to us in the mail, via e-mail, and you can go to the
14 website and post them there. We appreciate it.
15 Thank you.

16 **MS. EDEN:** Thank you. The hearing is
17 adjourned.

18 **(Whereupon, the hearing was adjourned at**
19 **7:45 p.m.)**

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CERTIFICATE

I, Jea H. OH, do hereby certify that pursuant to the Rules of Civil Procedure, the witness named herein appeared before me at the time and place set forth in the caption herein; that at the said time and place, I reported in stenotype all testimony adduced and other oral proceedings had in the foregoing matter; and that the foregoing transcript pages constitute a full, true and correct record of such testimony adduced and oral proceeding had and of the whole thereof.

IN WITNESS HEREOF, I have hereunto set my hand this 13th day of October, 2009.

/Signed June 01, 2012
Jea H. OH Commission Expiration

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