

**H.R. 1719, “ENDANGERED SPECIES  
COMPLIANCE AND TRANSPARENCY  
ACT OF 2011” AND H.R. 2915,  
“AMERICAN TAXPAYER AND WEST-  
ERN AREA POWER ADMINISTRA-  
TION CUSTOMER PROTECTION ACT  
OF 2011”**

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**LEGISLATIVE HEARING**

BEFORE THE

SUBCOMMITTEE ON WATER AND POWER

OF THE

COMMITTEE ON NATURAL RESOURCES

U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

Thursday, September 22, 2011

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**LEGISLATIVE HEARING ON H.R. 1719, TO BETTER INFORM CONSUMERS REGARDING COSTS ASSOCIATED WITH COMPLIANCE FOR PROTECTING ENDANGERED AND THREATENED SPECIES UNDER THE ENDANGERED SPECIES ACT OF 1973. “ENDANGERED SPECIES COMPLIANCE AND TRANSPARENCY ACT OF 2011”; AND H.R. 2915, TO REPEAL THE WESTERN AREA POWER ADMINISTRATION BORROWING AUTHORITY, AND FOR OTHER PURPOSES. “AMERICAN TAXPAYER AND WESTERN AREA POWER ADMINISTRATION CUSTOMER PROTECTION ACT OF 2011.”**

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**Thursday, September 22, 2011  
U.S. House of Representatives  
Subcommittee on Water and Power  
Committee on Natural Resources  
Washington, D.C.**

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The Subcommittee met, pursuant to call, at 2:01 p.m., in Room 1324, Longworth House Office Building, Hon. Tom McClintock [Chairman of the Subcommittee] presiding.

Present: Representatives McClintock, Hastings, Napolitano, Garamendi, and Markey.

**STATEMENT OF HON. TOM McCLINTOCK, A REPRESENTATIVE  
IN CONGRESS FROM THE STATE OF CALIFORNIA**

Mr. McCLINTOCK. The Subcommittee on Water and Power will come to order. The Chair notices the presence of a quorum, which under Committee Rule 3(e) is two Members.

The Chair asks unanimous consent that Mrs. McMorris Rodgers be allowed to sit with the Subcommittee and participate in the hearing.

Hearing no objection, so ordered.

We will begin with 5-minute opening statements by myself and the Ranking Member of the Water and Power Subcommittee, and the Chair will begin.

The Water and Power Subcommittee convenes today to hear testimony on H.R. 1719 by Congresswoman McMorris Rodgers that will provide electricity consumers with transparent price information on the cost of ESA mandates; and also my bill, H.R. 2915, that will rescind the provision of the discredited stimulus that puts

taxpayers on the hook for loans to wind and solar transmission developers administered by the Western Area Power Administration.

For the past decade, the Federal Government has taken extraordinary steps to force wind and solar electricity on American consumers while spending untold hundreds of billions of dollars of direct subsidies and loans and loan guarantees that hide from consumers the actual price of these sources and puts taxpayer money in jeopardy when investors recoil at the risk and these schemes collapse.

As we will hear, the unsubsidized cost of solar and wind power makes them the most expensive forms of electricity generation yet to be invented. Solar voltaic, for example, costs about \$211 per megawatt hour, compared to combined-cycle gas-fired generation at \$63.

And that is just the beginning of the expense. Electricity systems are integrated, meaning that the amount of power being put onto the grid must constantly match the amount being drawn from the grid or the grid collapses. Solar and wind are intermittent and unpredictable. At a moment's notice, a passing cloud bank or a sudden calm can drop generation to zero. This means that consumers must also pay for backup generation of equal amount to be kept constantly ready and on call to fill the gap at a moment's notice.

As we will hear, ironically, this often means more carbon emissions are produced because of the wind and solar mandates. And we pay twice: once for the enormous capital expense of these systems and a second time for the backup power that we must also build, maintain, operate, and keep in a constant state of readiness.

Then we get to the next problem: transmission. Unlike conventional power, solar and wind arrays are usually placed in the most remote regions of the country, requiring construction of transmission lines over vast distances. Because of electrical current degradation over those long distances and the low initial output of wind and solar, the transmission lines must be special high-tension direct-current lines that are much more expensive than normal transmission facilities.

Put all this together and one wonders, who in his right mind would invest in such a ridiculous arrangement? Well, the answer is, nobody in his right mind would risk their own money to do so, but there have been Members of Congress more than willing to risk their constituents' money, and those bills are now coming due.

We are told that creating jobs is the purpose of this money. I suppose you could say that Solyndra created jobs while their management was raking in government-guaranteed loans. What we found out, though, is that jobs that are not economically viable do not last. And these temporary jobs come at a steep price. When taxpayers are left holding the bag to bail out these loans, that money comes from the same capital pool that would otherwise have been available to invest in permanent, economically viable jobs.

And if investors, with all the information at their disposal, aren't willing to risk their own money on these ventures, well, that ought to be a warning that Congress has no right to risk their constituents' money in them either. Yet the so-called "stimulus" bill gave the Western Area Power Administration the authority to put \$3.25 billion of tax money at risk to finance wind and solar transmission

lines. And here is the ultimate warning: The measure even provides for loan forgiveness if the developer can't repay it. They don't even have to declare bankruptcy.

My bill pulls the plug on this program before taxpayers end up holding the bag for these projects. Some Members of this House already bear enormous responsibility for the Solyndra fiasco. This bill gives them a chance to redeem themselves before this program, too, blows up in their faces.

The Subcommittee will also hear testimony on H.R. 1719, a bill to provide consumers with the information on the cost of the Endangered Species Act as it affects their electricity prices. Consumers deserve to know the actual cost of what they are paying for, and this measure does so.

I look forward to the consideration of these two important bills that will help us return sanity, abundance, and transparency back to our water and power policies.

And, with that, the Chair recognizes the Ranking Member, the gentlelady from California, Mrs. Napolitano.

[The prepared statement of Mr. McClintock follows:]

**Statement of The Honorable Tom McClintock, Chairman,  
Subcommittee on Water and Power**

The Water and Power Subcommittee convenes today to help return our federal power policies back to a rational cost-benefit approach and force government transparency as one way to reduce higher energy costs and bring about job creation.

This Administration's underlying agenda is to promote a so-called "green transmission system"—meaning facilities that limit transmission to sources the minority party finds ideologically pleasing—principally wind and solar—and that exclude electricity they find ideologically displeasing—namely hydropower, coal and nuclear. Never mind that wind and solar are the two most expensive ways to generate electricity and forget that hydropower, coal and nuclear are the least expensive while two of those produce exactly zero emissions.

Wind and solar are also entirely unreliable, so they require a highly complex transmission system and a kilowatt-for-kilowatt backup system to maintain the electrical grid. This dual system makes these energies extremely expensive and could not possibly survive a rational cost-benefit analysis. Despite that, the Democrat majority and this Administration rushed through in 2009—with no debate or committee consideration—a \$3.25 billion stimulus loan slush fund for wind and solar developers. The provisions governing this so-called borrowing authority even provide forgiveness of the loans to companies that cannot repay them—forcing taxpayers and ratepayers to bail out fiscally irresponsible projects. While the Administration has only doled out 8.5% of these loans over two and a half years later, we need only look to the Solyndra failure of what could happen to the next transmission project that lacks the merit to attract full private investment.

The WAPA borrowing authority is simply a governmental financial exercise that picks winners and losers when in fact the market should be the decision-maker. The real losers are the taxpayers that may end up holding the bag. It is time to require every sector of the energy industry to raise its own capital through its own merit rather than to perpetuate the crony capitalism that is now running rampant through this government. My bill, The American Taxpayer and Western Area Customer Protection Act of 2011, helps return us to the market approach that has been lost over the last decade. I'm pleased to have two excellent witnesses testifying on the notion that federal subsidies on intermittent power are not in the best interest of the taxpayer, ratepayer, the economy and the environment.

On that note, we will hear from the Democrat minority today that my bill kills clean energy jobs. On the contrary, all we are asking is that wind and solar stand on its own without one form of government subsidies. I have been a longstanding proponent that no form of energy should be subsidized through any federal means. Instead, we should provide the regulatory climate by which all energies are not blocked by government fiat and can stand against each other in the marketplace. I only wish my Democrat colleagues had that same approach. At a hearing last week on a common sense hydropower production bill, my counterparts were all too

eager to stand behind regulatory red tape that strangulates rural job creation. It reminded me of the Tolstoy saying: “I sit on a man’s back, choking him and making him carry me, and yet assure myself and others that I am very sorry for him and wish to ease his lot by all possible means—except by getting off his back.”

The Subcommittee will also hear testimony on H.R. 1719, a bill to provide needed transparency on how Endangered Species Act mandates impact electricity ratepayers. As I’ve said before to this Subcommittee, the Endangered Species Act has put a gun to the head of the West. The utterly unreasonable effect of this law is now impoverishing millions of people in western communities, devastating the agricultural sector of our economy and threatening all of us with permanent water shortages, higher energy costs, skyrocketing food prices and chronic unemployment.

Congresswoman McMorris Rodgers’ bill does not amend the Act itself, but provides a mechanism by which electricity ratepayers have the ability to understand how much of their wallet goes towards complying with endangered species regulations. The environmental community has concerns over such transparency and that should be telling given that they drive the lawsuits that increase these costs. This bill, which I’m cosponsoring, provides much needed light on these activities and the resulting costs.

I look forward to further consideration of these two important bills that will help us return sanity and abundance back to our water and power policies.

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**STATEMENT OF HON. GRACE NAPOLITANO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA**

Mrs. NAPOLITANO. Thank you, Mr. Chairman.

And thank the witnesses for coming and being our witnesses today. I look forward to your testimony.

The bills we are considering today attempt to create more transparency and protect our taxpayers, but both pieces of legislation fail in their attempts.

H.R. 1719 is an oversimplification of cost in an overly complicated power system. The PMAs are required, under numerous existing laws, including ESA, treaties, tribal trust responsibilities, to protect, mitigate, and enhance fish and wildlife and their habitat. It attempts to pay all fish and wildlife costs associated with the dam operations under the Endangered Species Act. H.R. 1719 is misleading and disregards the PMAs’ other responsibilities and obligations. BPA is already transparent in providing thorough information on their fish and wildlife program funding. And it is available to all. On this Committee, there have been repeated assertions to that effect.

Transparency also does not mean, and should not mean, that we can pick and choose and single out compliance with one law. Transparency means that we should include all costs that affect power rates, such as the cost of transmission, the cost of irrigation, as well as the cost of failed investments like the Washington Public Power Supply System, or “WPPSS” for short, nuclear plant default of 1983—\$6.8 billion default, the largest municipal bond default in U.S. history. And 28 years later, the BPA ratepayers are still paying for this defunct investment.

Meanwhile, the millions of dollars that BPA ratepayers are paying annually for fish and wildlife costs are allowing the hydropower system to operate while protecting endangered species. And I keep repeating, those are fish species. We are the man species. When are we next?

If we are going to list transparency, let’s list all the costs that affect power rates, as well as the benefits of a robust ecosystem. And for the record, to help better understand the issues, I am re-

questing and would like the power users on this first panel to submit for our record for this Subcommittee, at your agency—record the price at which your agency purchases power from the PMA and the price you sell it for.

H.R. 2915, introduced by the Chair of the Subcommittee, repeals Western borrowing authority as authorized by the American Recovery and Reinvestment Act. In reality, what this legislation does is repeal thousands of jobs associated with the construction of transmission lines, wind farms, and across the West. And, yes, some of these may be sometimes short-term, but let me tell you, the benefits are long-term.

For example, Montana-Alberta line project, the first project to utilize Western's borrowing authority, created approximately 900 short- and long-term jobs. The number does not take into account the spillover effects of employment incomes being spent in the economy as well as tax revenues for the communities. This is one of 21 job-creating projects that is in the queue to utilize this authority. Enactment of Western's borrowing authority repeals those jobs, mostly in rural communities.

2915 also disregards a 2009 Department of Energy study that shows that more transmission is needed to relieve areas of congestion within our Federal power grid. It is also important to note that, in the stimulus bill, the Bonneville Power Administration was also given an additional \$3.25 billion in borrowing authority, which they will pay back with interest, yet today's legislation only addresses Western's borrowing authority because of its focus on promoting renewable energy.

A February 2011 Gallup poll found that 83 percent of the general public supports an energy bill that provides incentives for using solar and other alternative energy sources. 2915 not only repeals those jobs and disregards the need for upgrading our transmission, it also ignores what the American people not only want but need. Mr. Chairman, now is not the time to kill good legislation or jobs.

I yield back.

[The prepared statement of Mrs. Napolitano follows:]

**Statement of The Honorable Grace F. Napolitano,  
a Representative in Congress from the State of California**

The bills we are considering today attempts to create more transparency and protect our tax payers. Both pieces of legislation fail at their attempts.

H.R. 1719 is an oversimplification of costs in an overly complicated power system. The PMAs are required under numerous laws, including the ESA, treaties, and tribal trust responsibilities to protect, mitigate and enhance fish and wildlife and their habitat. H.R. 1719 also attempts to peg all fish and wildlife costs associated with dam operations on the Endangered Species Act.

This legislation is misleading and disregards the PMAs other responsibilities and obligations.

BPA is already transparent in providing thorough information on their fish and wildlife program funding.

Transparency does not mean and should not mean that we can pick and choose and single out compliance with one law. Transparency means that we should include all costs that affect power rates, like

- the costs of transmission,
- the cost of irrigation,
- as well as the cost of failed investments, like the Washington Public Power Supply System (*or WHOOPS for short*) nuclear plant default in 1983.

- The \$6.8 billion default became the largest municipal bond default in US history, and 28 years later, the BPA rate payers are still paying for this defunct investment.

Meanwhile, the millions of dollars that the BPA rate payers are paying annually for fish and wildlife costs are allowing the hydropower system to operate, while protecting endangered species.

If we're going to list transparency, let's list all the costs that affect power rates as well as the benefits of a robust ecosystem.

To help better understand the issues, I would like the Power users on the first panel to submit for the record the price at which your agency purchases power from the PMAs and the price it is sold for.

H.R. 2915, introduced by the Chair of the Subcommittee, repeals Western's Borrowing Authority as authorized by the American Recovery and Reinvestment Act.

In reality what this legislation does is repeal thousands of jobs associated with the construction of transmission lines and wind farms in across the west.

For example, the Montana-Alberta Line Project, the first project to utilize Western's borrowing authority created approximately 900 short term and long term jobs.

This number does not take into account the spillover effects of employment incomes being spent in the economy, as well tax revenues for the communities.

This is one of 21 job creating projects that in queue to utilize this authority. Enactment of Western's Borrowing Authority repeals those jobs, mostly in our rural communities.

H.R. 2915 also disregards a 2009 Department of Energy Study that shows that more transmission is needed in order to relieve areas of congestion within our federal power grid.

It is also important to note that in the stimulus bill, the Bonneville Power Administration was also given an additional \$3.25 billion in borrowing authority.

- Yet today's legislation only addresses Western's borrowing authority, because of its focus on promoting renewable energy.

A February 2011 Gallup poll that found that 83% of the general public supports an energy bill that provides incentives for using solar and other alternative energy sources.

H.R. 2915 not only repeals jobs and disregards the need for upgrading our transmission, it also ignores what the American people want.

Mr. Chairman, now is not the time to kill jobs.

Mr. MCCLINTOCK. The gentlelady yields back.

The Chair is pleased to note the presence of the Chairman of the Natural Resources Committee, Congressman Doc Hastings of northern Oregon—oh, Washington.

#### **STATEMENT OF HON. DOC HASTINGS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON**

Mr. HASTINGS. It used to be northern Oregon.

Thank you very much for holding this hearing.

Today's hearing is really about restoring transparency, fiscal responsibility, and American jobs. The Water and Power Subcommittee Chairman McClintock's bill to repeal the Western Area Power Administration's Stimulus Act borrowing authority for renewable energy transmission is a necessary response to a recent bankruptcy of Solyndra, the now-bankrupt recipient of 535 million stimulus dollars.

In the same way the taxpayers are now on the hook for over a half a billion dollars due to the failed Solyndra loan, the WAPA borrowing authority actually envisions and allows for similar failed investments. I will simply read to you what the statute says, and I quote: "If, at the end of the useful life of a project, there is a remaining balance owed to the Treasury under this section, the balance shall be forgiven," end quote—another way of saying, "Taxpayers, it is your responsibility."

This is a Stimulus Act experiment that needs to be halted and repealed. Billions of dollars in taxpayer dollars are at risk of a failure and a bailout. Chairman McClintock's bill would protect taxpayers and responsibly end this risky stimulus program.

We will hear that protecting taxpayers in this manner is an action hostile to renewable energy development and the construction of major transmission lines. Yet that is simply nonsense, that such projects aren't economically possible without government handouts. Such projects were under way before the program existed, and undoubtedly they will continue to stand on their own economically after it has ended.

In responding to and discussing this bill, I would urge all to be cautious about seeking to compare WAPA borrowing authority with the longstanding Bonneville Power authority, since that has been referenced at least a bit already. These authorities are as different as day and night. WAPA's authority is a creature of the stimulus and is mandated to be used for renewable energy transmission, while BPA's authority has been in existence for decades and has no such mandates. WAPA's authority specifically allows for a bailout by taxpayers, while BPA customers are fully responsible for any shortfall. In fact, that was referenced with the Washington Public Power Supply System default.

The BPA authority is administered in a public, collaborative process without political interference from Washington, D.C., while WAPA's activities have been anything but open and transparent. BPA's authority also exists to respond to the many Federal regulatory conditions, including for fish and wildlife protection, placed upon by the region's hydropower system. Do not make the mistake of trying to defend the indefensible in WAPA by attempting to change the subject.

And as it relates to Bonneville costs, I also commend the Chairman for hearing the bill sponsored by our colleague, Cathy McMorris Rodgers, that provides for the Endangered Species Act transparency on electric bills. Endangered fish costs are a major reason for electricity increases in the Pacific Northwest region—in some cases, 30 percent of the costs right now. And now, environmental extremists are pushing Snake River dam removal, which obviously would drive up power rates to unprecedented levels.

And I will just say tangentially, Mr. Chairman, as long as I am Chairman of the full Committee, that any legislation dealing with removing the Snake River dams will not be looked upon favorably by me. And, of course, now we have a problem there because we have a Federal judge that has recently put another cloud on the operating process for that area, and we have to deal with that now.

But I just want to say one thing, and that is that it is clear that in the Pacific Northwest and elsewhere in our Nation, when energy prices rise and it is followed by lower job growth and more out-of-work Americans, these two bills will protect and inform taxpayers. And they deserve bipartisan support from this Committee.

And I thank the Chairman for his courtesy in allowing me to be here, and I yield back my time.

[The prepared statement of Mr. Hastings follows:]

**Statement of The Honorable Doc Hastings, Chairman,  
Committee on Natural Resources, on H.R. 1719 and H.R. 2915**

Thank you for holding this hearing.

Today's hearing is about restoring transparency, fiscal responsibility and American jobs.

Water and Power Subcommittee Chairman McClintock's bill to repeal the Western Area Power Administration's borrowing authority is a necessary response to the recent bankruptcy of Solyndra, a recipient of a \$535 million stimulus loan guarantee. In the same way that taxpayers are now on the hook for over a half billion dollars due to the failed loan guarantee, the WAPA borrowing authority actually envisions and allows for similar failed investments. I will simply read to you what the statute says: "*If, at the end of the useful life of a project, there is a remaining balance owed to the Treasury under this section, the balance shall be forgiven.*"

At a time when we need to protect scarce taxpayer dollars, we shouldn't be in the business of continuing programs that allow taxpayers to be fleeced by failed federal investments. And, we should be asking ourselves whether it's appropriate to have the federal government even considering using 1.5 billion of additional taxpayer money a few years from now to prop up a renewable-only transmission line being financed by a multi-billion dollar company. It is simply nonsense to believe that it's economically possible without taxpayer assistance to build major transmission lines that only support intermittent renewable energy sources.

As part of this debate, I want to make sure there is a clear understanding of the distinct difference in the borrowing authorities of the Bonneville Power Administration and WAPA. While WAPA has a mandate to only use its authority for renewable energy transmission for developers, Bonneville has no such mandates, is able to use its funding for other regional matters and is able to prioritize its needs without interference from Washington, DC. The borrowing authorities are as different as night and day.

As it relates to Bonneville costs, I also commend the Chairman for hearing our colleague Cathy McMorris Rodgers' bill to provide Endangered Species Act transparency on electric bills. Endangered fish costs are a major reason for electricity rate increases in the Pacific Northwest region, reaching over 30% of the costs passed on to consumers. Environmental extremists are pushing Snake River dam removal, which would drive up power rates to unprecedented levels –while likely harming fish. Although that will not happen as long as I'm Chairman of this Committee, with a federal judge recently putting another cloud of uncertainty on the river system, electricity consumers have a right to know what their hard-earned dollars are paying for under current regulations. That's what this bill does and it's time for this Administration to open the books on salmon spending to provide more answers and to allow consumers to make informed decisions on the effectiveness of their increased energy costs.

One thing is clear in the Pacific Northwest and elsewhere in our nation: when energy prices rise, lower job growth follows. Government intervention that picks winners and losers is not the answer nor are increased regulations aimed at stifling energy production. That's why it's imperative for this Committee to help provide the business climate for an all-of –the-above energy plan that includes increased oil and natural production along with alternative and renewable sources such as hydro-power, wind, solar and nuclear. This comprehensive approach will help ensure low energy costs, strengthen our economy and create new American jobs.

Thank you again for holding this hearing.

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Mr. MCCLINTOCK. I thank the Chairman.

We will now hear from our first panel of witnesses. Each witness's written testimony will appear in full in the hearing record, so I would ask that our witnesses keep their oral statements to 5 minutes, as outlined in the invitation letter and also in the Committee's rules.

We have a timing system. A green light means you have all the time in the world. The yellow light means you are down to 1 minute. And the red light means that we have stopped listening so you might as well stop talking.

The Chair will begin by recognizing Ms. Leslie James, Executive Director of the Colorado River Energy Distributors Association, from Phoenix, Arizona.

I would like to note that Ms. James has to leave for a flight out of Baltimore, and if there is no objection, she can be excused from the panel after her testimony, and we will submit questions to her to answer.

**STATEMENT OF LESLIE JAMES, EXECUTIVE DIRECTOR,  
COLORADO RIVER ENERGY DISTRIBUTORS ASSOCIATION,  
PHOENIX, ARIZONA**

Ms. JAMES. Thank you, Mr. Chairman and members of the Subcommittee. As noted, I am Leslie James, Executive Director of CREDA. I am pleased to be here today to speak with you regarding H.R. 1719 as it relates to the Federal Colorado River Storage Project, or CRSP.

CREDA is a nonprofit organization representing consumer-owned electric utility systems that purchase Federal hydropower from the CRSP. We were formed in 1978, and our members serve over 4 million consumers in the States of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming. CREDA members have all entered into long-term cost-based contracts with the Western Area Power Administration for purchase of these resources.

CRSP customers have been insuring repayment of the Federal investment for 40 years. The rates charged under these long-term cost-based contracts repay all of the Federal investment with interest, including generation, transmission, O&M, and environmental costs. In addition, the CRSP customers are paying over 95 percent of the cost of the irrigation features of the CRSP, which are beyond the ability of the irrigators to repay. There are no taxpayer subsidies in this project.

Let me give you an example of—another example of transparency. Since 1992, CREDA has been party to a collaborative work program review process with Reclamation and Western. This process is a beneficial relationship and has provided transparency to customers of the work program elements of these Federal agencies.

H.R. 1719 is consistent with that objective. The environmental-related costs incurred by Western and Reclamation in the CRSP are both substantial, both in terms of direct program costs as well as indirect costs and replacement power due to restricted generation. From the year 2000 to the current, Western has incurred \$743 million in purchase power costs due to endangered species and other environmental objectives, market and hydrologic conditions. It is important that the customers, the firm electric service customers who are paying the bill, are apprised and aware of these costs.

Let me talk a little bit about the CRSP in general. Glen Canyon Dam is the largest generating facility in this project. It is located near Page, Arizona. In 1996, after many years of study and a \$104 million environmental impact statement, Glen Canyon operations were changed. Approximately one-third of the generating capacity has been reduced. The actual cost of this reduction, as reported in a very recent study by Argonne National Labs, is estimated to be

\$50 million per year, on average. This number reflects environmental restrictions, market conditions, and hydrologic conditions. To date, over \$273 million has been spent on studies at Glen Canyon Dam, also paid for by CRSP power revenues.

Another example: During the year 2000, due to the requirements of a 1994 Fish and Wildlife Service biological opinion, a low steady flow experiment was undertaken. This experiment was intended to gain information regarding endangered humpback chub conditions. The cost of this experiment required Western to purchase replacement power totaling \$26 million for that summer. In addition, the cost of the experimental loan was about \$3.5 million, also paid by CRSP power revenues. Just last month, we are finally receiving a report on the results of that experiment from 2000. In 1997, the Glen Canyon Dam Adaptive Management Program was established. Since that time, the direct program costs paid for by CRSP power revenues have exceeded \$105 million.

Moving up the basin, Flaming Gorge Dam is on the Green River, located near Vernal, Utah. Since 1992, Flaming Gorge operations have been changed to benefit endangered fish, reducing the generation about 17 percent. The cost averages about \$2 million a year, and the cost of the EIS was about \$1.6 million.

Over in Colorado, the Aspinall Unit includes three dams and generating facilities along the Gunnison River. Since 1998, the Upper Colorado River Endangered Fish Recovery Implementation Program has been funded \$84.5 million from CRSP power revenues. CREDA's current concern is that, once again, there may be efforts to reoperate the Aspinall Unit in favor of endangered fish and National Park Service concerns and to the detriment of hydro-power generation.

These facilities are the last remaining peaking units in the CRSP. A preliminary final EIS is currently under review by the co-operating agencies, but this process has been under way for about 8 years, with about \$3.4 million being spent on studies to date.

There should be an appropriate balance of environmental needs with authorized project purposes. We believe that H.R. 1719 provides good cost transparency for the customers who are paying the bill.

I thank the Subcommittee for being here today, and I would be glad to take any questions.

[The prepared statement of Ms. James follows:]

**Statement of Leslie James, Executive Director,  
Colorado River Energy Distributors Association (CREDA), on H.R. 1719**

Mr. Chairman, members of the Subcommittee, I am Leslie James, Executive Director of the Colorado River Energy Distributors Association (CREDA). I am pleased to have been asked to talk with you today regarding H.R. 1719, the Endangered Species Compliance and Transparency Act of 2011.

CREDA member utilities (firm power customers) have long-term, cost-based contracts with the Western Area Power Administration (WAPA), an agency within the Department of Energy, for purchase of federal hydropower generation from the Colorado River Storage Project (CRSP). My purpose today is to provide some background on the CRSP facilities, to describe environment-related impacts on the CRSP federal facilities, and to offer our support of H.R. 1719.

CREDA is a non-profit organization representing consumer-owned electric systems that purchase federal hydropower generation of the CRSP. CREDA was established in 1978, and serves as the "voice" for them in dealing with resource availability and affordability issues. CREDA represents its members in working with the

Bureau of Reclamation (Bureau), as the owner and operator of the CRSP, and WAPA, as the marketing agency of the CRSP. CREDA members are all non-profit organizations, serving over four million electric consumers in the six western states of Arizona, Colorado, Nevada, New Mexico, Utah and Wyoming. CREDA members purchase over 85% of the CRSP hydropower generation.

Attached is a listing of current CREDA members. When CREDA was formed, the key issue for its members was the increasing CRSP rate. CREDA members felt it would be more effective to have a single “voice” for them on rate, federal legislative and environmental issues impacting the CRSP.

CRSP contractors have been ensuring repayment of the federal investment for 40 years, by entering into long-term contracts to purchase the CRSP hydropower generation and by paying all of the federal investment in generation and transmission facilities (with interest), all power-related operation and maintenance costs, and associated environmental costs. In addition, the CRSP contractors are paying over 95% of the cost of the irrigation features of the CRSP—the costs that are determined to be beyond the irrigators’ “ability to pay”. In fact, in the current CRSP rate, 21% of the total annual revenue requirement is due to irrigation assistance!

It is important to note that the CRSP rate includes costs other than those associated with generation of the hydropower and irrigation assistance. Specific examples of the environment-related costs assessed to the CRSP are the programmatic (i.e., “direct”) costs of the Glen Canyon Adaptive Management Program (AMP) and the Upper Basin Endangered Fish Recovery Implementation Program (RIP). Since approximately \$743 million in purchased power costs have been incurred by WAPA since 2000, CREDA believes it is important that the customers have visibility of those costs, which are included in their firm power rates. More detail on these costs and programs will be provided below.

#### **I. H.R. 1719 AND THE CRSP**

The environment-related costs incurred by the Bureau and WAPA in the CRSP are significant. Those costs are borne almost exclusively by the power customers of the CRSP. By law, these customers are not-for-profit entities; thus they have no option other than to pass those costs on to their consumers.

H.R. 1719 provides a mechanism for the power customers to readily receive information regarding the direct and indirect costs associated with the federal agencies’ compliance with the Endangered Species Act (ESA) and other environmental requirements. These costs should also include those costs associated with mitigation and reasonable and prudent alternative compliance under the ESA. Each power customer would then have the ability to utilize that information in a manner that best fits its individual needs. It is our understanding that this information is readily available and can be provided at little or no incremental cost to the agencies. CREDA supports the additional transparency of these costs as a sound business practice.

In 1992, CREDA, the Bureau and WAPA entered into a contractual arrangement that gives CREDA the ability to review agency work plans and, through a defined process, provide customer input and perspective to the agencies. This contractual arrangement has been invaluable to fostering a partnership-type relationship among the three entities and has encouraged transparency in agency cost reporting. H.R. 1719 is consistent with that objective; it provides more information to the customers who ultimately are responsible for “paying the bills”.

#### **II. THE CRSP FACILITIES AND ENVIRONMENTAL IMPACTS**

CRSP was authorized in the Colorado River Storage Project Act of 1956 (P.L. 485, 84th Cong., 70 Stat. 50), as a multi-purpose federal project to provide flood control; water storage for irrigation, municipal and industrial purposes, in addition to the generation of electricity. This testimony will focus on the major generation features of the CRSP, although there are several irrigation projects authorized as part of the Project. The CRSP power features include five dams and associated generators, substations, and transmission lines.

##### ***GLEN CANYON DAM***

Glen Canyon Dam is located near Page, Arizona and is by far the largest of the CRSP projects. Glen Canyon Dam began operation in 1964. The water stored behind the dam is the key to full development by the Upper Colorado River Basin states of their Colorado River Compact share of Colorado River water. The Glen Canyon power plant consists of eight generators for a total of about 1300 MW, which is more than 76% of total CRSP generation.

The ability of the Bureau to generate, and WAPA to market, the total generating capability of Glen Canyon Dam has been impacted over a period of many years, by various processes and laws. In 1978 the Bureau began evaluating the possibility of

upgrading the eight generating units at Glen Canyon. This was possible, primarily due to design characteristics of the generators and improved insulating materials. This upgrade was completed, and the generation was increased from about 1000 to 1300 MW.

To fully utilize the unit upgrades would require the maximum release of water from Glen Canyon to be increased from 31,500 cubic feet per second (cfs) to about 33,200 cfs. The Bureau also studied the possibility of adding new generating units on the outlet works to provide additional peaking capacity. The possibility of increasing maximum releases from Glen Canyon raised concerns with downstream users. After discussion with stakeholders, the Secretary of the Interior initiated the first phase of the Glen Canyon Environmental Studies.

In 1982, the Bureau began Phase 1 of the Glen Canyon Environmental Studies. These studies were primarily to analyze the impacts of raising the maximum release from 31,500 cfs to 33,200 cfs on the transport of sediment downstream from the dam, recreation (including fishing and rafting), endangered species (including the humpback chub in the Lower Colorado River), and the riparian habitat along the river banks. The studies proceeded during the early 1980's and were concluded in 1987. The general conclusion of the Glen Canyon Environmental Studies Phase 1 was that the dam had blocked much of the sediment coming down the Colorado River and therefore beaches were not being replenished with sand. However, the impact on power and water economics was not fully explored.

After reviewing the Glen Canyon Environmental Studies Phase 1 and a review by the National Academy of Science, the Secretary of the Interior determined that the Glen Canyon Environmental Studies should be continued to address the economic impacts, particularly as they relate to power, and also to collect additional data to substantiate some of the conclusions in the Phase 1 report. The Glen Canyon Environmental Studies Phase 2 was initiated in 1989, which included a series of test flows to evaluate the impact of different operating conditions.

In July 1989, the Secretary of the Interior announced the start of an environmental impact statement (EIS) on the operation of the Glen Canyon Dam. No specific Federal action was identified for study. Meetings were held during 1990 to seek input into alternatives that should be considered, and the Bureau determined that nine alternatives (including a "no action" alternative) should be studied. Meanwhile, in 1992, the Grand Canyon Protection Act (GCPA) (106 Stat. 4672) was signed into law. Section 1804 of the Act required completion of the EIS within two years. The EIS was completed and the Record of Decision (ROD) signed in October 1996. As a result, Glen Canyon operations were changed to reflect a revised flow regime; approximately one-third of the generating capacity was lost (456 MW).

The cost of the Glen Canyon EIS was approximately \$104 million, and was funded by power revenues collected from the CRSP contractors. To date, over \$273 million has been spent on Glen studies, and paid by CRSP power revenues. This figure does NOT include the over \$105 million spent from 2000 to the current year for the Adaptive Management Program. The GCPA says that CRSP power revenues MAY be used to fund the Adaptive Management Program (emphasis supplied). It is not a mandate, but a permissive use of power revenues, which will be addressed in more detail below.

In 1991, the Department of the Interior estimated the expense from lost generation due to the changes in Glen Canyon Dam operation to be \$44.2 million annually (adjusted for inflation). Given what has occurred in the energy markets and hydrologic conditions (drought) since that time, the cost was higher. A recent study prepared by Argonne National Labs for the Western Area Power Administration (the "post-ROD study"), the average annual cost has been approximately \$50 million annually. The cost of replacing that power is borne by the CRSP customers.

In April of 2000, it was determined that due to hydrologic conditions and requirements of a 1994 USFWS biological opinion, a low steady flow summer experiment would be undertaken. The experiment included high spike flows in May and September, with low flat flows (8,000 cfs) all summer. The purpose was to gain information regarding endangered humpback chub conditions. The low, flat flows and hydrology, along with western energy market prices, had a severe impact on power generation, requiring CRSP customers and WAPA to purchase replacement power to meet their resource needs. The cost incurred by WAPA (and to be recovered from CRSP contractors) for this replacement power was \$26 million, during that summer. The cost of the experiment alone was over \$3.5 million, funded by CRSP power revenues. These figures do NOT include additional costs to CRSP contractors who had to purchase or supplement their CRSP resource with purchases from the energy market. A final report on the responses of key resources was finally issued in August 2011 (USGS Open File Report 2011-1220).

*ASPINALL UNIT*

The Aspinall Unit includes three dams and generating plants along the Gunnison River near Gunnison, Colorado. Blue Mesa is the first dam on the river and has two units producing about 97 MW. Morrow Point is the second dam in the series and consists of two generators producing a total of 146 MW. Crystal is the final dam and has one 32 MW generator. Morrow Point and Crystal Reservoirs allow some regulation of the river flow so that releases from Crystal can be used to regulate downstream flows as necessary.

Since the early 1990's as part of the Upper Colorado River Endangered Fish Recovery Implementation Program, or RIP, studies have been undertaken to determine fish needs in this region. In November 2004, the Bureau held the first Cooperating Agency meeting, which they have opened to the public. One of CREDA's members, Platte River Power Authority (Colorado), is a cooperating agency in the process. This EIS process has been underway for about 8 years, and a draft preliminary final EIS was issued to the cooperating agencies in late August, 2011. Study costs to date total \$3.4 million. CREDA's view is that, while maintaining authorized project purposes, the Bureau may operate the facilities to benefit fish and wildlife and recreation resources. Their obligation, however, is to avoid jeopardy to endangered species, not a broader duty.

*FLAMING GORGE DAM*

Flaming Gorge Dam is on the Green River, a major tributary of the Colorado River, and is located near Vernal, Utah. Flaming Gorge has three units producing about 152 MW of generation. In 1992, the USFWS issued a Biological Opinion on the operation of Flaming Gorge Dam. Approximately 26 MW of generating capacity have been lost to date due to changed operations to benefit endangered fish, estimated at approximately \$2 million per year. The Record of Decision on the operation of Flaming Gorge Dam was signed in February 2006. The cost of the EIS was approximately \$1.6 million. Two CREDA members from Utah have been "cooperating agencies" through this process. We expect the same level of operational expense to be incurred following issuance of the ROD.

**III. THE ENVIRONMENTAL PROGRAMS IN THE CRSP***GLEN CANYON DAM ADAPTIVE MANAGEMENT PROGRAM*

CREDA participates on the Federal Advisory Committee charged with making recommendations to the Secretary of the Interior as to operations of Glen Canyon Dam pursuant to the Record of Decision and underlying laws. Funding for the program (Adaptive Management Program) is provided through CRSP power revenues. Proposed funding for this year's program is over \$10 million.

On October 27, 2000, President Clinton signed the FY 2001 Energy and Water Development Appropriations Act, which includes language (Section 204) capping the amount of CRSP power revenues that can be used for the Adaptive Management Program at \$7,850,000, subject to inflation. Without this cap, the annual program costs would have continued to increase more rapidly, with power revenues being the primary funding source. Over \$105 million of CRSP power revenues has been spent to date on direct program costs.

Science findings over the past 14 years indicate that some of the premises on which the EIS/ROD were based may have resulted in different or inconclusive resource impacts and that the current flow restrictions may not be beneficial to downstream resources (primarily humpback chub and sediment). For instance, the endangered humpback chub population has continued to increase since 2000, albeit it is unclear whether this increase is due to current fluctuating operations, temperatures, or non-native fish interactions. It is imperative that these science findings be incorporated into recommendations to the Secretary of the Interior to implement flow changes and management actions to benefit the downstream resources and to maximize power production.

On February 15, 2006, ESA-related litigation was filed in Arizona District Court by the Center for Biological Diversity, Sierra Club, Living Rivers and Arizona Wildlife Federation against the Department of the Interior and the Bureau. This litigation was ultimately settled. Unfortunately, additional litigation was filed by the Grand Canyon Trust in December 2007 against the Bureau and Fish and Wildlife Service, seeking to impose an extreme operational shift to a steady flow regime. Although the District Court in Arizona found for the United States on all counts in March 2011, the case has been appealed to the 9th Circuit Court of Appeals. This litigation could have program and cost implications for the Adaptive Management Program.

CRSP contractors have paid, and continue to pay, the majority of costs at Glen Canyon, even while the dam's generating capacity has been depleted by about one-

third, and there are significant operating constraints on the remaining available capability, as required by the 1996 ROD. Just since 2000, the replacement power cost (i.e., "indirect" cost) incurred by WAPA (and borne by CRSP power customers) totals \$239 million. This amount does not include costs borne by each CRSP power customer to "make up" any additional resource not provided by WAPA. These costs are significant and H.R. 1719 would enhance the ability of the power customers to be aware of the environmental costs associated with these programs.

**UPPER COLORADO RIVER ENDANGERED FISH RECOVERY IMPLEMENTATION PROGRAM (RIP)**

The RIP was established through cooperative agreements among States and federal agencies in 1988 for a 15-year period to help recover four endangered fish in the Upper Colorado Basin. Power revenues currently fund about 60% of the base research/study program. Federal legislation was passed in October 2000, which authorized a \$100 million capital improvements program. CREDA testified in support of this legislation in both House and Senate hearings. The legislation provides matching funds for the capital program so that, in the event State funding for the program ceases, power revenue funding also ceases.

The legislation requires CRSP power revenue funding for monitoring and research (currently \$7.2 million per year. In addition, the Upper Basin States and CRSP power customers each contributed \$17 million toward funding capital features. The legislation recognized that changes in operation of Flaming Gorge and Aspinall generation as a result of Biological Opinions cost CRSP contractors \$15 million. To date, \$84.5 million has been funded by CRSP power revenues for monitoring and research activities in this program.

**IV. RECOMMENDATION**

CREDA encourages passage of H.R. 1719 as a sound business practice and an important measure, which will provide transparency and cost information to the customers of the federal Power Marketing Administrations.

Thank you for the opportunity to appear today.

**COLORADO RIVER ENERGY DISTRIBUTORS ASSOCIATION (CREDA)  
MEMBERSHIP**

**ARIZONA**

Arizona Municipal Power Users Association  
Arizona Power Authority  
Arizona Power Pooling Association  
Irrigation and Electrical Districts Association of Arizona, Inc.  
Salt River Project

**COLORADO**

Colorado Springs Utilities  
Intermountain Rural Electric Association  
Platte River Power Authority  
Tri-State Generation & Transmission Cooperative  
(also Nebraska, Wyoming and New Mexico)  
Yampa Valley Electric Association, Inc.

**NEVADA**

Colorado River Commission of Nevada  
Silver State Electric Association

**NEW MEXICO**

City of Truth or Consequences  
Farmington Electric Utility System  
Los Alamos County  
Navajo Tribal Utility Authority

**UTAH**

City of Provo  
City of St. George  
South Utah Valley Electric Association  
Utah Associated Municipal Power Systems  
Utah Municipal Power Agency

**WYOMING**

Wyoming Municipal Power Agency

# FactSheet

January 2010

## BPA invests in fish and wildlife

The Columbia River hydroelectric system produces emissions-free electricity that provides a host of benefits to our region. BPA is committed to mitigating impacts of the federal hydropower system on fish, wildlife and habitat. As a result, BPA funds and manages one of the largest fish and wildlife protection programs in the nation, and invests hundreds of millions of dollars a year to make dams safer for fish, restore damaged habitat, protect threatened lands and more. The fish and wildlife program is guided by on-the-ground partnerships with conservation agencies, states and Tribes, and is responsive to regional and federal environmental protection regulations.

BPA's funding for fish and wildlife has five main components:

**EXPENSE OR DIRECT PROGRAM:** BPA funds more than 450 fish and wildlife projects in the Columbia Basin including habitat restoration, research, hatcheries, land acquisitions, predator control and culvert replacements.

**REIMBURSABLE:** BPA reimburses the U.S. Army Corps of Engineers and the Bureau of Reclamation for a portion of those operation and maintenance costs related to improvements at the dams for fish passage and the U.S. Fish and Wildlife Service for hatchery operations.

**CAPITAL REPAYMENT:** BPA reimburses the U.S. Treasury, principal and interest, for constructing capital projects such as hatcheries and fish passage projects at the dams.

**POWER PURCHASES:** BPA is obligated to provide its customers with electricity, and if fish operations limit electricity generated at the dams, BPA must purchase power elsewhere to supply customer demand. Cost varies depending on power market prices and water volume.

**LOST OPPORTUNITY COSTS:** The water that is spilled over the dams for fish represents "lost" electricity and money that could have been generated if the water had passed through the turbines. Cost varies depending on power market prices and water volume.

BPA's investment in protections for fish and wildlife is part of a broader federal effort in the region by agencies including the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the U.S. Bureau of Reclamation, and the National Oceanic and Atmospheric Administration that total over \$1 billion each year.

What BPA spent for fish and wildlife 1999–2009<sup>1</sup> (\$ in millions)

Cost category	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Expense or direct	\$ 108.2	\$ 108.2	\$ 104.0	\$ 144.2	\$ 147.2	\$ 145.7	\$ 135.8	\$ 137.9	\$ 139.5	\$ 148.9	\$ 177.9
Reimbursable	38.9	37.6	42.5	50.9	52.6	57.2	57.9	60.7	60.3	62.2	64.3
Capital repayment	76.1	76.3	78.2	78.2	80.5	85.4	89.7	87.5	112.9	116.2	120.0
Power purchases	47.6	64.8	1389.6	147.8	171.1	191.0	110.8	168.2	120.7	274.9	240.3
Lost opportunity costs	197.8	272.2 <sup>2</sup>	115.9	12.6	79.2	21.7	182.1	397.4	282.6	273.5	142.8
<b>TOTAL</b>	<b>\$ 468.6</b>	<b>\$ 559.1</b>	<b>\$ 1730.2</b>	<b>\$ 433.7</b>	<b>\$ 530.6</b>	<b>\$ 501.0</b>	<b>\$ 576.3</b>	<b>\$ 851.7</b>	<b>\$ 715.9</b>	<b>\$ 875.8</b>	<b>\$ 745.3</b>

<sup>1</sup> For purposes of this presentation, this financial information has been made publicly available by BPA in January 2006 and is consistent with the financial system of record used in preparation of the audited financial statements for the respective period reported.

<sup>2</sup> This includes an estimated cost to BPA of \$79.1 million for an energy-shaping agreement with Idaho Power Company (IPC). FY 2000 was the final year of this contract.



Bonneville Power Administration  
BPA/807-4136 • January 2010

Mr. McCLINTOCK. Thank you, Ms. James, for your testimony. We also understand your transportation constraints, and you are excused from the panel whenever you need to leave.

Ms. JAMES. Thank you.

Mr. McCLINTOCK. The Ranking Member of the Committee on Natural Resources has arrived and would like to make an opening statement. So, without objection, we will suspend the regular order to recognize him.

I will also ask unanimous consent that we suspend the regular order for Ms. McMorris Rodgers, who is detained at a House Republican Conference meeting.

So, without objection, the Chair recognizes the Ranking Member, Mr. Markey, for 5 minutes.

**STATEMENT OF HON. EDWARD MARKEY, A REPRESENTATIVE  
IN CONGRESS FROM THE COMMONWEALTH OF  
MASSACHUSETTS**

Mr. MARKEY. Thank you, Mr. Chairman. Thank you for your graciousness.

Mr. Chairman, we are meeting today to consider two bills. They may be the worst policy suggestions that have come before this Committee since yesterday.

The first bill would bar the Western Area Power Administration from using borrowing authority to support the construction of transmission lines. But the Bonneville Power Administration also has a similar borrowing authority. The bill doesn't go after the \$3.25 billion in borrowing authority; it only targets Western's, because Western's borrowing authority is intended for transmission of renewable energy. Bonneville's does not specify.

What happened to the GOP's all-of-the-above energy strategy? Apparently, it has been replaced by an all-of-the-below strategy, energy sources that come from below the ground—oil, natural gas, coal—along with nuclear power, which all get lavished with huge tax breaks, royalty breaks, government loan guarantees, and other subsidies. Solar, wind, and other renewable energy sources get left behind under the Republican plan.

From Alexander the Great to our current conflagrations in the Middle East, battles are often won or lost on the supply routes. And in the growing Republican war on clean energy, today we are seeing that they are using the same tactics, attacking the transmission supply route for wind and solar energy to starve the sound basis for new projects. It is classic military strategy. But in this war on clean energy, Republicans are on the wrong side of history and of economics.

The second bill that we are considering would have Power Marketing Administrations make a special note on customer bills highlighting the cost of compliance with the Endangered Species Act. If my Republican colleagues are really concerned about disclosing costs to their customers, let me suggest an alternative.

In 1982, the Washington Public Power Supply System, more commonly and appropriately remembered as WPPSS, finally gave up on the construction of four nuclear power plants after realizing they were hopelessly behind schedule and way over budget. The ensuing default was the largest municipal bond failure in the history of our country until that time. Ratepayers were on the hook for \$2.3 billion—big money in the early 1980s. This worked out to more than \$12,000 per customer in some regions. Ratepayers to this day are still paying back the cost of that nuclear folly nearly 30 years later.

If the idea behind this bill is transparency, I would suggest the legislation also require inclusion of the cost of nuclear bailouts on customer bills in the Bonneville operating region, where WPPSS is located. I think they should each know how much they are still paying on that mess that was created with nuclear power back in the 1980s.

We could also require bills to note what the power would actually cost if market rates were being charged, like they are in most

places in the country, rather than taxpayer-subsidized cost-based rates.

Maybe we could also include a line item on customer bills to show the discount power administration customers are getting from U.S. taxpayers subsidizing the construction of the hydroelectric dams generating the vast majority of their electricity.

Bonneville's cost to service the debt left over from the nuclear bailout three decades ago was more than \$550 million last year alone. The cost of compliance with the Endangered Species Act, something that the region actually receives a significant benefit from, is \$175 million. So what we really have here is a little fish in a big nuclear debt pond.

These bills are part of the same Republican agenda that yesterday attempted to push through emergency funding for natural disaster victims at the expense of a program that helps American companies manufacture super-efficient vehicles that reduce our dangerous dependence on foreign oil. That initiative failed yesterday. That is why the Republicans are in caucus right now; how can they resuscitate that? These two anti-environment, anti-clean-energy bills before us today should fail, as well.

Thank you, Mr. Chairman, very much.

[The prepared statement of Mr. Markey follows:]

**Statement of The Honorable Edward J. Markey, Ranking Member,  
Committee on Natural Resources**

Mr. Chairman, we are meeting today to consider two terrible bills. If fact, they may be the worst policy suggestions that have come before this Committee since . . . yesterday.

The first bill would bar the Western Area Power Administration from using borrowing authority to support the construction of transmission lines. But the Bonneville Power Administration also has a similar borrowing authority. Mr. McClintock's bill doesn't go after that \$3.25 billion in Borrowing Authority, it only targets Western's. Why? Because Western's borrowing authority is intended for transmission of renewable energy. Bonneville's does not specify.

What happened to the GOP's "All of the Above" energy strategy? Apparently it has been replaced with an "All of the Below" strategy. Energy sources that come from below the ground—oil, natural gas, and coal—along with nuclear power get lavished with tax breaks, royalty breaks, government loan guarantees, and other subsidies. Solar, wind and other renewable energy sources get left behind under the Republican plan.

From Alexander the Great, to our current conflagrations in the Middle East, battles are often won or lost on the supply route. And in the growing Republican war on clean energy, today we see they are using the same tactics, attacking the transmission supply route for wind and solar energy to starve the sound basis for new projects. It's classic military strategy, but in this war on clean energy, Republicans are on the wrong side of history and of economics.

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In 1982, the Washington Public Power Supply System—more commonly remembered as WOOPS—finally gave up on the construction of four nuclear power plants after realizing they were hopelessly behind schedule and way over budget. The ensuing default was the largest municipal bond failure in history at the time. Ratepayers were on the hook for \$2.3 billion. This worked out to more than \$12,000 per customer in some regions. Ratepayers to this day are still paying back the costs of that nuclear folly nearly 30 years later.

If the idea behind this bill is transparency, I would suggest the legislation also require inclusion of the cost of nuclear bailouts on customer bills in the Bonneville operating region, where WPPS [PRONOUNCE: WOOPS] is located. We could also require bills to note what the power would actually cost if market rates were being

charged like they are in most places in the country—rather than taxpayer subsidized “cost based” rates. Maybe we could also include a line item on customer bills to show the discount Power Administration customers are getting from U.S. taxpayers subsidizing the construction of the hydroelectric dams generating the vast majority of their electricity.

Bonneville’s cost to service the debt leftover from the nuclear bailout 3 decades ago was more than \$550 million last year alone. The cost of compliance with the Endangered Species Act—something that the region actually receives a significant benefit from—is \$175 million. So what we really have here is a little fish in a big nuclear debt pond.

These bills are part of the same Republican agenda that yesterday attempted to push through emergency funding for natural disaster victims at the expense of a program that helps American companies manufacture super-efficient vehicles that reduce our dangerous dependence on foreign oil. That initiative failed. These two anti-environment, anti-clean energy bills before us today should also fail.

Mr. McCLINTOCK. Thank you.

We will now resume the regular order of the Committee, which begins with Mr. Fred Rettenmund, Power Resources and Communications Manager of the Inland Power and Light Company, from Spokane, Washington, to testify.

**STATEMENT OF FREDERIC DEAN RETTENMUND, POWER RESOURCES AND COMMUNICATIONS MANAGER, INLAND POWER AND LIGHT COMPANY, SPOKANE, WASHINGTON**

Mr. RETTENMUND. Thank you, Mr. Chairman and other Committee members. Inland Power and Light appreciates the opportunity to be here today and share our views on H.R. 1719, which we think is an important piece of legislation that would help all of us better understand, and our consumers understand, costs related to the Endangered Species Act and related programs.

First, though, Inland is a small utility. We only serve 39,000 members or consumers, but we cover that area in 13 counties in eastern Washington and northern Idaho. We buy all of our power, currently, from the Bonneville Power Administration, which I would happily note is 80 percent clean, renewable hydropower, and we really like that aspect of their portfolio.

Our total cost of purchasing power and transmission services from Bonneville is about \$27 million per year. That is \$24 million for power and about \$3 million for transmission. Transmission is a much smaller component of the total cost from Bonneville.

About half of our total cost of business is to buy power and transmission services from Bonneville. The other portion is related to our own distribution costs. To get it to our members—which, by the way, we only have five members per mile line. So, Mr. Chairman and others, to give you a sense of the real rural nature of our service territory, we are quite rural. Our service territory overlaps Congresswoman McMorris Rodgers’ service territory—or, her district quite well. And we appreciate her efforts to focus on issues that are of interest to us.

So we support 1719. We support it both in terms of the direct costs that Bonneville incurs and the indirect cost. And the importance there is, both of those affect the rates that BPA charges us. And indirect costs are just as important, if not more so, than direct costs. The number is considerable.

I guess I would indicate that these costs are paid for by our consumers. We don’t have any money, ourselves. We get it from our

consumers, who are working families and they are irrigators and they are small businesses. And those people are working hard to make ends meet. And that is who we get the funds to pay this \$27 million to Bonneville.

Now, I have attached to my testimony a fact sheet that Bonneville issued, 2010, that describes the total cost of their providing fish and wildlife programs that, as I indicated, we pay for. The cost has risen from around \$470 million in 1999 to about \$745 million per year. That is big numbers.

I would note that over the course of the whole fish and wildlife program, the total cost of that is about \$12 billion from the beginning in 1980. That is also, in anybody's scorecard, that is real money.

I would address the notion that, yes, there are other cost categories, but fish and wildlife is the cost category that seems to be growing faster than other, sort of, components of Bonneville's rates. A lot of the other costs are fixed, and a lot of the fish and wildlife costs are varying significantly.

Thirty percent of Bonneville's rate is related to fish and wildlife costs. That is a significant portion. And, quite frankly, the \$750 million a year for the total cost of the program is very difficult for our members to get, sort of, a handle on what that means for them. So what we need to do is provide them with good information about how that relates to their bill and what they are sending to us.

Now, we think Bonneville can play a major role in sort of clarifying some of that, providing better information. I have done a back-of-the-envelope calculation, but we really would like to rely on Bonneville to provide a more precise set of numbers with respect to what is on our bill and other customers' bills. It won't be real tough for them to do. They have some of the best analytical staff in the country on the power side of the business. And it won't be, really, a difficult thing for them to do, at least in total. And we are interested in a total, as well as ESA costs, as an estimation.

So I guess I would just leave you with the concluding, sort of, notion that we are on board with the general notion that we need to try and do right things for fish, things that are cost-effective, prudent, things that are based on sound science, but, basically, there are some questions there.

I would indicate, finally, we support 1719. And our fundamental view is that, in the spirit of 1719, better-informed electric consumers mean better-informed citizens, and that is a good thing.

Thank you.

[The prepared statement of Mr. Rettenmund follows:]

**Statement of Frederic Dean Rettenmund, Power Resources and Communications Manager, Inland Power and Light Company, on H.R. 1719**

**Introduction and Background**

Chairman McClintock, Ranking Member Napolitano, Representative McMorris Rodgers and members of House Subcommittee on Water and Power, I appreciate the opportunity to appear before you today representing Inland Power and Light Company to share our views on the importance of having timely, accurate and easy to use information about ESA compliance costs.

My name is Fred Rettenmund. I am the Power Resources and Communications Manager for Inland Power and Light Company. Inland Power is a cooperative utility that serves approximately 39,000 consumers in thirteen counties in eastern Washington and northern Idaho. Inland Power currently purchases all its wholesale

power from the Bonneville Power Administration. Over 80% of our total power supply comes from clean, renewable hydroelectric power. Inland Power spends about \$27 million a year for BPA power and transmission services. BPA related costs make up about half of our total cost of doing business with the other half covering the costs of delivering power to our members. Inland Power primarily serves residential consumers and has a largely rural service territory averaging only five members per mile of distribution line.

Inland Power is located principally in Washington's 5th Congressional District served by Representative Cathy McMorris Rodgers. We appreciate her ongoing support regarding issues facing our consumers.

#### **Inland Power Supports H.R. 1719**

Inland Power supports H.R. 1719, the Endangered Species Compliance and Transparency Act of 2011. BPA should report to its utility customers what portion of each utilities' monthly wholesale power and transmission bill is related to direct and indirect fish costs. This information will assist utilities in their efforts to better inform their consumers.

BPA costs are paid for by the consumers of utilities that purchase power from BPA. The policies BPA adopts, actions it takes and costs it incurs have a large impact on our members. Accordingly, we participate in a large number of BPA related forums and meetings. We commit the time and effort to these activities to create a better understanding of BPA's programs and their related costs, and in turn provide informed recommendations and comments about BPA's policies, operations and practices. H.R. 1719 will be of significant value in these efforts.

#### **Challenges Utilities Face with Fish and Wildlife Costs**

Key amongst the challenges faced by BPA are issues dealing with salmon and steelhead programs. The BPA funded, or should I say consumer or ratepayer funded, actions regarding fish are very complex, diverse and on a scale unmatched anywhere else in the United States or possibly the world. As shown in the BPA's January 2010 Fact Sheet ("BPA invests in fish and wildlife") attached to this testimony, in the eleven years from 1999 to 2009 BPA's fish and wildlife expenditures increased from approximately \$470 million to about \$745 million per year. What was spent in total for fish and wildlife during this period was about \$8 billion, and almost \$12 billion has been spent since 1980. Fish related costs are one of the fastest growing BPA cost categories, have a significant impact on BPA wholesale power rates and what utility customers like Inland Power, and our consumers, pay for electric power.

All these costs end up in the monthly electric bills of the ratepayers of 125 Northwest utilities. It is our understanding that fish and wildlife costs represent more than 30 percent of the rate that is charged to Inland Power and other utilities. We doubt that many of the consumers in the region are aware of what they are paying towards BPA's fish related costs. Providing clear direction to BPA about their responsibilities in reporting Endangered Species Act related costs would be useful to the region and the public. Having readily accessible and transparent cost information would be most beneficial.

#### **Providing Valuable Information**

We are aware that the Northwest Power and Conservation Council annually provides a report to the Northwest Governors on the expenditures of Columbia River Basin Fish and Wildlife Program. Using data primarily supplied by BPA this report provides extensive information on the varied aspects of the BPA funded fish program. However, making these very large and program-wide numbers meaningful to the typical consumer is another story. It is very difficult for an Inland Power consumer to understand what \$700 to \$800 million per year in BPA fish costs might mean in terms of their own electric bill. Inland makes an effort to convey what fish costs are included in an Inland members' retail electric bill. However, it would be a big improvement if the monthly wholesale power bill Inland Power receives from BPA would provide information regarding what portion of that bill is related to fish costs.

From Inland Power's perspective H.R. 1719 is about information sharing. While from time to time there is much debate about the effectiveness of various specific fish programs and actions, information and knowledge about fish and wildlife costs should be seen as a means to improve the overall discussions about the fish and wildlife programs.

Inland Power, like many other utilities, has in recent years experienced increases in retail electric rates and will undoubtedly have to raise its rates in the not too distant future. Our members want and deserve to have quality information about the factors impacting their electric bills. That would include information related to

Inland Power's own costs of operating and maintaining over 7,500 miles of distribution lines, other costs of providing reliable and safe electrical service and information regarding BPA costs, including fish costs.

**Conclusion**

In summary, having easy access to factual numbers about how much each utility is spending on ESA costs and related activities would be very helpful to the region's utilities as they seek to provide information to their consumers. Mr. Chairman, I would like to thank you for holding this hearing and providing Inland Power with the opportunity to share our views on this significant issue affecting our utility and the members we serve.

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Mr. MCCLINTOCK. Thank you for your testimony.

Our next witness is Ms. Sara Patton, Executive Director of the Northwest Energy Coalition, from Seattle, Washington, to testify.

**STATEMENT OF SARA PATTON, EXECUTIVE DIRECTOR,  
NW ENERGY COALITION, SEATTLE, WASHINGTON**

Ms. PATTON. Good morning, Mr. Chairman and members of the Committee. Thank you very much for the opportunity to be here.

My name is Sara Patton. I am the Executive Director of Northwest Energy Coalition. The Northwest Energy Coalition is a coalition of more than 110 consumer, environmental, faith-based, and low-income groups, unions, clean energy businesses, and progressive utilities from the four Northwest States and British Columbia, working together for a clean and affordable energy future.

I am testifying today to raise concerns about H.R. 1719. My remarks focus on the Bonneville Power Administration because that is what we basically know about. And I have also submitted detailed written comments and will be brief and happy to answer any questions.

For the groups I represent, H.R. 1719 raises a number of concerns. First, I would like to emphasize that environmental and consumer public interest groups enthusiastically support transparency in economic analyses and reporting. We would support H.R. 1719 if it mandated a full and thorough accounting of the costs and benefits of Federal dam operations on fish anglers and fishing communities, irrigators, recreational businesses, and other users of the river along with power consumers. Only by looking at the whole picture can any particular cost category be put in perspective. H.R. 1719 looks only at a small part of how the Columbia River is shared and paid for.

The whole picture would include, for example, disclosure of the high cost of the Columbia Generating Station, a nuclear power plant which BPA funds. BPA reported in 2009 that the operations and maintenance costs for the Columbia Generating Station, which produces 10 percent of BPA's power, are greater than the operations and maintenance costs of the entire remainder of the Federal Columbia River Power System, the 31 hydroelectric dams which produce the remaining 90 percent of Bonneville's electricity. Those are costs and benefits worth thinking about.

My next concern is that this bill is unnecessary for the Northwest. Information on fish and wildlife restoration costs are readily available from BPA and the Northwest Power and Conservation Council. Utilities are free to inform their consumers if they wish, and many do so now. And it must be noted, the bill doesn't guar-

antee the information will get to the utilities' customers but only to the utilities.

Third, it must be noted that BPA's fish and wildlife restoration is required by a number of Federal laws and treaties dating back to 1855, so separating out the ESA cost is next to impossible. H.R. 1719 proposes no way to separate which costs are specifically required to meet the ESA alone, perhaps because it can't be done.

Fourth, H.R. 1719 should not count the cost of foregone revenue as an ESA compliance cost. Including foregone revenue and the cost of replacement power as a cost implies that BPA can claim savings for violating Federal laws or that BPA somehow owns the river. Bonneville does not own the river; it shares the river with all the other users, including fish and wildlife. BPA is not entitled to all the possible revenue it can squeeze out of the river, only its share. Nor is BPA entitled to claim lost revenue from power that is illegal to generate in the first place.

An analogy will help. Trucking companies must obey a number of safety regulations. These include providing seatbelts and equipment inspections. Equipment costs are real and should be counted as a cost of compliance with regulations. However, we do not count as a cost the forgone revenue that a company could have realized if its drivers could drive over the speed limits or ignore weight limits. Trucking companies do not own the highways, and the cost of sharing them with other users is not revenue somehow owed to them. Similarly, the various users of the river do not owe each other money. They are all simply sharing this great resource.

In fact, the Northwest Power and Conservation Council reported in 2006 that irrigation water withdrawals account for about \$250 million per year in, quote, "foregone revenues," end quote. Does that mean BPA ratepayers are subsidizing farmers? Of course not. Farmers and power users are sharing the river with recreation, flood control, navigation, and, of course, fish and wildlife.

However, if Congress believes it is important to report such costs, then it should require a calculation of all the costs of the Federal river system and report all of them on a consistent basis.

Furthermore, true transparency would examine both costs and benefits. A real examination of ESA impacts must include the economic benefits to the region of salmon restoration in terms of jobs and revenue. This legislation would only identify costs and, therefore, would not give the public or utilities a clear and complete picture of Federal and regional investments in salmon recovery unless it includes the enormous benefits these expenditures provide.

Finally, even if we accept the foregone revenue for ESA compliance as a cost, BPA rates will still be a great deal. We don't think it is a good idea to jeopardize the low-cost hydropower the Northwest depends on by failing to meet our legal and stewardship responsibilities for God's creation.

In conclusion, the Northwest Energy Coalition supports objective and transparent accounting of BPA's fish-and-wildlife-related costs, but H.R. 1719 introduces a number of difficult issues that need to be resolved before our coalition could support it.

Thank you very much for this opportunity.

[The prepared statement of Ms. Patton follows:]

**Statement of Sara Patton, Executive Director,  
NW Energy Coalition, on H.R. 1719**

The NW Energy Coalition is a coalition of more than 110 consumer, environmental, faith-based and low-income groups, unions, clean energy businesses, and progressive utilities from the four Northwest states and British Columbia, working toward a clean and affordable energy future. I am testifying today in opposition to H.R. 1719. Although H.R. 1719 applies equally to all Federal Power Marketing Agencies (PMAs), this testimony is focused mainly on the Bonneville Power Administration (BPA) because that is our area of expertise and concern. However, in most cases, we believe the intent of these comments is applicable to the other PMAs.

**Summary**

The proposal in H.R. 1719 to require the Bonneville Power Administration (BPA) to report the costs of compliance with the Endangered Species Act (ESA) raises a number of concerns:

- Transparency of BPA's costs is a laudable goal, if there is full and honest accounting to inform the public of the whole story.
- This bill is unnecessary: the information on fish and wildlife program funding is already readily available from BPA, and utilities are free to inform their customers if they wish.
- BPA's fish and wildlife funding is required by a number of federal laws and treaties; separating out ESA costs is difficult or impossible.
- Proposals to include foregone revenues in these costs imply that BPA can claim benefits for violating federal laws, and that BPA power production usage is paramount to all other uses.
- Meaningful economic transparency should address both costs and benefits.
- The definition of the firm customers' share of BPA's ESA costs can be interpreted in different ways, leading to starkly different conclusions. If not done correctly such accounting fosters more confusion than transparency.
- This issue is likely to focus national attention on the fact that BPA's wholesale power rates are lower than most any other wholesale generator, and normally well below market rates.

**The NW Energy Coalition Supports Real Transparency**

Environmental and consumer advocates would enthusiastically support H.R. 1719 if it mandated honest accounting of the costs and benefits of federal dam operations on fish, anglers and fishing communities, irrigators, recreation businesses and other users of the river—along with power consumers. Only by looking at the whole picture can any particular cost category be put into perspective. H.R. 1719 looks at only a small part of how the Columbia River system is shared and paid for. This issue will be addressed in detail later in this testimony.

**H.R. 1719 is Unnecessary**

H.R. 1719 does not compel the production of any information that is not already available to the public, electricity utilities, or anyone else who seeks it. BPA currently provides information to the region regarding the costs of its fish and wildlife programs (including so-called "indirect costs"). Bonneville also provides a detailed walk through of all of its costs as part of its Integrated Program Review preparatory to each power rate case. Any utility wishing to provide this information to its retail consumers may do so; some do this now. This bill is not needed and would not change current practice at all.

**Salmon Recovery Actions Meet a Myriad of Federal Responsibilities**

BPA's investments in rebuilding fish and wildlife populations are required by a number of federal laws and treaties, including the Endangered Species Act, the Northwest Power Act, the Fish and Wildlife Coordination Act, the Clean Water Act and United States treaties with Indian Tribes and Canada. It is not possible to categorize which of the costs are related solely to the ESA.

Bonneville and the federal family have numerous legal obligations to recover these valuable fish in addition to the ESA. H.R. 1719's mandate to isolate ESA costs is impossible, since most of the actions being taken for endangered and threatened fish and habitat overlap or are also required by these other laws and treaties.

For example, the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act), Section 16 U.S.C. 839b(h)(6)(E), requires the Northwest Power and Conservation Council (NPPC) to include measures in its Fish and Wildlife Program (Program) that:

- (i) provide for improved survival of such fish at hydroelectric facilities located in the Columbia River system; and

- (ii) provide **flows of sufficient quality and quantity** between such facilities to improve production, migration, and survival of such fish as necessary to meet sound biological objectives. (Emphasis added)

More generally, the Northwest Power Act requires the Administrator and other Federal agencies to exercise their responsibilities “in a manner that provides **equitable treatment** for such fish and wildlife with the other purposes for which such system and facilities are managed and operated.” (Section 16 U.S.C. 839b(h)(11)(A); emphasis added). BPA’s obligation “to adequately protect, mitigate, and enhance fish and wildlife. . .” (ibid.) is not a secondary “cost” of the power system, it is a coequal purpose along with irrigation, navigation, recreation and flood control.

Similarly, there are numerous treaty obligations to Native American Tribes that require BPA and the Federal agencies to restore and enhance their native fisheries. At the same time, the Federal Columbia River Power System (FCRPS) Biological Opinion requires specific flow and spill operations to ensure that the operation of the FCRPS does not jeopardize the continued existence of listed species under the ESA.

It is important to note that the flow targets in the Program and Biological Opinion are constrained by the current configuration of the hydroelectric system. Average spring flows in the Columbia before the dams were 450,000 cubic feet per second. The current target is 200,000 cubic feet per second—less than half the historical average. Unfortunately, the federal agencies have only met this flow target 37.5% percent of the time between 1995 and 2010, and not once between 2006 and 2010.

It is evident that these various obligations overlap and cannot be separated into ESA and non-ESA obligation

Adding “Indirect Costs” is Improper and Obscures The Actual Monetary Contribution BPA Makes to Salmon Recovery

H.R. 1719 requires PMAs to include “foregone generation and replacement power costs” as indirect costs in their ESA-compliance calculations (Sec. 2 (c)). As explained below, it is false and highly misleading to include these items as “costs.” It also improperly distorts the actual monetary contribution BPA makes to salmon recovery. H.R. 1719 would set a dangerous precedent by codifying this type of accounting.

BPA already counts the revenue foregone and the cost of replacement power from operating the FCRPS to meet the requirements of the Endangered Species Act, the Northwest Power Act, the Clean Water Act, and other laws and regulations as a part of these costs. According to the NW Power and Conservation Council’s Tenth Annual Report to the Northwest Governors on BPA Expenditures (July 1, 2011; Document 2011–04), over 50% of BPA’s claimed expenditures for Fish and Wildlife programs are from foregone revenue and replacement power costs.

#### **Foregone Revenue**

“Foregone revenue” is the cost of foregone generation; that is, the money BPA speculates it could have made if it did not have to operate the river to assist salmon migration. It is the lost generation from water spilled over the dams plus the difference in prices BPA forecasts it might have received if it could shift timing of generation into higher priced periods rather than when salmon need a push out to sea. Considering as a “cost” the revenues or profits that a business or agency could have made if it had violated federal laws, regulations, or court orders is a curious accounting concept, to say the least.

An example is illustrative. Trucking companies must obey a number of safety regulations. These include providing seat belts, equipment inspections and rest breaks for drivers. These are all proper costs of compliance with these regulations. However, we do not count as a cost or even “indirect cost” the foregone revenue that the company could have realized if it did not have to give its drivers rest breaks, or if those drivers could drive over the speed limits or ignore weight limits. On the contrary, it is understood that the trucking companies do not own the highways, and the “cost” of sharing it with other users is not revenue somehow owed to them.

Given its practice of reporting foregone revenue for fish and wildlife protection, it is important to note that BPA does not report the foregone revenue associated with meeting other legal constraints on power generation such as providing irrigation water, flood control, maintaining minimum flow depths for river transportation, limiting rapid variations (“ramping”—which can damage streambeds and banks) in flow rates, or recreation. All of these other federally mandated purposes limit the ability to generate electricity and reduce BPA’s potential revenue. Hence, to be consistent, BPA would need to count them as “costs” as well.

For example, the Northwest Power and Conservation Council has calculated that the 14.4 million acre-feet withdrawn for irrigation could generate an additional 625

average megawatts if the water remained in the river—about five percent of the total output of the BPA system. (“Multiple Use Memorandum,” NPCC, February 7, 2006, p.5) Analysis by the NPCC calculated that at average market rates, the foregone revenue of this irrigation would be \$250 million per year. At the market prices for the summer of 2005, the lost revenue associated with irrigation withdrawals was over \$380 million. Neither BPA nor H.R. 1719 counts this “cost.”

While these numbers are dated and the impact of other uses of the river will vary from year to year depending on market power prices and the amount of water in the river at any given time, the point remains that BPA is not including foregone revenue from any other uses of the river in its calculations of costs.

All of this begs the important question of whose costs these are. Are irrigation foregone revenues a “cost” for BPA’s ratepayers? Is a requirement to keep rivers flowing at minimum levels for navigation another “cost”? If so, then one would conclude that Bonneville is subsidizing the irrigators and barge and boat operators. This logic is absurd. Bonneville does not own the river; it shares the river with all the other uses, including fish and wildlife. BPA is not entitled to all of the possible revenue it can squeeze out of the river, only its share. NW Energy Coalition recommends that Sec. 2(c) be deleted from the bill. The various uses and users of the river do not owe each other money; they are all simply sharing in this great resource.

However, if Congress believes it is important to report such costs, then it should require BPA to calculate the costs of each of the other purposes of the dams and report all of them on a consistent basis. After all, every use of the river, from navigation to flood control to irrigation, reduces BPA’s revenues, and its ability to fund its obligations.

#### **Foregone salmon**

We should also note, if the Committee wants to continue down the road of assigning indirect costs, that the NPCC found that 5 to 11 million salmon lost each year (compared to the period prior to dam construction) were attributable to damage caused by the hydroelectric system. Based on this estimate, the Columbia River Indian tribes, anglers and fishing businesses have “foregone” 365 to 805 million salmon and steelhead since the dams were built.

Salmon and steelhead are invaluable to tribal culture and religion—the tribes would not put a price on this loss. Non-tribal economists, on the other hand, would value the annual losses in the hundreds of millions of dollars.

#### **Replacement Power Costs**

H.R. 1719 also requires that BPA include “replacement power costs” due to fish and wildlife operations in its estimate of indirect costs. These costs can vary dramatically depending on water availability, market energy prices, and load demand—none of which can be properly attributed to salmon recovery.

This problem was made very clear in 2001 when BPA’s power purchase costs alone exceeded \$1 billion. But that was a year when the agency eliminated “spill” for salmon, so it would be fair to say that Bonneville’s salmon restoration efforts were reduced because the impact of fish operations on generation was even less than in previous years. Instead, BPA counts that as a year when its indirect costs skyrocketed. It is bad public policy to pin power purchase costs that could arise for any number of non-salmon-related reasons on salmon recovery. In fact, the reason power purchase costs were so high that year had nothing to do with fish and everything to do with energy deregulation problems and weather.

#### **Costs Must be Balanced with Benefits**

Any meaningful effort to provide real transparency should include both the cost and the benefits of actions to recover salmon. H.R. 1719 would require that only costs be reported, and therefore would fail to provide the public a complete picture. The economic benefits of salmon recovery efforts come in at least two forms: the economic benefit from increased fishing opportunities and the impact of actually implementing recovery measures.

#### *Economic Impact of Implementing Salmon Recovery Measures*

BPA funds implementation of habitat improvements and other restoration measures through the Federal Columbia River Power System (FCRPS) Biological Opinion and through BPA’s “Integrated Fish and Wildlife Program.” Most of these fish and wildlife activities are implemented in rural areas east of the Cascade Mountains. These investments pay salaries and purchase materials creating additional jobs and economic activity. The effects of these investments over the next several years can be expected to ripple through tribal and rural economies, creating thousands of additional jobs and significant economic activity. If this work is implemented over the

next ten years at the level recommended by state and tribal scientists, the annual funding would support more than 5,000 jobs over the next ten years (assuming \$40,000 per job).

*Economic Benefits of Commercial and Recreational Fishing Opportunities*

If fish and wildlife populations increase, the Pacific Northwest will experience increased spending by fishers, hunters, and recreationalists creating additional jobs and economic benefits. Increased fishing opportunities for the commercial fishing industry will also have a ripple effect on local coastal communities.

To illustrate the economic benefit of increased fishing opportunities, one need not look further than 2001, when the region experienced better-than-average adult salmon returns due to improved ocean conditions. In that year, salmon runs increased sufficiently for Idaho to open a rare recreational fishing season on salmon. A report by credentialed independent economists (Ben Johnson Associates, Inc. The Economic Impact of the 2001 Salmon Season in Idaho, prepared for the Idaho Fish and Wildlife Foundation, April 2003) examined the economic impact of the 2001 salmon season and found that the increased fish opportunity was responsible for almost \$90 million in angler expenditures. These expenditures were split evenly between the local river communities and the rest of the state. However, impacts were more significant in the smaller local economies. Angler expenditures in Riggins, Idaho (on the Salmon River) during the salmon fishing season stimulated 23 percent of the town's annual sales. While more recent economic analysis is not yet available, modestly higher salmon returns over the past three years (an increase widely attributed to spill) have provided fishermen and fishing businesses with seasons similar to the 2001 fishing season. Any presentation of economic costs must also provide the important benefits to local economies of investments in fish and wildlife while considering the costs of the actions.

**BPA's Firm Customers' "Share" of Fish Costs is not Well-Defined.**

H.R. 1719 requires that PMAs report each firm power customer's "share" of ESA compliance costs, but leaves the determination of what constitutes a share to the PMAs (in coordination with other Federal agencies). How shares are calculated, and what constitutes a firm customer, is left open in the legislation, but these issues are highly contentious. How shares are calculated can vary tremendously, depending on various assumptions. We have seen media reports that set the proportion of fish restoration costs in Bonneville's rates ranging from less than 5% to 30% using the same basic information!

While this information is extremely important, we all know that statistics can be presented or "spun" in different ways depending on the desired outcome. It is important that this information be fair and objective.

There are several reasons why this calculation is not straightforward and will most likely foster confusion rather than transparency. First to recover its costs, BPA sells to many different types of firm customers at different rates. Some of these rates are determined by BPA, some by the market. Some rates to firm customers are fixed for many years, while others can vary periodically.

This complicated web of arrangements can lead to confusion and misinterpretations of what, at first, seem easy questions. We have seen the media and electric utility representatives take an accurate BPA statement that BPA power rates could go down by a specified percentage if it didn't have any fish costs and report that specified percentage of "your power bill" goes for fish. This deductive leap is incorrect and troubling for several reasons:

1. All of BPA's sales help pay its fish costs, but many of BPA's firm customers' rates are fixed or set by the market. Therefore, if costs are reduced, only a subset of BPA's customers would get all the benefit of the reduction. How much those customers' rates would be reduced is not the same as how much of BPA's rates go to fish.
2. BPA was referring to its power rates only. But almost a quarter of BPA's budget is transmission, whose costs are recovered through a separate rate. Those rates were not included in the calculation, but all customers have to pay for transmission.
3. BPA was referring to its wholesale rate, but consumers pay retail bills. Retail bills contain all the other costs of delivering electricity, such as meter reading, distribution wires, billing, etc. Only about 50-60% of a homeowner's bill is due to the actual wholesale cost of power.
4. Finally most consumers in the region are served by utilities that buy only some of their power from BPA, if any. These consumers' bill-impacts would be proportionally less.

This discussion illustrates how controversial and complicated this issue is—and how open to misinterpretation it will be.

**There are less costly, and more effective ways to restore wild salmon and steelhead.**

Public interest groups, fishing based businesses, taxpayer advocates and others support a full and honest accounting of BPA's fish-restoration costs. This is because we know that the public supports the goal of restoring wild salmon and steelhead to the Columbia Basin, but only if that effort is successful. That is why we believe that there is a better way: the removal of the four lower Snake River Dams; replacing their modest amount of power with energy efficiency and renewables; extending irrigation pumps to continue irrigation to the 13 or so affected farms; and refurbishing the rail and highway system to ensure farmers can economically ship their goods to market.

As the true costs of the expensive and ineffective path we are currently on becomes clear, the region will realize that removing those four dams is a less-expensive option. Every day these dams continue to exist, the federal government is wasting money and holding back the quality of life for people in the region.

The federal government can act responsibly by taking down these four dams. Eliminating them will be less costly than allowing them to exist, and will create a more reliable energy source in the Pacific Northwest that is paid for by people in the region. Taking down these dams will also reverse the decline of an important natural resource, Pacific salmon.

While NW Energy Coalition supports full transparency, it is important to note that even with BPA's large fish obligations, BPA's rates are the envy of other regions. If BPA's customers want to avoid these fish costs, they are free to get their power elsewhere—at about twice the price! We are concerned that shining a spotlight on BPA's rates will only renew calls by some outside the region who believe our rates are heavily subsidized.

**Conclusion**

Although the NW Energy Coalition supports objective accounting of BPA's fish and wildlife-related costs, indirect costs are not appropriate to assign to one party in a shared system that is put to multiple uses. However, if Congress believes it is important to attempt to quantify these costs, it should insist that the impacts from other users such as irrigation and navigation are also accounted for. Unfortunately, H.R. 1719 introduces a number of difficult issues that need to be resolved before our Coalition could support it.

Thank you for this opportunity to provide these comments.

Mr. McCLINTOCK. Thank you for your testimony.

Our final witness on this panel is Mr. Scott Corwin, Executive Director of the Public Power Council, from Portland, Oregon.

**STATEMENT OF R. SCOTT CORWIN, EXECUTIVE DIRECTOR,  
PUBLIC POWER COUNCIL, PORTLAND, OREGON**

Mr. CORWIN. Thank you, Mr. Chairman, Ranking Member, other members of the Committee. Greetings from the Northwest.

I should also note, with me today is my 10-year-old daughter, Hadley, learning about Congress.

I appreciate the opportunity to testify today on H.R. 1719, the Endangered Species Compliance and Transparency Act. And we appreciate the initiative of Representative McMorris Rodgers and the co-sponsors in raising the issue and proposing H.R. 1719.

Our members provide retail electricity service to millions of citizens throughout the Northwest, including Washington, Oregon, Idaho, western Montana, parts of California, Nevada, and Wyoming. And while these consumers often ask about the nature of costs that make up their electricity rates, some have little knowledge about the level of fish and wildlife costs affecting those rates.

In the case of BPA, ESA-related costs in the rates the agency charges for wholesale power are inordinately large. According to

the Northwest Power and Conservation Council, the independent State compact that looks at these costs, last year alone those costs were \$802 million. This single category of costs accounted for about 30 percent of the BPA power costs charged in rates. The total BPA ratepayer cost for fish and wildlife since 1980 is well over \$12 billion. Now, that does not count the amounts contributed through other Federal, State, and local entities.

More knowledge about fish and wildlife costs is not an impetus to do less for fish. Rather, it can create ownership in the efforts under way and serve as an inducement to create better, more effective means of assisting species in the future. Support for this bill should not depend upon whether you believe these expenditures in the name of salmon and steelhead should be lower, higher, or are just about right. The issue here really is information.

It could make the understanding of these costs clearer if they were displayed directly on the power bill each month. What happens to the information after that or to the opinions of consumers that get that information will vary greatly from utility to utility and from customer to customer. This is the local control that public power values highly.

It is not necessarily the case, certainly, as has been claimed, that a utility or ratepayers could gain this information without this bill. The processes in place to determine the costs that I just described are lengthy and complex in the region. Utilities would benefit from having one official estimate that is produced by the agency and disclosed on the actual bill.

In addition, with respect to whether ESA-related costs should be the only costs displayed on the bill, certainly there are other costs displayed now. Transmission is completely billed separately. But there are not other costs in BPA's power rates that are of this magnitude and this level of volatility. This does distinguish these particular costs from all the other categories that flow into the rates of Power Marketing Administrations. There are existing accounting systems with which the agency can produce the number for fish and wildlife costs already at little additional administrative burden.

How should these costs be defined? As you just heard, some question the approach here that would include indirect costs as well as direct costs of ESA implementation in H.R. 1719. To the ratepayers, they are one and the same. Water spilled over a dam, rather than creating electricity, impacts ratepayers just as much as direct projects or capital costs. It is also not a foregone conclusion that that particular mode of meeting that statutory obligation is most efficient or effective at any particular point in time. In other words, the law does not directly compel the action that is creating the loss to ratepayers in this instance.

The pertinent question is, without the set of actions in question, would the power rate be lower? Whether the action causes a loss of generation or is a direct expenditure, the impact is pressure on rates to be higher than they otherwise would be. And, in this case, an objective baseline is already established. You can look at generation capacity clearly, pre- and post-implementation of the biological opinions.

In conclusion, H.R. 1719 is a straightforward approach to providing more information and accountability. Timely release of this information is a worthy goal in and of itself. And to the extent it can create incentives for better management of our natural resources, this can benefit endangered species and ratepayers alike.

Again, thank you very much for the opportunity to testify today. [The prepared statement of Mr. Corwin follows:]

**Statement of R. Scott Corwin, Executive Director,  
Public Power Council, on H.R. 1719**

**Introduction**

Good afternoon, Chairman McClintock, Ranking Member Napolitano, and Members of the Subcommittee. My name is Scott Corwin. I am the Executive Director of the Public Power Council. I thank you very much for the opportunity to testify today on H.R. 1719, The Endangered Species Compliance and Transparency Act of 2011.

The Public Power Council (PPC) is a trade association representing the consumer-owned electric utilities of the Pacific Northwest with statutory first rights (known as “preference”) to purchase power that is generated by the Federal Columbia River Power System and marketed by the Bonneville Power Administration (BPA). These preference rights were granted to publicly and cooperatively-owned utilities because they have a mandate to pass the benefits through to the citizens of the Northwest, the consumers who are their owners. Our member utilities have service territories in portions of seven western states and serve over 41% of the electricity consumers in the region.

These utilities, being both some of the largest and the smallest in the Northwest, are committed to preserving the value of the Columbia River system for clean, renewable hydropower and for the system’s multiple other uses. Customers pay for all of the power costs incurred by BPA; the agency is a pass-through entity of its costs and obligations. And, because the utility members of PPC are owned by and answer directly to their customers, they are very sensitive to the rates they pay for wholesale power and transmission of electricity.

We appreciate the initiative of Representative McMorris Rodgers and the cosponsors in raising this issue, and for proposing H.R. 1719, the Endangered Species Compliance and Transparency Act of 2011. H.R. 1719 is narrowly tailored to require the power marketing administrations to display these costs on the monthly wholesale power bill sent to utilities. It is then up to the local utility to decide what to do with that information. Local control over management of the utility is a fundamental priority of each consumer-owned utility in the Northwest.

This bill offers the opportunity for ratepayers to be better informed consumers. Our members provide electricity to retail utilities serving millions of citizens throughout the Northwest, including Washington, Oregon, Idaho, and parts of Montana, California, Nevada, and Wyoming. While these consumers often ask about the nature of the costs that make up their electricity rates, some have little knowledge about the level of fish and wildlife costs affecting those rates.

With respect to awareness of costs, past polling conducted by a consortium of river users and utilities who support a balanced approach to the use of the Columbia River system (Northwest RiverPartners) found that about 60% of respondents did not know there were *any* costs in their rates related to implementation of the Endangered Species Act. A poll conducted this year found concern about the impact to electricity rates once respondents were informed about these costs.

**Fish and Wildlife Costs**

In the case of BPA, the fish and wildlife costs in the rates the agency charges for wholesale power are inordinately large. At \$802 million last year alone, this single category of costs accounted for about 30 percent of the BPA power costs charged in rates. The total BPA ratepayer cost for fish and wildlife since 1980 is well over \$12 billion. That does not count the amounts contributed through other federal, state, and local entities.

The latest assumption for fish and wildlife annual costs in the BPA power rate starting on October 1, 2011 is likely to include \$745.5 million annually, broken down as follows:

- \$239.4 million for direct expenditures under the Integrated Program;
- \$5.1 million for internal costs of the Northwest Power and Conservation Council related to fish and wildlife;

- \$29.4 million for the U.S. Fish and Wildlife Service;
- \$42.8 million for the U.S. Army Corps of Engineers;
- \$5.4 million for the Bureau of Reclamation;
- \$280 million of indirect operational costs; and,
- \$143.4 million in capital investments.

The efficiency and effectiveness of some of the specific projects and methods for salmon recovery are questions with which the region has struggled significantly over the last two decades as the underlying science continues to develop. Certainly, highlighting the costs on power bills could lead to more scrutiny over the effectiveness of salmon mitigation measures. If it does, then that would be a useful byproduct of H.R. 1719 that would benefit fish as well as ratepayers. In the meantime, the federal agencies overseeing salmon recovery efforts, along with most of the states and tribes in the region, have done extensive collaboration to come together on a scientifically sound plan (“biological opinion”) under the Endangered Species Act committing to an enormous continued effort for these fish.

More knowledge about fish and wildlife costs is not an impetus to do less for fish. Rather, it can create ownership in the efforts underway and serve as an inducement to create better, more effective means of assisting fish in the future. And, it should be noted that any approach to salmon recovery that will be successful long-term must take into account all aspects of the salmon lifecycle including impacts from hatcheries, harvest, and all areas of habitat.

#### **Providing Valuable Information**

Support for this bill should not depend upon whether you believe these expenditures in the name of salmon and steelhead should be lower, higher, or are just about right. The issue here is information. Certainly, it would make the understanding of these costs clearer if they were displayed directly on the power bill each month. What happens to the information after that, or to the opinions of consumers receiving that information, will vary greatly from utility to utility and from customer to customer.

Some may argue that a utility and its ratepayers could gain this information without this bill. This is not necessarily the case. In the case of BPA, only the agency itself is in the best position to determine with accuracy the costs it expends on fish and wildlife. The processes in place to determine those costs and inform customers about them are lengthy and complex. Utilities would benefit from having one official estimate that is produced by the agency and disclosed on the actual power bill.

Some might question why only ESA-related costs should be displayed on the bill. There are very few costs in BPA’s power rates that are of this magnitude and this level of volatility. In addition, these costs are particularly driven by federal laws that do not directly relate to the business of producing power. This distinguishes them from many of the cost categories that flow into the rates of power marketing administrations. And, there are existing accounting systems with which the agency can produce the number for fish and wildlife costs at little additional administrative burden.

#### **Defining ESA Costs**

Under H.R. 1719, some may argue about whether the number that a power marketing agency displays is the correct reflection of fish and wildlife costs. Those arguments are inevitable, and there are plenty of venues in the region for all of us to voice our concerns to the agency. But, that discussion should not inhibit the agency from making a final determination and getting that information to customers.

For example, H.R. 1719 correctly includes the indirect costs as well as the direct costs of ESA implementation. To a ratepayer they are one and the same. Water spilled over a dam rather than creating electricity impacts rate-payers just as much as direct projects, capital costs, or operations and maintenance. The pertinent question is: without the set of actions in question would the power rate be lower? Whether the action causes a loss of generation or whether it is a direct expenditure, the impact is pressure on rates to be higher than they otherwise would be. An objective baseline can be clearly established in generation capacity pre and post-implementation of the biological opinions.

We would hope that BPA would administer this provision by including all fish and wildlife costs in its calculation of cost for purposes of this bill. While the bill refers specifically to costs incurred related to compliance with the Endangered Species Act (ESA), it also refers to “activities related to such Act”. In the case of mitigation paid for by BPA and its ratepayers, the ESA has such broad impact that most if not all fish and wildlife mitigation could be defined as related to that Act even if it is more formally associated with another law such as the Northwest Power Act.

**Conclusion**

H.R. 1719 is a straightforward approach to providing more information and accountability regarding a major factor in the power rates of consumer-owned utilities. Timely release of useful information is a worthy goal in and of itself. And, just as important is the potential that this information may create incentives for better management of our natural resources that could benefit endangered species and ratepayers alike. Thank you for this opportunity to testify today. I look forward to working with you on this matter and addressing any questions.

Mr. McCLINTOCK. Thank you, Mr. Corwin.

This concludes the testimony of the first panel. We will now move to questions by each of the Members, and the Chair will begin.

Mr. Corwin, I will start with you. Both of the Ranking Members mentioned the failure of WPPSS as an argument against this bill. You would think that highly speculative ventures like WPPSS would caution them against even more speculative ventures like solar and wind transmission, but we will save that for the next panel.

The question I would ask of you is to highlight again the difference between the fixed expenditures for retiring the WPPSS bonds and ESA costs.

Mr. CORWIN. Thanks. Yeah, I would say, the region has learned a lot by the Western Power Supply System issues in the past. As far as the differences between those costs, right now the bonding piece from the—it is now Energy Northwest—is melded with Bonneville's portfolio, and they have been refinanced several times. And I would have to get with BPA to pull out the exact cost of that, but it is lower than I heard stated because the entire debt service of the agency—

Mr. McCLINTOCK. Well, I just wanted to underscore the point you made, that these are fixed costs, as opposed to the ESA costs, which are volatile and steadily mounting.

Mr. CORWIN. Yes, there is a fixed amortization on those costs now. ESA is volatile year to year by hundreds of millions of dollars.

Mr. McCLINTOCK. And those ESA costs have nothing to do with power generation. They are tacked on, having nothing to do with that power generation.

Mr. CORWIN. There is certainly not a direct O&M cost of generating power.

Mr. McCLINTOCK. One of the pressing questions I have for both Mr. Rettenmund and Mr. Corwin is, why can't the local retailers simply provide this to their customers anyway? Why don't you already put that on the bill?

Mr. RETTENMUND. Well, it is readily available, the total amount that Bonneville spends on fish and wildlife—

Mr. McCLINTOCK. But is there anything stopping you from just putting that on the bill?

Mr. RETTENMUND. What we want to put on is what our individual consumer is contributing toward that total, and so we need some way for the actual cost that we are incurring, and then we can calculate what is representative for the individual member. It wouldn't help the individual member, just the whole 750 million bucks, so—

Mr. McCLINTOCK. Right.

Mr. RETTENMUND.—so we need a way to understand our share.

Mr. MCCLINTOCK. But can't you do that anyway without Federal legislation?

Mr. RETTENMUND. It would be much better, much higher-quality. I have done a back-of-the-envelope, but it is not very precise. Bonneville is much more capable of telling us what our share, of our \$24 million in power costs, how much of that relates to fish and wildlife. That is something they are uniquely positioned to do.

Mr. MCCLINTOCK. Well, just looking at it from the perspective of a customer, my advice would be not to wait for Federal legislation, just give it your best shot, so that people at least have a ballpark estimate of what they are paying through their power bills for all of these mandates. Because, right now, they have no guidance. And, you know, prices are absolutely critical to people. Prices convey all of these costs and give them an accurate picture of what they are getting for what they are paying. I rather suspect they would be appalled. And I am surprised that utilities don't already provide them with the best estimate of this information that they can make.

Mr. RETTENMUND. Well, we do. I can't speak for other utilities, but we have taken our shot at it. And for our typical residential customer, it is about \$150 per year. For an irrigator, we are talking about \$8,000, \$9,000 a year. And for a larger business—not real large, because we don't have a lot on our system—we are talking \$30,000-plus a year.

So, Mr. Chairman, we do take our shot at doing that, and we provide that information to our customers, our members on their bill. But it is just our best estimate, and we would like to do a better job of conveying that information.

Mr. MCCLINTOCK. Well, I understand this bill will give you far more accurate information. But, in the meantime, I wouldn't wait for it.

Mr. RETTENMUND. We do it.

Mr. MCCLINTOCK. As a consumer, I would love to see what I am actually paying for when I write those big checks to the utility district every month.

Mr. RETTENMUND. We get calls on that.

Mr. MCCLINTOCK. Just to cover the question of replacement costs, you know, when you are required to spill massive amounts of water from a dam to meet these ESA requirements, for example, the opposition says, "Well, that is not really a cost, that is just impossible to estimate," what is your response to that?

Are these real costs when you have to spill water off a dam that would be going for power generation instead to meet some of these requirements? Is that an actual cost to consumers?

Mr. RETTENMUND. Most definitely, that is an actual cost. To the extent water is spilled, doesn't run through the generator, there is an impact on the rates. They are higher than they otherwise would be.

This is the "compliance" in the title of the Act, "compliance." And those actions are in compliance, arguably, with the Endangered Species Act. So this isn't saying, you know, we will have a debate another time about whether they are really cost-effective, some of

those, but this is to identify the cost of complying with the Act, that those costs are very much definitely a compliance cost.

Mr. McCLINTOCK. Thank you.

Mr. RETTENMUND. Scott can probably speak to it in more detail than I can, but—

Mr. McCLINTOCK. Yes, but he doesn't have the time now, so—

Mr. RETTENMUND.—that is the gist of it.

Mr. McCLINTOCK.—thank you.

The Chair recognizes Mrs. Napolitano for 5 minutes.

Mrs. NAPOLITANO. Thank you, Mr. Chairman.

And normally, in business, that is known as the cost of doing business. OK?

Ms. Patton, most of the discussion on the legislation involves the costs related to the Endangered Species Act compliance. Could you elaborate on the economic benefits of a healthy fishery for the Northwest?

Ms. PATTON. Yeah, I would love to.

Just the fisheries alone, the commercial fishery, the tribal fishery, and the sports fishery, are a huge contribution to the Northwest economy and to jobs in and around. They also contribute to those fisheries in Alaska and elsewhere. So that is one of the big issues.

The sports alone is in the billion dollars of annual kinds of revenue. I, in fact, was—a couple of good old boys from West Virginia sat next to me on the plane out here, and they were telling me about their NRA problems with elk hunting, but they also were telling me they were out there for a fishing visit to the Columbia River, their very first, and they were thrilled. And we kidded around about how much they spent on hotels and meals and all that kind of stuff. But that is part of what the benefit is of having a solid fishery that can benefit commercial sports and tribal fisheries.

Mrs. NAPOLITANO. OK. BPA has the highest ESA compliance cost of any of the four PMAs, right?

Ms. PATTON. Yes.

Mrs. NAPOLITANO. And we often hear fish and wildlife mitigation costs account for as much as 30 percent of BPA's wholesale rates. But what impact does all these costs have on the ratepayers?

Ms. PATTON. Well, actually, looking at that analysis, we have parsed out those numbers for 2010, which is not the same number as the 802. It is more like in the \$700 million range. And once you look at that, it is about 21.5 percent of BPA's budget in that year.

And when you look at how much that then translates into for individual end-users, an investor-owned utility end-user pays nothing because they don't buy from BPA. A full requirements customer from Inland or one of the other utilities that buys all their power from BPA, it is 13—well, closer to 14 percent. That is including the foregone revenue and the replacement power costs that we don't think should be included.

Mrs. NAPOLITANO. Is that the spill also?

Ms. PATTON. Yeah, that is paying for spill. If you took the coalition's point of view and said that those are not the real costs, then you would be down to more like 6 percent for those who buy all.

And then there are a number of utilities that buy only part of their power from BPA, like Seattle City Light. And the relevant numbers there would be—if we include foregone revenue and the indirect costs that we were talking about, that is about 5-1/2 percent of their bills. And if you don't do that, as we would suggest, it would be in the neighborhood of 2 to 2-1/2 percent.

And it is a little higher if the costs are higher, but that is because, as Mr. Rettenmund said, the power costs are only about half of any—

Mrs. NAPOLITANO. I have a limited time, so—

Ms. PATTON. Sorry.

Mrs. NAPOLITANO.—I want to be able to get to the next question.

And is spill the only source of so-called foregone revenue for BPA? And to that, what other uses of Columbia Basin water prevent BPA from generating electricity? And how would these uses affect power rates?

Ms. PATTON. Well, the spill is not the only foregone revenue. We definitely have uses for irrigation, for navigation, and for flood control. And those are all important uses, and we definitely support them.

This year, when BPA actually gave away power because we had so much water coming through the system to avoid—to balance the system—

Mrs. NAPOLITANO. How do they affect the power rates?

Ms. PATTON. Well, if they could have sold that power, they would have made a lot more money and they would have been able to reduce the rates. But they couldn't because we all care about flood control, especially the people who live in Portland.

Mrs. NAPOLITANO. The farmers, right.

And the question is, in regard to the printing of the information, how often would that change based on some of the conditions of drought, the purchase power, the court-ordered spills, and the irrigation needs?

Ms. PATTON. It would certainly change annually. To keep up even better, it would probably change monthly. But I am sure it would be at least annually.

Mrs. NAPOLITANO. Thank you, Mr. Chair. I yield back.

Mr. MCCLINTOCK. I think we are going to go to a second round on questions, since we only have two Members here and I have a number of additional items to cover on this bill.

Mr. Rettenmund, we are told—and we know this bill requires Federal agencies to provide very objective numbers, not the so-called, you know, benefits from the ESA such as tranquility, that sort of thing. That seems to me to be subject to interpretation.

I mean, if you are required to provide ESA benefits on customer bills, how would you be able to list quantifiable, objective benefits, or would they be highly subjective and subject to interpretation?

Mr. RETTENMUND. Well, the benefits would be very complicated and certainly beyond our capability of doing that. But when you are talking about fish, they are a creature that migrates out to the ocean, they have lots of interactions with lots of elements, and to be able to then assign the benefits for what we get for our \$750 million would be a real challenge. And, certainly, I don't know how anybody would objectively and straightforwardly do that.

I mean, we can look at particular actions under the fish and wildlife program, such as the removable spillway weirs called the fish slides at the dams, and, you know, they cost tens of millions of dollars. And we can kind of get a ballpark number about what the benefits of those particular things would be in terms of getting them downstream. What happens out in the ocean and how many return as adults, there are lots of other variables out there, and it would be very difficult to do that, Mr. Chairman.

Mr. MCCLINTOCK. Actually, I think people would be appalled at the per-fish cost of many of these mandates, which, in many cases that I have seen, runs into the tens of hundreds of thousands of dollars per fish.

Mr. RETTENMUND. Yes, Mr. Chairman. We haven't gone that route. We have put this estimated individual cost to our members, but we haven't attempted to do that. But it is my understanding that for certain species it would be quite significant per fish.

Mr. MCCLINTOCK. I think the public would be absolutely appalled to see such numbers.

Mr. RETTENMUND. I talk to our members, and they are quite vocal about sometimes what they see on their bill. They would like not to pay that portion. We make it clear—

Mr. MCCLINTOCK. It is amazing, when you pull out a pocket calculator, the lunacy of some of the requirements and the costs that they impose, real costs on real people paying real electricity bills every month. And it seems to me and many others that they have a right to know how much of that is actually going to power generation and how much of it is going to the pet causes of the environmental left.

The group American Rivers has said that the Klamath Dam removal is a model for the Snake River dam removal. The removal of the four Snake River dams would be under the guise of helping endangered salmon. What would be the impact on your electricity rates, and the salmon by the way, if the dams were destroyed?

Mr. RETTENMUND. Well, it would be a significant increase in the rates that Bonneville would charge us, a significant increase to our members. Those 4 projects, if memory serves me correctly, are about 1,100 average megawatts of firm energy, which is about 15 percent of Bonneville's total portfolio of firm energy. You would have to replace that lost energy with some other, much more higher-cost resource, much higher than the cost of the hydro.

It is often argued that conservation can step in and do that. We are already assigning conservation the role of trying to reduce the cost of low growth. And there isn't an unlimited supply of conservation. The six-power plan that the council put out does not call for the removal of the Snake River dams and has conservation being the resource of first choice to try and tamp down low growth to help lower rates and make our system more cost-effective.

Mr. MCCLINTOCK. Final question. This will be a matter of discussion on the next panel, as well, but I would like to take the opportunity to ask you a question about the difference between the Bonneville Power Administration's borrowing authority compared to WAPA's authority.

Actually, I guess, Mr. Corwin, you would be the best person to take that one on. Can you tell the Subcommittee what differences there are between the two of them?

Mr. CORWIN. Sure. Thank you, Mr. Chairman. And I had the opportunity to testify on the Bonneville authority in March of 2009 when this Subcommittee was considering it.

They really are apples and oranges. The Chairman put it pretty well. Bonneville had existing authority that it has had for decades under the Transmission System Act. They had structures in place for decades to use that financing for transmission infrastructure and reliability, energy efficiency, fish and wildlife, hydropower generation, such as the upgrades to the Grand Coulee—or refurbishment at Grand Coulee.

The agency is legally required to act with adherence to business principles, by statute, and they do so. Most importantly of all, they have the strong, well-established process that they go through for planning and building of any infrastructure and looking at those costs with customers. In fact, we spent 2 days earlier this week, full days, with the agency going through their capital planning process.

Mr. MCCLINTOCK. Great. Thank you very much.

If there is no objection, we will take out of order the Ranking Member of the Natural Resources Committee for 5 minutes of questions.

Mr. MARKEY. Thank you, Mr. Chairman, very much.

Ms. Patton, I seem to remember reading very recently that Google and Facebook are building server farms up in the Northwest as fast as they can. Are they doing that because electricity rates are high in the Northwest and they like to pay high electricity rates, Ms. Patton?

Ms. PATTON. I don't think so. Those server farms use a great deal of energy.

Mr. MARKEY. Why do you think they picked up there rather than, like, the Northeast for something that consumes so much electricity?

Ms. PATTON. I think because the power rates are very competitive.

Mr. MARKEY. Very competitive or very low?

Ms. PATTON. Very low.

Mr. MARKEY. Compared to the Northeast, compared to the South, compared to the Midwest. Do you think that is the case, Ms. Patton?

Ms. PATTON. That is correct. The hydropower base is very—

Mr. MARKEY. Have you ever heard of Google complaining about the Endangered Species Act as one of the reasons why they might not move to the Northwest with all of these server farms?

Ms. PATTON. I have not.

Mr. MARKEY. What?

Ms. PATTON. I have not heard Google complain.

Mr. MARKEY. You have not heard them.

Ms. PATTON. In fact, I have asked them about it, and they don't complain.

Mr. MARKEY. Actually, I remember reading that Facebook and Google are actually touting all of the green power that they have, huh, coming out of—

Ms. PATTON. They are. They are. We actually brought to their attention that they should think about the fact that green hydropower is great hydropower. It has many, many great attributes, but it also has some problems with salmon.

Mr. MARKEY. Do you believe, Ms. Patton, that it would be good, in terms of attracting investment from large high-tech companies that are streaming into your region, that they all know that, you know, they are all going to be part of an effort to undercut the Endangered Species Act? Do you think that would help to draw Google and eBay and Amazon and Hulu up there?

Ms. PATTON. I think they would be very embarrassed.

Mr. MARKEY. Do you think they would be very embarrassed? Yeah. That is interesting.

Now, as you know, the Federal Government, pursuant to a program that has been authorized by the Congress, is going to be providing an \$8.2 billion loan guarantee program for the Southern Company to build nuclear power plants down in Georgia—\$8.2 billion worth of Federal funding.

Do you think it might be helpful for them to know what happened with WPPSS, in terms of the exposure to the taxpayers?

Ms. PATTON. I think that would be. I think that the WPPSS—we call it Energy Northwest now—debt has—

Mr. MARKEY. They changed the name to protect the guilty. Yeah, they are in, like, a big witness-protection program up there now, you know. But—

Ms. PATTON. But it is paid for by the ratepayers.

Mr. MARKEY. Yeah, we have been able to track them down up there. They changed the name.

But do you think it might be helpful, in other words, for the American taxpayer if the people up in the Northwest, those who are still paying that WPPSS bill, had it on their bill?

Ms. PATTON. It would be great.

Mr. MARKEY. Don't you think it would help all of us here—

Ms. PATTON. I think so.

Mr. MARKEY.—if that was on the bill and then they could see the \$500 million, even last year, that they had to pay on it, so they can see what happens when something goes wrong with nuclear power in terms of their bills? Especially if it is taxpayer-guaranteed.

Ms. PATTON. Yeah. Almost \$550 million. And the total debt is now \$5.9 billion for those three plants.

Mr. MARKEY. Yeah. So would you have a problem with us putting that on the bill?

Ms. PATTON. I would have no problems, but I would want it to be—

Mr. MARKEY. Mr. Rettenmund, would you have a problem if we put that on the bill, just so that the—

Ms. PATTON.—everything on the bill.

Mr. MARKEY.—yeah, the public would know about that? Would you have a problem with that?

Mr. RETTENMUND. I think the public is already generally aware—

Mr. MARKEY. No, no. Well, they are generally aware of the Endangered Species Act, too, but you are going to give them a specific number. Don't you think—

Mr. RETTENMUND.—and the costs that were incurred during—

Mr. MARKEY. But \$500 million—how many people do you really think know they are paying still \$500 million on that mistake?

Mr. RETTENMUND. I think most of our members are aware of the—

Mr. MARKEY. I am talking about the consumer, the consumer.

Mr. RETTENMUND. Our members are—we refer to our consumers as members in the co-op.

Mr. MARKEY. Oh. You think they all know?

Mr. RETTENMUND. I don't think they all know, no, sir.

Mr. MARKEY. Would you object to us putting it on the bill?

Mr. RETTENMUND. I think the way the bill is crafted right now works.

Mr. MARKEY. No. But I am asking, would you mind if we added that as an extra line?

Mr. RETTENMUND. I don't need that information, sir.

Mr. MARKEY. You don't think that the consumer needs that information?

Mr. RETTENMUND. I didn't say that.

Mr. MARKEY. Why not? Why not? Why don't they need the information?

Mr. RETTENMUND. I think we can do an adequate job now of putting that type of information, conveying it—

Mr. MARKEY. How would you convey that information, Mr. Rettenmund?

Mr. RETTENMUND. Well, we know that there are three broad cost categories for Bonneville. There is the operating—

Mr. MARKEY. No, but how do you communicate the \$550 million last year to your consumers? How do you do that?

Mr. RETTENMUND. We would be able to—monthly, we communicate with our members about what the overall costs are. And we can do the \$750 million for fish and wildlife. We can do the \$700 million for the nuclear plants, including the operation and maintenance. And there is the other big bucket of dollars of \$700 million for the operation/maintenance debt.

Mr. MARKEY. So if I made the Markey amendment to add in, you know, the WPPSS money to the bill so that everyone could know, would you object to that?

Mr. RETTENMUND. I don't have an opinion on that today, sir.

Mr. MARKEY. You don't.

OK, how about you, Mr. Corwin? Would you object to it if we were able to put that in?

Mr. CORWIN. I don't think it is necessary because it is one number.

By the way, I think that estimate is high for just the WPPSS part of the debt.

It is one number you can come up with. Fish and wildlife is much more complex, much more volatile year to year. It goes hundreds of millions of dollars up and down between years. So that is why it is valuable to have the agency produce it.

Mr. McCLINTOCK. All right, thank you. The gentleman's time has expired.

Mrs. NAPOLITANO?

Mrs. NAPOLITANO. Thank you, Mr. Chair.

And I would like to introduce into the record a copy of the U.S. residential average price per kilowatt hour. I think Mr. Markey had an issue with this, over his subsidizing the rest of the Western U.S., and I will yield to him in a minute if he wants to comment on that.

Mr. McCLINTOCK. A question for the Ranking Member. Is that the chart that shows that the areas with large hydropower production have the lowest prices?

Mrs. NAPOLITANO. That is correct.

Mr. McCLINTOCK. Thank you. I would be happy to enter that into the record, without objection.

Mrs. NAPOLITANO. Thank you.

Mrs. NAPOLITANO. And then, to Mr. Corwin, in your written testimony, you state BPA's fish costs are particularly driven by Federal laws that do not directly relate to the business of producing power, and that—that is it. Therefore, more important that these costs be displayed on the utility bills.

Would you agree that, since BPA, the WPPSS-related costs are not directly related to the business of producing power, they should also be displayed on the customers' monthly power bills?

Mr. CORWIN. Right now, that bucket of nuclear debt and costs is kind of melded together. It does relate to producing 10 percent of the power that Bonneville purchases.

Mrs. NAPOLITANO. I know. But would you—they should also be displayed, wouldn't you agree?

Mr. CORWIN. I don't know. I was entertained by the foregoing discussion, but I hadn't come prepared to take a position on what else should be on the bill. I could think of many other things that could be, in theory.

Mrs. NAPOLITANO. Precisely. And if you want to really be—

Mr. CORWIN. But this one is unique, I think.

Mrs. NAPOLITANO.—transparent to the general paying customer and the public—that is, the end-user, which would be your residential—don't you think all of this information would be valuable to them to be able to then assess where their taxpayer money is going to in helping fund some of these entities?

Mr. CORWIN. I do think that transparency of all costs is valuable to the consumers. And we work with the agency to make sure that we can identify those costs.

This one is just unique in that it has many, many different parts that you have to try to combine together to get the one figure that we are talking about, as opposed to identifying, you know, just—another cost we haven't talked about is the cost of the treaty with Canada, for example—

Mrs. NAPOLITANO. Right.

Mr. CORWIN.—and other—

Mrs. NAPOLITANO. Precisely. There are many moving parts.

Mr. CORWIN. But those are much easier to—like Mr. Rettenmund's testimony earlier, when he is trying to figure out

how to display a cost, he can grab those, put them on if he wants. That is the local prerogative of the utility.

Mrs. NAPOLITANO. OK.

But, to any of you, do you think it is worth almost half a million dollars—\$500 million a year to add this? I mean, this is a—well, if you want to say it is a—it is an additional cost to the taxpayer and the ratepayer.

Ms. PATTON. I think it would be great. I do think it should be all of the costs and benefits of all of those major pieces of Bonneville's budget.

Mrs. NAPOLITANO. But would it be worth—

Ms. PATTON. Absolutely worth having.

Mrs. NAPOLITANO.—\$500 million annually to do display for this?

Ms. PATTON. Yes.

Mrs. NAPOLITANO. OK.

Mr. Markey, would you care to take over?

Mr. MARKEY. Yes. I thank you. I very much appreciate it.

And I am a little shocked at the fact that a couple of our witnesses here seem to think that the consumers only care about endangered species compliance costs and that they don't care or don't have to know on a monthly basis about the WPPSS costs. I just am kind of shocked by that because the WPPSS cost is just so massive. And I just think that you have to keep it in front of them so they can see what happens when these nuclear projects go wrong. And, again, I am going to continue to advocate for that, because, you know, I do think that there is a real problem there.

And I think one other thing—maybe you can help me with this, Ms. Patton. Don't you think that we should also be telling consumers how much lower their bills are because they are only being charged cost-based rates rather than market-based rates? Because I'm a big market guy. You know, I am a big free-market guy. And the whole idea of, you know, subsidies out there and the government getting in and subsidizing—so, don't you think they should know that, that they are getting this incredible discount because of—you know, they don't get charged market rate?

Ms. PATTON. Well, I think that—

Mr. MARKEY. And I was up in New England. All of us in New— it is all market-based up in New England. We believe in capitalism and the free market. But up in the Northwest, they don't; they don't believe in that whole concept of market-based rates.

So do you think that the consumers should know that, that they are getting this additional benefit?

Ms. PATTON. Well, I guess I have a couple things. One, there are a lot of good reasons for the market-based rates in the Northwest. Two, right now the market is so low for wholesale power that Bonneville might even be higher than some of the market.

And, three, the good thing is that our utilities, the publicly owned utilities that get that power from Bonneville are very happy to explain on a regular basis how their rates are cheaper than the investor-owned utilities that neighbor them. So we do get that information out to them.

Mr. MARKEY. Yeah, but having them put it on the bill each month is what I am saying. You know, apparently, we are just going to be expanding these bills with all the extra info they get

each month, because they can't remember it, so they see it each time. Don't you think we should be putting in this other extra info so they can just understand a little bit better how the flow of cash works?

Ms. PATTON. It would be very interesting to see the market rate for power next to the portion of the customer's bill that—

Mr. MARKEY. Yeah. I am a big Darwinian paranoia-inducing capitalist, OK? So I would just like to get that info out there. Thank you.

Mr. MCCLINTOCK. The Chair is delighted that at this hearing of the Water and Power Committee the Ranking Member has had an epiphany on free markets.

And, with that, we will conclude this panel and thank the witnesses for their testimonies. And we will excuse them at this time and call up our second panel on the subject of H.R. 2915.

OK. If we are all set, the Chair would like to welcome our second panel of witnesses.

You heard what I said earlier about time and timekeeping and records, so we will just go right into the testimony.

We will begin with Ms. Lauren Azar, Senior Advisor to Secretary Steven Chu, Department of Energy, from Washington, D.C.

**STATEMENT OF LAUREN AZAR, SENIOR ADVISOR TO SECRETARY OF ENERGY STEVEN CHU, DEPARTMENT OF ENERGY, WASHINGTON, D.C.**

Ms. AZAR. Good afternoon, Mr. Chairman and Ranking Member Napolitano.

Three months ago, I arrived here after Secretary Chu hired me to get things built—things like transmission and storage. Four months ago, I was a utility commissioner in Wisconsin. Prior to that, I was a partner in the same law firm as Reince Priebus, and, as a lawyer, I helped to create the American Transmission Company. I also helped to site a 220-mile extra-high-voltage line through the wetlands and scenic rivers of Wisconsin and Minnesota. In short, I come from the trenches.

Today I sit before you in strong opposition of H.R. 2915. I applaud the Chairman's goal to minimize Federal risk, but 2915 doesn't further that goal. While I have only been at the DOE for 3 months, I have discovered ways this Subcommittee could minimize the risk associated with WAPA, and I would be happy to work with you to get this done, but that is not our task today. Our task today is to address whether Congress should remove WAPA's borrowing authority.

Congress, when led by Republicans and Democrats, has recognized this Nation's desperate need for new electric transmission. Federal mechanisms to bolster transmission were passed in 2005 and 2009. And we need to look no further back than 2 weeks ago, when apparently maintenance on a substation in Arizona prompted a cascading blackout for about 5 million customers. That event should never, never have happened. When the investigations are completed, I suspect we will find that additional transmission would have stopped the blackout from spreading. Indeed, the transmission engineer from WAPA's Phoenix office suspects some lines

that WAPA may fund through its borrowing authority could have localized that blackout.

I have attached a map to my testimony—and it is on the screen right now—showing project applications that WAPA is most actively pursuing as of May 2011. I would welcome questions about the West's need for more transmission, but, given the legislation in 2005 and 2009, I suspect you already know it.

So if the West needs more transmission, why would someone try to eliminate the government financing for that transmission? Policy alone appears to be driving this bill: that the Federal Government should have no role in funding our Nation's infrastructure. I disagree for three reasons.

First, public-private partnerships built our Nation's electric infrastructure. Our Nation is relatively unique in the world as to how we built electric infrastructure. From the birth of the electric industry, public-private partnerships have been at the heart of its infrastructure build-out. This borrowing authority simply continues that legacy. WAPA has borrowed funds for three projects. For two of the three, it has partnered with a private entity. In exchange WAPA, has the opportunity to be part-owner. For the third, WAPA is developing it alone to assist its preference customers—your constituents—and to convey power from a renewable energy zone to the Palo Verde hub.

Second, borrowing authority increases competition in transmission. Historically, public utilities have been able to rely on bonding authority through their State statutes to build transmission. But sometimes public utilities would prefer not to build transmission because it brings competition into utility service territories. While public utilities have bonding authority, private entities who could compete with them do not. WAPA's borrowing authority helps to levelize this playing field, thereby bolstering competition in the development of transmission.

Third, WAPA brings more than just a purse. Thirteen of the 15 States in WAPA's territory have implemented renewable portfolio standards or goals, as shown on the map attached to my testimony and now on the screen. More renewable generators will be built because of these State decisions. Coal, natural gas, and nuclear generators can be built nearly anywhere because the fuel can be transported to the generator. Not so with renewables. For renewables, the fuel cannot be shipped, so the generators must be sited where the fuel is located and the transmission built to the site, often through multi-State transmission lines. Multi-State transmission lines are particularly difficult to build. If built at all, they take 5 to 15 years because of both the State siting and Federal permitting processes.

In administering the borrowing authority, WAPA brings more than a purse. It also brings a partner in development who can assist with the NEPA process and a partner who can condemn property if there are no other alternatives. While WAPA brings more than a purse, the purse itself is also significant because the interest rates under the borrowing authority drive down the cost of capital.

In conclusion, I am ready, I am willing, and I am able to help both sides of the aisle reduce risk associated with WAPA and the

other Power Marketing Administrations—actions that would address the patchwork of legislation created over the last 100 years. But I ask you not to adopt H.R. 2915 unless you would like to hinder the development of transmission in the West.

I look forward to your questions.

[The prepared statement of Ms. Azar follows:]

**Statement of Lauren Azar, Senior Advisor,  
Office of the Secretary of Energy, U.S. Department of Energy, on H.R. 2915**

Chairman McClintock and Ranking Member Napolitano, I appreciate the opportunity to testify on H.R. 2915, a bill to repeal Western Area Power Administration's borrowing authority. The Department of Energy (DOE) will be submitting additional comments on H.R. 1719 at a later date.

I currently serve as a Senior Advisor to U.S. Secretary of Energy, Steven Chu, whom I assist in developing energy infrastructure and storage opportunities. Prior to joining DOE, I was a Commissioner of the Public Service Commission of Wisconsin, a state regulatory body responsible for electricity, natural gas, telecommunications and water industries. I also served as President of the Organization of Midwest Independent Transmission System Operator States, a non-profit organization of states covered by the Midwest ISO—which is the transmission operator and planner for the upper Midwest region. In both positions I have had the responsibility to ensure that needed transmission projects are planned and built in a responsible, cost-effective way.

Today I am testifying in strong opposition to H.R. 2915, a bill to repeal the Western Area Power Administration (Western) borrowing authority statute. Western's borrowing authority statute empowers it to develop transmission facilities that deliver power generated by renewable energy sources.

New transmission is urgently needed in the western United States. And yet, getting lines in the air has been far too slow over the past few decades. Western's \$3.25 billion of permanent, indefinite, borrowing authority is, therefore, a critical tool for addressing two of the major energy challenges we now face in the West—the need for additional transmission infrastructure and integration of renewables onto the grid. To date, three projects have been approved: Montana Alberta Tie, Ltd., a 214-mile, 230-kilovolt single-circuit alternating current transmission line between Great Falls, Montana, and Lethbridge, Alberta; the development phase of TransWest Express, a 725-mile, 600-kilovolt direct current transmission line from south central Wyoming to the El Dorado Valley south of Las Vegas, Nevada, a transmission gateway to California; and Electrical District 5 to Palo Verde Hub, a 45-mile, 230-kilovolt transmission line in Arizona. The construction of these three transmission lines alone, if completed, would use more than half, or approximately, \$1.8 billion, of Western's borrowing authority. Western is also considering a number of other projects that are at various stages of the review process.

The heart of our Nation's renewable energy potential lies within Western's service territory. It includes nine of the ten windiest states of the country, as well as the best geothermal, hydropower, and solar potential in the Nation. That is why there are 57 active requests for transmission interconnections for wind power pending in Western's interconnection request queue—representing a total of 9,223 megawatts of wind power to add to the grid. On average, each of these requests represents the equivalent of a 162-megawatt wind farm. These are private sector developers that want to put people to work and steel in the ground, but can't without access to transmission to bring their electricity to market.

In addition to being a promising area for renewable energy development, Western's service territory also suffers from significant transmission congestion. Several areas in Western's service territory were identified in DOE's December 2009 National Electric Transmission Congestion Study either as critically congested, as congestion areas of concern, or as conditionally congested areas where future congestion would result if new generation is developed without simultaneous development of transmission.

If the legislation before this Committee were enacted into law, very promising renewable energy projects in California, Arizona, New Mexico, Wyoming, Colorado, and Nevada would likely be delayed, or worse not materialize at all. Just two weeks ago, Arizonans and Californians experienced the impacts of our fragile transmission infrastructure when widespread blackouts impacted millions of people in the Southwest. The Administration firmly believes that Western's borrowing authority is essential to enhancing domestic energy production and improving electricity reliability

throughout the West. For these reasons, the Administration strongly opposes H.R. 2915.

Finally, I would like to stress that no funds will be provided through Western's borrowing authority except after substantial due diligence on the part of both Western and the Department of Energy. The technical merits and feasibility of each project, as well as the financial stability and capability of potential project partners are thoroughly reviewed. Also, there must be a reasonable expectation that a project considered for funding will generate enough transmission service revenue to repay the principal investment; all operating costs, including overhead; and accrued interest. Facilities funded through Western's borrowing authority will be repaid through the rates paid by subscribers of that new facility. Moreover, the statute calls for each project funded under this authority to be repaid separately from Western's other facilities, as well as from other projects funded using borrowing authority. This safeguard assures that costs of each new project are properly allocated to those who benefit from it.

DOE appreciates and respects the oversight role this Committee and others play in ensuring we are implementing laws in the manner Congress intended. Thank you for the opportunity to share these views and I look forward to your questions.

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Mr. McCLINTOCK. Thank you for your testimony.

I now recognize Dr. Robert Michaels, Professor of Economics at California State University-Fullerton, to testify.

**STATEMENT OF ROBERT J. MICHAELS, PH.D., PROFESSOR OF ECONOMICS, CALIFORNIA STATE UNIVERSITY-FULLERTON, FULLERTON, CALIFORNIA**

Dr. MICHAELS. Thank you, Mr. Chairman. I am honored to be here.

We have three basic points that we want to make here. The question about transmission of renewables, priority for renewables, is really a question that needs to be rethought, particularly in light of what we now know about renewables, what we now know about the operations of the electrical system, and what we understand about the economic effects of renewables.

There have always been some renewables that have, in fact, made the market test: biomass, such similar things. Right now, the renewables we are talking about are renewables that overwhelmingly do not pass the market test. They are wind, solar—which, generally speaking, live on subsidies. Wind and solar are high-cost energy. Wind and solar are intermediate energy. And the contribution that wind and solar make to reliability is often negative.

The problem that we are facing here is a much broader question of subsidies, much broader than the immediate subject matter here, and which needs to be thought about. Interestingly, there is a Federal agency that is exactly doing that. The Energy Information Administration has come out and produced the first set of estimates of subsidies per kilowatt hour for different types of generation fuels. The figures that they come up with—I have them on my exhibits—are eye-opening, to say the least. Allegations that fossil fuel sources carry some sorts of preferences, they simply fall apart when you do an objective accounting analysis of the data. And, in fact, wind, solar—far, far more heavily subsidized, and it is not at all clear that they make a contribution.

Well, you might say, what if we need this to develop them? The problem is the subsidies that they are giving out are not like research subsidies. The subsidies are basically production tax credits. They are not things to incorporate, say, like happens with coal, all

the hundreds of millions being done on carbon capture and sequestration.

We really need to rethink the subsidies. We need to rethink the role of the intermittent renewables. And we need to think out once more the question on which so much of this policy is justified, an argument that it is going to bring us so-called “green jobs.”

Green jobs are something nobody wants to think about too hard because it is a matter of hope more than anything else. But if you think about it with a little bit of sense, there is a problem. What happens when some of these subsidies are used to create green jobs? Taxes are paid by people or higher electric bills are paid by people. The money they have to pay out is money that they don't get to spend on stuff that is produced by other people. The problem that we have in here is, all we think about is creation. And the real difficulty is nobody wants to be thinking about the job destruction that is just as likely to happen.

We have some interesting figures because one of the big problems with the analysis of so-called green jobs is this: Nobody has any idea what they are. And you have remarkable sets of figures coming out of prestigious research institutions like the Brookings Institution. They recently put out one which said that there were 2.7 million green jobs in the economy, and somehow this was going to be a good reason for them to have additional subsidies and additional renewables. About three-quarters of a million of those jobs are for bus drivers and trash haulers. Green jobs are whatever you want to define them as. Bus drivers supposedly reduce congestion and pollution.

There is a great deal of work that needs to be done here. It really needs to be done before we think about any policies to expand renewables usage. And, more than that, we need to be rethinking all about markets for electricity.

The Federal Energy Regulatory Commission used to actually have a statement of its vision on the front page of its Web site. It is gone. But only 7 years ago, a regulatory commission, if you can imagine this, said, “We want reliable, affordable energy through sustained competitive markets.” If there is anything that we need on the Department of Energy's Web page, it is the same slogan.

Thank you.

[The prepared statement of Dr. Michaels follows:]

**Statement of Robert J. Michaels, PhD, Professor of Economics,  
California State University**

**I. Introduction**

My name is Robert J. Michaels. I am Professor of Economics at California State University, Fullerton and an independent consultant. I hold an A.B. Degree from the University of Chicago and a PhD from the University of California, Los Angeles, both in economics. My past employment as an economist includes the Institute for Defense Analysis and affiliations with consulting firms. I am also Senior Fellow at the Institute for Energy Research and Adjunct Scholar at the Cato Institute. I attach a biography to this testimony. The findings and opinions I am presenting today are entirely mine, and they are not the official views of any of my professional or consulting affiliations.

For over 20 years I have performed research on regulation and the emergence of markets in the electricity and gas industries. My findings have been presented in peer-reviewed journals, law reviews, and industry publications and meetings. I am Co-Editor of the peer-reviewed journal *Contemporary Economic Policy*, an official publication of Western Economic Association International with a circulation of

2,800. I am also author of *Transactions and Strategies: Economics for Management* (Cengage Learning, 2010), an applied text for MBA students and advanced undergraduates. My consulting clients have included state utility regulators, electric utilities, independent power producers and marketers, natural gas producers, large energy consumers, environmental organizations, public interest groups and governments. My services have at times entailed expert testimony, which I have presented at the Federal Energy Regulatory Commission, public utility commissions in California, Illinois, Mississippi and Vermont, the California Energy Commission, and in three previous appearances before other House committees.

## II. Background and Purpose

The Committee today is exploring the economics that underlies H.R. 2915, and in particular the consequences of repealing the Western Area Power Administration's (WAPA) \$3.25 billion borrowing authority under The American Reinvestment and Recovery Act of 2009. That Act authorizes borrowing to construct new or upgraded transmission lines interconnected with WAPA, and specifically mentions lines "delivering or facilitating the delivery of power generated by renewable energy resources."<sup>1</sup> Numerous individuals and agencies have alleged that the increased investment in "renewable" sources of power is a worthwhile national objective on two grounds:<sup>2</sup> [1] it will provide environmental and climate benefits that outweigh their higher costs, and [2] these investments will favorably impact employment, particularly in a time of recession. If these statements were even approximately true, they could justify support and subsidization of renewable power. Unfortunately, they are not.

My testimony addresses the realities of renewable electricity. It first addresses the very minor contribution of renewables to the nation's power supply, and how that contribution reflects subsidies and regulations rather than market factors. It continues with a summary of the actual subsidies to various power sources, showing that some renewables receive highly disproportionate treatment that is unjustifiable on economic grounds. The third part questions the logic behind any policy that purports to "create jobs." Even if government can create them, energy policy is one of the poorest possible vehicles with which to do so. Renewables are seldom sources of durable jobs, and their actual importance for the nation's employment is negligible. On closer examination, most of the millions of frequently touted "green" and "clean" jobs have little to do with either existing or proposed energy policies. I conclude that federal policies toward renewables are due for a complete rethinking, and that the WAPA authorization may be a useful starting point for that process.

## III. Renewables and reality

### A. Renewables in the U.S. power supply

Exhibit 1 shows the amounts of the nation's power coming from various sources. In 2010, 44.9 percent came from coal, 23.8 percent from natural gas, 19.6 percent from nuclear, and 4.1 percent from renewables (excluding hydropower).<sup>3</sup> Note the recent drop in production from coal, the longer-term increase in production from gas and the remarkable constancy of nuclear generation. Renewable power is a small fraction of today's total, but its contribution was even smaller in the past—2.1 percent in 1990 and 2.2 percent in 2005, when its current growth began. Exhibits 2 and 3 show that the mix of renewable sources has changed substantially over the past 20 years. In 1991, over 95 percent of renewable electricity was from geothermal sources, biomass and waste burning. These technologies were viable because their unsubsidized power was (and still is) competitive with fossil-fuel generation in a few areas. They were also dispatchable, operable when their power was valuable and left idle when it was not. All three of them have since stagnated. In 1992 they produced 70.5 million kilowatt-hours (gigawatt hours or gwh) and in 2009 slightly more, 72.2 gwh. Solar power remains a minor presence despite its substantial subsidies. Its 1993 output of 0.45 gwh grew to only 1.29 gwh in 2010, under 1 percent of renewable power and 0.03 percent of all U.S. power. Exhibit 4 shows that the growth of renewable electricity since 2000 has been almost entirely in wind power,

<sup>1</sup> 42 U.S.C. § 16421a.

<sup>2</sup> There is no generally accepted definition of "renewable" sources, but popular usage includes biomass, geothermal, wind and solar facilities. The U.S. Department of Energy has sometimes included hydroelectric generation and some states include still others, e.g. Pennsylvania's inclusion of waste coal as a renewable source.

<sup>3</sup> All figures are from various reports from the U.S. Department of Energy's Energy Information Administration. Data and references are available upon request from the author.

which by 2010 accounted for over half of all renewable generation capacity. Explaining that growth is our next task.

### B. Costs of power and costs of reliability

Wind power is both intermittent and expensive, and official expectations are that it will remain so. Exhibit 5 shows the U.S. Energy Information Administration's (EIA) projections of the levelized cost per megawatt-hour (mwh) of various technologies (including fuel where applicable) for plants expected on-line in 2016 (in 2009 dollars). The three most costly sources are solar thermal (\$312/mwh), offshore wind (\$243) and solar photovoltaic (\$211). The cost of onshore wind is \$97/mwh. Compared with a conventional (not an advanced) combined cycle gas-fired generator (\$66/mwh) the cheapest intermittent source is almost 50 percent more expensive. Intermittent renewables are even likely to be poor investments under a carbon tax or cap-and-trade system. The costs of carbon capture and sequestration (CCS) technology are still highly uncertain, but EIA estimates that adding it to a combined cycle gas unit still leaves it 8 percent less expensive per mwh than the cheapest wind turbine. At carbon prices typically projected for cap-and-trade regimes the wind plant still loses.

Technology and economics both tell us that intermittent wind capacity carries costs that will likely exceed those the same dispatchable fossil-fueled capacity. Small amounts of wind can easily be integrated into a regional grid because a sudden calm is operationally indistinguishable from a minor outage. Larger amounts of wind capacity, however, require costlier backup arrangements, including operating reserve generators. In most regions wind blows most strongly when its power production is least valuable. In 2006, California had 2,323 MW of wind capacity and was operating under record loads in early summer. Wind's average on-peak contribution (over the diverse northern and southern climates) was 256 MW.<sup>4</sup> For system planning purposes, ERCOT, the Texas grid operator, currently sets a wind turbine's "effective capacity" at 8.7 percent of its nominal amount for planning purposes.<sup>5</sup>

Because wind requires fossil-fuel generation as backup we cannot simply conclude that a mwh of wind power eliminates the pollutants in a mwh of conventional power. Research by gas marketer Bentek Energy found that in some areas additional wind power has strikingly perverse consequences. Bentek found that large increases in Texas and Colorado wind capacity indeed led to less coal-fired generation. Emissions of EPA "criteria pollutants" from these plants, however, actually increased, and CO<sub>2</sub> emissions were unchanged.<sup>6</sup> Operating data showed that wind's variability required numerous quick adjustments by coal-fired units, which were responsible for the added pollution. Bentek's controversial conclusion was that the total load in the area could have been served with lower total emissions had the wind units never existed.

### C. Who gets what subsidies?

Subsidies and regulations can explain wind power's rise quite graphically. The American Reinvestment and Recovery Act (ARRA) extended wind's sporadic production tax credit (PTC, now also applicable to some other renewables) through the end of 2012. Before the PTC's first enactment in 2000, only 67 megawatts (MW) of wind capacity were built. That figure grew to 1,697 MW during its initial year of 2001. For 2002 (credit not in effect) and 2003 (in effect) the figures are 446 and 1,687 MW;

<sup>4</sup>Robert J. Michaels, "Run of the Mill, or Maybe Not," *New Power Executive*, July 28, 2006, 2. The calculation used unpublished operating data from the California Independent System Operator. Similarly low wind power production can be seen in real time on most warm days at the ISO's web site. <http://www.caiso.com/Pages/TodaysOutlook.aspx>

<sup>5</sup>Lawrence Risman and Joan Ward, "Winds of Change Freshen Resource Adequacy," *Public Utilities* Fortnightly, May 2007, 14-18 at 18; and ERCOT, *Transmission Issues Associated with Renewable*

*Energy in Texas*, Informal White Paper for the Texas Legislature, Mar. 28, 2005 at 7. <http://www.ercot.com/news/presentations/2006/RenewablesTransmissi.pdf>

<sup>6</sup>Bentek Energy, *How Less Became More: Wind, Power and Unintended Consequences in the Colorado*

*Energy Market* (April 10, 2010). <http://docs.wind-watch.org/BENTEK-How-Less-Became-More.pdf> Criteria pollutants include ozone and oxides of nitrogen and sulfur. Bentek's findings have yet to be challenged.

and for 2004 (off) and 2005 (on) they are 389 and 2,431 MW.<sup>7</sup> Many other factors influence investment, but total investment in years with the tax credit was 544 percent greater than in years without it. (We cannot go beyond these years because subsequent extensions have included retroactivity provisions that investors may have come to expect.) There is, however, no evidence of changes in market conditions that would diminish the importance of subsidies, as was recently noted by the American Wind Energy Association (AWEA). In mid-2010 it claimed that ARRA's subsidy provisions (which included an investment tax credit option) had been responsible for an increase in small turbine installations:

“The ITC was perhaps the most important factor in last year’s growth. . . [it] helped consumers purchase small wind systems during a recession when other financing mechanisms were hardest to obtain. The enactment of the ITC [was] the industry’s top priority. . . .”<sup>8</sup>

Alongside such subsidies, renewable portfolio standards (RPS) and related regulations in approximately half of the states require utilities to obtain certain quantities of power from renewable sources. Although quantification is difficult it is likely that some wind investments have been made solely for RPS compliance, rather than because they were cost-effective choices.

Energy subsidies are a sensitive issue in part because they have no generally agreed-upon definition. For fiscal 2010 the U.S. Energy Information Administration (EIA) produced what are the currently authoritative estimates. Its authors took particular care in calculating the effects of subsidies to various fuels on the actual amounts of power they produced. Thus a subsidy to the oil industry will only be relevant to the extent that it affects the (negligible) amount of oil used to generate power. Exhibit 6 presents the basics. Per mwh of power that it actually produced, wind received a subsidy of \$56.29 and solar received \$775.64. Wind gets 88 times more funds per mwh than coal, and the same multiple more than gas and oil.<sup>9</sup>

Taken by themselves, these figures alone cannot determine the desirability of subsidies. For example, the newness of renewable technologies might provide an economic rationale for subsidies to fund basic research that if successful could render them truly competitive. (Justifying the subsidy, however, also requires a demonstration that renewables somehow differ from other leading-edge industries in their unique needs for support.) Even if so, the current form of the subsidy is inappropriate. A targeted research subsidy might make sense, but one that simply lowers prices paid by purchasers of renewables or reduces the taxes of investors is harder to rationalize. EIA’s report states that “tax expenditures” (i.e. reductions) to the coal industry (including those for coal not used to produce power) were \$561 million in fiscal 2010, while R&D subsidies (possibly necessary if we are to have “clean coal”) were \$663 million. Tax expenditures for renewables were \$8,168 billion, primarily the production tax credit for wind, while the R&D that might make them competitive was only \$1,409 million for renewables as a group with \$166 of that going to wind.<sup>10</sup>

## IV. Renewables and employment

### A. “Green jobs”

It is rapidly becoming apparent that renewable energy is failing to produce the promise of painless prosperity embodied in “green jobs” that will simultaneously decrease unemployment rates and reduce pollution. Begin with some principles:<sup>11</sup>

1. The proper goal of energy policy is to support the efficient provision of energy. The lower the cost of energy to the economy, all else equal, the higher will

<sup>7</sup> U.S. Department of Energy, Energy Efficiency and Renewable Energy (DOE/EERE), GPRA07 Wind

Technologies Program Documentation (2007), App. E at E-6.

[http://www1.eere.energy.gov/ba/pdfs/39684\\_app\\_E.pdf](http://www1.eere.energy.gov/ba/pdfs/39684_app_E.pdf)

<sup>8</sup> AWEA Small Wind Turbine Global Market Study, Year Ending 2009, 4.

<http://www.awea.org/smallwind/pdf/>

2010 AWEA Small Wind Turbine Global Market Study.pdf

<sup>9</sup> Institute for Energy Research <http://www.instituteforenergyresearch.org/2011/08/03/eia-releases-new-subsidy-report-subsidies-for-renewables-increase-186-percent/>

<sup>10</sup> EIA, Direct Federal Financial Interventions and Subsidies in Energy in Fiscal Year 2010 (2011), <http://www.eia.gov/analysis/requests/subsidy/pdf/subsidy.pdf>

<sup>11</sup> Some of these are adaptations of statements that originally appeared in Robert Michaels and Robert Murphy, *Green Jobs: Fact or Fiction?* (Institute for Energy Research, Jan. 2009).

be job creation and economic growth *outside of* the energy sector. Raising energy costs by forcing the use of uneconomic technologies that create more job slots will have exactly the opposite effect. Put simply, more workers in energy reduce the production of non-energy goods and services.

2. Any analysis of job creation by green energy must consider the simultaneous effect of job destruction. Policies that raise the cost of energy to households and businesses must leave them with fewer funds to spend elsewhere. Such policies include the spending of tax revenues to support green activities instead of other government purchases or returning the funds to taxpayers. To a first approximation the net effect of such programs on employment will be zero. This is particularly important here because the new job slots are often visible, while the losses are dispersed among the thousands of goods and services that households and businesses will spend less on. Jobs that cost more to create will generally have higher costs in terms of lost jobs elsewhere.

3. Double counting of jobs and unrealistic assumptions about labor markets.

Although they seldom say so explicitly, the models that underlie most studies of green energy and job creation assume that there is a limitless pool of idle laborers with just the right skills to fill the job slots created by the spending. As always happens in labor markets, many such jobs will in fact be filled by already-employed workers, whether the nation is in prosperity or recession. Even if green policies moved massive amounts of labor between jobs they would have little impact on the national unemployment rate.

#### *B. How Government Models Job Creation*

Much federal research on both the technology and economics of renewables is in the hands of the National Renewable Energy Laboratory (NREL), where a now-standard computer model of the economic impact of renewable projects originated and continues to be maintained. During my appearance at a 2010 hearing before the House Energy and Environment Subcommittee the discussion turned to what was known about the effects of renewables on unemployment. After a representative of NREL testified about the optimistic findings of that standard model, known as JEDI (Job and Economic Development Impact), I commented that its use was entirely inappropriate. I noted that JEDI is structured, by NREL's own admission, in a way that makes any outcome other than job creation mathematically impossible.<sup>12</sup> It is thus a worthless tool for analyzing the actual employment effects of renewables, because it can only produce favorable ones. NREL's representative disputed my statement, and that person and I agreed to submit supplemental testimony on the matter.<sup>13</sup>

As I detail in that testimony, JEDI is one of a large class of "input-output" models that analyze the effects of a project by examining the payments its owners make to workers and suppliers of materials. The monies they receive will in part be spent on other goods, and a "multiplier" effect brings further increases in incomes, outputs and employment across potentially many industries. I noted that

"[t]here is nothing in the model that could conceivably decrease employment or output in other sectors of the economy. Any project considered by JEDI, no matter how efficient or inefficient as a source of electricity, will show a positive effect on employment. That increase may be large or small, but we can be certain that it will not be negative."<sup>14</sup>

I further noted that most of the effects will be transitory, since most of the positions created will be in construction rather than operation.

JEDI's creators appear to have consciously chosen to avoid discussing the sources of the workers or the funds for projects under study. Even if there is a vast pool of unemployed workers in the project area who just happen to have the right skills, we can say nothing about its effect on overall employment. JEDI does not net out jobs lost due to taxes paid by consumers and businesses elsewhere that they cannot spend as they wished to. Even if the project is funded by private or public bond issue, alternative projects with their own employment consequences could have been undertaken. It is not even enough to have workers in the project area with the right skills, because net increases in employment usually happen only if those persons have also been suffering long-term unemployment.

<sup>12</sup>The model and some applications are discussed in detail at <http://www.nrel.gov/wind/news/2011/1574.html>

<sup>13</sup>See Supplemental Testimony of Robert J. Michaels, PhD, June 28, 2010. I have not seen any comparable submittals from NREL.

<sup>14</sup>*Id.* at 3.

NREL's disregard of elementary economics and continued reliance on this model is remarkable, particularly in light of its' creators' acknowledgments of its inadequacies:

On occasion [the creators] have cited the works of others who use more complex models capable of forecasting both job creation and job destruction. Such models can incorporate factors that include responsiveness to higher power prices, reductions in employment in conventional power, and the 'crowding out' of other capital spending by increased investment in renewables. Sometimes such models produce negative effects on employment in the long run. NREL's researchers are thus aware that other models that capture important complexities are available (or they could surely create their own). For unknown reasons, they instead persist in using a model that can produce only the single result of job creation from renewables.<sup>15</sup>

The "green jobs" claim is logically insecure at best, and models like JEDI mask that insecurity by invariably finding that the jobs are created. Interestingly, however, I am aware of no published research in which the predictions of JEDI or a similar model for some project have been compared with the actual results. Apparently the model's own creators also take its claims on faith, and that faith appears to be without foundation.

### C. Which jobs are green?

Even if there were a usable model to analyze job creation, we are left with the problem of identifying which jobs are actually "green." A renewable project can result in the employment of technical personnel trained to specialize in operating or maintaining its technology (whom we presume are green), as well as additional bartenders who will help the workers to enjoy their evenings (harder to classify as green). The matter is important because any type of governmental or private spending might open up slots for bartenders. Renewable technologies, however, have been viewed as the foundation for a massive increase in skilled workers whose human capital will provide them with higher lifelong earnings.

Two recent studies point up that the choice of definitions can affect estimates of the green workforce, and show that an extremely small fraction of jobs defined as green are in renewables. The Brookings Institution recently estimated 2.7 million jobs associated with the "clean economy." The categories include "Agricultural and Natural Resources Conservation" (18.9%), "Regulation and Compliance" (5.3%), "Energy and Resource Efficiency" (31.0%), and "Greenhouse Gas Reduction, Environmental Management, and Recycling" (39.6%).<sup>16</sup> The clean economy expands its bounds by creative classification. Thus we find that energy efficiency includes 350,000 people in public mass transit, mostly bus drivers, and environmental management includes 386,000 people in waste management, formerly known as trash disposal. The researchers chose not to use an alternative definition that would have been far more helpful to most readers: how many clean jobs have (or will) come into being as a result of recent and proposed energy, environmental and climate regulations? (And, of course, how many others will vanish.)

Some additional insight is possible when we consider the Brookings' final category. "Renewable Energy" contains 138,000 clean jobs, only 5.1 percent of the total. If we subtract the 55,000 of them in hydropower, which most data sources class as nonrenewable, the figure is down to 84,000, or 3.1 percent of all clean jobs. 29,000 of this remainder are in solar (thermal and photovoltaic), which accounts for under 1 percent of actual renewable power production. 24,000 more are in wind (17.4 percent of renewable power workers and under 1 percent of total clean workers).<sup>17</sup> Even if we are willing to assume very large "multipliers" from renewable power, its impact on employment will be trivial, whether taken as a fraction of all energy, clean economy jobs, or the entire labor force.

As a check on those figures we examine Washington State, where environmental awareness is high and renewable energy (non-hydro) is a significant presence. Its four base categories are [1] Increasing energy efficiency, [2] Producing renewable energy, [3] Preventing and reducing environmental pollution, and [4] Providing mitiga-

<sup>15</sup> *Id.* at 5, one footnote omitted. It is also noteworthy that the model has never appeared in the peer-reviewed economics literature. As best I can discern, its basic structure was developed by urban planners rather than economists.

<sup>16</sup> Mark Muro, *et al.*, *Sizing the Clean Economy: A National and Regional Green Jobs Assessment*, (Brookings Institution, 2011).

<sup>17</sup> Brookings' authors note (at 12) that the American Wind Energy Association claims 30,000 "direct" workers and the Solar Energy Industries Association 24,000, roughly the same as the Brookings figures.

tion or cleanup of pollution.<sup>18</sup> Again, a significant fraction of its green workers are bus drivers, trash handlers and the like. The Washington data show that renewable energy occupies 3,464 workers, 3.5 percent of the state's 99,979 green jobs.<sup>19</sup> Its current wind capacity is 2,357 MW, ranking it sixth among the states.<sup>20</sup> Washington is one of the most active states in wind investment and production, but still only a small percentage of its green workforce works with renewables, including wind. The Washington study's authors further note that "construction-related industries and occupations, as well as professional and technical services occupations, accounted for the majority of all [renewable] positions."<sup>21</sup> The majority of these jobs are in manufacturing and construction. Per project, both are short-lived, and once in operation "most renewable energy facilities operate with a relatively small number of operations and maintenance employees. . . . The proportion of part-time positions is higher for renewable energy than for any other private-sector core area (35 percent)."<sup>22</sup>

Both the Brookings and the Washington data tell similar stories. Green or clean jobs are not objectively definable, and cases like the bus drivers tell us that they are easy to inflate. Under both studies' definitions, renewable power jobs are small fractions of the total, and most will be short-lived construction work performed in the main by people with skills that are usable in almost any type of project. Washington's wind units produce a higher fraction of the state's power than those of most other states, but their existence has not created any discernible difference in Washington's labor market performance. Similarly, it appears that most of the solar workforce is in construction, where opportunities will diminish with the growth of installations. The past three years have led many to question the federal government's ability to create new employment and the odd logic that lies behind that hope. The data, however, should make it clear to both believers and nonbelievers that renewable power is a singularly inappropriate and ineffective way to increase employment.

## V. Summary and Conclusions

The reality of most renewable electricity, particularly from intermittent sources, is easy to summarize. It is expensive, undependable and environmentally problematic. Some renewables such as biomass and geothermal are exceptions, often capable of passing market tests that wind and solar cannot. Unchallenged data from the Energy Information Administration show that the subsidies per kwh actually generated by wind and solar power are over 80 times those received by non-nuclear conventional sources, and over 15 times those for nuclear power. Most subsidies to wind and solar are politically-inspired wealth transfers, rather than tools to incentivize improvements in their competitiveness. In all but the most extreme scenarios, the Department of Energy projects that they will be uncompetitive with conventional resources, even if carbon policies come into being.

The economic theory behind claims that renewables will increase employment applies (if at all) to an economy that hardly resembles today's. Advocates of job creation almost invariably fail to note the concomitant destruction of jobs in industries whose products are no longer bought because consumers must pay taxes or higher prices for the renewable power. The National Renewable Energy Laboratory's models of job creation are curiosities devoid of policy relevance, mathematically structured to render any possible job destruction an impossibility. Even if we only look at jobs in renewables, their impacts on employment are minimal. The Brookings Institution estimates slightly over 80,000 renewable energy jobs, many of which are short-term construction work. The millions of "clean" or "green" jobs mentioned in the media are overwhelmingly positions that would be filled even if all renewable electricity vanished—bus drivers, refuse workers, and some building trades, to name a few. Calling these workers part of the "clean" economy can only mislead the public about the likely effects of energy and climate policy.

<sup>18</sup> Washington State Employment Security Department, *2009 Washington State Green Economy Jobs* (Mar. 2010), 5. Brookings notes (at 14) that its total is approximately 19 percent higher than its own on a per capita basis.

<sup>19</sup> Calculated from Washington State Employment Security Department, 15 and 21.

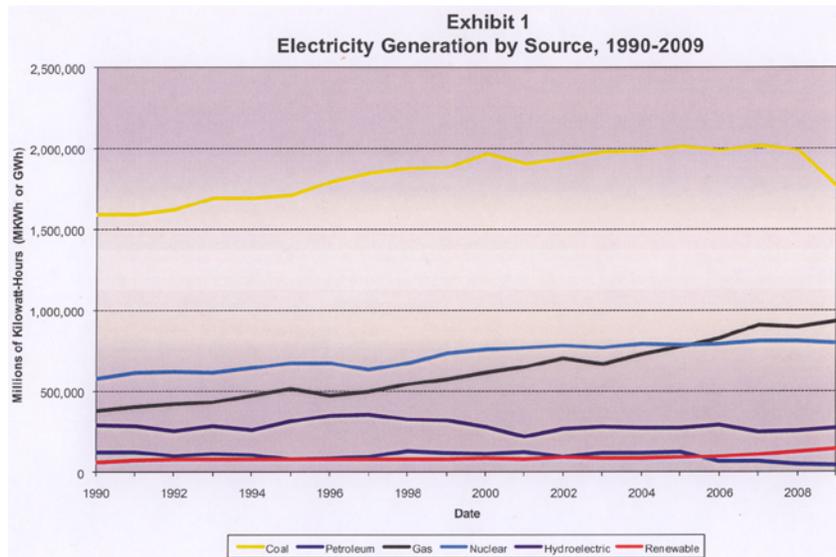
<sup>20</sup> American Wind Energy Association, *Wind Energy Facts: Washington* (Aug. 2011). Washington has very little non-wind renewable capacity. <http://www.awea.org/learnabout/publications/upload/Washington.pdf>

<sup>21</sup> Washington State Employment Security Department, 7.

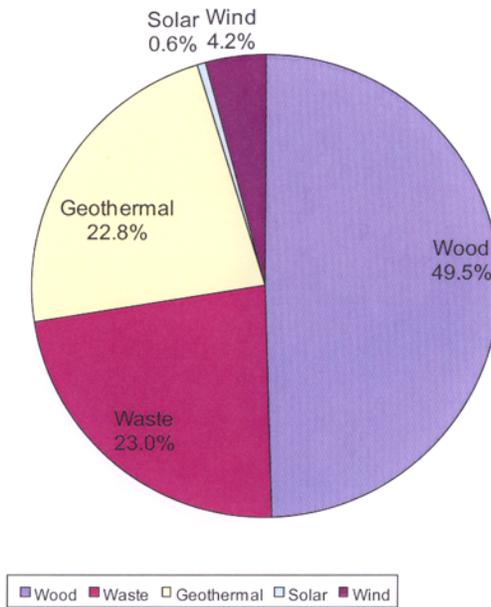
<sup>22</sup> Washington State Employment Security Department, 30.

Any choice by government to financially support one energy source over another is by definition an exercise in picking winners. All too often such spending generates forces that make it very difficult to abandon the non-winners. The stories of synfuels and ethanol are back today in wind and solar power, which have many friends in Washington. Whatever happens there, the real future of energy has already arrived, and the winner was picked by the market, with virtually no help from the District of Columbia. Independent risk-takers devised ways to access shale gas for the simplest of reasons—there was profit to be made by alleviating a scarcity of conventional gas. Shale is competitive on costs, compliant with environmental rules and in the main within state jurisdiction, under which it is producing prosperity. The jobs shale creates are the kind that have always powered the country, and their finance comes from the voluntary savings of households and businesses. The nation is looking at centuries of low-cost, clean, secure fuel that creates the kind of jobs that are really worth creating—in the making of goods and services that people voluntarily trade because doing so makes both sides better off. Wind and solar largely exist because government can coerce payments for them.

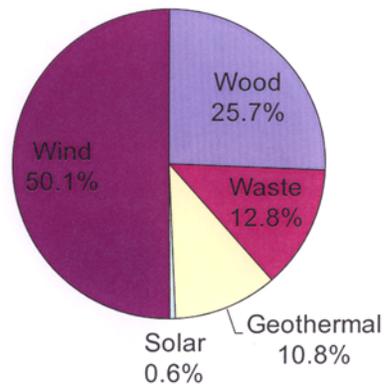
The subject matter of this hearing is a seemingly minor provision in a far larger and more pervasive law. ARRA and many other recent laws contain language that prioritizes facilities associated with renewable power in ways that I believe are unwarranted. This testimony has summarized some facts about renewable energy in order to shed light on its true costs, benefits, and labor market effects. These facts clearly show that this committee must rethink ARRA's statement that WAPA pay particular attention to renewable energy. I am not testifying about the organization or performance of WAPA, or about the costs and benefits of any specific transmission project. Rather, I am stating that power from renewable sources should compete for transmission resources on the same terms as power from conventional ones.



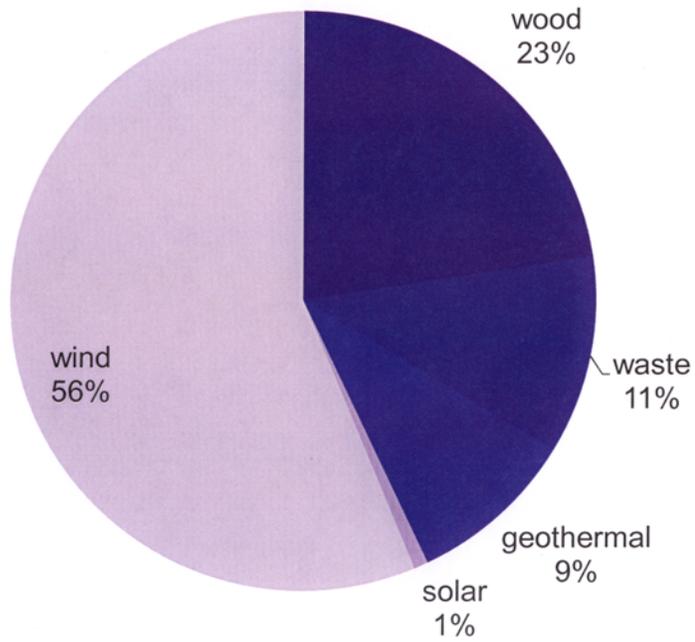
**Exhibit 2**  
**Percentage of Renewable Generation by Source, 1991**



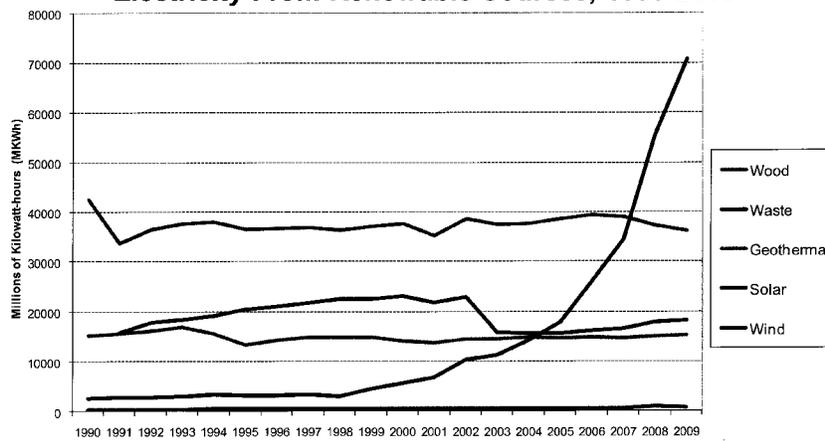
**Exhibit 3**  
**Percentage of Renewable Generation by Source, 2009**



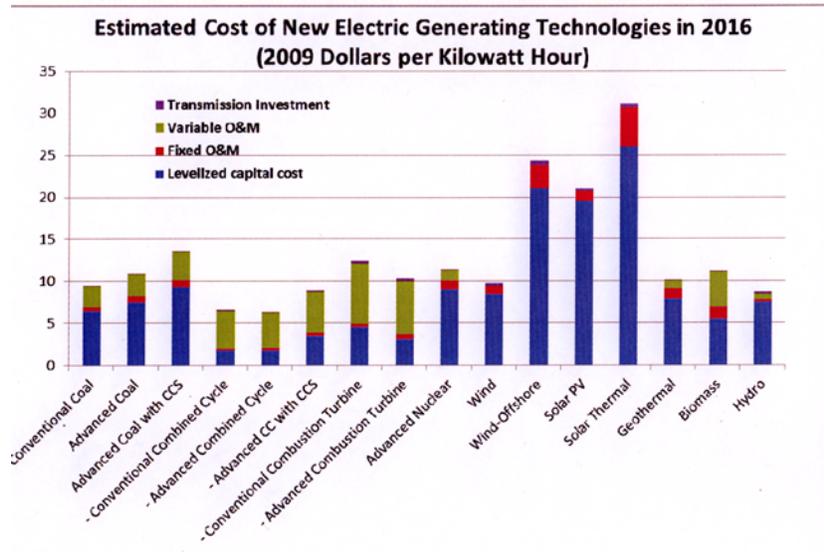
**Exhibit 3**  
**Percentage of Renewable Generation by Source, 2010**



**Exhibit 4**  
**Electricity From Renewable Sources, 1990-2009**



## Exhibit 5



Mr. McCLINTOCK. Great. Thank you very much for your testimony.

I now recognize Mr. Jimmy Glotfelty, Executive Vice President of Clean Line Energy Partners LLC, from Houston, Texas, to testify.

**STATEMENT OF JAMES GLOTFELTY, EXECUTIVE VICE PRESIDENT, CLEAN LINE ENERGY PARTNERS LLC, HOUSTON, TEXAS**

Mr. GLOTFELTY. Thank you, Mr. Chairman and Ranking Member, members of the Committee. My name is Jimmy Glotfelty. As the Chairman said, I am Co-Founder and Executive Vice President of Clean Line Energy Partners. I appreciate the opportunity to provide comments with our views on H.R. 2915 today.

In its current form, we oppose this bill, but we would be happy to work with you to find ways to address your concerns and find a way where this program can sustain transmission development in the West while protecting consumers and Western's ratepayers.

We agree with the need to ensure that consumers of Western Area Power Administration are financially protected. We also understand the concerns really about this hearing have arisen as a result of some DOE loan guarantee programs. We believe they are two very different types of programs.

We strongly believe that taxpayers and Western customers can be fully protected without repealing one of the most important programs enacted in recent years to encourage the development of major new electric transmission lines, especially in the Western United States. Unlike laws that Congress enacted to enable the de-

velopment of railroads and interstate natural gas pipelines, there has never been a comprehensive Federal authority to develop and site interstate transmission lines. This is precisely why this program is extremely important.

Congress partially addressed the problem of siting interstate transmission lines in the Energy Policy Act of 2005. Section 1221 provided the Federal Energy Regulatory Commission with backstop authority. Unfortunately, legal challenges and court decisions have rendered this program largely ineffective.

Section 1222 of the Energy Policy Act of 2005 authorizes the Federal Power Marketing Administrations, like Western, to partner with private developers, like Clean Line Energy Partners, to finance and develop new transmission lines. We provide them with the capital, and we use their development authority, siting authority, to build transmission lines. This is an extremely viable provision that Clean Line has been pursuing in the Eastern interconnection. However, it is currently unclear if this authority can be effectively utilized in the West.

Our company is privately funded. We have spent millions of dollars in good faith developing our transmission lines in the East and in the West. Our projects are based upon the free market and will not get built unless market participants purchase capacity on our lines. The greatest challenge that we face in siting the transmission lines is obtaining necessary cooperation from government agencies.

Once completed, our line in the West, which is called Centennial West, will be 900 miles. It will be a high-voltage, direct-current transmission line. And it will deliver 3,500 megawatts of clean energy from very high-capacity-factor wind resources and perhaps solar resources to communities in California and in the Western United States.

The development and construction of the Centennial West Clean Line is estimated to cost \$2.5 billion, and the wind resources that will follow are in the \$7 billion range. These investments do create jobs. If you have been to a wind farm or seen a transmission line being built, there are actual jobs that come with this type of investment.

We have been in discussions with Western for over a year and have executed a memorandum of understanding and are close to executing a joint development agreement to complete this line. Under the arrangement we are working on with Western, Clean Line would bear all development expenses, and we would reimburse Western for all of their expenses as well as any environmental costs that they must bear. This will ensure that their ratepayers, that their customers, are made whole.

Western would only use funds borrowed from the U.S. Treasury for the project once key development milestones have been reached, risks have been mitigated. And this is at a time when other financial institutions believe the project is secure, as well. We don't expect Western to finance 100 percent of a transmission line, so what happens is Wall Street firms have to be secure in their understanding of the line, as well. So Western is really in a boat with a lot of other financial institutions, and that is a risk-mitigation tool.

Western has been extremely prudent in the manner in which the officials have implemented their transmission infrastructure program, and I might say, in fact, a little too cautious. The Centennial West line is estimated to provide more than 5,000 construction jobs and 500 permanent jobs once completed.

The wind resource in the Great Plains from Canada to Texas is among the best in the world. For this reason, wind farms in that area produce the least-expensive clean energy in the country. Recent power purchase agreements signed in this region are in the 3-cent range. Please look at the numbers. Wind is very inexpensive. There are private-sector Wall Street firms that suggest that it is the least cost-expensive electricity on the market today.

I look forward to your questions. Thank you, sir.

[The prepared statement of Mr. Glotfelty follows:]

**Statement of James Glotfelty, Executive Vice President,  
Clean Line Energy Partners, on H.R. 2915**

Mr. Chairman and Members of the Committee:

As a cofounder and Executive Vice President of Clean Line Energy Partners, I appreciate the opportunity to provide the Committee with our views on H.R. 2915 and the effects it will have on the development of transmission in the western United States.

Clean Line opposes this bill in its current form. We understand the desire to ensure that taxpayers and the customers of the Western Area Power Administration are financially protected. We also understand the concerns that have arisen recently with respect to some unrelated loan and loan guarantee programs. But we also strongly believe taxpayers and Western's customers can and will be fully protected without the need to repeal one of the most important authorities enacted in recent years to encourage the development of major new electric transmission lines.

Clean Line Energy Partners is a developer of long distance, high voltage direct current electric transmission lines to connect the best renewable energy resources in North America to communities and cities that lack access to new, low-cost renewable power. Clean Line provides transmission solutions to generators and load-serving utilities in order to efficiently interconnect clean energy with consumers.

The United States is in dire need of new electric transmission lines. Transmission is required to move electric power from generating facilities to load centers because major renewable, nuclear, and fossil generating facilities often are located tens, if not hundreds, of miles from load centers where the electric power they produce is consumed. Many of the transmission lines in the United States are decades old, and were built when generating resources and electric demand were much different than they are today. Moreover, new transmission is needed to increase reliability in all areas of our grid. And yet, while many transmission lines have been announced across the country in recent years, very few have actually been built.

The need for new electric transmission lines and new authority to enable development of those lines has been recognized by the industry for many years and also has been recognized and acted upon by Congress. Unlike laws that Congress enacted many decades ago to enable the development of railroads and interstate natural gas pipelines across the country, there never has been comprehensive federal authority to develop and site interstate transmission lines. Congress partially addressed this problem with two provisions of the Energy Policy Act of 2005. Section 1221 authorized the Federal Energy Regulatory Commission to site transmission lines in national interest electric transmission corridors designated by the Department of Energy, but legal challenges and court decisions concerning DOE's and FERC's exercise of this authority have rendered this program largely ineffective in its current form. Section 1222 of the 2005 law authorizes the federal power marketing administrations to partner with private developers to finance and develop new transmission lines. However, the power marketing administrations and DOE have not proceeded with any Section 1222 projects to date.

In contrast, the Western Area Power Administration's Transmission Infrastructure Program (TIP), which Western put in place after enactment of the American Recovery and Reinvestment Act and the authorization of borrowing authority for Western, has enjoyed success. Under this program, one transmission project is under construction and several more are in advanced stages of development.

This leaves us in a precarious situation. At a time when we all want energy security, when virtually all informed market participants believe new electric transmission facilities are necessary, and when we need to improve electric reliability, we have only one currently successful national authority whereby public and private sector participants can partner to build new interstate electric transmission lines: Western's TIP program under the borrowing authority enacted in the ARRA. We strongly believe that now is not the time to repeal that authority.

Our company is privately funded and has spent millions of dollars in a good faith effort to develop transmission facilities across the United States using the legal authorities that Congress and the States have made available. Our projects are based upon the free market and will not get built unless market participants purchase capacity on our lines. The greatest challenge we face is siting the transmission lines and obtaining the necessary cooperation from government agencies. Western has been a leader among federal agencies, under the TIP program, in working with us and seeking to advance the development of interstate transmission.

Clean Line is developing a transmission line in the western United States called the Centennial West Clean Line (please see attached project description). Once completed, this HVDC transmission line will deliver 3,500 megawatts of clean power from very high capacity factor renewable energy projects in New Mexico and Arizona to communities in California and other areas in the West that have a strong demand for clean, reliable energy. We have been in discussions with Western for over a year and have executed a memorandum of understanding and are close to executing a development agreement. In parallel with our discussions with Western, we have invested millions of dollars in routing studies, electrical feasibility processes, path rating studies, and public outreach activity. Under the arrangement we are working out with Western, Clean Line would bear all development costs and reimburse Western and other federal agencies for all of their costs. Western would only use funds borrowed from the U.S. Treasury for the project once key development milestones have been reached and risks have been significantly mitigated, and we expect such borrowings to be secured. Moreover, as currently contemplated, Western would have ownership of the assets purchased with borrowed funds. In our negotiations to date, Western has been extremely conscientious about not exposing taxpayers or its customers to financial risk.

Western has been extremely prudent in the manner in which its officials have implemented the TIP program. It is our experience that Western will not participate in a project if it is not prudent, not supported by sufficient market demand, or does not contain strong financial protections for customers and taxpayers. In fact, Western has a successful track record of public/private partnerships that we as a country should build upon, not eliminate.

The Centennial West Clean Line will transport clean power via an approximately 900-mile overhead, high voltage direct current transmission (HVDC) line. This line is currently planned to traverse New Mexico, Arizona and end in California. The development and construction of the Centennial West Clean Line is estimated to cost \$2.5 billion and will make possible another approximately \$7 billion of new renewable energy investments. The Centennial West Clean Line is estimated to provide more than 5,000 construction jobs and more than 500 permanent jobs to maintain and operate the wind farms and the transmission line.

Clean Line has invested thousands of hours in the development of the Centennial West Clean Line project and has met with thousands of landowners, stakeholders, elected officials and others who will be impacted by our lines. We have tried to be as transparent and straightforward as possible, and work very hard to do a good job at siting lines and maintaining landowner relations. Currently in the West, the TIP program managed by Western to implement the borrowing authority enacted in the ARRA is the only viable program that will help us site our line across three states.

The wind resource in the Great Plains, from Canada to Texas, is among the best in the world. For this reason, wind farms in the area produce the least expensive new clean energy in the country. Recent power purchase agreements signed in the region have been in the range of three cents per kilowatt-hour including the Production Tax Credit (PTC). Accessing these resources, however, requires new transmission.

In the West, Western's TIP program is a critical piece of this puzzle. Without a workable TIP program or other workable federal electric transmission siting authority, it will be virtually impossible to site a long distance, interstate electric transmission line. Doing so requires working with each state and its own unique state laws, some of which—as Clean Line has experienced in some states—will not permit the development of interstate transmission lines. As a result, an individual state can bring to a complete stop the development of a line that is in the nation's and

the region's best interests, that would put thousands of Americans to work, that would improve electric reliability, and that would enable the development of additional domestic energy resources.

A stable and progressive electric transmission siting policy is the most crucial need for the development of new transmission in the U.S. As a result of stable policy in Texas, the private sector is building over \$6 billion of transmission to access renewables. These facilities reduce costs and provide thousands of jobs across the state.

I urge the Committee not to move forward with repealing the authority that enables Western to carry out its TIP program. It would be even better if Congress would move forward with a more comprehensive federal electric transmission siting authority. But in the meantime, it is important that Congress leave in place the authority it has enacted so far that enables at least some new electric transmission to be financed and built.

In closing, Mr. Chairman, the loss of this program would potentially mean that Clean Line's efforts, as well as numerous others in the West, would grind to a halt. This could have a detrimental effect on energy security and eliminate the possibility for thousands of jobs. At a time when the American public is demanding investment in new infrastructure and access to clean, domestically-produced energy, we should be expanding successful programs like TIP, not eliminating them.

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Mr. McCLINTOCK. Thank you for your testimony.

Our final witness on this panel is Mr. William Yeatman, Assistant Director of the Center for Energy and Environment at the Competitive Enterprise Institute, from Washington, D.C.

Welcome.

**STATEMENT OF WILLIAM YEATMAN, ASSISTANT DIRECTOR,  
CENTER FOR ENERGY AND ENVIRONMENT, COMPETITIVE  
ENTERPRISE INSTITUTE, WASHINGTON, D.C.**

Mr. YEATMAN. Chairman McClintock, Ranking Member Napolitano, thank you very much for inviting me before you today to testify in strong support of H.R. 2915.

This legislation is necessary primarily because there is strong evidence that the WAPA loan authority is unnecessary. In March of 2009, Ed Rahill, the CEO of ITC, America's largest transmission company, testified before this Committee that his company had no problems raising capital to build transmission lines. He said, and I quote, "Even in the current environment, ITC has not found access to the debt or equity markets to be difficult. Financing new transmission is not the problem that needs to be overcome in order to build transmission to provide greater market access for renewable resources," unquote.

Mr. Rahill's testimony begs an important question: If the private sector is ready and willing to facilitate the transmission of electricity from green energy sources, then why is there a need for the WAPA loan authority?

In addition to the fact that the market renders the WAPA loan authority unnecessary, there are several structural reasons that suggest the loan authority is an unduly risky use of taxpayer dollars, especially in light of our current budget woes.

For starters, assessing the creditworthiness of transmission projects is well outside the core competencies of WAPA. The Western Area Power Administration was created in 1977 to market and deliver Federal hydropower to load centers. Now it is being asked to create investment-bank-like capabilities from scratch.

The history of much more established loan programs for clean energy projects suggests that there is a long learning curve. For ex-

ample, the Department of Energy's Loan Programs Office was created by the 2005 Energy Policy Act in order to facilitate the development of low-carbon energy technologies. Since its inception, the Loan Programs Office has been criticized repeatedly by Federal watchdogs for management issues. And in my written testimony, I cite all the studies. There are five, all told: three from the GAO, Government Accountability Office; two from the Inspector General of the Department of Energy. Most recently, it was criticized for the high-profile bankruptcy of Solyndra, Incorporated, which put the American taxpayer on the hook for almost \$500 million.

The Department of Energy's Loan Programs Office has had 6 years to build capacity, and it is still plagued by problems. By comparison, the WAPA loan authority was established in less than 3 months. That raises a red flag.

Finally, the WAPA loan authority is made even riskier by the American Recovery and Reinvestment Act's mandate to rush money out the door. In enacting this legislation in February 2009, the Congress' primary purpose was to jump-start the economy, made moribund by a global recession. To this end, the WAPA loan authority announced its first loan just 7 months after the enactment of the stimulus and just 4-1/2 months after it was created. In the words of WAPA loan authority manager Craig Knoell, this timeline was, quote, "amazingly fast," unquote.

However, the WAPA loan authority's mandate to spend quickly coexists uneasily with wise fiscal management. Rushed investments tend to be rash investments, which tend to be poor investments.

With this in mind, it is worthwhile to consider the current state of WAPA's first loan, which financed the Montana-Alberta Tie Line, a 200-mile interstate transmission line. As originally conceived, the project was slated to cost \$150 million and it was supposed to be completed by the end of 2008. In September 2009, it received the first WAPA loan for \$160 million. At the time, the project's cost had risen to \$213 million, so \$63 million more than what it originally cost. And it was expected to be completed in 2010, so a year after the original—or a year later.

Then, in March 2010 testimony before this Subcommittee, WAPA Administrator Timothy Meeks indicated that the project's completion date had been pushed back to mid-2011, a further delay. In June of this year, construction on the project was halted due to a lawsuit filed by the principal contractor against the project owner for failure to pay its bills. At the time, the project owner indicated that the Montana-Alberta Tie Line needed to raise an additional \$25 million, and it pushed the expected completion date back to late 2011. Last month, the project owner indicated that it needed an additional \$25 million—so \$50 million, all told, since June—to complete the line.

As such, the project is 3 years over schedule and almost double what it originally—or it will cost almost double what it was originally estimated to cost. That strikes me—or that raises a number of red flags for me, with respect to this first loan.

Thank you very much for allowing me to testify, and I look forward to answering your questions.

[The prepared statement of Mr. Yeatman follows:]

**Statement of William Yeatman, Assistant Director, Center for Energy and Environment, Competitive Enterprise Institute, on H.R. 2915**

Chairman McClintock, Ranking Member Napolitano, Members of the Subcommittee, thank you for inviting me to testify before you today in support of H.R. 2915, the American Taxpayer and Western Area Power Administration Customer Protection Act of 2011. I am William Yeatman, assistant director of the Center for Energy and Environment at the Competitive Enterprise Institute. We are a non-profit public policy organization dedicated to advancing the principles of limited government, free enterprise, and individual liberty. CEI specializes in regulatory policy. We accept no government funding and rely entirely on individuals, corporations and charitable foundations for our financial support.

My testimony is organized in two sections. The first explains why I believe that the Western Area Power Administration Section 402 Transmission Infrastructure Program (“WAPA loan authority”) is too risky for American taxpayers, especially in light of our nation’s current deficit problems. In the second section, I explain the potential unintended consequences of policies like the WAPA loan authority that are meant to promote renewable energy.

**I. The WAPA Loan Authority Is Too Risky for Taxpayers**

*Environmentalism Public Policy Is a Poor Substitute for the Profit Motive*

Investment banks and venture capitalists have a singular purpose: To earn a worthwhile return on their capital investments. This is a powerful incentive for wise fiscal management. It is their resources that are at stake, and foolhardy investments will lose money. Thus, private sector financing is subject to market discipline that provides powerful incentives for sound money management.

By contrast, the WAPA loan authority has nothing to do with the profit motive. Rather, the purpose of the program is to lend taxpayer money to transmission projects that advance environmentalist public policy, to the benefit of special interests—in this instance, renewable energy developers. Specifically, the American Recovery and Reinvestment Act created the WAPA loan authority for the purpose of “delivering or facilitating the delivery of power generated by renewable energy resources constructed or reasonably expected to be constructed.”

At a fundamental level, public policy imposes much less discipline on capital allocation than does the profit motive. To some extent, the WAPA loan authority’s mandate to facilitate green energy must compete with the taxpayer’s interest in ensuring recuperation of the original investment. This reality is reflected by the fact that the Western Area Power Administration needs to certify only a “reasonable” expectation of repayment before it can lend taxpayer money through the WAPA loan authority. Private sector financing, unencumbered by public policy goals to promote green energy, has a higher threshold for repayment than a mere “reasonable” chance.

As such, the WAPA loan authority lends money as would an investment bank or a venture capitalist, but it is subject to entirely different incentives that render it inherently riskier relative to private sector financing.

*WAPA Loan Authority Lending Is a Moral Hazard*

This discrepancy in riskiness between private sector lending and financing by the WAPA loan authority is increased by the fact that the American Recovery and Reinvestment Act allows for the forgiveness of loans if they cannot be repaid. Whereas private sector lenders suffer direct financial harm if their loans default, the WAPA loan authority is under no such constraints, because the American taxpayer in general—rather than only the Western Area Power Administration or its customers—are on the hook. This is a moral hazard conducive to fiscal mismanagement.

*Investment Banking Is outside the Western Area Power Administration’s Core Competencies*

Another reason for concern is that lending money to facilitate green energy projects is well outside the core competencies of the Western Area Power Administration. In effect, it has been tasked with creating an investment bank from scratch. The history of much more established loan programs for clean energy projects suggests that there is a long learning curve.

For example, the Department of Energy’s Loan Programs Office was created by the 2005 Energy Policy Act, in order to facilitate the development of low-carbon energy technologies. Since its inception, the Loan Programs Office has been red-

flagged repeatedly by federal watchdogs<sup>i</sup>—most recently for betting almost half a billion dollars on Solyndra, Inc., a California-based solar power components manufacturer that declared bankruptcy in August. The Department of Energy’s Loan Programs Office has had six years to build capacity, and it is still plagued by problems. By comparison, the WAPA loan authority was established in less than three months.

*The American Recovery and Reinvestment Act’s Priority on Speed Is Conducive to Rash WAPA Loan Authority Lending*

The WAPA loan authority is made even riskier by the American Recovery and Reinvestment Act’s mandate to rush money out the door. In enacting this legislation in February 2009, Congress’s primary purpose was to jumpstart an economy made moribund by a global recession.

The WAPA loan authority has explicitly adopted this purpose—that of speedily spending taxpayer money. As noted by the promulgation of the WAPA loan authority in the Federal Register, “The Purpose of the Recovery Act, which authorized this Program, *is to stimulate job-creation in the near term*.” [Italics added] Later in the same notice, it stated, “The [WAPA loan authority] anticipates a combination of new transmission construction and upgrades to existing infrastructure. . . *in order to meet the objectives of the Recovery Act to create jobs in the near term and rapidly develop infrastructure to deliver renewable resources*.” [Italics added]

To this end, the WAPA loan authority announced its first loan just seven months after the enactment of the American Recovery and Reinvestment Act. In the words of WAPA loan authority Manager Craig Knoell, this timeline was “amazingly fast.”<sup>iv</sup> However, the WAPA loan authority’s mandate to spend quickly coexists uneasily with wise fiscal management. Rushed investments tend to be rash investments, which are almost always poor investments.

This was evidenced recently evidenced by the high-profile July bankruptcy of Solyndra, Inc, the recipient of the first loan guarantee subsidized by the American Recovery and Investment Act through the Department of Energy Loan Programs Office. An ongoing investigation by the House Energy and Commerce Subcommittee on Oversight and Investigations suggests that this loan was rushed in order to quickly demonstrate results from the American Recovery and Reinvestment Act.<sup>v</sup> Notably, the Solyndra loan was closed 10 months before the next such loan guarantee; in the 10 months thereafter, 10 loan guarantees were issued.<sup>vi</sup> Serious questions remain whether the rushed schedule compromised due diligence.

*Private Financing Is Not a Limiting Factor to Renewable Energy Development*

In testimony before this Subcommittee during a March 2009 hearing, Western Area Power Administrator Timothy Meeks justified the WAPA loan authority as a means to break “a vicious cycle,” whereby, “a lack of funding has been the weak

<sup>i</sup>In a 2007 report, the Government Accountability Office questioned, “whether this program [the Department of Energy Loan Programs Office] and its financial risks will be well managed” See p. 4: <http://www.gao.gov/new.items/d07339r.pdf>

In a 2008 report, the Government Accountability Office stated that, “The Department of Energy is not well positioned to manage [the loan guarantee program] effectively and maintain accountability.” See: p.1 <http://www.gao.gov/new.items/d08750.pdf>

In a February 2009 report, the Department of Energy Inspector General warned that, “[I]n a number of critically important areas, the [Department of Energy] had not fully developed and implemented controls necessary to successfully manage the program.” See p. 2: <http://energy.gov/ig/downloads/department-energys-loan-guarantee-program-innovative-energy-technologies-ig-0812>

In a July 2010 report, the Government Accountability Office noted that 50% of the conditional loan guarantees it examined had been issued before full reviews were conducted. See p. 8: <http://www.gao.gov/new.items/d10627.pdf>

In a March 2011 report, the Department of Energy Office of the Inspector General, 15 out of 18 loan guarantees issued by the Loan Programs Office lacked “pivotal” information regarding risk ratings. See p. 2 <http://www.recovery.gov/Accountability/inspectors/Documents/IG-0849.pdf>

<sup>ii</sup> Federal Register Vol. 74, No. 92, 14 May 2009, 22733

<sup>iii</sup> *Ibid.*, 22734

<sup>iv</sup> Western Area Power Administration website, “About TIF,” <http://ww2.wapa.gov/sites/western/recovery/Pages/default.aspx>

<sup>v</sup> For information on the investigation, see: <http://energycommerce.house.gov/hearings/hearingdetail.aspx?NewsID=8897>

<sup>vi</sup> The Department of Energy posted a timeline of Section 1705 loan guarantees on its website, available here: [https://lpo.energy.gov/?page\\_id=134](https://lpo.energy.gov/?page_id=134)

link in building transmission and the lack of transmission has been the weak link in the development of renewable generating resources<sup>vii</sup>.”

This supposed impetus for the WAPA loan authority was contradicted by testimony at the same hearing from Edward M. Rahill, CEO of ITC Holdings, Inc, the nation’s largest independent transmission company. He indicated that there are no constraints on private sector financing to link renewable energy projects to the nation’s electricity grid. He testified,

“Despite the current and recent turmoil in the credit markets, ITC and its subsidiaries have been successful in every debt and equity financing related to the ongoing operating company investments and acquisitions since ITC was founded in 2003. Even in the current environment, ITC has not found access to the debt or equity markets to be difficult. . . .Financing new transmission is not the problem that needs to be overcome in order to build transmission to provide greater market access for renewable resources<sup>viii</sup>.”

If the private sector is already financing transmission adequately, then the WAPA loan authority is not necessary. At best, it is duplicative, and therefore crowds out market mechanisms that allocate capital more efficiently. At worst, it is financing only those projects that have been spurned by the market, which suggests they are a bad bet.

*Too Risky for Private Lenders, Too Risky for Taxpayers*

WAPA loan authority loans are riskier than private sector financing. As such, they should also be too risky for public sector financing. In light of America’s current deficit problems, now is not the time to unduly chance taxpayer money on the success or failure of novel renewable energy technologies.

## II. Unintended Consequences

*The WAPA Loan Authority’s Mission Is at Odds with Affordable and Reliable Electricity, Especially in light of Pending/Final Regulations from the Environmental Protection Agency*

The Western Area Power Administration’s 17,000 miles of high voltage transmission lines are a component of the nation’s interconnected electricity grid. At any given time, the power that enters the system must equal the power that leaves the system. Supply must equal demand, on a second to second basis, or else the system breaks down and the lights go out.

This balancing feat is a complex engineering challenge, and it is made much more difficult by the incorporation of renewable energy. Unlike conventional energy sources, which can “ramp” electricity generation up or down predictably due to fuel stored onsite, renewable energy production is variable and unpredictable. After all, the wind doesn’t always blow and the sun doesn’t always shine.

The primary solution to the reliability challenges engendered by the intermittent nature of renewable energy is to back up wind and solar generation with conventional energy generation, primarily natural gas fired power plants, as they are able to “ramp” up and down the fastest.

However, at the same time that the Obama administration is trying to incorporate as much renewable energy into the grid as quickly as possible, it is also implementing environmental regulations that will radically alter the nation’s electricity market by dramatically reducing demand for coal-fired electricity. Unfortunately, the addition of renewable energy and the subtraction of coal power work to the detriment of the system’s reliability and affordability.

A significant portion of the nation’s coal-fired power plant fleet is expected to be shuttered, due to an array of pending and final Environmental Protection Agency regulations—including the Cross-State Air Pollution Rule, the Utility Maximum Achievable Control Technology requirement under Hazardous Air Pollutants program, the Regional Haze Rule, and the regulation of greenhouse gases under the Clean Air Act. According to the Edison Electric Institute, the breadth and speed of EPA regulations could lead to the retirement of up to 90,000 megawatts of coal-fired electricity generation<sup>ix</sup>. And a preliminary assessment by the Federal Energy Regulatory Commission Office of Electric Reliability showed 40,000 MW of coal-fired gen-

<sup>vii</sup> Statement of Timothy J. Meeks before Subcommittee on Water and Power, 10 March 2011, p. 4, <http://naturalresources.house.gov/UploadedFiles/MeeksTestimony03.10.09.pdf>

<sup>viii</sup> Statement of Edward M. Rahill before Subcommittee on Water and Power, 10 March 2011, p. 2 <http://naturalresources.house.gov/UploadedFiles/RahillTestimony03.10.09.pdf>

<sup>ix</sup> Edison Electric Institute, Potential Impacts of Environmental Regulation on the U.S. Generation Fleet, January 2011, p. v, [http://www.pacificorp.com/content/dam/pacificorp/doc/Energy\\_Sources/Integrated\\_Resource\\_Plan/2011IRP/EIEModelingReportFinal-28January2011.pdf](http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Integrated_Resource_Plan/2011IRP/EIEModelingReportFinal-28January2011.pdf)

erating capacity “likely” to retire, with another 41,000 megawatts “very likely” to retire<sup>x</sup>.

Something must replace this lost power, and the most plausible alternative is natural gas. The Fukushima Daiichi disaster in Japan helped galvanize opposition to nuclear power, and it is difficult to foresee a near to medium term scenario whereby that industry increases its market share in the United States. A significant expansion of the hydropower industry is also difficult to imagine, thanks to entrenched environmentalist opposition to new dams. The only alternative is natural gas. Accordingly, it is reasonable to expect that there will be a profound shift in baseload electricity generation away from coal and to natural gas.

Thus, the current administration is pushing variable renewable energy, which requires backup conventional energy production, primarily natural gas, in order to maintain system reliability. At the same time, the administration is implementing regulations that will shutter a significant amount of coal-fired electricity generation, which will likely lead to a precipitous increase in natural gas generation. These are two potentially enormous sources of demand for gas, occurring simultaneously. Of course, when demand increases, prices follow. The result is likely to be expensive electricity.

There are additional reliability concerns. It is always a challenge to site a new power plant, be it conventional or renewable. In the short term, therefore, there is no guarantee that sufficient new generation will be built to accommodate the expected loss of coal-fired generation. As a result, it is possible that natural gas “peaker” power plants—those that are designed to “ramp” up and down quickly—will be reassigned for baseload generation. This would reduce the flexibility of the grid and make it much more difficult to maintain system reliability as greater amounts of renewable generation are incorporated.

#### *Environmental Harm*

Presumably, the purpose of promoting renewable energy is to mitigate the environmental consequences of conventional energy generation. Ironically, recent evidence suggests that adding wind power—the predominate form of renewable energy—into the power supply actually *increases* air pollution.

Demand for intermittent renewable energy is not set by market forces, but by government mandates. Thirty states have renewable energy production quotas, known as Renewable Portfolio Standards, which require ratepayers to use fixed percentages of renewable energy. As a result of these mandates, most utilities operate their wind energy generation on a “must take” basis. This means they add wind power whenever it is available. As wind power is added to the power system, conventional energy generators like coal and gas fired power plants must “ramp” down. However, fossil fueled generators, and coal power plants in particular, operate much less efficiently when they are “ramped” up and down, and this causes more emissions of air pollution.

A recent study by Bentek, a Colorado-based energy market information company, found that in Colorado and Texas electricity markets, the incorporation of high amounts of wind energy into the grid actually increased emissions of sulfur dioxide and nitrogen oxides<sup>xi</sup>.

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Mr. McCLINTOCK. Well, thank you very much for your testimony.

This concludes the formal testimony in the hearing, and we will now move to Members’ questions. And I would like to begin.

Dr. Michaels, taxpayers are being asked to risk \$3.25 billion on the same technology and by the same Administration that has just delivered the Solyndra scandal. Now, we are told that this is a very cheap way of producing electricity. I believe that you took a comparative look at the costs of various forms of electricity. Is this a cheap form of electricity? Is this a good investment for our taxpayers?

<sup>x</sup>FERC Chairman Jon Wellington, Commissioner John Norris, Commissioner Cheryl LaFleur, letter to Sen. Lisa Murkowski, 1 August 2011, p. 2 [http://murkowski.senate.gov/public/?a=Files.Serve&File\\_id=0942ce17-3b12-4643-99ba-8fe2f5a7680a](http://murkowski.senate.gov/public/?a=Files.Serve&File_id=0942ce17-3b12-4643-99ba-8fe2f5a7680a)

<sup>xi</sup>Bentek, How Less Became More. . . Wind, Power and Unintended Consequences in the Colorado Energy Market, see: <http://docs.wind-watch.org/BENTEK-How-Less-Became-More.pdf>

Dr. MICHAELS. It looks like it has a cost of zero if all you think about is the wind turning the turbine. The problem is that that is electricity that is almost valueless. It is almost valueless because it can't be integrated with the system, it can't be firmed up for reliability, unless you make a large number of other investments. And you incur a large number of other operating costs—in particular, gas-fired units that can come on quickly as backup for when the wind stops blowing.

Mr. MCCLINTOCK. So you have to build a separate gas generator and keep it at constant readiness in order to back up the intermittent power coming off of the windmills; is that correct?

Dr. MICHAELS. Not quite, because each utility already has a good-sized fleet of gas generators that it uses to adjust its output as you go through the day. It doesn't necessarily entail the making of a large number of additional investments.

When we are getting to the questions like 30 percent wind, various studies like that, then you do have issues in gas investment.

Mr. MCCLINTOCK. Now, hadn't you in your written testimony contended that, in many cases, this actually increases emissions because of the solar mandate? Or perhaps that was Mr. Yeatman's testimony.

Mr. Yeatman?

Mr. YEATMAN. Oh, indeed, yes, sir. A recent study by Bentek, an energy information firm in Colorado, based in Colorado, found that there is a high amount of wind input onto the grid that exceeds natural gas capacity that forces utilities to switch to coal-fired power plants to back up these intermittent wind resources due to the inefficiencies wrought by turning up and down, ramping up and down coal-fired power plants, which is not the way they were intended to operate. It actually, ironically, results in an increase of emissions of sulfur dioxide and also nitrogen oxide.

Mr. MCCLINTOCK. Now, our constituents are actually being asked by force—because we are not giving them a choice in the matter; we are investing them in the transmission lines for these facilities.

Now, is there a difference between the transmission lines required for the wind and solar arrays compared to normal transmission facilities?

Dr. Michaels?

Dr. MICHAELS. Wind installations—very often, you have to have the turbine where the wind is. We are seeing a lot of initiatives, including the one we were talking about here, being taken. These are to reach remote units. The difficulty in some of these cases is that they have to be reached by radial lines—lines that don't improve the reliability of the system and are particularly vulnerable.

Mr. MCCLINTOCK. But isn't there a degradation in transmission over long distances?

Mr. GLOTFELTY. Mr. Chairman, if you would let me answer that, there is.

Mr. MCCLINTOCK. Well, no, I am asking Dr. Michaels.

Dr. MICHAELS. For a standard AC, yes. For DC, in fairness, there is relatively less loss, but you have to have special engineering considerations on the system to make it work.

Mr. MCCLINTOCK. So we are talking about more expensive lines than you would use for normal transmission; are you not?

Dr. MICHAELS. Quite possibly, yes, sir.

Mr. McCLINTOCK. OK.

Mr. Yeatman, we are being told that the WPPSS collapse was devastating for consumers, and it was a very risky investment. How would you compare this investment to WPPSS? And, for that matter, how would you compare this investment to Solyndra?

Mr. YEATMAN. Well, in all honesty, I am ignorant of the WPPSS investment, so I am ill-qualified to answer that particular question. Certainly, with respect to Solyndra, I am on firmer ground.

It seems as though—well, I will note this much. Within the first 10 months—within the first 10 months of the loan guarantee program that issued the Solyndra loan, there was one loan, Solyndra. The 10 months thereafter, virtually—well, I think it was 17 of the 18 loans issued by the Loans Program Office. The appearance is that it was rushed out the door. And we all know what happened as a result.

Certainly, with respect to this Montana-Alberta Tie Line, the subsequent problems that the line has experienced, to this day actually, would indicate that perhaps in an effort to get money out the door, to comply with the stimulus mandate—

Mr. McCLINTOCK. I would simply add that the recipients of all of this taxpayer largess appear to be quite clear that it is a bad investment or they wouldn't have had written in to the law a provision for loan forgiveness when these projects do not produce the capital necessary to repay the loans, ending up with the taxpayers holding the bag.

Thank you.

I now yield to the Ranking Member.

Mrs. NAPOLITANO. Thank you, Mr. Chair.

Mr. Glotfelty, do you want to answer that question? You seem ready to go. Can you do it quickly? Because I don't want to lose time.

Mr. GLOTFELTY. I think the question was the difference between AC and DC lines. In fact, AC lines are used—DC lines are not just used for wind. They are the most efficient manner to move large amounts of power long distances. AC lines are used for every single type of generation in the United States. This was a decision that went way back to Edison and Westinghouse. But DC lines are the most efficient type of technology to move large amounts of wind long distances.

Mrs. NAPOLITANO. Thank you, sir.

Ms. Azar, what are the differences in developing transmission for renewables versus non-renewables? And do these differences justify the Federal role in development?

Ms. AZAR. As indicated in my opening statement, the development for renewables—and let me be clear, this borrowing authority is not about renewable generation; it is about transmission.

The development of transmission for renewables is more difficult than developing transmission for fossil fuel generation for two reasons.

Number one, as indicated in my opening statement, for renewables you have to go where the fuel source is. So usually these are long, multistate lines, which means more permitting, more State citing issues. And, in fact, the examples given for the MATL line

and the delays there are a perfect example of why it is more difficult to site transmission.

And, second, there is a timing issue. These lines take much longer to build, which essentially is not true—the timing for the development of fossil plants actually corresponds with the timing of the development of the transmission line for fossil plants. Whereas, for renewable lines, renewable plants can be built in a very short timeframe, whereas the transmission lines needed for those renewables sometimes take 10 to 15 years. So there is a disconnect between that.

Mrs. NAPOLITANO. Thank you. I am sorry, but I have very limited time, so I have to kind of move on.

Ms. AZAR. I understand.

Mrs. NAPOLITANO. To both Mr. Glotfelty and you, Mr. Yeatman states that WAPA's lending has been conducted too rapidly and rashly. Do you agree?

And then can you opine on—because Mr. Yeatman was indicating that there should be the PPPs, Wall Street should be involved in this. But what would be the cost of the interest rate Wall Street would charge versus the Treasury with WAPA's borrowing authority, and what would that translate to for the ratepayer/taxpayer in the household?

Ms. AZAR. With regards to whether or not WAPA has been rash, I think Mr. Glotfelty can state the frustrations that have been expressed by the applicants because WAPA is doing so much due diligence over these projects.

Mr. GLOTFELTY. I can echo that. As I said in my opening statement, we are privately funded. We have never accepted any taxpayer dollars, any Recovery Act dollars. We are spending our money and my money. This is partly my company. And I want the government to help create jobs and help move this policy along. And I can say that I believe that they are actually moving too slow.

Ms. AZAR. Of the \$3.25 billion, \$2.973 billion remains to be spent. WAPA has only requested borrowing authority for 8 percent.

Mr. GLOTFELTY. And to answer the second part of your question, I believe that I have not seen any indication that Western would like to finance an entire transmission line. I have seen no indication of that, but I am not on the inside of the DOE.

That means, for instance, for our line, we are going to have Wall Street firms that will help finance the debt on this project. Western will be a part of it if we are successful, as well as other Wall Street firms.

So the point is, I don't know the differential in the rate, but, in fact, there are multiple times when there are risk-reduction measures that are taken into consideration when using this authority.

Mrs. NAPOLITANO. But would there be a noticeable rise in costs to a ratepayer or to a consumer?

Ms. AZAR. The borrowing authority actually is driving down the cost of capital significantly. And, as Mr. Glotfelty indicated, WAPA is partnering with private entities for most of its projects.

Mrs. NAPOLITANO. Does that mean that is going to hold the costs down? That is what I am trying to—

Ms. AZAR. That is correct.

Mr. GLOTFELTY. That is correct.

Ms. AZAR. That is correct.

Mrs. NAPOLITANO. OK.

Then, as I understand WAPA's transmission infrastructure program, no projects will be funded until it has been demonstrated there is sufficient demand and tariffs are in place at rates designed to ensure repayment of the borrowed funds. As briefly as you can—would you submit for the record the process that describes how WAPA protects taxpayers? And that is for the record, please.

Mrs. NAPOLITANO. Thank you, Mr. Chair.

Mr. MCCLINTOCK. Great. Thank you.

And Mr. Markey gets the last word.

Mr. MARKEY. I thank you, Mr. Chairman, very much.

Mr. Yeatman, are you aware that, by law, Western and other Power Marketing Administrations must market power at cost, not market-based rates?

Mr. YEATMAN. Indeed, yes, sir.

Mr. MARKEY. Excuse me?

Mr. YEATMAN. That they must, yeah, at cost.

Mr. MARKEY. By law. You are aware of that?

Mr. YEATMAN. Yes, sir.

Mr. MARKEY. So it is by design and by statute that the Power Marketing Administrations are not subject to market discipline, which, according to your testimony, lacks, quote, "powerful incentives for sound money management."

So, as you know, Mr. Yeatman, there are several suggestions out there about how we decrease the debt of our country, especially in areas which are not subject to sound money management and market forces. And I understand that Senator Coburn and the Congressional Research Service have estimated that eliminating the Power Marketing Administrations would save \$1.1 billion over 10 years.

Is that something that you could support, privatizing this, getting it out of the public domain?

Mr. YEATMAN. Indeed, yes, sir.

Mr. MARKEY. Now, we don't see any members of the Committee willing to sell off the Bonneville Power Administration. I am just guessing; I don't know. I have never heard that suggestion coming from the minority side.

Mr. MCCLINTOCK. Open to a discussion.

Mr. MARKEY. Open to a discussion on selling Bonneville and whatever.

But how about a less radical approach? Based on your position on free markets and sound financial decisions, do you think that Power Marketing Administrations should be required to sell their power at market rates rather than cost-based rates in order to prevent a moral hazard conducive to fiscal mismanagement?

Mr. YEATMAN. Oh, well, certainly, with respect to the moral hazard, I was referencing the forgiveness provision of the section—

Mr. MARKEY. I understand, but it is the same principle—that is, that it kind of induces you to do something that you would not otherwise do because it is not market-based. It is—

Mr. YEATMAN. Well, one is a mandate—I mean, a mandate to sell power at cost, whereas one—

Mr. MARKEY. But would you change that mandate so that we avoid the moral hazard?

Mr. YEATMAN. Well, I mean, with respect to the utility industry as a whole, I have a number of ideas as to how to open it up—

Mr. MARKEY. No, I am only speaking about this one particular— if we could cure this problem so that the moral hazard is removed, would you support removing the moral hazard of having the taxpayers give a false signal to the marketplace, which then incentives use where perhaps otherwise it would not?

Mr. YEATMAN. Well, I don't necessarily agree that it is a moral hazard per se. But I will say that, yes, generally speaking, pricing things at market rates will, indeed—

Mr. MARKEY. Well, I think you and I may disagree.

Mr. YEATMAN.—is the most efficient allocation of resources—or results in the most efficient allocation—

Mr. MARKEY. Right. Well, I don't see it as being any different than—

Mr. YEATMAN.—of natural resources and whatnot.

Mr. MARKEY. I don't see it as any different than Freddie or Fannie, where you create that moral hazard for people to, you know, take a public entity and start to think the taxpayers are behind it and then you just, you know, do things that perhaps you wouldn't do. So you maybe haven't thought it through, but I think it is pretty similar.

Do you challenge the notion that Power Marketing Administrations were created to serve a public purpose?

Mr. YEATMAN. Oh, indeed, that is the codified purpose within the law, yes, sir.

Mr. MARKEY. OK. So why isn't building new transmission for wind and solar also a valid public purpose?

Mr. YEATMAN. Well, I mean, I would—a public purpose—I mean, as the testimony of the CEO, Ed Rahill, the largest—

Mr. MARKEY. No, I understand that. I am saying—

Mr. YEATMAN. He did indicate that there is no issue, I guess, that there is not necessarily—

Mr. MARKEY. No, we are not talking about not—

Mr. YEATMAN.—the need for a public purpose if you can already access—if you can already provide these services, if they can already raise capital to invest in these transmission lines independent of having the government finance them or provide preferential rates, if the market can do it on its own. Indeed, I believe the—

Mr. MARKEY. Ms. Azar, can you respond to that?

Ms. AZAR. Yes. First of all, I would be very interested to hear where ITC has been building transmission lines outside of the service territory. This is not an open market. Indeed, in my opening statement, I indicated there are lots of problems with regards to merchant transmission developers trying to develop outside of their service territories. So we don't have competition in this area.

And, in fact, this borrowing authority allows WAPA to serve over a number of States throughout their service territories. It brings more than its purse.

Mr. MARKEY. OK, thank you.

Mr. Yeatman, you know, the Federal Government is talking about, under these programs, these Solyndra-type programs, \$8.3 billion in loan guarantees to the Southern Company to build nu-

clear power plants after Fukushima, after the North Anna plant accident. Do you think that that should be re-evaluated and—

Mr. YEATMAN. Indeed, yes, sir. No, I am against all such—

Mr. MARKEY. So you oppose those loan guarantees?

Mr. YEATMAN. Indeed, yes, sir. I will note—

Mr. MARKEY. Well, can I just tell you something?

Mr. YEATMAN. Yes, sir.

Mr. MARKEY. Out of this Republican Congress this year, they took away the loan guarantees for wind and solar but left them in for nuclear power.

Mr. YEATMAN. I am not a Republican. I am a Libertarian, sir.

Mr. MARKEY. Would you oppose that? Pardon me?

Mr. YEATMAN. Indeed, any—

Mr. MARKEY. You would take them off for both.

Professor, would you take them off for both, nuclear and wind and solar, the loan guarantees?

Dr. MICHAELS. No loan guarantees for any.

Mr. MARKEY. No loan guarantees for anyone, is that what you said?

Dr. MICHAELS. Correct.

Mr. MARKEY. So when they keep in the nuke loan guarantees, that is a mistake, huh?

OK. Thank you.

Mr. MCCLINTOCK. Perhaps we can reach bipartisan agreement on that, Mr. Markey.

Mr. MARKEY. We have tripartisan down here.

Mr. MCCLINTOCK. We have just been joined by Mr. Garamendi, for 5 minutes.

Mr. GARAMENDI. I am trying to figure out what the heck is going on here.

Mr. MARKEY. It is a Massachusetts guy trying to figure out the West Coast, is what it is.

Mr. GARAMENDI. Well, I can understand the quandary that you are in. But are we trying to not provide additional lending authority for the Western Power Administration to build things? Is that what this is all about?

Mr. MARKEY. You got it. Yes, that is it.

Mr. GARAMENDI. Why would we do that? A very successful program that is providing service power, is it—what is going on here? I thought maybe I wound up in some other strange committee. Why would you not want—

Mr. MARKEY. Same old strange committee.

Mr. GARAMENDI. What is the point?

We will start over here, just quickly, you know, 15 seconds. What is the point?

Ms. AZAR. Yeah, I mean, I can't speak for the proponents of this bill, but they are attacking the development of renewable generation. And that is not what this borrowing authority is about. This borrowing authority is about transmission. And so they have created a straw man, and it is difficult, obviously, to attack straw men.

Dr. MICHAELS. I am only here testifying on the matter of renewables and not on the matter of WAPA's administration per se.

Mr. GARAMENDI. Well, then it is not relevant to this? Then why are you testifying? Because if we are doing away with the power to borrow money to build transmission lines and you are only talking about renewables, why are you testifying?

Dr. MICHAELS. Because the question of whether renewables should have priority or not, the question of dedicating lines for renewables is one that should be rethought.

Mr. GARAMENDI. So you are opposed to renewables?

Dr. MICHAELS. Yes, I am, generally. Not all.

Mr. GARAMENDI. That is another question, but let's continue on.

Mr. GLOTFELTY. First of all, as the only transmission developer up here, we are using the free market. This authority that the Congress has given Western is absolutely critical if we are going to build interstate transmission lines. Congress has not developed an interstate transmission siting regime like they have in pipelines and in railroads. And this is the only—one of the two, but primarily the only one that will allow for us to site interstate transmission lines in the West.

Mr. GARAMENDI. This bill does that?

Mr. GLOTFELTY. Yes, it does. This bill would repeal that authority.

Mr. GARAMENDI. So you are opposed to the bill?

Mr. GLOTFELTY. I am opposed to this bill.

Mr. YEATMAN. Yes, sir. I believe the Western Area Power Administration's transmission infrastructure program—I oppose it because I believe it is unnecessary. As was indicated in previous testimony, 13 of the States within the WAPA service territory have renewable energy mandates that are, in essence, renewable energy production quotas. So you have a guaranteed demand.

As I intimated in my testimony, the market is ready and willing to meet that demand. In particular, this one gentleman who testified before this Subcommittee in March of 2009, the Chairman of ITC Holdings, the largest transmission company in the country, indicated that raising finance—

Mr. GARAMENDI. So why are you opposed to supporting the bill?

Mr. YEATMAN. Oh, I am sorry, I support the bill. I apologize.

Mr. GARAMENDI. You support the bill. Because?

Mr. YEATMAN. Because the program is unnecessary. The transmission infrastructure program itself—

Mr. GARAMENDI. Somebody else will build the transmission lines without the loan guarantees?

Mr. YEATMAN. Oh, it is not a loan guarantee; it is actually direct borrowing authority from the Treasury Department. But, indeed, yes, sir—

Mr. GARAMENDI. So, who—

Mr. YEATMAN.—the owner of the largest transmission company in the country—

Mr. GARAMENDI. Who have you lined up—

Mr. YEATMAN.—before this Subcommittee, indicated that they were willing to build the lines.

Mr. GARAMENDI. Excuse me. Who have you lined up to build the transmission lines without—I guess it is not WAPA going—who is going to build them?

Mr. YEATMAN. Well, given that there is a guaranteed source of demand for this renewable energy—

Mr. GARAMENDI. No. No, no—

Mr. YEATMAN.—given that the renewable energy must be delivered, I trust the market to deliver that power.

Mr. GARAMENDI. Do you know of any organization that wants to build these power lines?

Mr. YEATMAN. Well, again, in testimony before this Subcommittee, the chairman of the country's largest transmission company indicated that, indeed, they were willing to build such power lines to deliver green energy, that financing was not an issue, that raising capital was not an issue. So, in light of that, why do we need a government program to do so?

Mr. GARAMENDI. Now, the next question is, are they able to do it cheaper to the consumer than the Western power group?

Mr. YEATMAN. Certainly more efficiently. Well, I mean, I suspect that the money has to come from somewhere. So be it from the taxpayer or be it WAPA customers, I mean, ultimately we are dealing with America's money, we are dealing with a finite resource.

Mr. GARAMENDI. That argument doesn't fly. I don't think that flies at all. I asked, will they be able to do it at less cost than an organization that has delivered power for 70 years at the lowest rate in—one of the lowest rates, if not the lowest rate, in America?

Mr. YEATMAN. They can do it cheaper to the extent that it is subsidized by the taxpayer as a whole, indeed, yes, sir. But I don't necessarily think that is saving the country money or saving—

Mr. GARAMENDI. I am out of time.

And, Mr. Chairman, I thank you. I am still a bit confused as to why we are doing this.

Mr. MCCLINTOCK. Well, if the Chair could offer a recommendation, maybe the Member would want to attend the hearing prior to weighing in on the subject. And we thank you for your—

Mr. GARAMENDI. That is a smart-ass remark—

Mr. MCCLINTOCK. Well, I don't mean—

Mr. GARAMENDI.—and unnecessary.

Mr. MCCLINTOCK. I apologize. You are right.

Mr. GARAMENDI. Thank you.

Mr. MCCLINTOCK. You are right, and I apologize.

Mr. GARAMENDI. Accepted.

Mr. MCCLINTOCK. I want to thank the witnesses for their valuable testimony.

The members of the Subcommittee may have additional questions for witnesses, and we ask you to respond to these in writing.

The Ranking Member has a request.

Mrs. NAPOLITANO. Yes. Mr. Chair, for the record, I have two letters in opposition to 2915 from TransWest LLC and American Wind Energy Association.

Mr. MCCLINTOCK. And, without objection, those will be entered into the record.

[The documents submitted for the record by Mrs. Napolitano follow:]

**Statement submitted for the record by  
The American Wind Energy Association, on H.R. 2915**

The American Wind Energy Association (AWEA) writes to oppose the House Natural Resources Water and Power Subcommittee Chairman Tom McClintock's recently introduced H.R. 2915, the American Taxpayer and Western Area Power Administration Customer Protection Act of 2011. The proposed legislation would repeal the Western Area Power Administration's (WAPA) borrowing Authority under section 301 of the Hoover Power Plant Act of 1984, which provides borrowing authority to WAPA for purposes of construction of certain transmission facilities. We believe that taxpayers will be fully protected without eliminating one of the most important authorities enacted in recent years to encourage the upgrading of our aging electric grid and, in turn, create jobs.

The United States is in dire need of new electric transmission lines. Many of the transmission lines in the United States are decades old, and were built when generating resources and electric demand were much different than they are today. A number of studies have found that investing in our transmission grid will save homeowners and businesses billions of dollars per year by providing them with access to lower cost sources of electricity and protecting them from volatility in the price of fossil fuels. Our congested grid further harms consumers by reducing competition on the electric grid. New transmission is also needed to increase reliability in all areas of our grid, helping to avert major blackouts of the type we have seen in recent years as well as the more frequent smaller-scale outages that are also very costly for business and industry. Finally, transmission allows us to put America's vast untapped renewable energy resources to use, providing consumers with low-cost, job-creating, clean, domestic energy resources.

Continuing the successful public/private concept begun with a transmission line upgrade in central California (Path 15), which alleviated significant transmission congestion, and embodied in the 2005 Energy Policy Act, Congress gave WAPA \$3.25 billion in borrowing authority for new or upgraded electric power transmission lines, including transmission for renewables. Pursuant to that authority, WAPA may permit other entities, including private parties, to participate in the funding, construction, or ownership of transmission projects financed under this section. It also provides for WAPA to repay the Federal Treasury for funds borrowed using revenues derived from the use of the projects financed under that authority.

The use of borrowing authority by Federal utilities to finance transmission construction is not at all unprecedented. For instance, the Bonneville Power Administration (BPA) has consistently used Federal borrowing authority to finance transmission facilities in the Pacific Northwest. The risks to taxpayers associated with BPA's borrowing authority—to the extent there are any—are similar to the risks associated with the borrowing authority granted WAPA. BPA is also under no penalty if it fails to pay back the Treasury. Yet, BPA has managed its transmission program to ensure that it has sufficient revenues to make its payments. WAPA is doing the same.

The genesis for H.R. 2915 appears to be Chairman McClintock's concern that the Treasury might be required to "forgive" advancements made by WAPA if there is a balance owed to it at the end of the useful life of a project. For the reasons discussed above, it is highly unlikely that any balance will remain unpaid to the Treasury and, therefore, WAPA's borrowing authority does not need to be altered. Nevertheless, if others are troubled by the forgiveness provision, Congress should amend the provision of the Hoover Bill to remove the offending portion (treating WAPA the same as BPA), rather than repeal the entire program for WAPA.

At a time when we want to increase America's energy security, improve electric reliability, and provide access to clean, domestically-produced energy and the associated job creation, now is not the time to repeal WAPA's borrowing authority, which will continue to help meet all those goals.

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VIA E-MAIL DELIVERY

September 21, 2011

The Honorable Doc Hastings, Chairman  
 The Honorable Edward Markey, Ranking Minority Member  
 Committee on Natural Resources  
 U.S. House of Representatives  
 1324 Longworth House Office Building  
 Washington, D.C. 20515

The Honorable Tom McClintock, Chairman  
 The Honorable Grace Napolitano, Ranking Minority Member  
 Subcommittee on Water and Power  
 Committee on Natural Resources  
 U.S. House of Representatives  
 1324 Longworth House Office Building  
 Washington, D.C. 20515

Dear Congressmen Hastings, Markey and McClintock and Congresswoman Napolitano:

H.R. 2915—the *American Taxpayer and Western Area Power Administration Customer Protection Act of 2011*—would repeal Western Area Power Administration's borrowing authority, which was designed to stimulate development of much-needed transmission in the West. Western currently is using that borrowing authority to partner with Trans West Express LLC (TWE) and jointly develop the TransWest Express Transmission Project (TWE Project), among other transmission infrastructure efforts.

TransWest Express LLC submits the attached statement in opposition to H.R. 2915. *See Attachment A.* The statement addresses how Western's leveraging of its borrowing authority for the TWE Project represents exactly the type of private/public partnership Congress should support—not the kind that Congress should seek to dissolve.

The document describes the TWE Project; highlights the project's economic benefits including job creation; and addresses the sensibility and safety of TWE's partnership with Western, including multiple measures and provisions that protect federal interests.

Western chose to split its commitment to the TWE Project into two phases—the development phase and the construction/ownership phase—to protect taxpayer dollars. The development agreement between Western and TWE eliminates any risk to the U.S. taxpayer. Should Western decide not to proceed to the second construction/ownership phase of the TWE Project, Western's development costs will be fully refunded, with interest, by TWE. Ironically, had Western committed to the TWE Project in its entirety upfront, then Western's participation in the TWE Project would have been grandfathered under the language of the bill.

## **ATTACHMENT A**

### **Contents**

- A. Executive Summary
- B. TWE Project Overview
- C. Estimates of Jobs Created
- D. Western Area Power Administration's Borrowing Authority
- E. TWE's Partnership with Western
- F. H.R. 2915 to Repeal Western's Borrowing Authority
- G. Conclusion

## **TRANSWEST**

Further, Western's decision to participate in the development of the TWE Project comes not in a matter of months but after nearly 2 1/2 years of comprehensive due

diligence, project scrutiny and certification that the TWE Project's purpose, benefits and financial model comport with the stringent principles set forth in Western's Transmission Infrastructure Program. TWE responded to Western's Request for Interest process in April 2009. TWE and Western signed a non-binding agreement for Western to pursue ownership of half of the TWE Project in January 2010. And it was not until September 2011 that the first phase of the partnership was finalized following project reviews by Western, its peer power marketing agency Bonneville Power, the U.S. Department of Energy, and the Office of Management and Budget.

Finally, this is not a case where the U.S. government grants money and goes away without a stake in the project's success. Western will have the option to own 50% of the TransWest Express Transmission Project, just like it owns and operates thousands of miles of other transmission lines across the West, from Nebraska to California. This is a practical, essential long-term investment that will benefit electricity users in the West for decades to come. There is a long history in this country of energy infrastructure projects being solely funded by federal government funds. In the case of Western's proposed collaboration with a private-sector partner like TransWest Express LLC, however, Western has the opportunity to significantly leverage borrowed federal funds, which will be repaid, to build a project critical to developing our nation's renewable energy resources at a scale that would not be possible if only federal dollars were used.

Sec. 402 of the American Recovery and Reinvestment Act (ARRA) provides clear protection for customers of Western that do not utilize projects developed in that section. "Revenue from the use of projects under this section shall be the only source of revenue for—(A) repayment of the associated loan for the project; and (B) payment of expenses for ancillary services and operation and maintenance."

The need for large-scale, multi-state investments in the Western U.S. electric grid goes well beyond connecting renewable electricity supplies to the cities that need the power. Congress has recognized for years—and sought to address the matter in the 2005 Energy Policy Act—that transmission development simply has not been occurring at the pace needed to meet load growth and to ensure the reliability and stability of the electricity supply that our nation depends on for its success. Why has this development not been occurring? Permitting is complex, construction is extremely costly, and the current regulatory regime is ill-suited to provide adequate incentives to private enterprise.

By combining their respective strengths and common vision for a better, stronger, safer U.S. electric grid, Western Area Power Administration and TransWest Express LLC can make the 725-mile, 600 kilovolt, 3,000 megawatt, \$3 billion TransWest Express Transmission Project a strategic, sensible, valuable reality. The whole partnership is greater than either partner.

Should Western's responsibly managed, well-vetted borrowing authority be repealed by this Congress, the successful development of the TransWest Express Transmission Project in the timeframe and with the energy resources that the nation needs will be at risk—as will the thousands of union construction jobs and operations jobs, the millions of dollars in local tax revenue that will support rural counties in the West, and the gigawatt-hours of cost-effective electricity that Wyoming is poised to provide to help its neighbors in the West, like Arizona, Nevada and California.

Summer 2010	Western Area Power Administration joins BLM as joint lead agency for the preparation of the EIS.
January 2011	BLM/Western publish Notice of Intent and hold 23 public scoping meetings, Jan. 25-March 10.
Q4 2011	Preliminary Draft EIS for agency review.
July 2012	Draft EIS released for public comment.
July 2013	Final EIS released for public comment.
Oct. – Dec. 2013	Record of Decision and Rights-of-Way Grant

### C. Estimates of Jobs Created

The TransWest Express Transmission Project will create, sustain and influence thousands of jobs across the country—not only through its construction and operation but also through the energy generation jobs it will help facilitate in Wyoming. No new generation projects are likely to be built in Wyoming unless transmission paths exist to get the electricity to the markets that need it.

*TWE Project jobs*

The owner's engineer estimates that up to 1,000 construction-related jobs will be created for the duration of the three-year construction phase of the TWE Project, jobs that will follow the transmission line as it is built. Approximately 3,000 to 5,000 indirect jobs will be created nationwide because of the demand for materials and services to build the power line itself.

Type	Number
Direct construction jobs per year at peak	675-1,050
Direct construction jobs per year average	300-450
Indirect jobs in the project area	1,000
Indirect jobs nationally	3,000-5,000
Line maintenance jobs after project completion	10-20

Additional jobs will be created to build the terminals/substations in Carbon County, Wyo., and Clark County, Nev. The owner's engineer estimates these are the job totals for both terminal facilities over an approximate two-year construction period.

Type	Number
Direct construction jobs per year at peak	360-500
Direct construction jobs per year average	160-300
Indirect jobs in the project area	600
Indirect jobs nationally	2,000-4,000 over a 3-year period
Operations/maintenance jobs after project completion	15-25

**Overall economic impacts of transmission development**

The Wyoming Infrastructure Authority commissioned a study from the National Renewable Energy Lab about the economic benefits of new transmission development for Wyoming. According to the study results, which were released June 14, 2011:

The development of 9,000 MW of new power transmission lines in Wyoming for export to California and other states would add \$12 billion to \$15 billion in total economic output in the State of Wyoming (construction plus 20 years of operation). An estimated average of 4,000 to 5,900 jobs would be supported from construction of infrastructure between 2011 and 2020 and a total of 2,300 to 2,600 permanent jobs were estimated during operation. New infrastructure considered includes high voltage interstate transmission (required to export new electricity generation from the state); wind and natural gas-fired generation; and a collector system. The premised operating life of the generation facilities is 20 years following construction; however, transmission lines are expected to be operational well beyond the economic life of generation facilities.

With a planned capacity of 3,000 MW, the TWE Project alone could deliver approximately one-third of the economic benefits projected by this study.

Local communities in Wyoming, Colorado, Utah and Nevada will benefit from tax revenues. TWE, as a 50% owner of the TWE Project, will pay property taxes in every state and county that the transmission line traverses, augmenting state and local government budgets. As an example, the cost of the approximately 55 miles of transmission line planned for Carbon County, Wyoming, is about \$68.5 million. Based on local tax rates, in year one with TWE owning 50% of the TWE Project, TWE would pay about \$259,000 in property taxes (not including the substation/terminal property taxes). The TWE Project will cross at least 15 counties, and a complete tax analysis is not yet available, but nearly \$10 million in additional funding

would be contributed to mostly rural counties in Wyoming, Colorado, Utah, and Nevada in just the first year of the complete TWE Project.

There are also economic benefits to states like California where there is increasing demand for renewable power. Studies by regional transmission planning and analysis groups (including the WEIL Group and WECC) indicate that substantial savings can be achieved for utilities and their customers by accessing higher-quality, lower-cost renewables outside of California, such as Wyoming wind.

According to WECC studies as part of the DOE-sponsored 10-Year Regional Transmission Plan, taking 12,000 GWh/year of the lowest-ranking California renewable resources currently planned to meet the state's 33% RPS, and replacing this block of resources with an equal amount of energy from high-quality Wyoming wind resources such as those delivered by the TWE Project, would reduce the cost of this block by approximately \$600 million every year.

#### **D. Western Area Power Administration's Borrowing Authority**

Western Area Power Administration is a power marketing administration within the U.S. Department of Energy that markets and delivers clean, renewable, reliable, cost-based hydroelectric power and related services within a 15-state region of the central and western United States. Western owns,

##### *Barriers*

It has been widely recognized that the regulatory regimes in this country that determine investment returns from privately funded electric transmission projects are generally geared to intra-state and single-service-territory transmission projects with shorter time horizons, and do not generally provide adequate incentive for developers to build large-scale multistate projects that will take many years to develop.<sup>1</sup> In addition, for large-scale multi-state projects in the West, where much of the land is owned by the federal government, a developer must clear regulatory hurdles involving multiple federal, state and local agencies, where any one government entity can effectively have veto authority over an entire project. **For this reason, private development of multistate large-scale electric transmission projects in the West has been almost nonexistent.**<sup>2</sup>

Congress has recognized for years that transmission development has not been occurring at the pace needed to meet load growth and ensure reliability for our country's security and stability and in particular that there is an increasing need for large, long-distance transmission. Thus, in the Energy Policy Act of 2005 (EPAct 2005), Congress directed the Department of Energy to identify critical transmission-constrained areas, referred to as National Interest Electric Transmission Corridors, and it gave FERC the authority to issue permits to construct or modify transmission facilities in a DOE-designated corridor if it found: (1) the state in which the facility is located lacks authority to approve the siting of the facility or to consider the interstate benefits of the facility; (2) the applicant does not qualify for state siting approval because it does not serve end-use customers in the state; or (3) the relevant state agency denies or otherwise withholds approval for more than one year or conditions its approval so as to make the proposal economically unfeasible.<sup>3</sup>

One of DOE's first designations of a National Interest Electric Transmission Corridor was in Western's territory, an area in southern California and Arizona, from just north of Los Angeles to the Mexican border south of San Diego, and then east to three counties in Arizona. DOE is scheduled to begin a second round of national interest designations, but a judicial decision has sharply curtailed the value of the designation, by declaring that FERC's backstop siting authority cannot be exercised when a state has specifically refused to approve a project.<sup>4</sup> Thus, states that act within a year can continue to exercise veto authority over the siting of new transmission even in declared national interest corridors.

<sup>1</sup>This hurdle has been overcome to some degree within organized regional transmission markets in the North East and Midwest, but it remains a significant problem in the West.

<sup>2</sup>See Green Power Superhighways, a joint publication of the American Wind Energy Association and the Solar Energy Industries Association, <http://seia.org/galleries/pdf/GreenPowerSuperhighways.pdf>

<sup>3</sup>See Regulations for Filing Applications for Permits to Site Interstate Electric Transmission Facilities, Dkt. No. RM-06-12, Order No. 689 (2006), at P 4. Congress further required that, before issuing a permit, FERC must find that the proposed facility: (1) will be used in interstate commerce; (2) is in the public interest; (3) will significantly reduce transmission congestion to the benefit of consumers; (4) is consistent with sound national energy policy and will enhance energy independence; and (5) will maximize the transmission capabilities of existing towers or structures. Id

<sup>4</sup>*Piedmont Envtl. Council v. FERC*, 558 F.3d 304 (4th Cir. 2009), cert. denied sub nom. *Edison Electric Institute v. Piedmont Envtl. Council*, U.S. (2010).

*Western's Transmission Infrastructure Program*

The Western and BPA borrowing authority provided in ARRA was intended to help overcome these barriers. Notably, the statute provides for Western to partner with private investors in developing transmission projects. As noted in the testimony from Western's Administrator Tim Meeks in March, Western has established a Transmission Infrastructure Program (TIP) to implement its borrowing authority.<sup>5</sup> One of the primary goals of the TIP is to ensure repayment of funds for any projects built under the program. Project and program principles guide Western's funding of partnerships to develop transmission infrastructure that delivers renewable energy to markets across the West. Western's participation in individual projects is based on these criteria:

- Facilitates delivery to market of power generated by renewable resources constructed or reasonably expected to be constructed.
- Is in the public interest.
- Will not adversely impact system reliability or operations, or other statutory obligations.
- Reasonable expectation that the project will generate enough transmission service revenue to repay the principal investment; all operating costs, including overhead; and accrued interest.
- Have at least one terminus within Western's service territory.
- Provides economic development benefits, including job creation.
- Satisfies Western's Open Access Transmission Tariff.
- Technical merits and feasibility.
- Financial stability and capability of potential project partners.
- Project readiness.
- Participation in region-wide or interconnection-wide planning groups or forums.

Of particular relevance, in implementing TIP, Western has required that, before Western draws funds from Treasury pursuant to its ARRA borrowing authority, the project must demonstrate demand, key project documents must be executed, and tariffs must be developed with rates designed to ensure repayment of borrowed funds.<sup>6</sup>

**E. TWE's Partnership with Western**

Western's partner in the TWE Project, TWE, is a wholly owned affiliate of The Anschutz Corporation (TAC), a privately held company headquartered in Denver, Colorado. TAC was founded by Philip F. Anschutz in 1965, initially as an oil and gas exploration company. Today, TAC is a multibillion-dollar diversified company with worldwide investments in the fields of energy, ranching and agriculture, real estate, lodging, transportation, sports and entertainment, entertainment venues, film production, movie theaters, and newspaper and internet publishing. TAC supports the TWE Project both financially and strategically.

In April 2009, TWE submitted a response to Western's request for proposals under TIP.<sup>7</sup> Western's evaluation concluded that the TWE Project met the TIP criteria and provides Western with an opportunity to participate in a viable, large-scale interstate transmission project. The TWE Project will deliver a significant amount of economic renewable resources to the largest renewable energy markets in the West and may link two of Western's regional service territories.

Significantly, TWE has agreed to reduce Western's risk by contracting to purchase 1,250 MW of the 1,500 MW of capacity that Western would own. These steps all but guarantee that revenue from the TWE Project will be there to pay back the U.S. Treasury for any funds borrowed in connection with Western's ownership of the TWE Project. In addition, the results from Western's Request for Statements of Interest published in the Federal Register in October 2010 establish that there is overwhelming interest from generation developers in Wyoming in the remaining 250 MW to justify Western's potential ownership in the TWE Project and its participation in the development phase.

<sup>5</sup> <http://www.wapa.gov/recovery/programs.htm>

<sup>6</sup> See, e.g., <http://www.wapa.gov/fedreg/FRNpdfs/frn2010/75FRN63826.pdf> (Notice of request for Statements of Interest from entities interested in purchasing transmission service over TransWest Express Transmission Project).

<sup>7</sup> Western received more than 200 responses to its Request for Interest.

#### F. H.R. 2915 to Repeal Western's Borrowing Authority

On September 14, 2011, U.S. Representative Tom McClintock (CA-4) introduced H.R. 2915, which would repeal Western's borrowing authority to build electric transmission under section 301 of the Hoover Power Plant Act of 1984.<sup>8</sup>

The justification for H.R. 2915 relies upon the recent bankruptcy of Solyndra, which as discussed above was a loan guarantee for a solar company gone bad—a situation that is not comparable to Western's use of its borrowing authority, along with significant private capital, to build transmission. Although the bill's repeal would not apply to projects funded pursuant to this authority that have been approved by the Secretary or Deputy Secretary of the U.S. Department of Energy before September 15, 2011, or projects deemed "projects in execution" in Western's May 17, 2011, Quarterly Report on Borrowing Authority Projects, Western's partnership with TransWest Express LLC would be impacted by the repeal.

Under the current language in H.R. 2915, Western could go forward through the development phase, but the bill would, in effect, render the Development Agreement with TWE moot. Under the terms of the DA, if Western does not go forward to the second phase of ownership and construction for any reason including lack of funding, then TWE has to repay all the monies expended by Western up to that date with interest. So, there would be no point in Western participating in the development stage if there is no possibility of it participating in the second phase.

Western chose to split its commitment to the TWE Project into the two phases to protect taxpayer dollars. By requiring TransWest Express to refund all monies paid by Western in phase one should Western choose not to participate, Western was guaranteeing that the loan forgiveness provision—a provision also relied upon as justification for H.R. 2915—that would apply to funds expended to "study" projects would not be used. **Ironically, had Western combined the two phases and committed to the project in its entirety, then Western's participation in the TWE Project would have been grandfathered under the language of the bill. Instead, Western was more cautious, mindful of its duty to protect taxpayer funds.**

Western's participation in the TWE Project—one of the most important transmission projects in the country—will be a major contributor to its success. The elimination of Western's funding authority under H.R. 2915 would dissolve this public/private partnership based on an unfortunate but incomparable default by Solyndra. The attention of Congress should be focused on areas where there is a true risk of taxpayers being stuck footing the bill for bad investments, not on solid, well-vetted projects backed by solid private capital and solid project planning and economics.

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Mr. McCLINTOCK. The hearing record will be open for 10 business days to receive these responses.

Mr. McCLINTOCK. And if there is no further business, without objection, the Subcommittee stands adjourned.

[Whereupon, at 3:55 p.m., the Subcommittee was adjourned.]




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<sup>8</sup>H.R. 2915 does not repeal Bonneville Power's authority even though it was also granted under the Recovery Act.