

**PROTECTING LONG-TERM TRIBAL  
ENERGY JOBS AND KEEPING ARI-  
ZONA WATER AND POWER COSTS  
AFFORDABLE: THE CURRENT AND  
FUTURE ROLE OF THE NAVAJO  
GENERATING STATION**

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**JOINT OVERSIGHT HEARING**

BEFORE THE

SUBCOMMITTEE ON WATER AND POWER

JOINT WITH THE

SUBCOMMITTEE ON INDIAN AND  
ALASKA NATIVE AFFAIRS

OF THE

COMMITTEE ON NATURAL RESOURCES

U.S. HOUSE OF REPRESENTATIVES

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**JOINT OVERSIGHT HEARING ON “PROTECTING LONG-TERM TRIBAL ENERGY JOBS AND KEEPING ARIZONA WATER AND POWER COSTS AFFORDABLE: THE CURRENT AND FUTURE ROLE OF THE NAVAJO GENERATING STATION”**

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**Tuesday, May 24, 2011**  
**U.S. House of Representatives**  
**Subcommittee on Water and Power, joint with the**  
**Subcommittee on Indian and Alaska Native Affairs**  
**Committee on Natural Resources**  
**Washington, D.C.**

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The Subcommittees met, pursuant to call, at 2:00 p.m. in Room 1324, Longworth House Office Building, Hon. Tom McClintock [Chairman of the Subcommittee on Water and Power] presiding.

Present from Subcommittee on Water and Power: Representatives McClintock, Gosar, Napolitano, Grijalva, Costa, Luján, Garamendi, and Markey (ex-officio).

Present from Subcommittee on Indian and Alaska Native Affairs: Representatives Young, McClintock, Gosar, Luján, and Markey (ex-officio).

Also Present: Representatives Quayle and Schweikert.

Mr. MCCLINTOCK. The Subcommittees on Water and Power, and Indian and Alaska Native Affairs will come to order. The Subcommittee Chairman does note a quorum, which under Committee Rule 3(e) is two Members. The Subcommittee today meets to hear testimony on an oversight hearing, entitled, “Protecting Long-Term Tribal Energy Jobs and Keeping Arizona Water and Power Costs Affordable: The Current and Future Role of the Navajo Generating Station.”

We are also meeting under the mandate of House Resolution 72 to identify regulatory impediments to job creation, and I think we have stumbled upon one. Before we begin, I have a statement from Congressman Franks, which he would like to submit for the record. I would ask for unanimous consent that Congressman Franks’ statement be included. Hearing on objections, so ordered.

And also the Chair would ask for unanimous consent that Congressman Quayle be permitted to sit with the Subcommittee and participate in today’s hearing. Without objection, so ordered.

Also, the Chair has been warned that we are likely to be called away for a vote at about 2:15, and so we will have to recess. They told us only one vote, and so it will be about 15 minutes of recess probably after the opening statements by the Committee Members, which will begin now with opening statements by myself, and the Chairman of the Indian and Alaska Native Affairs Subcommittee, and the Ranking Members of each of those Subcommittees.

[The prepared statement of Mr. Franks follows:]

**Statement submitted for the record by The Honorable Trent Franks, a  
Representative in Congress from the State of Arizona**

I want to thank Mr. McClintock and the Subcommittee on Water and Power and Mr. Young and the Subcommittee on Indian and Alaska Native Affairs for holding this hearing today. This situation is a stunning example of environmentalism run amuck. If the Navajo Generating Station (NGS) is forced to close due to the EPA's nonsensical actions, it would be devastating to the economies of the surrounding region, including those of the Hopi and Navajo tribes.

As the sole remaining buyer of coal from the Hopi tribe, shutting down the NGS would cut nearly 90% of the tribe's income and would effectively shut down the Hopi tribe as a functioning government, in addition to putting hundreds of Arizonans (including hundreds of members of the Navajo tribe) out of work, and affecting hundreds of thousands of Arizonans' current ability to receive water and electricity.

In exchange for all of the difficulties created, the only 'benefit' yielded would be a change in visibility so slight as to not even be detectable without specialized equipment that is significantly more sensitive than the human eye. In other words, the supposed environmental benefit is functionally non-existent.

This is far beyond the pale of environmental stewardship, and I commend the holding of this hearing during which these concerns can be laid out in greater detail.

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

Mr. McCLINTOCK. As I said, the purpose of today's hearing is to comprehend an effort by the EPA to impose cost-prohibitive mandates on one of the largest sources of electricity in the western United States, the Navajo Generating Station.

I want to thank our Arizona colleagues, Paul Gosar and Trent Franks, for requesting this hearing. Dr. Gosar has spoken eloquently about the need to protest the Navajo Generating Station in our past hearings, and today the Subcommittees on Water and Power, and Indian and Alaska Native Affairs, get the chance to focus entirely on this subject with expert witnesses.

Since 1975, the Navajo Generating Station has produced 2,250 megawatts of inexpensive electricity. That is more than produced by the entire Hoover Dam. It employs 545 workers, 80 percent of whom are members of The Navajo Nation and Hopi Indian Tribe.

It pays workers an average of over \$100,000 per year in wages and benefits. In addition, the nearby coal mines employ another 422 tribal workers. Royalties from coal sales comprise 80 percent of the budget of the Hopi Indian Tribe.

This electricity powers the Central Arizona Project's delivery of affordable water to most of Arizona, and provides electricity to the Los Angeles Department of Water and Power, the Arizona Public Service Company, Nevada Power, and Tucson Electric Power.

Surplus electricity sales repay Federal funds fronted for the construction of the Central Arizona Project and underwrite the Arizona Indian Water Rights Settlements. The NGS is equipped with \$200 million of environmental control equipment that removes 99.5 percent of particulate matter.

In the late 1990s, the NGS was outfitted in addition to that with wet limestone scrubbers at a cost of nearly a half-a-billion dollars that remove more than 90 percent of sulfur dioxide emissions. In 2008, low NO<sub>x</sub> burners were installed at the cost of \$45 million.

The problem is this. Beginning in 1998, environmental extremists began a concerted effort to shut down the inexpensive coal-fired electricity upon which our economy depends. Their first victim was the Mojave Generating Station.



The taxpayer-funded Grand Canyon Trust boasted, and I quote, “This ends an era of coal at that site, and we hope that it is the beginning of many in the region.” Well, it was. The EPA pulled an already-granted permit for the clean coal Desert Rock Project in 2009.

A former Navajo Nation President, Joe Shirley, said, quote, “These are individuals and groups who claim to have put the welfare of fish and insects above the survival of the Navajo people, and in fact their only goal is to stop the use of coal in the United States and The Navajo Nation.”

The question today is whether the Navajo Generating Station will be their next victim. The EPA is now moving to impose \$1 billion of new costs on the Navajo Generating Station, which will make it economically impossible to continue operations.

This radical agenda does not even pretend to be in support of public health. Rather, it is to improve the viewshed. But as we will hear, the \$1 billion of visibility improvements, even if they could be economically supported, won’t even be visible to the human eye.

It is important that we understand the irrational extremism behind this effort. This Administration is willing, and indeed, appears eager, to throw thousands of tribal and non-tribal workers into unemployment, devastate the Hopi Indian Tribe, and The Navajo Nation, compromise the Bureau of Reclamation’s ability to make water deliveries to millions of Americans, and to repudiate the Federal Government’s trust responsibility to numerous tribal nations.

We will be told by the Minority’s witnesses not to worry. We will replace the electricity with wind and solar power. Well, we need to understand what that means. It means replacing power that costs less than four cents per kilowatt hour with power that costs 10 cents and 21 cents, respectively.

And because wind and solar power is intermittent and unpredictable, it adds absolutely nothing to baseline power because it requires us to build one megawatt of reliable backup power for every megawatt of wind and solar, and all of this to replace a generating station that we have already paid for. This is sheer insanity. This is the Obama EPA.

We have very painfully witnessed how left-wing ideology and junk science have made water and energy shortages, and price increases, a mainstay in my home state of California. The same thing could happen in Arizona if the EPA drives the bus off the cliff on the matter before us this afternoon. I hope today’s hearing brings the EPA back at least to this planet.

And with that, I yield to the Ranking Member of the Water and Power Subcommittee.

[The prepared statement of Mr. McClintock follows:]

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

The purpose of today’s hearing is to comprehend an effort by the EPA to impose cost-prohibitive mandates on one of the largest sources of electricity in the west—the Navajo Generating Station.

I want to thank our Arizona colleagues, Paul Gosar and Trent Franks, for requesting this hearing. Dr. Gosar has spoken eloquently about the need to protect the Navajo Generating Station in our past hearings and today the sub-committees on Water and Power and Indian and Alaska Native Affairs get the chance to focus entirely on this subject with expert witnesses.

Since 1975, the Navajo Generating Station has produced 2,250 megawatts of inexpensive electricity—more than produced by the Hoover Dam. It employs 545 workers—80 percent of whom are members of the Navajo Nation and Hopi Indian Tribe—and pays workers an average of over \$100,000 per year in wages and benefits. In addition, the nearby coal mines employ another 422 tribal workers. Royalties from coal sales comprise 80 percent of the budget of the Hopi Indian Tribe.

This electricity powers the Central Arizona Project's delivery of affordable water to most of Arizona and provides electricity to the Los Angeles Department of Water and Power, the Arizona Public Service Company, Nevada Power and Tucson Electric Power. Surplus electricity sales repay federal funds fronted for the construction of the Central Arizona Project and underwrite the Arizona Indian Water Rights Settlements.

The NGS is equipped with \$200 million of environmental control equipment that removes 99.5 percent of particulate matter. In the late 1990's, the NGS was outfitted with wet limestone scrubbers at a cost of nearly a half-billion dollars that remove more than 90 percent of sulfur dioxide. In 2008, low NO<sub>x</sub> burners were installed at the cost of \$45 million.

Beginning in 1998, environmental extremists began a concerted effort to shut down the inexpensive coal-fired electricity upon which our economy depends. Their first victim was the Mojave Generating Station. The taxpayer-funded Grand Canyon Trust boasted, "This ends an era of coal at that site and we hope that it is the beginning of many in this region." It was. The EPA pulled an already-granted permit for the clean coal Desert Rock project in 2009.

Former Navajo Nation President Joe Shirley said, "These are individuals and groups who claim to have put the welfare of fish and insects above the survival of the Navajo people when in fact their only goal is to stop the use of coal in the U.S. and the Navajo Nation."

The question today is whether the Navajo Generating Station will be their next victim. The EPA is now moving to impose one billion dollars of new costs on the Navajo Generating Station, which will make it economically impossible to continue operations. This radical agenda doesn't even pretend to be in support of public health—rather, it is to improve the "view-shed." But as we will hear, the \$1 billion of visibility improvements—even if they could be economically supported—won't even be visible to the human eye.

It is important that we understand the irrational extremism behind this effort. This administration is willing and indeed, appears eager, to throw thousands of tribal and non-tribal workers into unemployment, devastate the Hopi Indian Tribe and the Navajo Nation, compromise the Bureau of Reclamation's ability to make water deliveries to millions of Americans and to repudiate the federal government's Trust responsibility to numerous tribal nations.

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

Mrs. NAPOLITANO. Thank you, Mr. Chair. Hopi ancestors left these instructions about their sacred homeland. "Underneath your feet lies enormous wealth. Guard it. Do not fall asleep, for if you do, it will be pulled out. Do not use it until the right time to do it, in the right way, and only use it for the right purposes."

The words of the Hopi Elders are as relevant today as they were hundreds of years ago. The tribal homelands of the Navajo and the

Hopi Tribes have many natural resources, including coal, abundant sunshine, and excellent, and for some other adjective, groundwater.

The Black Mesa of the Hopi and the Navajo Reservations is the home to the Kayenta Mine, which provides 8.1 million tons of coal to power the Navajo Generating Station annually, normally known as the NGS.

Power produced at the Navajo Generating Station moves 1.6 million acre-feet of Central Arizona Project water through 300 miles of aqueducts and lifting the water on the average of 3,000 vertical feet.

This provides many Arizonans with affordable, should we say inexpensive, and/or cheap, water from the Colorado River. In the process of mining this coal, precious groundwater is contaminated and sacred sites destroyed. What Peabody Energy, the largest coal mining company in the world, pays the tribe in royalties, roughly \$14 million annually, pales in comparison to the \$7 billion revenue the company makes each year.

Compare that to the Navajo 40 percent unemployment, and 48 percent poverty rate currently. The tribes face a paradox: the coal comes from the reservation, the plant is located on tribal land. YET there are tribal communities surrounding the generating station and the mine that have no access to running water and no electricity in their homes. The tribes that do have access to electricity pay at market rates greater than the 3 cents a kilowatt/hour the NGS station produces at cost to its owners.

The tribes that do have access to electricity pay at market rates higher and greater than 3 cents a kilowatt hour that the NGS produces at costs to its owners. The Navajo and Hopi do not own any part of the NGS, and today's hearing is entitled, Protecting Long Term Tribal Energy Jobs and Keeping Arizona Water and Power Costs Affordable: The Current and Future Role of the Navajo Generating Station.

In order to look at keeping the water and power costs affordable, we should ask ourselves a fundamental question. How do we provide water and power to all Arizonans, which includes the tribes and their non-tribal neighbors.

Four years ago, we asked children from The Navajo Nation to draw where they thought their water came from. I remember that as if it were today. The children drew trucks with hundred-gallon water jugs in their truck bed. You can see it. That is a copy of it right there.

It is in the record and I want you to see it again, and engrave it in your mind, because this is sad that in this day and age our children think that is where the water comes from. A majority of the Navajo communities have to use water in stations because there is no access to water in their homes.

Here we are in 2011, and we are faced with the same situation where some communities in The Navajo Nation and the Hopi Tribe have no access to clean water, and worse, communities are limited or have no access to electricity, and many times their water is contaminated.

Do we really want our children to grow up thinking that their water comes from water trucks, and their power from lanterns and

candlelight? The NGS is no doubt a complex issue involving the supply for water deliveries.

It impacts tribal communities, cities, and the future of Arizona, and the contamination of the water is a grave concern of mine. People would like to boil down this complex issue to the simple and false claim that EPA regulations threaten to shut down the Navajo Generating Station, and jeopardize our tribal economies. That is not a cut-and-dried case.

What we do have is an opportunity to support the ongoing discussion among stakeholders to find short-term solutions that allow for water and power to continue to be delivered, and let me tell you that in my years in this Subcommittee that water is not getting cheaper. It is getting more costly.

And we also must involve Federal agencies, all of them, to be able to come up with solutions, whether it is Energy, Education, Labor, Interior, and others, because it is something that affects all of those agencies, and it affects our people in the United States.

At the same time, we must look at options for transitioning to clean energy in the future, and providing our tribal communities with a chance to develop all resources available to them, including job training and on-site manufacturing of whatever brings jobs and economy to them.

We should work to provide equity to The Navajo Nation and the Hopi Tribe. Their resources must be valued, and the value of their resources must be reflected in what is paid in royalties.

We must provide affordable water for all Arizonans. Thank you to our witnesses, and I especially welcome President Shelly. Good to see you, sir. And Hopi Chairman Shingoitewa, and Gila River Indian Community Lieutenant Governor Manuel, and I look forward to your testimony. Thank you, Mr. Chair.

[The prepared statement of Mrs. Napolitano follows:]

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

Hopi Ancestors left these instructions about their sacred homeland:

"Underneath your feet lies enormous wealth. Guard it. Do not fall asleep for if you do, it will be pulled out. Do not use it until the right time to do it, in the right way, and only use it for the right purposes."

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Four years ago, we asked children from the Navajo Nation to draw where they thought their water came from.

Children drew trucks with 100 gallon water jugs in the truck bed.

A majority of the Navajo communities have to use watering stations because there's no access to water in their homes.

Here we are in 2011—and we are faced with the same situation where some communities in the Navajo Nation and Hopi Tribe have no access to clean water—and worse, communities with limited or no access to electricity.

Do we really want our children to grow up thinking that their water comes from water trucks and their power from lanterns and candle light?

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People would like to boil down this complex issue to the simple, and false, claim that EPA regulations threaten to shut down the Navajo Generating Station—and jeopardizing our tribal economies. This is not a cut and dry case.

What we do have is an opportunity to support the ongoing discussions among stakeholders to find short-term solutions that allow for water and power to continue to be delivered.

At the same time, we must look at options for transitioning to clean energy in the future, and providing our tribal communities with the chance to develop all the resources available to them.

We should work to provide equity to the Navajo Nation and the Hopi Tribe. Their resources must be valued and the value of their resources must be reflected in what is paid in royalties. We must provide affordable water for ALL Arizonans.

Thank you for our witnesses for traveling today. We especially welcome President Shelley, Hopi Chairman Shingoitewa, and Gila River Indian Community Lt. Governor Manuel. WE look forward to hearing your testimony.

Mr. McCLINTOCK. The Chair next recognizes the distinguished Chairman of the Indian and Alaska Native Affairs Subcommittee, Mr. Young of Alaska, for his opening statement.

Mr. YOUNG. Mr. Chairman, I ask for unanimous consent to submit for the record a comment from the Affordable Power Alliance.

[The comment from the Affordable Power Alliance follows:]

Mr. McCLINTOCK. Without objection.

**[NOTE: The comments have been retained in the Committee's official files.]**

**STATEMENT OF HON. DON YOUNG, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALASKA**

Mr. YOUNG. Mr. Chairman, I am pleased to be here today, and I want to thank the witnesses. I love my lady and her comments, but I disagree. The EPA is trying to stop coal, and this is native land. This is their land, and you have outside agencies taking away the right of their land. That is a taking without compensation.

It is their decision how it should be utilized, and they say it is not. I have watched the EPA, and it is a lousy agency. It has not done what it should do. It is not really protecting the environment. It is stopping the economic development of this Nation by actions that they do not have the authority to do so by regulatory law.

Eighteen thousand EPA employees figuring out why you can't do something, and they have never done anything to improve the environment, and I will back that up. I watch what they are doing to my state every day and it is wrong.

These are Nations, and they have a right to develop their lands as they wish to do so. Yes, protect them, but who should decide how it shall be done, and as far as the royalties go, I want you to develop your own sources.

Peabody was leased that land by the BIA and not you, and under a Federal agency. The Federal Government has failed miserably on all the reservations. They have created the poverty. They created the drugs. They created the non-education, and they have not given the opportunity to take 49 permits on reservation land. It takes two off of reservation land because of the government.

In this one case the government and the Nation has failed miserably, and my role as Chairman of this Committee is to make sure that I am writing this empowerment act that gives you the power to do as you wish to do to benefit your people as you should be able to do, instead of patting you on the head, and stay where you are, and do not improve your lot.

We don't need you anymore, and we want you to keep your culture as you wish it to be, and not so as we wish it to be, and as we see it as white men. And that is where we have gone wrong in this whole body.

We keep saying that we are helping the poor Alaskan Natives, the poor American Indians. You are not helping and we are not helping. We have not done the job that we should have done.

We have an agency, the BIA, which is outdated, miserably outdated—1925, 1825—using the same principles, the same policy. Put them on a piece of ground, and don't let them go ahead, and just take care of them a little bit. Give them some poor beef. Don't give them the opportunity. After all, they are not too smart.

That is the attitude of this government, and I am saying that is wrong, and we should overcome that quickly. You have your water, yes, and utilize it correctly. Water is a big issue. You have your power, yes. You have your power and it is providing for the rest of the State of Arizona and other areas.

And you have minerals, and you have timber, and you have wild-life land. You have all of that, but you should be the manager and not some government agency, and this is why I feel so strongly about this issue.

And when I get done with this bill that I am writing, Mr. Chairman, I hope to empower the American Indian and the Alaska Natives to the point where they can be self-sufficient, with a trust relationship with this Congress, who has a responsibility.

This is important. You are a minority of minorities, and that is the scary part. If what has been done to you had been done to African-Americans, there would be a huge cry of outrage, but here, because you are a minority, we give you lip service. That is not going to happen under my watch.

We are going to solve this problem with these agencies that take away your rights, and given to you as a trust relationship with this Nation, and they have taken it away, and I have seen it time and again.

The EPA, the Corps of Engineers, the BIA, and Fish and Wildlife preserve parks surrounding your land so that you are no longer compatible, no longer compatible with those lands that are Federally designated so that you can't develop your lands.

So it is a giving and a taking with no compensation due to your people. So I look forward to your testimony, and I am confident that you will do a good job, but we are going to have the EPA in front of us, because they are doing wrong to you, and they are doing wrong to my people in Alaska, and they are doing wrong to this Nation.

They are a rogue agency. They are passing regulatory law that has no authority, no authority at all, and the fact that they can fine you, shut you down, and keep you from doing what you have been given the God-given right to do. Thank you, Mr. Chairman.

[The prepared statement of Mr. Young follows:]

**Statement of The Honorable Don Young, Chairman,  
Subcommittee on Indian and Alaska Native Affairs**

Today's hearing will focus on the uncertain future of the Navajo Generating Station, a 2,250-megawatt coal-fired generation power plant, located on the Navajo Nation. I want to thank my colleagues from Arizona, Mr. Paul Gosar and Trent Franks, for requesting this important hearing.

The U.S. Environmental Protection Agency, which regulates power plants on reservations, is endangering the survival of the Navajo Generating Station with absurd pollution controls. The costs and timeframes of such potential regulations regarding regional haze in the Grand Canyon could substantially increase power rates for customers or in a worst case scenario, close the plant. Shutting down the power plant would jeopardize jobs, tribal economies, and water rights for thousands of Native Americans in Arizona.

The Navajo Generating Station provides affordable power production for water and power customers in Arizona, California and Nevada. It is the eighth largest coal plant, in terms of output, in the nation. The plant, which became operational in 1976, provides the power necessary to move Arizona's allocation of the Colorado River to central and southern Arizona, through a water system called the Central Arizona Project. The importance of the Navajo Generating Station to the Central Arizona Project and its customers will be addressed by others testifying today. However, I would like to point out that the largest single customer of the Central Arizona Project water is the Gila River Indian Community.

As we all know, unemployment is high and rampant in most Indian communities. However, thanks to the Navajo Generating Station, hundreds of Native Americans are employed. In fact, the power plant employs 545 full-time works and over 80% are Native Americans. The Kayenta (KAY-en-TA) Mine, which supplies coal for the power plant, employs 415 full-time workers and over 90% are Native American. These high-paying jobs would be lost, should the plant close its doors.

I want to welcome our witnesses and especially thank the elected tribal officials who are here to testify about the potential economic and cultural damage the EPA's actions will have on your communities.

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Mr. McCLINTOCK. Thank you, Mr. Chairman. I have some good news and some bad news. The bad news is that we have about four-and-a-half minutes left to record our first of two votes on the House Floor.

The good news is that it shouldn't take more than about 20 minutes, and at that point, I am told that we should be clear for the rest of the afternoon. So without objection the Committee will stand in recess for about 20 minutes.

[Recess.]

Mr. McCLINTOCK. The Subcommittees will come to order. We were in the middle of opening statements when we were so rudely interrupted. I am assured or we do not expect another vote until about five o'clock, by which time I hope to have this hearing wrapped up and placed in the annals of history here.

On opening statements, Mr. Grijalva, and so Mr. Luján.

**STATEMENT OF HON. BEN RAY LUJÁN, A REPRESENTATIVE IN  
CONGRESS FROM THE STATE OF NEW MEXICO**

Mr. LUJÁN. Thank you very much, Mr. Chairman, and we want to welcome our friends, our guests that we have here with us today, especially our friend from The Navajo Nation, who I have the honor of representing in New Mexico with the Eastern Agency, Ya'at'eeh, my friend, and it is good to have you.

Mr. Chairman, this is an important hearing to talk about how we can work closely with tribal communities to ensure that the U.S. Government is doing its due diligence with tribal governments when it comes to consultation.

This is also an opportunity to highlight what we can do better and smarter to produce energy in this country, and I again want to thank President Ben Shelly of The Navajo Nation, and Hopi Tribal Councilman and Chairman Shingoitewa, thank you for being here, sir.

And, of course, Gila River Lieutenant Governor Joseph Manuel for being here. I appreciate it, sir. It is always good to see you, and for coming to talk with us today as we talk about the need for a thorough tribal consultation during the important decision making process, like the one that we are talking about here today.

Fair and open tribal consultation is important as we strengthen our government to government relationships with tribal communities, the Obama Administration has reaffirmed its commitment to Indian country to ensure that we are properly addressing tribal concerns, and bringing them to the table when we are making decisions about the future of Indian country, and the future of the United States of America.

I hope that the Administration through the EPA, and National Park Service, and BIA, and the Department of the Interior, will take adequate actions to consult and consider tribal consultations in the future.

And, Mr. Chairman, I think that it is important that as we talk about the future of energy in the country, and the future of water to some of the parts of the Nation that are restricted, that we talk about how we as a Congress can further support our tribes.

Most recently, we had the ability to get authorization and to move forward the Navajo Nation water pipeline project, which was opposed by some Members in Congress, and I think that it is important that as we talk about the future of energy in the country, but we cannot forget about the importance of water.

And surely what we can do as a Congress is to be supportive of sovereignty as a whole as we look to make sure that we are looking from economic opportunities, job opportunities, developing tech transfer opportunities, all of which require energy.

And as we see with The Navajo Nation specifically, we have seen other areas of manufacturing come to the Nation, where they are putting people to work, and we have seen the importance of training facilities, like San Juan Technical College, that provides that round of training not only to be able to support energy industry in the country, but again, we had an opportunity this year to vote for funding to be able to provide support for educational opportunity for The Navajo Nation, and it was rejected by many of our Members here.



And so, I hope, Mr. Chairman as we go forward that we truly talk about a holistic approach to making sure that we are supporting water projects like The Navajo Nation pipeline, which still needs funds to be completed.

That we have serious conversations about training, so that way we can support the Nation. We can support all our Native American brothers and sisters when we talk about the future of providing job opportunity on the reservations as well.

I think that there are areas where we can come together and be able to get this done. So, again, Mr. Chairman, I am honored to be able to be here with our friends, and I look forward to seeing you very soon in your home, and I always appreciate the invitations. So thank you very much, Mr. Chairman. I look forward to this important conversation that we are about to have.

Mr. McCLINTOCK. Thanks very much. Dr. Gosar.

**STATEMENT OF HON. PAUL A. GOSAR, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARIZONA**

Dr. GOSAR. Thank you very much, Chairmen McClintock and Young, and Ranking Members Napolitano and Boren, for holding this hearing regarding the regulatory challenges facing the Navajo Generating Station.

This is an important and complex issue facing my community, the State of Arizona, and the Southwestern region of the United States. I truly appreciate the Committee's accommodating my request.

For nearly 30 years the Navajo Generating Station has been a vital economic engine and job provider in Northern Arizona and directly influences job creation in Central and Southern Arizona as well.

The plant is paramount to sustaining jobs, job creation, and economic recovery. In addition, the plant has play an instrumental role in providing affordable year around energy, and an affordable reliable and sustainable water supply to cities, industries, farms, and tribal communities, encompassing nearly 80 percent of Arizona's population.

The Navajo Generating Station is critical to Arizona's water supply, because it provides 95 percent of the power for the Central Arizona Project or CAP. Each year, CAP uses approximately 2.8 million megawatt hours of electricity to deliver more than 500 billion gallons of Colorado River water to a three county service area, that includes more than 80 percent of the state's population.

This includes 45 percent of the City of Phoenix's projected water demand, and over 80 percent of Tucson's projected water demand. The Bureau of Reclamation owns nearly 25 percent of the Navajo Generating Station, and revenues from the sale of excess power generated from the plant are used to repay the Federal Government for Arizona's share of the project.

These revenues will also be used to help pay for the cost of Indian water rights settlements in Arizona. At a time when 48 percent of the Navajos are unemployed, and 40 percent live below the Federal poverty level, the plant provides 500 well-paying jobs, with almost 80 percent going to the Members of The Navajo Nation.

In addition, the plant and the associated Kayenta coal mine provides \$137 million in revenue and wages to The Navajo Nation, and about \$12 million annually to the Hopi Tribe, nearly 88 percent of their annual operating budget.

There, the plant both directly and indirectly supports the Native Americans' overall economic viability, and is vital to their sustainability as an independent sovereign nation. We have long encouraged Native American self-sufficiency, and to now see the Federal Government try to pull the rug out from under a successful, self-sufficient Native American industry, is beyond comprehension.

In addition, it is important to note the loss of revenue from the sale of excess Navajo Generating Station power threatens the continued viability of all current Native American water rights settlements in Arizona, and jeopardizes the ability of the United States to settle with other tribes in an ongoing water rights settlement negotiations.

Despite these proven benefits the Navajo Generating Station is in danger of being closed down due to unreasonable air visibility regulations. The Obama Administration's Environmental Protection Agency has spent in the last few years reevaluating and drastically changing the rules and policies, even though Congress has made little to no changes to the environmental law.

Specifically, the EPA is imposing regulatory uncertainty on the Navajo Generating Station by utilizing the best available retrofit technology, or BART, determination under the Regional Haze Rules of the Clean Air Act.

Since its construction, the owners of NGS have been committed to stewardship of the environment, continually taking actions toward the continued long-term safe, reliable, and economical operations of the plant.

They have been pro-active in implementing science-based environmental controls to ensure the plant meets ever-changing environmental regulations imposed by the Federal Government.

Over the past two decades, they have invested over \$650 million in construction of the plant, including \$200 million in environmental control equipment, with negligible rate increases to the consumer.

However, these pro-active measures are not enough for the EPA. Even when industry goes above and beyond these demands of Federal law, the agency continues to use rules and regulations to continue to move the bar further down the line, implicating economic impact.

The agency is strongly considering imposing over \$1 billion of new costs on the Navajo Generating Station, a cost almost 20 times more than equally effective environmental measures that NGS owners are willing to undertake.

The cost and time frames of EPA's pending mandates would make it economically impossible to continue operations. This is very tactic and used in the past in my state, and across the country, to dictate winners and losers in the energy field.

I look forward to the hearing with the rest of my Arizonans about the true effect of the Administration's actions could have on our communities and continuing to push this issue into the forefront as the EPA considers its regulatory stance. Thank you.

[The prepared statement of Dr. Gosar follows:]

**Statement of The Honorable Paul A. Gosar, a Representative  
in Congress from the State of Arizona**

Thank you Chairmen McClintock and Young, and Ranking Members Napolitano and Boren, for holding this hearing regarding the regulatory challenges facing the Navajo Generating Station. This is an important and complex issue facing my community, the State of Arizona, and the Southwestern region of the United States. I truly appreciate the committees' accommodating my request.

For nearly thirty years, the Navajo Generating Station (NGS) has been a vital economic engine and job provider in Northern Arizona and directly influences job creation in central and southern Arizona. The plant is paramount to sustained jobs, job creation, and economic recovery. In addition, the plant has played an instrumental role in providing affordable year-round energy and an affordable, reliable and sustainable water supply to cities, industries, farms, and Tribal communities encompassing nearly 80 percent of Arizona's population.

The NGS is critical to Arizona's water supply because it provides 95% of the power for the Central Arizona Project (CAP). Each year, CAP uses approximately 2.8 million megawatt hours of electricity to deliver more than 500 billion gallons of Colorado River water to a three-county service area that includes more than 80% of the state's population. This includes 45% of the city of Phoenix's projected water demand and 80% of Tucson's projected water demand.

The Bureau of Reclamation owns nearly 25% of the NGS, and revenues from the sale of excess power generated from the plant are used to repay the federal government for Arizona's share of the project. These revenues will also be used to help pay for the costs of Indian water rights settlements within Arizona.

At a time when 48% of the Navajos are unemployed and 40% live below the federal poverty line, the plant provides 500 well-paying jobs, almost 80% going to members of the Navajo Nation. In addition, the plant and the associated Kayenta coal mine provide \$137 million in revenue and wages to the Navajo Nation and about \$12 million annually to the Hopi Tribe, nearly 88 percent of their annual operating budget. Therefore, the plant both directly and indirectly supports the Native Americans' overall economic viability and it vital to their sustainability as independent sovereign nations. We have long encouraged Native American self-sufficiency. To now see the Federal Government try to pull the rug out from under a successful, self-sufficient Native American industry is beyond comprehension.

In addition, it is important to note, the loss of the revenue from the sale of excess NGS power threatens the continued viability of all current Native American water rights settlements in Arizona and jeopardizes the ability of the U.S. to settle with other Tribes in on-going water rights settlement negotiations.

Despite these proven benefits, the NGS is in danger of being closed down due to unreasonable air visibility regulations. The Obama Administration's Environmental Protection Agency has spent the past two years reevaluating and drastically changing rules and policies even though Congress has made little-to-no changes to environmental law.

Specifically, the EPA is imposing regulatory uncertainty on the Navajo Generating Station, by utilizing the Best Available Retrofit Technology (BART) determination under the Regional Haze Rule of the Clean Air Act.

Since its construction, the owners of the NGS have been committed to stewardship of the environment, continuously taking action towards the continued long-term safe, reliable, and economical operation of the plant. They have been pro-active in implementing science-based environmental controls to ensure the plant meets ever-changing environmental regulations imposed by the federal government. Over the past two decades, they have invested over \$650 million in construction of the plant, including \$200 million in environmental-control equipment, with negligible rate increases to the consumer.

However, these proactive measures are not enough for the EPA. Even when industry goes above and beyond the demands of federal law, the agency continues to use rules and regulations to continue to move the bar further without regard for the economic impact. The agency is strongly considering imposing over one billion dollars of new costs on the Navajo Generating Station, a cost almost 20 times more than equally effective environmental measures that NGS owners are willing to undertake. The cost and timeframes of EPA's pending mandates would make it economically impossible to continue operations. This very tactic has been used in the past in my state and across the country to dictate winners and losers in the energy field.

Despite what some might have you believe, over 2,200 mw of power cannot be easily replaced. While I support an all-of-the-above energy approach, which includes alternatives like solar and wind, those types of intermittent energies simply are incapable of replacing the NGS in the next 25 to 30 years, let alone in the next 10 years. At a time when long-term, good paying jobs are critical to our economic recovery, it would be devastating to our constituents and the State of Arizona to lose this important asset and its numerous benefits.

It is important to note that the final rule has not been issued. However, the Administration's conduct in this matter has made its intentions clear: it plans to impose the worst case scenario on the plant. There is no doubt that this scenario will effectively shut the NGS plant down, and devastate the already struggling Arizona economy. And by so doing, inflict another injustice against the Hopi, Gila River Community and the Navajo.

The EPA's hard line approach with respect to Navajo Generating Station is nothing short of a case study for this Administration's EPA: overreaching its regulatory authority, exceeding Congressional intent, and forgoing consultation with stakeholders. EPA's continued hard-line stance is a direct threat to the State of Arizona's long-term water and energy security.

I look forward to hearing from my fellow Arizonans about the true effect the Administration's actions could have on our communities and continuing to push this issue into the forefront as the EPA considers its regulatory stance.

Mr. McCLINTOCK. Thank you. Mr. Garamendi.

**STATEMENT OF HON. JOHN GARAMENDI, A REPRESENTATIVE  
IN CONGRESS FROM THE STATE OF CALIFORNIA**

Mr. GARAMENDI. Mr. Chairman, and Members, thank you very much for being here. It is good to be once again working with you. In the mid-1990s, I was engaged in this particular issue while I was Deputy Secretary to the Department of the Interior.

And shortly after I left the Department, an agreement was worked out to proceed, and here we are 10 years or 12 years later still trying to figure out what to do. Obviously complex and with economic and social impact for the Navajo Tribe, as well as an environmental impact for one of the—well, many of the most spectacular places in America, not only the tribal reservation, but also the Grand Canyon and areas around that.

There is no doubt that there is a haze problem in the area, having traveled through the area, and I know that you gentlemen live there, you are undoubtedly well aware of it, and it is also a health hazard as well. It is not just haze.

And also an economic problem in that many of the spectacular views are obscured by the haze from generating plants, not only this one, but others in the area. It needs to be dealt with, and we need to come to some sort of a conclusion to clean up these plants.

The technology has aged, is insufficient, and creates a problem. Will it be expensive? Yes. Will it be more expensive than doing nothing? I don't think so. And I would hope that the EPA moves along expeditiously with its current effort to find an appropriate accommodation, one that would significantly limit the pollution from the plant, and simultaneously allow for the necessary electrical generation and jobs associated with it.

I think it can be done. I know that when I was dealing with this in the 1990s, we were on a way toward solving it. Obviously, that has not happened in the intervening years. But at the end of the day, it does no one any good to pollute both the environment, the extraordinary view sheds of the region, and ultimately the atmosphere.

This has to be dealt with, and I urge all parties to stay with it. I will do what I can to accommodate that, but a hiatus and to stop this process would be in my view inappropriate. I yield back my time.

Mr. MCCLINTOCK. Mr. Markey.

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

Mr. MARKEY. In the early 1900s, Arizona's sunshine and clean desert air was advertised as a cure for tuberculosis. Today, the sunshine is still abundant in Arizona, but the clean air that the "lungers" sought is not always there.

Over the last decades the Clean Air Act has improved the air quality across the Nation, providing significant health benefits and beginning the clearing of our most iconic vistas, but as much progress as we have made cleaning up our cars, and power plants, some facilities, like the Navajo Generating Station, still need to improve.

Based on 2010 emissions, it is the third largest emitter of nitrogen oxides in the Nation, even with some nitrogen pollution controls installed on two of its three units. Nitrogen oxide are one of the main pollutants that reduce visibility.

They also have serious health impacts, both directly and as a component of ground level ozone and particulate matter, including asthma, other respiratory illnesses, heart disease, and premature death.

Just 15 miles from the Grand Canyon National Park, pollution from the Navajo Generating Station can impair the view, and at 10 other national parks and wilderness areas in the region.

The nearly five million people who visit the Grand Canyon annually expect a grand view, like this one on a good visibility day in 2010. But some days, as they stand on the rim of the canyon, their view is limited by the haze of pollution, like in this picture, a poor visibility day in that very same year.

Recognizing that preserving the air and the view was as important as preserving the land, Congress included a program to protect scenic vistas in the 1977 amendments to the Clean Air Act.

In 1999, the Regional Haze Rule finally established the requirements to carry out these protections. The owners of the Navajo Power Plant, and those owners of the Salt River Project Reclamation, the Los Angeles Department of Water and Power, the Arizona Public Service Company, Nevada Energy, and Tucson Electric Power, all those companies, they all knew it.

They knew what the rule was. They knew that they would have to make additional investments to clean up its pollution. The EPA is currently analyzing what pollution controls must be put in place to bring this generation station owned by those six entities into compliance with the Clean Air Act.

As part of that work, they are looking at the economic impact and the water and electricity users in Arizona that are clearly critical, and that have complex issues. At the same time the Salt River Project, the operator and partial owner of the plant, is conducting a stakeholder process to develop a consensus proposal to submit for EPA's consideration.

The EPA intends to release a proposal this summer, and after an additional period of public comment, they hope to make a final determination next year. In spite of this ongoing work, the Republican majority have called this hearing today.

And while they might want to portray it as a way to clear the air, I think it will just probably muddy the waters, although the EPA has not proposed to close the plant, you will hear dire predictions to that effect from my colleagues across the aisle.

Radio evangelist Harold Camping circulated that the world would end last Saturday at 6:00 p.m., and much like that prediction, today's forecast of a regulatory rapture of the Navajo Generating Station is overblown.

The power plant is too important and too profitable to shut down anytime soon. To bring some reality to the apocalyptic vision that some might try to portray today, I asked the EPA to answer some questions about their ongoing work at the generating station, as well as their work on other power plants in The Navajo Nation. I would like to submit their response for the record without objection.

Mr. MCCLINTOCK. Without objection.

[The letter submitted for the record by Mr. Markey from the U.S. Environmental Protection Agency follows:]



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MAY 20 2011

OFFICE OF  
AIR AND RADIATION

The Honorable Edward J. Markey  
United States House of Representatives  
2108 Rayburn House Office Building  
Washington, DC 20515

Dear Congressman Markey:

Thank you for your letter of May 17, 2011, to Administrator Lisa Jackson regarding questions in preparation for a joint oversight hearing on "Protecting Long-Term Tribal Energy Jobs and Keeping Arizona Water and Power Costs Affordable: The Current and Future Role of the Navajo Generating Station," scheduled for May 24, 2011 by the Subcommittees on Water and Power and Indian and Alaska Native Affairs. The Administrator asked that I respond on her behalf.

We reproduced your questions below in italicized text and provided our responses below each question.

Navajo Generating Station

*What is the current pollution emissions profile of the Navajo Generating Station (NGS)? How does it compare to other power plants in the United States? How many Class I Federal areas (national parks greater than six thousand acres in size and national wilderness areas) does NGS emissions impact?*

- Based on 2010 emissions, NGS was the third largest emitter of oxides of nitrogen (NO<sub>x</sub>) in the nation (24,000 tons), with a facility-wide average NO<sub>x</sub> emission rate of 0.28 lb/MMBtu, with two of three units operating new combustion controls, Low NO<sub>x</sub> Burners and Separated Overfire Air (LNB/SOFA), installed in 2009 and 2010.
- NGS impacts eleven Class I Federal areas, including Grand Canyon National Park.

*Has EPA made a Best Available Retrofit Technology (BART) determination for the Navajo Generating Station (NGS) yet? What is the estimated timeline in which EPA is expected to release a draft and final BART determination? Once a final BART determination is made, what is the approximate time that the owners will have to retrofit the plant with the pollution abatement technology?*

- EPA has not yet proposed a BART determination for NGS. We intend to issue a proposal in 2011 and a final BART determination in 2012.
- The Clean Air Act requires facilities to comply with a final BART determination within 5 years of the effective date of the final rule. Emissions reductions that are required under an alternative to the BART program must be achieved within the first regional haze planning period, which ends July 31, 2018.

*Is EPA aware of a stakeholder process initiated by the Salt River Project (SRP), the operator and partial owner of NGS, to develop a BART proposal? Should a BART proposal emerge from the SRP process, will the EPA assess their proposal as a part of EPA's BART determination process? What other opportunities will the public have to comment on EPA's BART determination?*

- EPA is aware of the stakeholder process initiated by SRP. If the stakeholders develop a proposal and submit it to EPA, EPA will take the information into consideration. When EPA proposes our BART determination in the Federal Register, EPA will request public comment on our proposal. We plan to hold open houses and public hearings in locations near Navajo Generating Station, both on the Navajo Nation, and in Arizona. All information will be available on [www.regulations.gov](http://www.regulations.gov).

*Given that the electricity generated by NGS is used for both power and water delivery in Arizona and other Western states, what is the EPA doing to evaluate the impact on electricity and water prices as part of the "five factor" analysis for BART determinations?*

- EPA is evaluating the potential impact on electricity prices to consumers of NGS power and the potential impact on water prices to consumers of water from the Central Arizona Project (CAP). Under the Regional Haze Rule, a BART analysis must include consideration of five factors: (1) the costs of compliance, (2) the energy and non-air quality environmental impacts of compliance, (3) the existing pollution controls at the source, (4) the remaining useful life of the source and (5) the degree of visibility improvement which may reasonably be anticipated to result from the use of such technology. EPA will evaluate the impacts to electricity and water consumers under Factor 2: Energy and Non-Air Quality Environmental Impacts of Compliance.

*Could you please outline the process in which that EPA has consulted, and will continue to consult, with the tribes regarding the NGS BART determination? How will EPA take into account the potential economic impact on the tribes of a proposed BART determination?*

- During EPA's preliminary work on its BART determination for the Four Corners Power Plant (FCPP) and NGS, EPA periodically updated Navajo Nation EPA on our analyses during annual meetings on air issues. Before signing the ANPRM in 2009, our Acting Regional Administrator called President Shirley to inform him of the ANPRM and offer consultation. We understand the importance of FCPP to the Navajo Nation, and the importance of NGS to both the Navajo and the Hopi Tribe.



- EPA met with representatives of the Navajo Nation in September 2009 to initiate consultation for both power plants. In November 2009, we sent letters to all Arizona Tribes offering to consult on NGS and requested feedback on how each Tribe would like the consultation process to occur. In December 2009, EPA provided a briefing and presentation to the members of the InterTribal Council of Arizona. We received consultation requests from the Gila River Indian Community, Hopi Tribe, Ak-Chin Indian Community, and Tohono O'odham Nation and met with those Tribes individually. In addition to a direct consultation meeting with EPA, the Hopi Tribe submitted a report it commissioned from ICF International on potential impacts of several potential regulatory requirements on NGS. We are reviewing that report as part of our economic analysis for NGS. EPA extended the time period for Tribes to review and comment on the ANPRM to March 1, 2010, over 6 months after Federal Register publication of the ANPRM.
- EPA is considering the potential economic impact to Tribes in our analysis of the potential impacts to electricity and water rates. We are providing the opportunity to Tribes to submit water volume and cost information so that our analyses can specifically focus on impacts to individual Tribes, as all Tribes have different water settlement agreements and sources of water.

*Concerns have been raised about closing the NGS. Has EPA proposed closing the NGS? In EPA's Advanced Notice of Proposed Rulemaking (ANPR) published in the Federal Register on August 28, 2009, none of the scenarios that EPA outlines for comment include shutting down any of the 3 boilers at NGS. As part of the BART determination, are you considering scenarios beyond those outlined in the ANPR? If so, do any of those scenarios involve shutting down any or all of the boilers at NGS?*

- EPA has not proposed to close NGS. EPA's goal is to conduct a thorough analysis to determine on a case-by-case basis the appropriate level of control as BART that is cost effective, improves visibility, and does not harm Tribes. EPA did not discuss any scenarios in our ANPRM that involved closing any of the boilers at NGS because it is not EPA's intention to require shutdown, directly or indirectly, of any boilers at NGS or FCPP. If the facility's owners propose to EPA an alternative to BART, EPA will consider the alternative proposal, whether or not it involves closing one or more units.

*The scenarios proposed in the August ANPR examine the impact of installing a variety of control technologies including Low NO<sub>x</sub> Burners (LNB), Separated Overfire Air (SOFA) and Selective Catalytic Reduction (SCR). Are these technologies in common use at other power plants in the United States? How many U.S. plants have these technologies installed? How many will be installing these technologies in the next 5 years? Does EPA factor in the construction jobs associated with installing these technologies in their economic analyses for the BART determination?*

- The NO<sub>x</sub> control technologies discussed in the ANPRM, LNB/SOFA and SCR, are common technologies that are used at coal-fired power plants throughout the United States and the world. LNB and SOFA are controls that reduce NO<sub>x</sub> during the

combustion process and are often known as “combustion controls”. SCR is a post-combustion control technology that removes NO<sub>x</sub> formed during combustion by converting it to inert atmospheric nitrogen (N<sub>2</sub>). The combined use of LNB/SOFA and SCR typically represents Best Available Control Technology (BACT), required for the construction of any new coal-fired power plant.

- In the United States, based on 2010 total coal steam capacity (315,900 MW), LNB was installed on 240,627 MW (76% of capacity) to reduce emissions of NO<sub>x</sub>. As stated previously, several NO<sub>x</sub> control technologies are often used in combination with each other. Because many coal-fired power plants using LNB also employ other technologies to further reduce NO<sub>x</sub>, the reported percentages will exceed 100%. Overfire air is used on 80,339 MW (25% of the coal steam capacity), and SCR is used on 122,947 MW (39% of capacity). In 2014, EPA expects the total coal steam capacity equipped with LNB to increase to 263,834 MW (83% of expected 2014 coal steam capacity of 317,700 MW), OFA to increase to 100,814 MW (32%), and SCR to increase to 147,986 MW (47%).
- EPA does not factor the construction jobs associated with installing these technologies into the economic analysis for BART.

#### Four Corners Power Plant and Desert Rock

*Did EPA require the shutting down of any boilers at the Four Corners Power Plant (FCPP) in its proposed October 2010 BART determination? Did the proposal to shut boilers 1-3 at FCPP originate with EPA or the owners of FCPP? How is the EPA evaluating the alternative proposal put forward by the FCPP owners? What opportunities have the public had to comment on the two proposals? What consultation has EPA done with the affected tribes?*

- EPA did not require the closure of any boilers at FCPP in the October 2010 proposed BART determination. The proposal to close Units 1 – 3 at FCPP originated with the owners of FCPP, and was facilitated by, and is contingent upon, the sale of Southern California Edison’s 48% share of Units 4 & 5 (1500 MW total) to Arizona Public Service, which owns 100% of Units 1 – 3 (560 MW total). EPA evaluated the alternative proposal put forth by the owners of FCPP in our February 25, 2011 Supplemental Notice, which proposed to allow the owners of FCPP the flexibility to either comply with our October 2010 proposed BART determination, or the Alternative to BART proposed by FCPP’s owners. EPA determined that the alternative proposal put forth by the owners of FCPP, if implemented by July 31, 2018, meets the requirements of a BART Alternative under the Regional Haze Rule because it will result in more emissions reductions, not only of NO<sub>x</sub>, but also sulfur dioxide, particulate matter, and mercury, compared to our October 2010 proposed BART determination.
- The comment period for the October 2010 proposal and the February 2011 Supplemental proposal closed on May 2, 2011. Thus, the public had over 6 months to review and comment on the October 2010 BART proposal and over 3 months to review and comment on the February 2011 Supplemental proposal. EPA held four open house and public hearing events in March 2011; two events were held on the Navajo Nation, in

Shiprock and Fruitland, New Mexico, near FCPP, one event was held in Farmington, New Mexico, also near FCPP, and the final event was held in Durango, Colorado, at the request of environmental groups due to its location downwind of FCPP. We provided Dine Interpretation services at the Shiprock, Fruitland, and Farmington events. Three of the events were held in the late afternoon and evening (e.g., open house from 3 – 5 PM, public hearing from 6 – 9PM), and one event, at the Nenahnezad Chapter House (Fruitland, New Mexico), was held in the morning (combined open house and public hearing 9 AM – 1PM). All open house and public hearing events were well attended. The Navajo Nation EPA attended the open house and public hearing events at all four locations.

- EPA consulted with the Navajo Nation EPA on the format, locations, and timeframes for the open house and public hearings, and Navajo Nation EPA participated in all events with EPA representatives. The Navajo Nation recently requested formal government-to-government consultation with EPA on the Four Corners Power Plant, and EPA Region 9 will be meeting the President Shelly and other representatives of the Navajo Nation on May 19, 2011.

*There has been controversy surrounding the issuing and rescinding of the air permits for the Desert Rock power plant that was proposed to be built on Navajo land near Farmington, New Mexico. Please outline the major milestones in permitting the plant. Has EPA indicated to the developers what additional actions are needed to secure the necessary air permits to move forward with the development of the plant? Are there actions EPA needs to take before the developers can complete the requirements to secure the necessary permits?*

- EPA wishes to clarify that its air program staff did not rescind the Prevention of Significant Deterioration (PSD) permit for the Desert Rock Energy Facility. Rather, after EPA issued the permit on July 31, 2008, several environmental organizations and the State of New Mexico (petitioners) appealed the decision to EPA's Environmental Appeals Board (EAB), which subsequently remanded the permit back to EPA's Region 9 office for further review on September 24, 2009. The EAB's remand was based on two separate grounds. First, the EAB concluded that it was appropriate to grant a motion filed by EPA for a voluntary remand of the permit. Second, based on the administrative record for the permit, the EAB independently concluded that the entire permit should be remanded because of one overarching issue related to the Best Available Control Technology (BACT) analysis conducted by the Region.
- The EAB was established in 1992 to function as an administrative appeals court within EPA and serves as the final Agency decision maker on administrative appeals under all major environmental statutes that the Agency administers. The EAB consists of four environmental appeals judges, which generally sit in a three-judge panel for a particular case. The EAB is an impartial body independent of all Agency components outside the immediate Office of the Administrator.
- Upon review of the facts contained in the permit record for this case, briefs filed by the Petitioners, and reply briefs submitted by both the permit applicant (Sithe Global Power,

LLC) and counsel for EPA, the EAB independently found that the permit was deficient because the applicant and the Region failed to properly consider the use of integrated gasification combined cycle (IGCC) technology as an emissions control measure in the required BACT analysis. Because of the fundamental nature of this deficiency, in September 2009, the EAB remanded the permit in its entirety to the Region for further review. In addition, the EAB granted a motion filed by Region 9 at the request of staff in the Administrator's office in April 2009 that the EAB remand the permit to Region 9 so EPA could voluntarily reconsider its approach to several issues raised in the appeal of the permit; the consideration of IGCC technology in the BACT analysis was also among the issues cited in Region 9's voluntary remand request. Before granting the Region's remand request, the EAB considered arguments about fairness and due process that had been made by the permit applicant in a written motion in opposition to the April 2009 request. The EAB concluded that the April 2009 request was not made in bad faith and that granting the request would not violate the due process requirements of the United States Constitution.

- Following issuance of the remand order from the EAB in September 2009, EPA made several attempts to work with the permit applicant to discuss how it could amend its permit application to address the deficiencies identified by the EAB, the matters that EPA had sought to reconsider, and other requirements that had arisen since the permit was initially proposed. The applicant has not amended its permit application to provide the information that EPA must have in order to proceed. We note that no further action on EPA's part is necessary before the applicant can submit its amended application. Nevertheless, EPA remains willing to work with the applicant to address these issues at any time. Upon receipt of an amended permit application, EPA would have to review that application, revise its analyses and the permit to address the issues identified in the EAB's remand order and applicable Clean Air Act requirements, provide the public with notice of the revised permit and an opportunity for comment, and make a final permit decision. In addition, prior to making a final decision to issue the permit, EPA would also have to ensure that its obligations under Section 7 of the Endangered Species Act (ESA) were met. Throughout our permitting process for this facility, the Bureau of Indian Affairs has been the lead federal agency with respect to the Section 7 ESA consultation with the Fish and Wildlife Service. It is our understanding that consultation has not been completed.

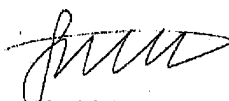
*Could you please outline the process in which that EPA has consulted, and will continue to consult, with the tribes regarding the development of the Desert Rock power plant?*

- Leading up to issuance of the permit on July 31, 2008, EPA conducted an extensive public involvement process, during which we contacted 41 Native American Indian Tribes to offer tribal consultation. Seven tribes responded to our consultation letter and/or submitted comments on the proposed permit. In addition, representatives of the Navajo Nation's Dine Power Authority regularly participated in meetings and conference calls between EPA staff and the permit applicant, and EPA Administrator Jackson had a number of conference calls with (then) President Shirley of the Navajo Nation. In the event the permit applicant submits an amended application for the Desert Rock facility,

EPA will continue to work closely with the Native American Tribes in the area as we have in the past.

We trust that this information will be responsive to your questions. If you need further information, please contact me, or have your staff contact Cheryl Mackay in the Office of Congressional and Intergovernmental Relations at (202) 564-2023.

Sincerely,



Gina McCarthy  
Assistant Administrator

Mr. MARKEY. Now, is the time to develop a plan that will reduce pollution, increase economic development, and overcome the decades of economic and health inequities faced by the tribes. There is a reason for optimism that that can be done.

In 1991, diverse stakeholders came together to craft a broad agreement to address sulfur dioxide emissions from the Navajo Power Plant and other similar issues that confront the plant today.

Rather than trying to protect the status quo of this Committee, should like in 1991 work to try to find a solution that leads to clean air and to clean energy. Mr. Chairman, I yield back the balance of my time.

[The prepared statement of Mr. Markey follows:]

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

In the early 1900s, Arizona's sunshine and clean desert air was advertised as a cure for tuberculosis. Today the sunshine is still abundant in Arizona, but the clean air that the "lungers" sought is not always there.

Over the last decades, the Clean Air Act has improved the air quality across the nation, providing significant health benefits and beginning the clearing of our most iconic vistas. But as much progress as we have made cleaning up our cars and power plants, some facilities, like the Navajo Generating Station, still need to improve.

Based on 2010 emissions, it is the third largest emitter of nitrogen oxides in the nation, even with some nitrogen pollution controls installed on two of its 3 units. Nitrogen oxides are one of the main pollutants that reduce visibility. They also have serious health impacts—both directly and as a component of ground-level ozone and particulate matter—including asthma, other respiratory illnesses, heart disease and premature death. Just 15 miles from the Grand Canyon National Park, pollution from the Navajo Generating Station can impair the view there and at 10 other national parks and wilderness areas in the region.

The nearly five million people who visit the Grand Canyon annually expect a grand view like this one on a good visibility day in 2010. [picture of Grand Canyon on a good day]

But some days, as they stand on the rim of the canyon, their view is limited by the haze of pollution like in this picture of a poor visibility day in that same year. [picture of bad visibility]

Recognizing that preserving the air and the view was as important as preserving the land, Congress included a program to protect scenic vistas in the 1977 amendments to the Clean Air Act. In 1999, the Regional Haze Rule finally established the requirements to carry out these protections. The owners of the Navajo power plant have known for decades that they may have to make additional investments to clean up its pollution.

The EPA is currently analyzing what pollution controls must be put in place to bring the Navajo Generating Station into compliance with the Clean Air Act. As part of that work, they are looking at the economic impact on Tribes and water and electricity users in Arizona, which are clearly critical and complex issues. At the same time, the Salt River Project, the operator and partial owner of the plant, is conducting a stakeholder process to develop a consensus proposal to submit for EPA's consideration. EPA intends to release a proposal this summer. After an additional period of public comment, they hope to make a final determination next year.

Despite all this ongoing work, the Republicans have called this hearing today. While they might want to portray it as a way to clear the air, I think it will just muddy the waters. Although EPA has not proposed to close the Navajo power plant, you will hear dire predictions to that effect from my colleagues across the aisle.

Radio evangelist Harold Camping calculated that the world would end last Saturday at 6 p.m. And much like that prediction, today's forecast of a "regulatory rupture" of the Navajo Generating Station is overblown. The power plant is too important and too profitable to shutdown any time soon.

To bring some reality to the apocalyptic vision that some might try to portray today, I asked the EPA to answer some questions about their ongoing work on the Navajo Generating Station, as well as their work on other power plants in the Navajo Nation. I would like to submit their response for the record.

Now is the time to develop a plan that will reduce pollution, increase economic development and overcome the decades of economic and health inequities faced by the Tribes.

There is reason for optimism that this can be done. In 1991, diverse stakeholders came together to craft a broad agreement to address sulfur dioxide emissions from the Navajo power plant and other similar issues that confront the plant now. Rather than trying to protect the status quo, this committee should be trying to help find the solution that leads to clean air and clean energy.

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Mr. McCLINTOCK. Thank you. Well, we will now hear from our first panel of witnesses. Each witness' written testimony will appear in full in the hearing record, and so I would ask that the witnesses keep their oral statements to five minutes as outlined in our invitation letter, and also under Committee Rule 4[a].

I also want to explain how our timing lights work. When you begin to speak, our Clerk will start the timer, and a green light will appear. After four minutes, a yellow light will appear, which means that you should talk very, very fast, and at five minutes, the red light will come on, and that means that you should stop talking because the Members have stopped listening.

And if it is any consolation, we hold ourselves to the same rules. The Committee is very honored to have as our first witness The Honorable Ben Shelly, President of The Navajo Nation, from Window Rock, Arizona, to testify. Mr. President, thank you for coming.

**STATEMENT OF HON. BEN SHELLY, PRESIDENT,  
THE NAVAJO NATION, WINDOW ROCK, ARIZONA**

Mr. SHELLY. Mr. Chairman, Members of the Committee, Tribal Leaders, Ya'at'eeh. I am Ben Shelly, President of The Navajo Nation. I thank the Committee for the opportunity to provide testimony on the future of the Navajo Generating Station, a power plant located on The Navajo Nation, employing Navajo people, utilizing Navajo coal, that is critical to our economy.

The Navajo Generating Station, NGS, is located near the Town of Page, Arizona. The Navajo Nation leased the site to a variety of stakeholders of NGS. The plant has been in operation since 1974. The many interests in the plants are far-reaching and have great impact on the region's economy.

The Navajo Nation wished to first preserve jobs in an already stressed economy, and the area of these jobs includes 545 full-time positions, 80 percent of which are Native Americans.

In addition to the Navajo Generating Station the jobs at the Kayenta Mine, which is supported by NGS, employs 415 full-time workers, and 90 percent of them are Native Americans. NGS and Kayenta Mine together contribute about \$140 million annually in revenues and wages to the Navajo Nation.

The Navajo Nation recognized the importance of the Navajo Generating Station and the deliveries of the Central Arizona Project, CAP, water for the entire valley of Arizona. We wish for this body to recognize the significant benefits The Navajo Nation gave up in the interests of external stakeholders and the development of NGS.

Now The Navajo Nation is engaged in negotiations to settle its water rights claims in Arizona. We ask for the support of Congress in this settlement. The Navajo Nation wishes to express support for utilizing an energy mix to ensure we are being a responsible caretaker of our environment, while providing economic opportunity to our people.

The Navajo Nation supports renewable energy development as part of its overall energy portfolio and energy policy. The Navajo Nation will continue to seek to develop a cleaner portfolio, to include such renewable sources such as wind solar and biomass.

The United States EPA proposed rules do not make sense for the Navajo Generating Station. The costs to implement these rules would force the plant closure, and would have damaging economic impact on The Navajo Nation, and the state dependence on NGS energy.

It would put nearly 1,000 people out of work and jeopardize our water settlement plan. Instead, The Navajo Nation supports using a phased approach to emission reduction for NGS, and we feel that this approach is reasonable to meet the EPA's timeline for the Regional Haze Rule, and is the most effective method for balancing the economy and environmental needs of our people.

The Navajo Nation's economy depends upon the development of this energy resource due to the past Federal policy. The Navajo Nation is heavily dependent on oil extraction, like the rest of the world, and The Navajo Nation faced the challenges associated with energy dependencies, including climate change effects on our health, environment, and other impacts for energy development.

As the President of The Navajo Nation, I am regularly required to evaluate competitive interests in making decisions that affects my people. The Navajo Nation is blessed with natural fossil fuels and renewable energy resources that we have the right to develop.

NGS is an essential component of The Navajo Nation's economy and must remain viable for the sake of The Navajo Nation and our people. Ahe'hee'. Thank you.

[The prepared statement of Mr. Shelly follows:]

**Statement of Ben Shelly, President, Navajo Nation**

**INTRODUCTION**

Ya'a'teeh. I am Ben Shelly, President of the Navajo Nation. I thank the Committee on Natural Resources, Subcommittee on Indian and Alaska Native Affairs and Subcommittee on Water and Power, for this opportunity to provide testimony to the Committee regarding the future of the Navajo Generating Station, a coal-fired

power plant located on the Navajo Nation, employing Navajo people and utilizing Navajo coal that is critical to the economy of the Navajo Nation.

#### **THE NAVAJO NATION**

The Navajo Reservation, or Diné'tah, is the homeland of the approximately 300,000 Navajo people. It covers more than 27,000 square miles within the exterior boundaries of Arizona, New Mexico, and Utah, also occupying parts of 13 counties in those states, and is a place of great beauty.

The Navajo people struggle with extreme poverty that places the reservation among the poorest regions in the United States. 48% of the Navajo people are unemployed and 40% live below the federal poverty line.

Our living conditions are substandard when compared with the rest of the United States. Navajo homes often lack basic infrastructure and amenities: 31% of homes do not have complete plumbing; 28% do not have operational kitchen facilities; 38% do not have water services; 32% are without electricity; and 60% of the homes lack basic telephone services, let alone having access to broadband and the internet.

#### **NAVAJO GENERATING STATION**

The Navajo Generating Station (NGS) is located in the outermost northwestern edge of the Navajo Reservation near the town of Page, Arizona. The Nation and owners of NGS entered into a plant site lease in 1969. NGS's operating agent is the Salt River Project (SRP), which owns 21.7% of the electric generating unit. The U.S. Bureau of Reclamation (BOR) owns 24.3%, Los Angeles Department of Water and Power (LADWP) owns 21.2%, Arizona Public Service Company owns 14.0%, Nevada Energy (NE) owns 11.3%, and Tucson Electric Power (TEP) owns 7.5%. NGS provides electricity to customers in Arizona, Nevada, and California, and also supplies a majority of the electricity for the Central Arizona Project (CAP).

Construction of the first of three electric generation units (EGUs) began in 1969. The first unit went online in 1974, and construction of the third unit was completed in 1976. Each EGU at NGS is rated at 750MW for a combined total of 2,250 MW. NGS uses high quality low-sulfur bituminous coal that is mined 78 miles away at the Kayenta Mine. The Kayenta Mine is located on Navajo and Hopi lands on Black Mesa and operated by Peabody Western Coal Company.

NGS employs 545 full-time workers, 80% of which are Native American. The Kayenta Mine employs 415 full-time workers, 90% of which are Native American. NGS and the Kayenta Mine together contribute approximately \$140 million annually in revenues and wages to the Navajo Nation, and the Hopi Tribe has commented that 80% of its general revenues are from coal. NGS thus both directly and indirectly supports the Nation's overall economic viability, the health and welfare of the Navajo people and its communities, and the sustainability of the Navajo Nation as an independent sovereign nation.

#### **CENTRAL ARIZONA PROJECT**

Energy generated by NGS and attributable to the federal share of ownership in the plant is used to deliver water through the CAP system. Many benefits from NGS flow to and through the CAP system. The importance of NGS to the CAP and its customers will be addressed by others testifying today. However, I would like to touch briefly on the relationship of NGS to Indian water rights settlements in Arizona. The Secretary of the Interior has reserved a pool of Arizona's CAP water to be used to settle the water rights claims of Arizona tribes. NGS power keeps that water affordable. Increased power costs, whether attributable to capital improvements at NGS mandated by environmental regulatory action or plant closure would increase the cost of tribal CAP water significantly. In addition, revenue derived from the sale of surplus federal power is deposited in the Lower Colorado River Basin Development Fund and provides a source of funds for tribal water rights settlements. The Navajo Nation is engaged in negotiations to settle its water rights claims in Arizona. It is likely that any settlement will include CAP water delivered with NGS power and money from the Lower Basin Development Fund to build water delivery infrastructure projects.

#### **UNCERTAINTIES FACING NAVAJO GENERATING STATION**

The Navajo Nation, Navajo employees of NGS and the Kayenta mine, and their families and communities, and the various other stakeholders at NGS, are currently faced with uncertainty over the future of the plant. This uncertainty stems from several issues: the current lease negotiations between the Navajo Nation and the plant owners, proposed rule-making by the Environmental Protection Agency (EPA) which would impose Best Available Retrofit Technology (BART) combustion controls on the plant and the associated costs of such technology, negotiations for a new coal supply contract between NGS and Peabody, potential changes in the ownership in-



terests of NGS, as well as expected future regulations or legislation limiting greenhouse gas (GHG) emissions, with the significant associated capital and operating costs for compliance associated with such regulation.

#### **EMISSION UPGRADES**

NGS has spent over \$650 million on environmental control technology, including new Sulfur Dioxide (SO<sub>2</sub>) limestone scrubbers that remove over 90% of the SO<sub>2</sub> emissions, Electrostatic Precipitators that capture 99% of the fly-ash that is recycled for uses as additives in cement or concrete construction materials, and Low-NO<sub>x</sub> burners and Separated Over Fire Air Technology that reduce the NO<sub>x</sub> emissions by 40%. NGS complies with all current federal air quality standards and emission limitations.

#### **EPA RULE-MAKING FOR BART**

The Navajo Generating Station is subject to regulation under the Clean Air Act Regional Haze Rule. The Regional Haze Rule was adopted to improve visibility in Federal Class I Areas, such as national parks, monuments and recreation areas. NGS is located in close proximity to 16 Class I Areas.

The goal of the Regional Haze Rule is to return visibility in federal Class I Areas (e.g. the Grand Canyon) to pristine conditions by 2064. The Rule requires 'reasonable progress' towards this goal. The EPA has the responsibility to establish a rate of reasonable progress for NGS, and to select appropriate technology to achieve meaningful emission reductions to meet the final visibility goal by 2064, rather than selecting a technology with exorbitant costs and compliance requirements by 2018, and in doing so adversely impacting the Navajo Nation and the Navajo people.

In 2009, the US EPA published an Advanced Notice of Proposed Rulemaking addressing preliminary issues in anticipation of the agency's determination of emissions controls that would be required as BART for NGS and a second coal-fired power plant located on the Nation's lands—Four Corners Power Plant. The US EPA is considering requiring installation of Selective Catalytic Reduction (SCR) technology as BART for NGS and has issued a proposed Federal Implementation Plan (FIP) that would require the installation of SCRs on all 5 EGUs at Four Corners.

The exorbitant capital and operating costs of SCR technology, while so much other uncertainty is facing NGS, would likely force closure of the plant if SCR is adopted as BART. Instead, the Nation supports using a phased approach to emission reductions for NGS. As the Nation commented to EPA in response to the ANPR, advanced combustion controls—Low NO<sub>x</sub> Burners (LNB) and Separated Over Fire Air (SOFA) Technology, and *not* SCR, are BART for Navajo Generating Station at this time.

Implementing any more stringent technology as BART for NGS in the short term could force plant closure, an eventuality that would have catastrophic economic impacts on the Navajo Nation. NGS is located on Navajo Nation land, it utilizes the Nation's coal, and income from NGS and the Kayenta mine contribute substantially to the economy of the Navajo Nation, both directly through lease fees and from royalties and taxes on the Nation's coal, as well as indirectly through skilled jobs and employment for the Navajo people and through economic development in the way of service support jobs. Any BART determination for NGS must give substantial consideration to the devastating impacts that closure of NGS would have on the Navajo Nation and the Navajo people.

The US EPA must also consider the cumulative effects of the BART determination for NGS regionally. Three coal-fired power plants are located on or near the Navajo Nation: NGS and Four Corners within the Navajo Nation, and the San Juan Generating Station adjacent to the Navajo Nation. All three coal fired plants and the coal mines that supply them contribute to the tribal economy and regional economic dynamics. Current and proposed environmental regulatory actions affecting these facilities, as well as the impact of past actions, including the closure of the Mojave Generating Station, and their potential cumulative economic impacts, should be considered in determining the BART for NGS.

#### **OTHER INTERESTS**

The Department of Interior (DOI) is proposing a study to provide various generation and emission control strategy options for responding to EPA's proposed BART determination for NGS. This study will consider the feasibility of transitioning NGS to cleaner energy production to improve the regional air quality while maintaining current energy and CAP water delivery obligations.

The National Renewable Energy Laboratory (NREL), the Department of Energy (DOE), including the Clean Coal Office (CCO) and the Tribal Energy Program (TEP), Sandia National Labs (SNL), Lawrence Livermore National Labs (LLNL), the DOI, the Navajo Nation, NGS, and CAP, and others, recognize the stake that many

parties have in the future of NGS, and the power and water delivery obligations of CAP. These parties have expressed their intent to work together as a group to consider all potential technical options for NGS in light of the many and complex interests implicated by a potential closure of NGS.

#### **NAVAJO NATION ENERGY POLICY**

The Navajo Nation has vast reserves of coal and derives a substantial amount of its royalties, rent, fees, tax revenue, and jobs and salaries from coal mining and production of electricity from coal. The Nation's Energy Policy envisions coal production and coal-fired generation as key components of the Nation's economy and its "energy mix" decades into the future. As a resource tribe, the Navajo Nation will seek to shape fossil fuel legislation as the Nation continues to adapt to the already changing regulatory environment. But coal, along with the other leading fossil fuels, i.e. oil and natural gas, will remain the dominant energy sources for the world through 2035.

Down the road, important to using the Nation's coal will be development and deployment of clean-coal technologies, including sequestration and coal-to-liquid. However, these technologies require significant federal support, including governmental funding and incentives, before they can be reasonably implemented. In the meantime, and without such federal assistance and subsidies, federal environmental rule-making and policy must reflect the real world costs and realities, including, where applicable, the federal trust responsibility to promote and ensure the economic well-being of resource based tribes like the Navajo Nation.

The Navajo Nation supports renewable energy development as part of its overall energy portfolio and Energy Policy. The Nation will continue to seek to develop a "cleaner portfolio" to include such renewable sources as wind, solar, and biomass. However, at this time, intermittent renewables are not sufficiently reliable to meet the Navajo Nation's or the United States' power needs alone. Additionally, renewable technologies still have very high capital costs and, in the case of both solar and wind, would require large land withdrawals on the Navajo Nation. Any such land withdrawals would have socioeconomic costs as well, affecting traditional uses of the land by Navajo People such as grazing.

As a government responsible for the health and welfare of its people, the Navajo Nation believes that a determination of the future of NGS must be made in light of all relevant factors, including the environmental and health impacts of the plant. However, the current regulatory challenges facing NGS stem not from a health-based rulemaking, but one designed to reduce visibility in national parks. Before potential health benefits of a visibility-driven rulemaking can even be considered, serious work needs to be done to establish a baseline for environmental health for the Navajo Nation.

In the forefront of any discussion of the future of NGS must be consideration of the catastrophic economic impacts to the Navajo Nation and the Navajo People from any closure of NGS. Such discussions must consider the government-to-government relationship of the United States with the Navajo Nation, the federal trust responsibility over Navajo resources and to the Navajo people, and the critical role that coal production and coal-fired generation will continue to have for many, many years for the Navajo Nation's economy.

#### **CONCLUSION**

The Navajo Nation's economy depends on development of its energy resources. The Navajo Nation, like the rest of the world, also faces the challenges associated with energy dependency, including climate change, effects on our health and environment, and other impacts from energy development, including socioeconomic effects on the Navajo People such as changes in traditional land uses. As President of the Navajo Nation, I am regularly required to evaluate competing interests in making decisions that affect my people. I have given great thought to the issues surrounding coal-fired power generation on Navajo lands and I have decided that the Nation must work to secure the continued operation of both NGS and the Four Corners Power Plant.

The Navajo Nation is blessed with a wealth of natural fossil fuels and renewable energy resources—resources we have the right to develop, and which we have the capability to manage. NGS is an essential component of the Navajo Nation's economy and our energy portfolio, and must remain viable, for the sake of the Nation and our People, for years to come. I urge this Committee to take those actions within its power to make the viability and future of NGS a reality.

Ahe'hee. Thank you.

Mr. McCLINTOCK. Thank you, President Shelly. I now recognize The Honorable LeRoy Shingoitewa, Chairman of the Hopi Tribal Council, from Kykotsmovi, Arizona, to testify. Welcome, Mr. Chairman.

**STATEMENT OF HON. LeROY SHINGOITEWEA, CHAIRMAN,  
HOPI TRIBAL COUNCIL, KYKOTSMOVI, ARIZONA**

Mr. SHINGOITEWA. Thank you, Chairman. My name is LeRoy Shingoitewa, Chairman of the Hopi Tribe. I represent 12,000 members of the Hopi Tribe. I am very happy to be here today to speak on the concern that we have in regard to the Navajo Generating Station.

As you know, there will be a ruling coming down from the EPA in regard to the Navajo Generating Station, which has a real concern for the Hopi people. Presently, 80 percent of our budget is the revenues that we generate through the coal mine, and that we sell coal and water to the Navajo Generating Station.

Because of this the Hopi Tribe is able to provide the infrastructure, services and education, to our Hopi people. Today, I sit before you to ask that you will take a strong look at what the impacts will be to the Hopi people if the EPA does pass a ruling that will be very stringent, the BART ruling.

It will have a devastating effect to us. As you know, Hopi is located in the northern part of the state. We are rural, and we are isolated. We are also landlocked, and the Hopis have lived in this area in the Black Mesa and the villages since 1100 A.D.

Oraibi, which is the oldest continually inhabited village in North America, still exists today and part of it deals with the fact of the traditions that we have as our Hopi people. The nearest community to Hopi that is non-Indian is 80 miles away. We do not have the capability of doing economic development on our reservation.

Our resources are very limited. Right now, we have no industrial development except for coal. So, coal is the essential part of the existence of our Hopi people. Therefore, we are asking that the ruling that is going to come down here be very carefully looked at.

For four decades, we have provided coal and water to NGS. While the Hopi Tribe is not a formal owner, or operator of the NGS plant, our economic stability is dependent upon the revenue that is generated by that plant.

Right now, 50 percent of our people are unemployed. Forty percent of our Hopi homes lack running water, or facilities that are for sanitary purposes. Yet, many of our Hopi people today still must haul water as was previously stated by our Congresswoman, and every day, many of our people on a daily basis must haul this water.

The coal resources that we have, we cannot transport any other place except to NGS. We have no rail system to transport to sell to other people. Yet, when the EPA came out in 2010, we asked that it weigh its obligation as a trustee to support us and being very careful about their ruling.

Yet, nowhere in the Federal Register was this ever mentioned. They mentioned the owners, and they mentioned the plant itself, and they mentioned the rate papers. Yet, Hopi's request to be put

into the Register as having a dire impact on us was never mentioned.

Therefore, we are asking that the EPA still maintain the fact that they are trustees for the Hopi people and for other native people. I do agree with the Congressman that it is up to us to regulate what we have, and if the Hopi people choose that we sell our coal to NGS, then let us do so.

If the NGS ruling by the EPA is done, I will let you know that we will become true wards to this government. Then you must be able to live up to your trusteeship to support our existence.

Without the revenue from the Navajo Generating Station, we will no longer be able to provide the services that we have, the education that we have, taking care of our people, and then in the end, we will not be able to maintain our homelands. Thank you.

[The prepared statements of Mr. Shingoitewa follows:]

**Statement of The Honorable LeRoy N. Shingoitewa, Chairman, Hopi Tribe**

My name is LeRoy N. Shingoitewa. I am the Chairman of the Hopi Tribe and I represent over 12,000 members of the Hopi Tribe. I am honored to have been given the opportunity to speak on behalf of my people in expressing the Hopi Tribe's view on the critical issue that faces you—balancing issues of tribal sovereignty, protection of the environment and the cost of the Nation's energy policies to the people.

My brief remarks concern the Navajo Generating Station ("NGS") located in Arizona and effect of the Environmental Protection Agency's ("EPA") Best Available Retrofit Technology ("BART") at the NGS's plant facility.

I have been made recently aware of Mr. Paul Orme's, General Counsel to several water districts in Arizona, congressional testimony regarding the same subject and I will agree with Mr. Orme on one point "EPA's ultimate BART decision will significantly impact the people and economies in and around Page, including the Hopi and Navajo Reservations. Their stories deserve to be heard. . ." but not with the Mr. Orme's characterization of a "story", rather, it is our voice. . .the Hopi people and our story is not yet complete.

In March 2010, the Hopi Tribe submitted written comments on the Environmental Protection Agency's Rulemaking regarding Best Available Retrofit Technology for Nitrogen Oxide Emission at the Navajo Generating Station (Docket Number EPA-R09-OAR-2009-0598). I wish to introduce these supporting documents in conjunction with my testimony.

As background for the sub-committees, the Hopi Reservation is isolated, rural and "landlocked". The U.S. Census reports that approximately 7,000 Hopi people live on the Hopi Reservation. We have lived in our villages on the Black Mesa since pre-historic times. Of the twelve (12) Hopi villages, Oraibi is referred to by anthropologists as the oldest continuously inhabited settlement in North American, dating to at least 1100 A.D.

The Hopi Reservation is ninety miles from any non-Indian community, thus limited access to any economic development centers is an understatement. The Hopi Tribe has no on-site industrial development and, other than coal, the Hopi resource base is extremely limited. In addition, the Hopi Tribe has chosen not to follow the path of other tribes which have built large gaming institutions to secure their economic stability; the voters of the Hopi tribe have rejected in two referenda.

For almost four decades, the Hopi Tribe has provided coal and water to NGS. While the Hopi Tribe has not been a formal partner in the ownership and operation of the NGS plant, there is no question that the Tribe's current economic security is fundamentally tied to the ongoing operation of the plant.

More than eighty percent (80%) of the Hopi Tribe's budget is dependent upon NGS derived revenues which in fact directly impact nearly every aspect of Hopi life, including the education of Hopi young people, health and social service programs, governmental infrastructure and many other essential tribal programs.

We can recite the U.S. Census economic profile for the Hopi Tribe, almost 40 percent of the Hopi homes lack complete plumbing facilities, and more than 35 percent lack complete kitchen facilities. More than 44 percent of Hopi families with children under the age of 18 live below the national poverty level. The figure rises to more than 50 percent below the poverty level for families with children below the age of 5 years old. I can visually illustrate that the living conditions on the Hopi reserva-

tion in the context of water consumption. Hopi per capital use of water—that is the amount of water used for all household, municipal, commercial and industrial development calculated on a per-person basis is one tenth of the use of a suburban community household. Many Hopi people still must haul their daily water supply in barrels in the back of their pick-up trucks from community wells.

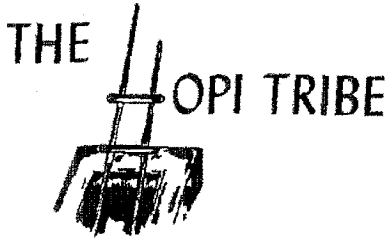
The Hopi Tribe's coal resource is distant from rail transportation links that it would not be economically feasible to be sold to another buyer at this time.

In 2010, the Hopi Tribe has asked EPA to weigh its obligations to the Hopi Tribe as a Trustee, however, in spite of our request, there has been no mention by EPA in the Federal Register of the economic impact of its decision on the Hopi Tribe. There is discussion concerning the economic impacts to utilities and other owners of the plant, and there is discussion of the impact on rate payers. In contrast, with respect to EPA's Trustee relationship and responsibilities to the Hopi Tribe, there was no consideration whatsoever to the trustee relationship and the impacts of the decision on the Hopi Tribe.

There is no mention that exercise of EPA's authority would have severe and immediate economic impacts on the Hopi Tribe including rising unemployment, severe curtailment of social programs, slowing of capital advancements, weakened tribal government infrastructure programs, and other indirect economic losses. Finally, the implementation of the BART decision would undermine the Hopi Tribe's ability to maintain its homeland.

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[A letter submitted for the record by Mr. Shingoitewa follows:]



LeRoy N. Shingoitewa  
Chairman

Herman G. Honanie  
Vice-Chairman

March 01, 2010

Jarod Blumenfeld, Administrator  
USEPA Region IX  
75 Hawthorne St.  
San Francisco, CA 94105

RE: The Hopi Tribe's Comments on the Environmental Protection Agency's Advanced Notice of Proposed Rulemaking Regarding Best Available Retrofit Technology for Nitrogen Oxide Emissions at the Navajo Generating Station Docket Number EPA-R09-OAR-2009-0598.

Dear Administrator Blumenfeld:

Enclosed are the Hopi Tribe's comments on the above referenced Proposed EPA Rulemaking regarding the Navajo Generating Station. The Hopi Tribe appreciates the opportunity to comment and express its views and recommendation on this extremely important issue.

The Hopi Tribes' comments are divided into three parts: Part I is a general overview of the Hopi Tribe and its economic relationship to the Navajo Generating Station (NGS) together with a summary of the Tribe's view and recommendations concerning the ANPR; Part II discusses the Trust Responsibility of the United States --including its administrative agencies - to the Hopi Tribe in the context of coal as a Hopi trust asset and the backbone of the Hopi economy and the responsibility of the United States to protect that asset and economy for the benefit of the Hopi Tribe and its people; and Part III, which sets out the economic analysis prepared for the Hopi Tribe by ICF International (ICF) demonstrating the likelihood of a shutdown of the Navajo Generating Station through a combination of a stringent EPA SCR BART determination for NGS in concert with other looming environmental regulatory actions impacting the plant. Parts 1 and 2 of our comments are set out in one PDF document and Part 3 is set out in a separate PDF document, both of which are attached.

The Hopi Tribe's comments are being submitted via e-mail in PDF format. A hardcopy will follow in the mail.

Best Regards:

A handwritten signature in black ink, appearing to read "L. Shingoitewa", written over a horizontal line.

Leroy Shingoitewa  
Chairman, Hopi Tribal Council

P.O. BOX 123 --- KYKOTSMOVI, AZ ---- 86039 ---- (928) 734-3000

Mr. McCLINTOCK. Thank you, Mr. Chairman. Our final witness on the first panel is The Honorable Joseph Manuel, Lieutenant Governor of the Gila River Indian Community, in Sacaton, Arizona. Welcome.

**STATEMENT OF HON. JOSEPH MANUEL, LIEUTENANT GOVERNOR, GILA RIVER INDIAN COMMUNITY, SACATON, ARIZONA**

Mr. MANUEL. My name is Joseph Manuel. This is the day that the Lord has made. Let us rejoice. Thank you for the opportunity to address the Subcommittees today. Mr. Luján, good to see you again, sir, and the great State of New Mexico. My eldest son still lives there, a music teacher, and music on the weekends. Mrs. Napolitano, good to see you again, Ma'am. Thank you. Mr. Gosar, it is good to see you, sir. Mr. Young, thank you, sir. Mr. McClintock, thank you, sir. Mr. Markey.

I am Joseph Manuel, Lieutenant Governor of the Gila River Indian Community. We are an Indian Nation of over 20,000 members located near Phoenix, which is in Central Arizona. The community sees the issue before you today from the singular vantage point of the largest customer of the Central Arizona Project, or CAP Water Project.

Critical to the community's economy and culture, NGS plays an integral role in delivering Colorado River water to Central and Southern Arizona through CAP, and meeting Federal trust responsibilities under the Community's 2004 water settlement.

Should the cost of emission controls at NGS make CAP water unaffordable the community's water rights would be significantly diminished, and it would suffer significant economic hardship.

This result would be especially troubling given the clear history of my people, the Akimel O'Otham and the Gila River. Akimel O'Otham means the River People in my language. For generations the river sustained my people until it was taken away from us.

So for us that history underscores the importance of our 2004 water settlement, which took over 80 years or so to settlement, which ensures the dependability of water supplies to our reservation through the allocation of CAP water to the community each year.

It also subsidizes the cost of delivering CAP water to the community, and to construct, operate, and maintain the facilities necessary to allow us to fully utilize our allocated water.

NGS supplies approximately 95 percent of the power to deliver the CAP water to the community, and requiring NGS to install and operate costly technology to significantly increase the cost of CAP water.

It would also decrease the future revenue generated for the fund created to reduce the community's costs of obtaining and using its CAP water. These two impacts alone will substantially undermine the benefits that the community especially bargained for and relied upon in agreeing to settle our water claims in 2004.

The community respectfully, but clearly, insists that the EPA uphold its trust obligations to the community under Federal law, and that any actions that the EPA may eventually desire to take must follow a full and proper study, and a full and proper consultation under EPA's May 4th consultation policy, and must comport with the legal rights that the community bargained for in its water settlement.

Farming the community's lands is of great importance for cultural, and economic, and health reasons. In reliance on the avail-

ability of affordable and dependable CAP water, the community is projecting to bring a hundred-thousand acres of community lands back into agricultural production.

Currently, 40,000 acres are being cultivated. The practical impacts of increased costs of water could render the community's efforts to reestablish our riparian lifestyle unattainable.

The EPA could also inadvertently negatively impact efforts to reduce groundwater pumping and conserve water for Central and Southern Arizona. If the use of CAP water becomes too expensive, this renewable resource will become unusable, and farmers will be forced to use finite groundwater resources.

Such an outcome would be unsustainable, and would degrade groundwater resources, and possibly renew old disputes between neighbors. Our water settlement was the culmination of many years of tough negotiations among the United States, the community, cities, and irrigation districts.

The settlement was programmatic solution that relied heavily upon affordable CAP water, and it most not be jeopardized by administrative action that would violate significant and enforceable legal obligations to the community.

Finally, to date, we have not had a full government to government consultation under Executive Order 13175. That consultation must begin as soon as possible, and must be meaningful consultation.

At the end of the day, we ask that the United States keep its word and fully honor our trust responsibilities. Thank you for the opportunity to be heard. I am happy to answer any questions that you may have.

[The prepared statements of Mr. Manuel follows:]

**Statement of The Honorable Joseph Manuel, Lieutenant Governor,  
Gila River Indian Community**

My name is Joseph Manuel and I am the Lieutenant Governor of the Gila River Indian Community, which is an Indian Nation located south of Phoenix, Arizona, encompassing 372,000 acres and approximately 20,000 tribal members. The Community also happens to be the largest single customer of Central Arizona Project (CAP) water. On behalf of the Community, I want to thank both Subcommittees for their continued interest in this issue that could have a very profound effect on all water users in the State of Arizona. In particular, I want to thank the members of the Arizona delegation for their support and efforts to have Congress take an active oversight role to ensure that the detrimental effects of the proposed environmental measures for the Navajo Generating Station (NGS) are taken into account by the EPA before it seeks to implement them.

As the largest customer of CAP water in the State of Arizona, the Community has a significant interest in the outcome of the EPA's NGS rulemaking. From our perspective, the EPA's decision must be consistent with the legal rights that the Community specifically bargained for and that Congress specifically granted under the Arizona Water Settlements Act of 2004 (AWSA). The United States, including the EPA, must uphold its trust obligation to ensure the Community's access to affordable annual deliveries of CAP water because the Community agreed to settle its water rights claims based upon the promise that affordable CAP water would be available to the Community on a long-term basis.

The Community does not object to any pragmatic solution EPA may propose to ensure visibility in our national parks and wilderness areas. In fact, the Community is a leader in Indian country in developing its own air quality plan. In January 2011 the EPA approved the Community's Tribal Implementation Plan which was lauded by the Agency as "a blueprint of how to achieve improved air quality on the Community's lands which will serve as a model for other tribes." The Community is committed to protecting natural resources and has a 12 year history with EPA in devel-



oping and implementing a Tribal Implementation Plan to protect air quality on its land.

However, the Community is very concerned about the potentially catastrophic consequences for Arizona Indian tribes, especially for the Community, that could occur if EPA requires Selective Catalytic Reduction (SCR) as the Best Available Retrofit Technology (BART) for NGS. EPA's BART determination for NGS has the potential—unlike any other Clean Air Act determination that we are aware of—to profoundly affect the economy and culture of the Community and all other similarly situated Arizona tribes with water rights settlements, the United States' trust responsibility to these tribes, and rights specifically bargained for and granted in Federal legislation. Given that the EPA's BART determination presents such grave consequences for the Community and other tribes, the Community is also troubled that EPA has not undertaken any formal consultation with the Community and other affected tribes. Instead the contacts with the Community have been limited to low level discussions between EPA and the Community and can hardly be considered consultation of the kind that should take place when the EPA is considering determinations that could have catastrophic implications for tribes in Arizona. To rectify this failure, the Community has formally requested that the EPA initiate such consultations immediately with all affected tribes in Arizona pursuant to the May 4, 2011 EPA *Policy on Consultation and Coordination with Indian Tribes*.

The Community believes EPA should acknowledge that NGS is unlike any other electrical generating facility in the Southwest. In addition to providing power to customers in Arizona, California and Nevada, NGS has two unique missions. First, NGS is critical to the economies of the Navajo Nation and the Hopi Tribe. The concerns of these two Tribes are best told by their leaders and I leave it to them to tell their story.

Second, and critical to the Community's economy and culture, NGS plays an integral role in delivering Colorado River water to Central and Southern Arizona through the CAP, and in meeting federal trust responsibilities under the AWSA and other Arizona Indian water rights settlements. Should the cost of emissions controls at NGS render CAP water unaffordable, the Community's water rights would be significantly diminished and the Community would suffer significant economic hardship. It would be comparable to the original wrongs done to the Community when non-Indian farmers upstream on the Gila River illegally diverted the flows of the River to the point that it stopped running. The uniqueness of NGS should give EPA pause if it is considering any rulemaking that will undermine the economies of Arizona tribes, especially without first undertaking intensive consultation with these tribes.

### **1. The Community's Water Settlement**

From the beginning of time, the Pima Indians' entire lives and identities involved the Gila River. We drank from the river, irrigated our farms, fished for food and depended on the River for many spiritual ceremonies. At the beginning of the 1900's, farmers upstream of the Gila River Indian Reservation (Reservation) diverted nearly all the water from the Gila River, depriving the Community of water to support the Community's agricultural economy, and causing dramatic and detrimental changes to our diet, lifestyle, economy, culture and spiritual well-being.

The Community began fighting for its water rights in the early 1930's, and finally in 2004 Congress approved the Community's settlement of its claims to water. This settlement was at the time the largest Indian water rights settlement in United States history. The Community's settlement was enacted as law in the AWSA. In the settlement approved in the AWSA, the Community agreed to waive its claims to additional water from the Gila River in exchange for the promise of long-term affordable CAP water. The use of CAP water to fulfill the entitlements of the Community to Gila River water is an essential component its settlement because there is no meaningful way to take back the Gila River water that was rightfully theirs.

The Community's settlement allocates 311,800 acre feet of CAP water to the Community each year, making the Community the single largest CAP contractor. The Community's settlement, through the AWSA, also provides funds to subsidize the costs of delivering CAP water to the Community, and to construct, operate and maintain the facilities necessary to allow the Community to fully utilize our allocated water. The AWSA's funding mechanism is a fund, entitled the Lower Colorado River Basin Development Fund (Development Fund), which pays "annually the fixed operation, maintenance, and replacement charges associated with the delivery of [CAP] water held under long-term contracts for use by Arizona Indian tribes." One of the sources of revenue for the Development Fund to pay these costs for CAP settling tribes is the sale of surplus power generated from NGS.

NGS supplies approximately 95% of the power to deliver the CAP water to the Community and other CAP customers. Requiring NGS to install and operate SCR technology as BART will both significantly increase the cost of CAP water and decrease the future revenue generated for the Development Fund. These two impacts will substantially undermine the benefits that the Community specifically bargained for and relied upon in agreeing to settle our water claims and claims against the United States.

*a. Increased Cost of CAP Water*

As the largest CAP contractor the Community will be impacted by the increased cost of CAP water more than any other entity in the State. Under the AWSA, the Community is entitled to a water budget from all sources of water of 653,500 acre feet per year. Of that 653,500 acre feet, 311,800 acre feet is CAP water.

If SCR retrofit technology is required as BART, it could possibly increase NGS's capital and O&M costs to the point of either closing the power plant or at least substantially increasing power costs, and thus the cost of CAP water for the Community. SCR would cost over 15 times more than LNB/SOFA—\$660 million in capital costs, plus \$13 million in annual operation and maintenance costs, according to estimates prepared by the Salt River Project. This increase translates to a very substantial additional cost for CAP water. Such increased costs for CAP water could cripple the Community's ability to use this water, depriving us of the most significant single source of water confirmed by our water settlement.

Assuming all the capital and O&M costs are passed through to the CAP customers on a proportional basis, the Community will bear the burden of paying between 20 and 25 percent of all the additional costs borne by CAP customers in the State. Imposing this kind of burden on a tribe that settled its claims for water on the promise of affordable CAP water would be akin to a second taking of the Community's water supply, and the Community will not be able to sit idly by without taking every action available to it to fight such a breach of promise and trust.

*b. The Revenue to the Lower Colorado River Basin Development Fund will be Substantially Reduced by the Increased Cost of SCR*

Revenue from the sale of excess NGS power is to be used to supplement the Development Fund. A determination by EPA to impose SCR as the BART would substantially increase the cost of excess NGS power, essentially eating away any potential profit from such sales, thereby substantially eroding the revenues that the Community and other CAP settling tribes counted on to enable the Development Fund to subsidize CAP water delivery on a long-term basis. Not only does this impact the Community's settlement, the loss of the revenue from the sale of excess NGS power threatens the continued viability of all current Indian water rights settlements in Arizona, and jeopardizes the ability of the United States to settle with other Tribes in on-going water rights settlement negotiations.

It has been estimated that "the installation and operation of SCRs would reduce revenues to the Development Fund from the sale of surplus NGS power by about \$9 million per year, or about \$175 million, not including interest, between the assumed date of their completion in 2016, and 2036, the end of the assumed 20-year amortization period. The operation of SCRs would reduce Development Fund revenues by about \$1.2 million per year thereafter" (Letter from David V. Modeer, General Manager, Central Arizona Project, to Colleen McKaughan, Associate Director, Air Division Region IX, Environmental Protection Agency, (December 18, 2009), page 8).

The Development Fund established in the AWSA was one of the main points on which the Community based its willingness to agree to a resolution of its water rights claims, claims that were the largest in the State at the time. The importance of this funding source cannot be overstated. During Congress' deliberations on the AWSA, the Community's Governor was asked to testify on the importance of the legislation to the Community. In response to a question from Senator Bingaman as to the importance of the Development Fund in the framework of the Community's settlement, Governor Narcia testified:

The specific process for funding this settlement is absolutely, absolutely fundamental to our settlement. Without it, our settlement simply will not work....[T]he funding mechanism of this bill is the strongest possible affirmation that the Federal Government is serious about reaching a fair and binding settlement with every Arizona Indian Tribe that is willing to negotiate in good faith. For the first time, the United States will be able to negotiate with Indian Tribes in Arizona knowing that if they are able to reach a settlement they will have the revenue, a certain quantity of CAP water, and the resources to guarantee that the operations, maintenance, and the

replacement costs associated with that water can be paid for both for this generation and the next generation to come.

Members of Congress expressly recognized this as well. Congressman Grijalva testified:

In Indian Country today, one of the most difficult hurdles to tribes utilizing their water rights is the high cost of water project development. While the federal government over the years has helped facilitate and pay for non-Indian water projects, Indian Tribes have been left without such assistance. This legislation, however, provides a reliable funding source which will help pay the operation, maintenance and replacement costs associated with each acre foot of water.

The guarantee of a dependable and affordable water supply and the funding for delivery infrastructure were key considerations for the Community in deciding to settle the Community's water rights claims and its claims against the United States. As Governor Narcia testified to Congress at a Joint Hearing before the Subcommittee on Water and Power of the Committee on Energy and Natural Resources and the Committee on Indian Affairs in the Senate on September 30, 2003: "While our Community and each party to this agreement will make sacrifices to fulfill this settlement, we will do so in exchange for dependable supplies of renewable water and a more certain economic future." Congressman Hayworth similarly recognized this, testifying in support of the AWSA that the legislation "is not a handout. It includes bargained for exchanges between all of the parties to the settlement."

## **2. EPA's Trust Obligation**

The federal government has an express trust responsibility to protect the water rights that the AWSA provides to the Community. Section 204(a)(2) of the AWSA states: "the water rights and resources described in the Gila River Agreement shall be held in trust by the United States on behalf of the Community...." EPA, as an agency of the Federal government, cannot make a BART determination that limits, suppresses or otherwise undermines the Community's right to receive and use its CAP water allocation guaranteed by the AWSA. Like all federal agencies and departments, EPA has a trust responsibility to ensure that the Community's water rights, and the other guarantees and benefits provided in the AWSA, are preserved and can be implemented.

EPA cannot, consistent with its trust responsibilities, impose a BART requirement that limits the Community's ability to receive and use CAP water. Imposing SCR, however, would do just that, because it would inhibit and possibly eliminate the Community's right to receive and utilize its allocation of CAP water guaranteed by the AWSA. Imposing SCR would make it extremely difficult, if not impossible, to pay for CAP water and would eviscerate the Development Fund revenue stream that subsidizes CAP water costs and pays for operation, maintenance, and replacement charges associated with the delivery of CAP water. Even more, imposing SCR would limit the Community's ability to farm its reservation lands and its future economic development opportunities, and would negatively impact the livelihood and health of Community members. The implications of imposing SCR simply cannot be squared with EPA's fiduciary obligations to the Community.

## **3. EPA's Obligation to Conduct Government-to-Government Consultation with the Community**

The EPA has not conducted government-to-government consultations under Executive Order 13175, a process that the EPA must engage in fully with the Community and other affected tribes. As of today, there was an initial meeting with EPA in February 2010 and another informal discussion with EPA in April 2011. Both meetings were limited in scope and are best characterized as information sharing. Moreover, the meetings lacked the participation of the Community's elected leadership such as the Governor and Council.

These meetings cannot be construed as consultation under Executive Order 13175, because they did not amount to "meaningful and timely government-to-government dialogue with elected duly-appointed officials of tribal governments." Pursuant to EPA's May 4, 2011 Policy on Consultation and Coordination with Indian Tribes, created pursuant to the President's November 5, 2009 memorandum directing federal agencies to implement Executive Order 13175, we have formally requested that the EPA undertake government-to-government consultation with affected Arizona tribes in order to discuss the implications to the Community in an appropriate forum. A copy of our letter to the EPA requesting this consultation is attached to our testimony.

#### **4. Threat to the Community's Culture and Way of Life**

It is the vision of the Community to return to a traditional lifestyle of farming. One of the primary uses of CAP water is for Community agriculture. Governor Narcia testified to Congress on this issue during AWSA deliberations before a Joint Hearing before the Subcommittee on Water and Power of the Committee on Energy and Natural Resources and the Committee on Indian Affairs on September 30, 2003:

Together, the Settlement water and distribution infrastructure will enable our community members to farm tribal and allotted lands as well as provide them an opportunity to escape poverty and to participate meaningfully in the economy of the region. While there is little chance that we can recapture the prosperity of our ancestors, the settlement agreement will enable more tribal members to participate in our ancestors' way of life.

Farming the Community's land is of great importance for cultural, economic and health reasons. In reliance on the availability of affordable and dependable CAP water, the Community is projecting to bring 146,330 acres of the Community's land back into agricultural production. Currently, 40,000 acres are being cultivated. The Community Farms, corporate farms and individual Indian farmers currently cultivate fruits, vegetables, small grains, potatoes, cotton and alfalfa. Community members engage in more than 60% of all agribusiness activities. The practical impacts of increased costs of water could render the Community's efforts to reestablish our agrarian lifestyle unattainable.

In preparation for the increased farming and the water that is necessary for it, the Community is developing an expansive 2,400-mile irrigation canal system under the Pima-Maricopa Irrigation Project (P-MIP) to deliver water throughout the Community. P-MIP will not only sustain the agricultural economy but also meet the needs of the Community's municipal and industrial water users and the establishment of riparian and recreational areas. In developing P-MIP, the Community has reasonably relied upon the delivery of affordable CAP water that was a central aspect of the Community's bargain in settling its water claims.

Finally, the CAP water is important for re-establishing riparian areas, where sacred plants can be grown for medicinal and cultural uses. Riparian areas will include plants such as cattails, devil's claw and arrow-weed, which are used to create the famous and culturally-significant Akimel O'otham baskets and Pee Posh pottery.

#### **5. Interference with Water Conservation Efforts in Arizona and Agreements Among AWSA Settling Parties**

In its efforts to protect air quality in Northern Arizona, EPA could inadvertently negatively impact efforts to reduce groundwater pumping and conserve water in Central and Southern Arizona. The introduction of CAP water as a renewable water supply to Central Arizona has benefited the State of Arizona by assisting agricultural users in meeting regulatory objectives to reduce groundwater use, and has thus far facilitated the long-term availability of groundwater resources as a resource for future drought conditions. Being located in Central Arizona the Community is a strong supporter of efforts to conserve groundwater resources. If the use of CAP water becomes too expensive, this renewable resource will become unusable and farmers will be forced to use finite groundwater resources. Such an outcome would be unsustainable and would lead to degradation of groundwater resources and possibly renew old disputes between the Community and its neighbors.

The AWSA was the culmination of many years of tough negotiations among the United States, the Community, cities and irrigation districts. It ultimately provided a pragmatic solution for all parties involved, but one which relied heavily on affordable CAP water. If CAP water becomes unaffordable because the EPA chooses SCR as the BART or otherwise issues a rule that shuts down NGS or makes CAP water cost prohibitive, the carefully woven water settlement that is the AWSA will quickly unravel.

That the cause of this concern comes from an agency of the United States, its trustee and partner in so many successful programs, is not only frustrating to the Community but raises the specter of past broken promises that the AWSA was intended to remedy. On behalf of the Community, I urge the House Water and Power and Indian and Alaskan Native Affairs subcommittees to work to prevent the economic and cultural damage the EPA's actions will have to my Community and other Arizona tribes, as well as the harm to the United States that would result from once again breaking its promise and breaching its trust responsibility to the tribes it is supposed to support and protect.

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[A letter submitted for the record by Mr. Manuel follows:]

**GILA RIVER INDIAN COMMUNITY**  
*Executive Office of the Governor & Lieutenant Governor*

*William R. Rhodes*  
 Governor



*Joseph Manuel*  
 Lieutenant Governor

May 20, 2011

Environmental Protection Agency  
 Ariel Rios Building  
 Attention Lisa Jackson, Administrator  
 1200 Pennsylvania Avenue, N.W. Mail Code 1101A  
 Washington, DC 20460

**Re: Proposed letter to EPA requesting Consultation on NGS Under New Agency Consultation Policy.**

Dear Mrs. Jackson,

As a tribe that will be dramatically affected, and on behalf of all other similarly situated Federally-recognized Indian tribes, the Community hereby requests that consultation be initiated pursuant to the May 2, 2011 *EPA Policy on Consultation and Coordination with Indian Tribes* in connection with EPA's upcoming Navajo Generating Station (NGS) Best Available Retrofit Technology (BART) rulemaking. Government-to-government consultation is appropriate and necessary prior to EPA taking any further action to advance the rulemaking, given the grave implications that EPA's determination could have on the economies and cultures of tribes, the continued viability of Congressionally-approved water rights settlements, and EPA's federal trust obligations. The gravity of tribal concerns, in our view, necessitates that this consultation take place with tribal leadership of all affected tribes and be undertaken through a series of face to face meetings with the most senior EPA officials. EPA's Consultation Policy supports the need for this level of consultation as well.

On August 28, 2009, EPA published its Advanced Notice of Proposed Rulemaking (ANPR) titled *Assessment of Anticipated Visibility Improvements at Surrounding Class I Areas and Cost Effectiveness of Best Available Retrofit Technology for Four Corners Power Plant and Navajo Generating Station*. The ANPR was an initial step in determining the BART for NGS. In early 2010, EPA contacted a small number of potentially affected tribes to elicit limited comments on the ANPR. For example, the contacts with the Community were limited to very low level preliminary discussions between EPA staff and the Community, hardly a consultation, and certainly not the kind of consultation that should take place when the EPA is considering determinations that could have catastrophic implications for tribes in Arizona.

Since then, the owners of NGS retained EN3 Professionals, LLC (Bill Auberle) to convene a deliberation process among NGS stakeholders and affected interests, which has generated significant new information regarding the potential implications of EPA's BART determination.

EPA's Consultation Policy expressly recognizes that consultation is required with affected tribes.<sup>1</sup> The limited contacts to date between EPA and tribes on NGS occurred before much was known about the potential impacts of EPA's BART determination. The new information from the deliberation process, combined with the scope and magnitude of the EPA decision at hand, confirms that a high level, face to face, and intensive consultation is necessary to satisfy EPA's obligations under its Consultation Policy.

EPA's BART determination presents such grave implications for tribes, and thus triggers the need for additional consultation, because of the very unique circumstances surrounding NGS – there is no other electrical generating facility in the Nation with such strong and vital ties to tribal economies and ways of life, to tribes' legal rights guaranteed by Federal legislation, and to EPA's fiduciary obligations to protect trust resources and responsibilities. NGS is located on the Navajo Indian Reservation, and is fueled by coal jointly owned by the Navajo Nation and Hopi Tribe from the Kayenta Coal mine, which is also located on the Navajo Reservation. NGS provides approximately 545 full-time jobs, almost 80 percent of which are held by Native Americans. Hundreds of Native Americans are also employed at NGS on a part-time basis during maintenance activities. The Kayenta Coal Mine provides 415 jobs, 90 percent of which are held by Native Americans.

The Navajo Nation and the Hopi Tribe also receive significant revenues from coal royalties, taxes, permits, lease fees, and scholarships from NGS and the Kayenta Coal Mine. In 2009, NGS and the mine contributed approximately \$140 million in revenue and wages to the Navajo Nation and its tribal members. Payments to the Hopi Tribe totaled \$14 million in 2009, representing eighty-eight percent of the Hopi annual budget that funds the Tribe's governmental and social programs.

NGS also provides the majority of the power for the Central Arizona Project (CAP), which pumps Colorado River water to Central and Southern Arizona. The implementation of eight Congressionally-approved Indian water rights settlements, where tribes relinquished their long-held Federal Indian reserved water rights, rely upon the continued availability and delivery of affordable CAP water.<sup>2</sup> The significant increases in NGS energy costs that could occur due to a decision by EPA to impose SCR as the BART, could make delivery of the very water that the tribes are to receive under their water rights settlements unaffordable, effectively depriving tribes of the benefit of their bargain.

Even worse, it has become apparent that, in certain circumstances, imposing SCR as BART could force NGS to shut down, and thus deprive the tribes of their CAP water allocations. In addition, NGS power not needed for CAP pumping is sold pursuant to federal law and policy to help repay the construction costs of the CAP and fund water delivery costs pursuant to the Indian water rights settlements. Thus, EPA's BART determination presents a very real threat to the

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<sup>1</sup> Consultation Policy at 5. The Consultation Policy similarly states that "as proposals and options are developed, consultation and coordination should be continued." Consultation Policy at 7.

<sup>2</sup> The Community, for example, waived its claims to over 2 million acre feet per year of natural flow from the Gila River in exchange for, among other things, an allocation of CAP water in excess of 300,000 acre feet per year, with the promise that this CAP water would be made available at an affordable price to the Community. This made the Community the largest single user of CAP water in the State of Arizona.

continued viability of existing water rights settlements in Arizona, and jeopardizes the ability of the United States to settle with other Tribes in on-going water rights settlement negotiations.

EPA's decision also implicates its federal trust obligation to Tribes. As a federal agency, EPA has "moral obligations of the highest responsibility and trust" when dealing with tribal monies and property.<sup>3</sup> One of the Key principals of EPA's formal Policy on working with Tribes is that the agency "will assure that tribal concerns and interests are considered whenever EPA's actions and/or decisions affect reservation environments."<sup>4</sup> EPA has also stated that "[i]n keeping with the trust responsibility, the Agency will endeavor to protect the environmental interests of Indian Tribes when carrying out its responsibilities that may affect the reservations."<sup>5</sup> EPA must also protect trust resources in its decision-making. Here, water rights provided by the Arizona Water Settlement Act<sup>6</sup> and the coal of the Hopi Tribe and Navajo Nation are trust resources.

As trustee of these water rights and mineral resources, EPA cannot make a BART determination that limits, suppresses or otherwise undermines the tribes' rights to receive and use these resources. Appropriate consultation under EPA's Consultation Policy is critical for the agency to fully understand and properly consider the impacts of and the trust-imposed boundaries on its NGS determination. EPA's trust obligation all but mandates further consultation.

To ensure the "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications,"<sup>7</sup> as required by the Consultation Policy, now is the appropriate time to initiate consultation. We understand that EPA is actively considering the BART that it will require for NGS, and following the conclusion of the deliberation process, will issue a Notice of Proposed Rulemaking (NPR). EPA needs to hear directly from Tribes in considering its BART options before issuing its NPR. As the Consultation Policy states, Tribes must be given the "opportunity to provide meaningful input that can be considered *prior to* EPA deciding whether, how, or when to act . . ."<sup>8</sup> Consistent with the agency's trust obligations, impacts of EPA's decision on tribes must be a key factor in determining BART. The limited, low level discussions that have taken place to date are in no way sufficient to satisfy EPA's consultation policy. Nor will discussions with tribes following issuance of the NPR constitute sufficient or timely consultation.

Finally, given the nature of the interests at stake, the implications of EPA's BART determination, and EPA's federal trust obligations, consultation must be among senior-level EPA officials and tribal leaders. Consistent with EPA's Consultation Policy, the NGS determination is sufficiently important to require senior management attention.<sup>9</sup> For the tribes, the elected

<sup>3</sup> *Seminole Nation v. U.S.*, 316 U.S. 286, 297 (1942).

<sup>4</sup> *EPA Policy for the Administration of Environmental Programs on Indian Reservations* (Nov. 8, 1984).

<sup>5</sup> *Id.*

<sup>6</sup> Arizona Water Settlements Act, Public Law 108-45-Dec. 10, 2004, Sec. 204(a)(2), 118 STAT. 3494 (emphasis added). Section 204(a)(2) of the AWSA states: "the water rights and resources described in the Gila River Agreement shall be held in trust by the United States on behalf of the Community . . ."

<sup>7</sup> Consultation Policy at 2.


<sup>8</sup> Consultation Policy at 7.

<sup>9</sup> Consultation Policy at 7-8.

leaders that are responsible for Tribal decision-making and reporting on the NGS issue to tribal members should participate in consultation meetings and discussions.

The Community views consultation between Tribal leaders and EPA senior management as necessary and critical to EPA fully understanding the unique and disproportionate impact that EPA's action will have on Tribes, fulfilling its Federal trust obligation and complying with the agency's new Consultation Policy. To be meaningful, this consultation must occur before EPA issues its NPR. We look forward to EPA initiating this important consultation.

Sincerely,

  
 William Rhodes, Governor  
 Gila River Indian Community

Cc: Senator Jon Kyl  
 Senator John McCain  
 Secretary Ken Salazar  
 Rep. Jeff Flake  
 Rep. Paul Gosar  
 Rep. Raul Grijalva  
 Rep. Ed Pastor  
 Rep. David Schweikert  
 Rep. Trent Franks  
 Rep. Ben Quayle  
 Rep. Gabrielle Giffords  
 Louis Manuel, Jr., Chairman, Ak-Chin Indian Community  
 Dr. Clinton M. Pattea, President, Fort McDowell Yavapai Nation  
 Leroy Ned Shingoitewa, Chairman, Hopi Tribe  
 Ben Shelly, President, Navajo Nation  
 Terry Rambler, Chairman, San Carlos Apache Tribe  
 Diane Enos, President, Salt River Pima-Maricopa Indian Community  
 Ned Norris, Jr., Chairman, Tohono O'odham Nation  
 Ronnie Lupe, Chairman, White Mountain Apache Tribe

Mr. McCLINTOCK. Thank you very much, Lieutenant Governor. The time has come for questions of the panel. It is the Chair's intention to do a single round of questions for the members of the first panel, and we will then bring up the second panel, and have a second round of questions, and then if Members desire, we can do a third round of questions involving everyone here.

Also, we will be limiting each of the Members to five minutes as I discussed earlier, and with that, I will begin. President Shelly, the Ranking Member on the Natural Resources Committee, Mr. Markey, showed pictures of the Grand Canyon, and accused the Navajo Generating Station of creating all the haze on hazy days.

I was just wondering what your reaction to that is, and specifically, what is the wind direction for the Navajo plant? Is that over the canyon or away from it?

Mr. SHELLY. I believe the wind comes along the canyon. It goes from west to east in most cases, but the visibility that I have seen, I do agree that we have to see the canyon as it is when it is a clear day.

But you can't blame the power plant as a whole. We also have California. We have forest fires that accounts for a lot of those. As you know, in California, there are a lot of brush fires, and all of



these are happening, and so you can't just blame the whole thing on a power plant, like NGS. That would be my answer to that.

I do agree that we should see a beautiful sight in the canyon, but again we can't just blame it all on the power plant.

Mr. MCCLINTOCK. And what increase can we expect in air clarity with the \$1 billion of additional costs that the EPA contemplates imposing upon the Navajo Station?

Mr. SHELLY. For \$1 billion upgrade, what the EPA is asking for, and with the cost being as it is, it probably will clean it up, but it still is not going to solve the visibility. We are still going to have that.

At the time when that happens, we will probably be saying to ourselves that I guess they were right, and that it was not the power plant causing the problem. It was something else. But again with \$1 billion, you are spending a lot of money. With that kind of money, what can I say.

Mr. MCCLINTOCK. Well, the information that has been submitted to the Committee is that after spending \$1 billion plus on this additional increment of regulation of the Navajo plant, the increase in visibility will be so slight that it will not be detectable by the human eye. Is that your understanding?

Mr. SHELLY. Probably not, because you are going to wind up dealing with other sources that will probably come down the canyon, and like I said, you probably would. What you see now is that it would be clear one day and visible, and at other times, it wouldn't be.

So for some reason, if there is a clear day, visibility was clear, even though the plants were going as it is. So again I don't know how to answer that, but again it depends on the wind and how fast it blows and clears the air, I guess. So the wind, the smoke, or the haze, whatever it is, I guess that is what I will say.

Mr. MCCLINTOCK. The Ranking Member also told us that this is simply partisan hysteria, and that these are akin to doomsday predictions, and that imposing another billion dollars of costs on the plant will have no serious impact on its operations, and he says it is just too profitable. What is your response to that?

Mr. SHELLY. Doomsday? Well, met just answer it in some other way here, is the best way to answer it. We always hear this, and that somebody is always coming out with the end of the world is coming and for me as an Indian, I know that the end of the world will come when you start seeing other animals, birds, and stuff disappearing. Then you will know that it is coming.

But again for the doomsday for the plant, it is something that we have to really give a thought to. Doomsday will come if they close the plant down, and a lot of people are going to lose work, their jobs, and the economy and hardship is going to happen.

Mr. MCCLINTOCK. Chairman Shingoitewa, any thoughts?

Mr. SHINGOITEWA. Yes, I just want to say, too, that I agree with President Shelly. There are other mitigating factors as to why there is haze. My 67 years that I have lived, and I live in the Village of Moenkopi on the western side of the Hopi Reservation.

Even prior to the NGS plant being built, a haze began to come as automobiles started, and having been to California and watching

it, haze has developed over all these years. I think to blame one component of contributors is very difficult to do.

So I think that we have to be very careful that as we look at what has to be done to fix up emissions, I think realistically that you have to look at what is happening. And like I said, I think that one of the things that we have to look at is that how much will really be cleared up putting all the retrofitting in.

Mr. MCCLINTOCK. Thank you.

Mr. SHINGOITWA. Throughout the United States, it has been an issue not only at NGS, but everywhere else that we have had issues with emissions.

Mr. MCCLINTOCK. Great. Thank you. Mrs. Napolitano.

Mrs. NAPOLITANO. Thank you, Mr. Chairman, and I kind of agree with you that in California that there used to be a lot of smog, but they have put in mandatory catalytic converters way back 30 or 40 years ago. So that is not the issue in California as much as it is in other areas.

But I understand the plant is considered the third west of the Mississippi in pollution, the third highest. So there has got to be something there that is affecting the health of the States in those areas, the tribes, and the environment, et cetera.

There are other things that need to be taken into consideration that are real critical. To President Shelly and Chairman Shingoitewa, do you think that the Navajo and Hopi have to choose between protecting your water rights, improving environmental conditions on the reservation, while ensuring that water and energy is affordable.

And by the same token do you believe that there is a way to work with the Administration and the Federal agencies so that you don't have to choose in protecting those rights?

Mr. SHELLY. You know, Congresswoman, I would like to put it in certain ways here. I really don't want to get into the subject of water at this point. We are negotiating water rights between the two tribes, and I would like to just kind of keep it that we always believe as Navajos that our environment is very important with our water thing.

And we do cherish that, as that is part of our tradition and culture, and we hope that we will uphold through our negotiations, and those will probably be mentioned, and I will leave it at that, and try not to go too heavily into talking about water. So we are still in negotiations on that.

Mr. SHINGOITWA. Well, the Hopi, it is always our belief that we be caretakers of the earth and to the sky, and so in this world today, we have had to try to learn to balance the environments.

We have had to learn to live on both sides of the fence. If we were to traditionally live our way, we would do away with many things. Yet, in today's real world, we have to survive as Hopi people. We have to look at the generations to come. How will we be able to sustain and maintain a balance so that we are able to live in two worlds.

To me, in this type of issue, as the modern world changes, it also brings other things. I have always believed that when you take a transition and learning something new, you give up something in return.

So for us natives, we have to learn what is best for us at this stage, and as I earlier said, in order for the Hopi people to survive, we also must sell natural resources. At this stage, we are very limited.

If we don't do our part to sustain a viable economy, then our people would have a hard time surviving in today's world, but we do have to do our part.

Mrs. NAPOLITANO. Thank you for that answer, Mr. Chairman, but shouldn't there be no necessity for you to choose, and that you should all work together with the Federal agencies?

Mr. SHINGOITewa. Yes, and I think that this is where it was talked about consultation.

Mrs. NAPOLITANO. Right.

Mr. SHINGOITewa. That is a critical portion of it.

Mrs. NAPOLITANO. Which is my next question to you, is have you approached the EPA, and if so, when, about your concerns regarding your relation to your water rights settlement?

Mr. SHINGOITewa. Well, we have talked, as far as the Navajo Generating Station. We submitted comments in March of 2010. We believe that the Hopi Tribe's comments had a bit impact on holding back on the final ruling that came down on NGS, because at the time, they did not think about the economic impacts that it would have on our tribe.

They were looking at only what would happen if they tried to clean up the air.

Mrs. NAPOLITANO. Well, in that mix, Mr. Chairman, were they taking into consideration the amount of time there that they are drafting out of your aquifer and the pollution of the water bodies that are left behind that may be contaminating your rivers, your streams, and your aquifers?

Mr. SHINGOITewa. We are at this stage—well, I could not give you a definite answer on that because at that point in time, we were not dealing with—and as President Shelly said, we were not dealing with the water portion of it. We were dealing mainly with the air quality that NGS was supposedly causing.

Mrs. NAPOLITANO. I know, but NGS uses an inordinate amount of water to be able to extract the coal, and to make it into slurry.

Mr. SHINGOITewa. We don't do slurring anymore. That slurring was done in the Mojave plant.

Mrs. NAPOLITANO. OK.

Mr. SHINGOITewa. Yes, the coal that is done is brought down in conveyor belts, and put on to an electric train, and then it is taken over to Page.

Mrs. NAPOLITANO. OK. I will wait for the second round, Mr. Chairman. Thank you.

Mr. MCCLINTOCK. Mr. Gosar.

Dr. GOSAR. President Shelly and Chairman Shingoitewa, I understand that tribal consultation is very important, and it goes to health care from the NIHS to the BIA, as well as to the EPA. So I want to get something straight for the record.

The EPA's response to the Minority's questions indicate that the agency has initiated a consultation within your tribes. Is this true?

Mr. SHELLY. Yes, it is. I would like to say one thing. We have met with Region 9 in San Francisco, and it was a very positive

meeting. It was a tribal consultation. I have my Navajo EPA here, Steve Etsitty, and Attorney General Harrison Tsosie, and we all went down there and my energy advisor, who is here, Samuel Wood, and we had a good consultation.

The support was there, and we all understand that we need to agree that if there are any rule changes, that we should be contacted. They need to work with the Navajo EPA and also the USEPA, because we are all implementing Federal policy, and they should be uniform, as one.

So the same thing happened with Region 6, which we met in Albuquerque, and we talked about the San Juan Power Plant, and also in Dallas, through telecommunications, we all talked and met with their EPA from up there.

So the dialogue is starting to happen. I am enjoying it, and I would like to continue doing that, and that the USEPA should work with the Navajo EPA. And the question about the water thing and the environmental issues.

Our Navajo EPA and our Navajo Clean Water Systems, we do have those in place, and so we kind of monitor that ourselves. We have that capability, and we monitor it like the USEPA, because we have Federal policy that covers that, and we follow that.

Dr. GOSAR. Thank you. Mr. Chairman.

Mr. SHINGOITewa. Representative Gosar, we initially made our contact in 2010. At the time the new regional director, Jackson, had just come into office. She met with us in Phoenix, and at that meeting it when we told them as they were coming out of the concerns that we had.

And at that point in time, they extended the time for comment. So from that point to this point, they have given more time now to analyze the concerns from the Hopi Tribe's side of what we had. So that has been a consultation that we have had with the EPA.

In other subjects throughout with clean water, and with drinking water, et cetera, there is a continual dialogue on other issues that we do deal with on the Hopi reservation.

Dr. GOSAR. Thank you. Lieutenant Governor Manuel, the EPA letter states that the Gila River Indian Community submitted a consultation request with the EPA. Did the EPA respond with a formal consultation with you?

Mr. MANUEL. The Executive Order 13175 initiated by President Clinton at the time called for consultation with Indian tribes, and the Obama Administration has done a lot of consultation with the tribes; the Bureau of Indian Affairs, IHS, and a lot of the cabinet, Labor, Health, et cetera, and Human Services.

But we did receive a letter on May 4th, just this month, from the EPA referencing that they have a consultation policy, and that is good. We did respond to that, and invited them to conduct a consultation with regard to the NGS issue, because we want to start in this consultation every step of the way until the finality of it at some point.

And then we can discuss all the issues, and put everything on the table, and it would be more meaningful in the end, and the end result. But there have been no consultation meetings with the community.

Dr. GOSAR. Well, late arrivals. That is what I thought. You know, the opposition, and I am running short of time, but just a yes or no, but the opposition has said that closing the power plant, what we can do is use renewables, and that has been a problem as well, because we have had the NEPA process being delayed over and over again.

Is it possible in your own mind that we can take away the Navajo Generating Station and supplant it with renewables right now, or at least in the next 10 years? President Shelly, real quickly.

Mr. SHELLY. Yes, Congressman Gosar, let me answer your other question about consultation with the EPA.

Dr. GOSAR. I am afraid that I don't have time for that question.

Mr. SHELLY. The Navajo Nation asked for time for a consultation, and so that what happened. What was the question again, Congressman?

Dr. GOSAR. Is wind or solar a viable option? If we shut down the Navajo Generating Station can we replace it with renewables right now, or in the next 10 or 15 years?

Mr. SHELLY. No. It is a small amount.

Dr. GOSAR. Just yes or no. We are over time.

Mr. MANUEL. No.

Dr. GOSAR. Thank you.

Mr. MCCLINTOCK. Thank you. Mr. Grijalva.

Mr. GRIJALVA. Thank you very much, and gentlemen, welcome, and thank you for the leadership that you provide your communities. If I may, Vice Chairman, let me ask a little bit, because we all went through that water settlement process.

It was lengthy, difficult, and the resolution that Congress passed in terms of a settlement was a very important milestone in settling not only claims, but providing some certainty.

And as one of the largest, if not one of the largest recipients, in terms of allocations on that settlement of the Gila River Community, can you talk about what impact that settlement has relative to the discussion that we are having with the generating station? I don't want to make it an either/or, but to some extent, they are linked, and maybe you can talk about that linkage.

Mr. MANUEL. Well, the health and the future of the tribal people depend upon being able to cultivate our lands. We traditionally are an agricultural people. When the waters of the Gila River were illegally diverted and our tribal members had to dramatically change their diets to one of the cheap processed foods, this devastated our community and resulting in our people developing one of the highest rates of diabetes in the world.

We are still suffering the consequences of the illegal taking of our waters, but we are using our settlement water to refocus on our way of life back to agriculture and traditional foods.

Our access to affordable CAP water was guaranteed to us in the 2004 law, and is critical to the long-term health of my people. If we lose access to the affordable CAP water, we won't be able to continue to cultivate our lands.

Mr. GRIJALVA. And much of the discussion is now and will be in the next panel the either/or proposition. Either we have the Navajo Generating Station and as it functions now, or you don't. So you

have worst case scenarios, and I really believe in the comment that somebody made that it is not an either/or proposition.

That the vitality of the generating station is vital to the region, but at the same time, as all of you indicated, there is a responsibility in terms of the environmental cleanup, if necessary, and how that gets transitioned, and what appropriate accommodations, realistic accommodations, happen.

I don't think that it is going to be shut down, but I also think that the EPA has to do a couple of things in terms of Native Nations that are affected by any decision, and that is an appropriate and formal consultation, government-to-government, period.

And if that has not been done to the letter that it should, then it has to be done because there are significant issues of sovereignty and trust responsibilities that must be dealt with by the Agency.

And, too, I think that regulations, whether it is this one that we are talking about, or whether it is NEPA, the Antiquities Act, the environmental assessments and statements, they are all a part of the process.

And for us to say that all of those need to be eliminated in order to provide some assurance I think is a dangerous step backwards, given the commitment that the nations before us have to the environment and to the earth that they inherited, and we occupy now.

So as we go forward, Mr. Chairman, and Ranking Member, I think that we need to work with the agency, not in an either/or proposition, but in a realistic accommodation that deals with all of the factors here that provide certainty and security for the Nations that are before us today, and other stakeholders, and at the same time doesn't jeopardize both the economy of the area, and the long-term environmental protections that have to be in place.

I think that it can be done. If we make it just a simple fight between either/or, there is going to be a loser, and in this instance, there should not be a loser. So, with that, let me yield back, Mr. Chairman, and I appreciate you calling this hearing.

Mr. MCCLINTOCK. Mr. Quayle.

Mr. QUAYLE. Thank you, Mr. Chairman. And thank you all for being here. Lieutenant Governor Manuel, I just have a couple of questions for you. As you know, the EPA is really charged with protecting the human health and the environment for writing and enforcing regulations.

But these regulations have to be based on actual laws that have been passed by Congress. Now, the EPA seems to be focused on complying with a really broad interpretation of the Clean Air Act, but my question is have they yet to acknowledge to the community that the 2004 Arizona Water Settlements Act needs to be complied with as well?

Mr. MANUEL. No.

Mr. QUAYLE. So they have not talked to you at all about that in terms of complying with the Water Settlements Act, but yet they are going with the broad interpretation of the Clean Air Act?

Mr. MANUEL. Correct, and also the community is the only nation at this time that has a tribal clean air program that was approved by the EPA just last October. So we are all for the Clean Air Act as we move forward, because we know in Arizona, and in our area,

that the PM-10, et cetera, that there is pollution in the Phoenix metro area, and the Pinal and Maricopa Counties.

But we just passed this program for the Clean Air Act, and so we are all for that. However, I think that because the EPA is a regulatory body, they feel that—and I think that they feel that they are a regulatory, and they are just going to do whatever they want anyway.

But they shouldn't because in dealing with these specific areas of the NGS, that is why it is important that we do this consultation process, and that they do it so that it is all on the table as we get to that end, whenever that is, and then we can have a better logical and reasonable study to come out with the best decisions.

Mr. QUAYLE. And just keeping in mind that the Water Settlement Act was just a mere six or seven years ago, because some opponents have really testified that the owners of the plant and the CAP are thwarting the tribes.

Do you think that it is fair to say that the Federal Government, and in this case, the EPA, if it took action that actually led to the closure of the plant, that the Federal Government would be breaking a legal promise that it made to you less than 10 years ago?

Mr. MANUEL. Yes. Yes, they would, and as a matter of fact, if the EPA actions failed to protect our rights under the 2004 laws, we would be forced to bring litigation against the United States. That is not our desired result, but one that we will be forced to take.

We understand the need to improve air quality, and in fact the Committee again has the Tribal Clear Air Program, and with the health of our people, and our economic livelihood depend upon affordable water.

It does not make any sense for the EPA to take action that exposes the United States to significant and unnecessary liability, and the Committee wants to avoid that result. But we have to protect our people.

Mr. QUAYLE. OK. Thank you very much. I yield back.

Mr. MCCLINTOCK. Mr. Luján.

Mr. LUJÁN. Mr. Chairman, thank you very much. To the leaders who are here today, does anyone know how much revenue is generated from The Navajo Nation's generation facility?

Mr. SHINGOITEWA. I just know how much we get, as far as revenue for the Hopi Tribe.

Mr. LUJÁN. And how much is that, Mr. Chairman?

Mr. SHINGOITEWA. We get right now about \$13 million in revenue.

Mr. LUJÁN. And that is from the purchasing of the coal at Kayenta?

Mr. SHINGOITEWA. Yes, and water, right.

Mr. LUJÁN. Do we know how much Peabody makes on the coal that is taken out from Kayenta and sold to the generation stations?

Mr. SHINGOITEWA. I could not answer you on that.

Mr. LUJÁN. If I am not mistaken, Mr. Chairman, from some of the information that I have, and we don't have a dollar amount on how much revenue is generated from the coal taken out, but it is 8.1 million tons of coal annually.

I don't know if maybe the staff later on, Mr. Chairman, might be able to help get me a value for what that is. I just want to make

sure, Mr. Chairman, that as we are talking about the future of energy generation, and the viability of the coal, because if I am not mistaken, the contract for the coal is for as long as the coal lasts, until 2026, or until the coal runs out.

And to make sure that the Hopi are being treated fairly and equitably for these resources as well. And, President Shelly, because the generation facility is on the land of the Navajo, is The Navajo Nation part-owners of The Navajo Nation generating facility?

Mr. SHELLY. No. Do you want me to go further on that?

Mr. LUJÁN. Please, Mr. President.

Mr. SHELLY. As you know, SRP is the operator, and 24 percent is what the Bureau of Reclamation owns in that, and that is what I have.

Mr. LUJÁN. So, Mr. President, the revenue coming to the Nation is through the lease of the land; is that correct?

Mr. SHELLY. Yes, sir, and royalty from the coal.

Mr. LUJÁN. And royalty from the coal. But it is not necessarily tied to the profits being generated from the generation facility?

Mr. SHELLY. No. The Navajo Nation workers are employed there, and so they do labor wise and they are being helped.

Mr. LUJÁN. Very good. And I think it is important because, Mr. President, I know that we had a conversation recently about the work that needs to be done to be able to get power to the homes on the Nation that currently don't have power.

And even at the opening of the spring session, many of the council delegates talked about the importance as well of making certain that we got electricity to the many homes of the Nation that don't have power today.

And I would just say, Mr. Chairman, that as we talk again about the future of the viability here, that one, that I hope we are able to get a witness from Peabody. I know that they are not here today on the roster, and to find out the revenues and the equitable treatment from the contracts.

And to make sure that the revenue going to our tribal brothers and sisters is one that is fair, and maybe one that we can help look at. But also that maybe we can have some agreement, Mr. Chairman, between the Members of the Body that we also look at Indian rural electrification if you will.

And in the same way that we saw rural America be able to benefit from the distribution of power lines, and to be able to get power to rural homes that would have never otherwise gotten it, and to have a similar approach in our United States if you will for The Navajo Nation.

So that we can work together to get that power, those electrons, whether we talk about whatever generation that we are going to be able to move to, because I think there may be a disagreement among all of us, Mr. Chairman, on the type of generation.

But I would hope that we could agree that we can work together in Arizona, in New Mexico, and in Utah, to be able to get power moving into these homes, if there are 18,000 homes without electricity now, and 40 percent of the homes without water.

And I know, Mr. Chairman, as we also look at the viability of economic opportunity, and again going back to water, because as we have seen with our brothers and sisters down in Arizona, as



well as on The Navajo Nation, I know that the chairman, the president, and many others of the Navajo Elders, have shared stories with me of when those cattle would run fat, and the sheep herds were huge, and you would see that rolling and grazing land.

Not just like we see in Napi right now, Mr. President, but all over the nation, and to see what we truly need to do to get to that point. And it is going to mean being able to get the power so that they can pull the water out of the ground with the wells.

Because until then, we are going to still be up against the wall, Mr. Chairman, and so again I appreciate the conversation, and I hope that we can get to some agreement here. Thank you.

Mr. MCCLINTOCK. Thank you. Mr. Markey.

Mr. MARKEY. Thank you, Mr. Chairman, very much. So the EPA in their letter of May 20th says that the EPA has not proposed to close the Navajo Generating Station. EPA's goal is to conduct a thorough analysis to determine on a case by case basis the appropriate level of control so that they can work with all of the concerned parties in order to ensure that the right solution is reached.

So here is the interesting kind of context to put this in. By 2014 the EPA projects that 83 percent of all coal plants in the United States will have low NO<sub>x</sub> burners, and over-fire air will be installed in 83 percent of the capacity of the United States plants, and selective catalytic reduction will be installed in 47 percent of the installed capacity. That is by 2014.

So they are heading toward having all of the facilities in the country be covered. So what they say here in the letter is that they intend on ensuring that these three power plants are treated no differently than any other power plant in the United States, and that they want to work to create a process to make sure that the same environmental technologies are installed here as they are going to mandate over the next several years to every power plant in the country.

So do you have any problems with ensuring that these technologies are installed as they are in all other power plants as long as they use a process that ensures that they are negotiating to ensure that it is done in a way that is compatible with your interests, Mr. President?

Mr. SHELLY. Yes, and this is the first time that I heard that the EPA gave you some option. We have not been getting that. The Navajo Nation is in support of low NO<sub>x</sub> and sulfur, and that is why we are in support of that.

But now I understand where you are being told that it can go from low NO<sub>x</sub>, and based, and supported in phrases. I think my reports here, and my talking point was that a phase-in approach is what we support.

And there are numbers of years where compliance will come, and we have been talking about that with the nation, and The Navajo Nation does support low NO<sub>x</sub>.

Mr. MARKEY. It says, too, that the EPA did not discuss any scenarios in our announced proposed rulemaking that involves the closing of any of the boilers at the Navajo Generating Station because it is not the EPA's intention to require a shutdown, directly or indirectly, of any of the boilers at NGS.

So their goal clearly is to work with you because they are going to require every other power plant in the United States as well. It is just part of a national standard. So assuming that is the case do you have a problem with working with the EPA toward achieving that goal so that you are in compliance, along with every other power plant in the United States?

Mr. SHINGOITewa. Well, Congressman, I guess if I had received that letter, then I would have understood it, but we have not received it.

Mr. MARKEY. OK.

Mr. SHINGOITewa. And I think in answer to that also is that unlike the President, low NO<sub>x</sub> burners are those things that we have to work with, and we do support that concept. But again like I said, I think that if the EPA had told us this, then this would have helped us to ease some of our questions.

Mr. MARKEY. Well, we are going to get you a copy of the letter so that you each can see it, but I think it should be reassuring to you that the EPA is making it clear that their goal is not to shut down any boilers, but to work with you to accomplish the goal. And, Lieutenant Governor, do you have a comment?

Mr. MANUEL. Yes. Mr. Chairman, and Mr. Markey, with regard to that letter, dated May 20th, and I guess that is Friday, and of course we were here Sunday, but that is good, and then what the EPA is saying is that they will go through a consultation policy process, and that is good.

But I just want to reiterate that the committee would support any pragmatic solution to the concerns of the EPA and others about NGS so long as it protects the rights of the community, and doesn't jeopardize its water settlement.

Mr. MARKEY. Yes, but you are not looking to avoid compliance. You just want to make sure that it is done in a way that the boilers are not shut down. Is that the key?

Mr. SHELLY. Excess costs will shut down the plant. That is in my report.

Mr. MARKEY. Yes, but you are not looking for a special exemption from the way that all the other power plants in the country are being viewed?

Mr. SHELLY. No.

Mr. MARKEY. OK. Thank you.

Mr. MCCLINTOCK. We will have a third round of questions involving both panels if there is interest in the Committee. I would like to thank this panel for its testimony, and would ask you if you can to stick around for the third round of questions. I would like to bring up the second panel now. Thank you again for joining us.

I have been informed that we are going to have votes sometime between 4:15 and 4:30. So if we are lucky, we maybe able to get through all of the witness statements before we have to recess again.

[Recess.]

Mr. MCCLINTOCK. Thank you. We will now hear from our second panel of witnesses. I would like to begin by recognizing Mr. William Justice, the former Mayor and Member of the Page Planning and Zoning Commission, from Page, Arizona, to testify. Welcome, Mr. Justice.

**STATEMENT OF WILLIAM JUSTICE, FORMER MAYOR AND  
MEMBER PRO TEM, PAGE PLANNING AND ZONING COMMIS-  
SION, PAGE, ARIZONA**

Mr. JUSTICE. Thank you very much. Mr. Chairman, and Members of both Committees, thank you for the opportunity to address the Committees regarding the concerns of our community, Page, Arizona.

The Navajo Generating Station is located just outside our city limits of Page, a remote Southwestern United States town, with about 7,500 people. We provide the housing and support services for a majority of the employees of NGS, Peabody Energy, and the support services of these companies, as well as the retail ability for nearly all employees of NGS, as well as a majority of the coal miners who work on the Black Mesa of The Navajo Nation, and the joint use area of the Hopi Tribe.

The Page economy is based on two items, tourism and power generation, and as a resident of Page, you either service tourism or power for employment. Our view of the environmental efforts installed and planned by the Salt River Project and the other owners of NGS are sufficient in meeting the environmental needs of our area of the United States.

We feel that the undue costs of systems that would provide a negligible result in pollutants would lead to a catastrophic consequence to our part of the region by the closure of NGS.

Our view on the short and long-term effects on Page, Arizona, The Navajo Nation, the Hopi Tribe, Coconino County, and the State of Arizona, would leave a devastating destruction on the economic, and educational, and the overall pursuit of the American dream, and would deny the inhabitants of this isolated area the ability to recover our livelihood, and where visitors enjoy their vacations when they come there.

Having been a witness to the dire results of the closure of the Mojave Generating Station in Laughlin, Nevada, and the loss of jobs to the coal miners in our area, resulted in the destruction of families by parents being uprooted to meet the financial responsibilities of their families, as well as the undermined ability for children to pursue their educational desires, and further provide for an area in great need of individuals to bring us into the 21st century.

Personally, my Navajo wife and I both lost our jobs because of this. We went from a family earning about \$140,000 a year to a family earning nothing, a dilemma that was felt many times by many families.

In an area where the unemployment rate far exceeds the national averages, the obvious result on our economy would be tremendous. Our school system would lose a significant tax base, and a large portion of our general population would most likely become wards of the State and of the United States.

Not only will this affect Page, but the surrounding reservation communities of LeChee, Kaibeto, Kayenta, Coppermine, Bitter Springs, and Cedar Ridge, and many more. How could such a great public/private partnership that provides such a valuable resource and base of employment be shut down due to negligible aesthetic concerns?

There are no such health issue gains to be accomplished. Who has the capital investment to replace this power within the next 10 years? This just does not appear to make good health or economic sense.

We truly hope the results of these Committees' hearings will lead to an economical continuation of NGS, therefore ensuring a financially successful existence of the inhabitants of our community and surrounding area. Thank you for your time.

[The prepared statement of Mr. Justice follows:]

**Statement of The Honorable William S. Justice, Former Mayor of Page, Member Pro Tem of the Page Planning and Zoning Commission, Page, Arizona**

Mr. Chairmen and Members of both Committees. Thank you for the opportunity to address the committees regarding the concerns of our community, Page, Arizona.

Navajo Generating Station is located just outside the city limits of Page, Arizona, a remote Southwestern United States town with about 7,500 people. We provide the housing and support services for a majority of the employees of NGS, Peabody Energy, and the support services of these companies; as well as the retail ability for nearly all employees of NGS; as well as, a majority of the coal miners who work on the Black Mesa of the Navajo Nation and the joint use area of the Hopi Tribe. The Page economy is based on two items, tourism and power generation. As a resident of Page, you either service tourism or power for employment.

Our view of the environmental efforts installed and planned by Salt River Project and the other owners of NGS are sufficient in meeting the environmental needs of our area of the United States. We feel the undue cost of systems that would provide a negligible result in pollutants would lead to a catastrophic consequence to our part of the region by the closure of NGS. Our view on the short and long-term effects to Page, AZ, The Navajo Nation, The Hopi Tribe, Coconino County, and the State of Arizona, would leave a devastating destruction on the economic, educational, and the over all pursuit of the American Dream and would deny the inhabitants of this isolated area the ability to recover their livelihood or visitors enjoy their vacation.

Having been a witness to the dire results of the closure of the Mohave Generating Station at Laughlin, NV, the loss of jobs to the coal miners in our area resulted in the disruption of families by parents being uprooted to meet the financial responsibilities of their families as well as the undermined ability for children to pursue their educational desires to further provide for an area in great need of individuals to bring us into the 21st Century. Personally, my Navajo wife and I both lost our jobs because of this. We went from a family earning about \$140,000 a year to a family earning nothing. A dilemma that was felt many times by many families.

In an area where the unemployment rate exceeds national averages, the obvious result on our economy would be tremendous. Our school system would lose a significant tax base, and a large portion of our general population would most likely become wards of the State and the United States. Not only will this effect Page but the surrounding reservation communities of LeChee, Kaibeto, Kayenta, Coppermine, Bitter Springs and Cedar Ridge.

How could such a great public/private partnership that provides such a valuable resource and base of employment be shut down due to negligible aesthetic concerns? There is no health issue gains to be accomplished. Who has the capital investment to replace this power; within the next 10 years? This just does not appear to make good health or economic sense!

We truly hope the results of these Committee hearings will lead to an economical continuation of NGS, therefore, insuring a financially successful existence of the inhabitants of our community and surrounding area. Thank you for your time.

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Mr. McCLINTOCK. Thank you very much. Our next witness is Mr. Richard Silverman, General Manager of the Salt River Project, from Phoenix, Arizona. Welcome.

**STATEMENT OF RICHARD H. SILVERMAN, GENERAL  
MANAGER, SALT RIVER PROJECT, PHOENIX, ARIZONA**

Mr. SILVERMAN. Chairman McClintock, Ranking Member Napolitano, Committee Members, I am Richard Silverman, general manager of the Salt River Project. I thank you for the opportunity to be here today to testify concerning the Navajo Generating Station.

I also want to thank Congressmen Gosar and Grijalva for their leadership and the tribal leaders who were on the first panel for their comments and continued partnership on this issue. The plant as you have heard is located on the Navajo Reservation near Page, Arizona.

It is in fact a 2,250 megawatt coal fired generating station that provides around the clock energy service to more than 3 million electric customers in Arizona, California, and Nevada.

NGS is not only an important baseload resource for the region, but it is also the primary energy source that moves water 336 miles for the Central Arizona Project to deliver this vital resource to millions of people in Arizona, including 10 of Arizona's Native American communities.

The Navajo Project is an important economic driver for Northern Arizona. NGS employs more than 500 people, 80 percent of whom are Navajos, and between NGS and the Kayenta Mine, we have a combined annual operating budget of approximately \$700 million, including more than \$140 million to the Navajo and Hopi Tribes through coal royalty payments, permit and lease fees, scholarships, and direct payroll for nearly 1,000 employees.

SRP operates NGS on behalf of the participants, and as you have heard that includes the United States Bureau of Reclamation, the Los Angeles Department of Water and Power, the Arizona Public Service Company, Nevada Energy, and Tucson Electric Power Company, and the Salt River Project.

NGS participants are and have always been committed to environmental protection and responsible environmental stewardship. This commitment began during construction nearly 40 years ago, when electrostatic precipitators known as ESPs were installed at NGS to remove 99.5 percent of fly ash particulates.

Later in response to visibility issues in the region, and in agreement with the EPA and other environmental groups, NGS participants once again worked proactively to address visibility concerns by installing scrubbers on all three units at the plant to eliminate over 90 percent of sulfur dioxide emissions.

This project placed NGS as a top performer in its class in reducing sulfur dioxide. Recently and voluntarily, NGS participants installed low NO<sub>x</sub> burners with over-fire air on all three units.

The new burners are expected to reduce nitrogen oxide emissions by at least 40 percent. For more than four decades NGS participants have worked in partnership with the public elected officials, Federal, Tribal, and State agencies, and other concerned parties, and have invested more than one-half billion dollars in technological improvement projects at NGS.

Despite the history of environmental performance, which has kept NGS in full compliance with all provisions of the Clean Air Act, the current ongoing EPA BART process could require installa-

tion of selective catalytic reduction technology, SCR<sub>s</sub>, to further reduce NO<sub>x</sub>.

This requirement carries a potential price tag in our judgment of over \$1 billion if bag houses are also required. Studies have shown that such technology does not improve visibility noticeable to the human eye, and this investment would come at time when the plant faces many uncertainties, and could put continued operation in jeopardy.

Mr. Chairman and Subcommittee Members, thank you for the opportunity to appear before you today.

[The prepared statement of Mr. Silverman follows:]

**Statement of Richard H. Silverman, General Manager,  
Salt River Project Agricultural Improvement and Power District**

Chairmen McClintock and Young, Ranking Members Napolitano and Boren, and Members of the Subcommittees on Water and Power and on Indian and Alaska Native Affairs, thank you for the opportunity to submit testimony today on Protecting Long-Term Tribal Energy Jobs and Keeping Arizona Water and Power Costs Affordable: The Current and Future Role of the Navajo Generating Station (NGS). I also would like to thank Representatives Franks, Gosar and Grijalva for their interest and involvement with the Committee on this important issue.

My name is Richard H. Silverman. I am the General Manager of the Salt River Project Agricultural Improvement and Power District (Salt River Project), a political subdivision of the State of Arizona that provides retail electric service to 950,000 residential, commercial, industrial, agricultural and mining customers in Arizona. Salt River Project operates or participates in a broad portfolio of generating resources, including nuclear, coal, natural gas, hydroelectric and renewable facilities. Salt River Project also operates a water delivery system providing the primary water supply for an area of approximately 250,000 acres that includes major portions of the Arizona cities of Phoenix, Glendale, Mesa, Tempe, Chandler, Gilbert, Peoria, Scottsdale, and Tolleson. I am here today to provide an overview of the history of NGS, explain its importance to the southwest, provide an overview of the ongoing federal Environmental Protection Agency's (EPA) Best Available Retrofit Technology (BART) process, and describe the extensive and complex issues the participants in the plant are facing at this time.

NGS is a coal-fired generating station consisting of three units, each capable of producing approximately 750 megawatts (MW) of electric power, for a total plant rated output of 2,250 MW. Salt River Project is the operating agent for itself and the five other participants in NGS: the United States Bureau of Reclamation, Arizona Public Service Company, Los Angeles Department of Water and Power, NV Energy, and Tucson Electric Power Company. The plant, which is located on the Navajo Reservation near Page, Arizona, is an important energy provider for all of its participants. NGS provides critical baseload energy to meet each utility's customer needs year round (but especially during the peak summer months), and plays a key role in Central Arizona Water Conservation District's (CAWCD) delivery of water to Native American communities, farmers, and cities in Arizona. Yet, the participants in NGS currently are faced with a set of complex issues that, when viewed in light of the potential EPA requirement for significant capital expenditures for emission controls that would result in imperceptible visibility improvement, threaten the long-term viability of the plant. Those issues include the need for lease extension and rights-of-way renewals, and the negotiation of key agreements for coal and water. Despite these challenges, however, we remain committed to working closely with the Native American, water and other stakeholders, and greatly appreciate our continued relationship with them and their continued engagement in issues affecting NGS.

**United States' Interest in NGS**

It is important to understand how the United States came to become the largest individual participant in NGS. In the 1960s, several southwest utilities, including Salt River Project, were jointly evaluating the construction of a series of plants that would make use of the quality low-sulfur coal resources located on the Navajo and Hopi Reservations. The utilities were planning the construction of several such plants—NGS Units 1–3, the addition of three more units at the Four Corners Generating Station, and another facility known at the time as Kaiparowits. All of the facilities required significant federal involvement for approval of tribal leases,

issuance of federal rights-of-way, coal leases and permits, and execution of water service contracts. Only NGS subsequently was constructed and put into operation.

At the same time the utilities were considering the plants, a parallel process was underway for the development of the Central Arizona Project (CAP) under the Colorado River Basin Project Act of 1968. As the CAP initially was conceived, the power needed to pump Colorado River water into central and southern Arizona would be supplied through the construction of two additional hydrogeneration facilities on the Colorado River at Bridge Canyon and Marble Canyon. Objections raised by environmental organizations to the construction of new dams on the Colorado River led then-Secretary of the Interior, Stewart Udall, to broker a compromise that resulted in the foregoing of the construction of these two Colorado River dams in exchange for Congress authorizing the United States, through the U.S. Bureau of Reclamation, to acquire the right to output from a thermal electric power plant, NGS, for purposes of providing pumping power, and to provide a source of revenue to repay the federal debt incurred for CAP construction. As a result of the environmental compromise, the United States acquired a 24.3% entitlement to the output from NGS and became the plant's single largest participant.

#### **Economic Importance of NGS**

Today, in addition to providing the power to pump CAP water to the major metropolitan areas of Arizona, NGS provides energy to more than 3 million customers in Arizona, California and Nevada through its utility participants. As a baseload resource that produces energy on a 24x7 basis, NGS could not be easily replaced by other types of resources, including renewables. NGS plays a critical role in providing cost-efficient baseload power to the southwest, helping the utilities control energy costs, especially important in these economic times.

Both NGS and the Kayenta mine that provides coal to the plant are vital economic drivers for the Navajo Nation, Hopi Tribe, the Town of Page, Coconino County, Arizona, the State of Arizona and 10 Native American Communities. NGS provides high-paying jobs for 540 skilled workers, of which more than 80 percent are Navajo.<sup>1</sup> During annual overhauls, NGS and its contractors employ more than 1,000 temporary skilled workers, contributing significantly to the Page economy during the tourism off-season. The Kayenta Coal Mine, operated by Peabody Western Coal Company and located on the Navajo and Hopi Reservations, supplies the coal for NGS via a dedicated 78 mile rail line and employs an additional 420 or so skilled workers, primarily members of the Navajo Nation and Hopi Tribe. NGS is the only remaining purchaser of coal from the Kayenta mine and there currently is no means to transport coal from the mine to any other purchaser. The high-paying jobs at NGS and the mine support many other jobs in Page and the surrounding area, and NGS tax payments benefit local schools and other governmental functions.

NGS and the mine have a combined annual operating budget of approximately \$700 million. This includes more than \$140 million in direct payroll for almost 1,000 employees, employee benefits, coal royalty payments to the Navajo Nation and Hopi Tribe, permits, lease fees and scholarships. The amount paid to the Navajo Nation is expected to increase if the lease is extended beyond 2019 and the rights-of-way for NGS are renewed. Coal royalties, which also can be expected to increase some over time, currently provide about \$14 million annually to the Hopi Tribe, which represents 88 percent of the Hopi Tribal government's annual revenue.

NGS also is a key component for the United States in meeting its federal trust responsibilities under the 2004 Arizona Water Settlements Act (AWSA), Public Law 108-451, and other Arizona Indian water rights settlements. Revenues generated by the sale of surplus power from NGS help fund repayment of the federal debt for the CAP and, as a consequence of the AWSA, underwrite the cost of delivering CAP water to Arizona's Indian tribes, fund the construction of CAP water delivery facilities for these tribes, and provide a settlement fund for future Arizona Indian water settlements. Without these NGS-generated revenues, Arizona's tribes could not afford to use their CAP water entitlements for re-establishing their agricultural economies on their reservation lands, and none of the other benefits accruing to Arizona tribes under the AWSA would materialize. Allowing these critical revenues to fade away through closure of NGS would turn the benefits provided to the tribes under the AWSA into another unfulfilled promise.

#### **Environmental Controls at NGS**

The participants in NGS have consistently ensured that the plant complies with applicable environmental regulations. Even prior to the passage by Congress of two

<sup>1</sup>The average NGS wage with benefits is approximately \$105,000 compared to an average of \$48,000 for Coconino County.

key environmental regulations at issue here—the Clean Air Act and the National Environmental Policy Act (NEPA)—the NGS participants agreed in the lease with the Navajo Nation to install emissions control equipment to address particulate matter. During the 1970s’ construction of NGS, the participants installed \$200 million in environmental control equipment, including hot side electrostatic precipitators (ESPs) with a design efficiency to remove 99.5 percent of particulate matter. The ESPs capture fly ash, which is then available for use in concrete, cement and other construction materials.

In 1977, Congress amended the Clean Air Act, adding a new Section 169A that established as a national visibility goal “the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from man-made air pollution.” CAA § 169A(a)(1). Section 169A directed EPA to develop appropriate regulations to make “reasonable progress” toward that visibility goal. Congress did not set a deadline to attain the goal in 1977, but it required EPA to balance the cost of emission controls and resulting visibility improvement in determining “reasonable progress.” In response, EPA issued its “Phase I” visibility regulations to deal with visibility impairment caused by large, individual sources, designated “Plume Blight” or “Reasonably Attributable Visibility Impairment” (“RAVI”), but deferred adopting “Phase II” rules to deal with regional haze caused by a multitude of sources, pending advances in the science of visibility impairment.

In the late 1990s, pursuant to an earlier evaluation process under Section 169A, the NGS participants installed wet limestone scrubbers on all three units to address visibility issues at a cost of approximately \$420 million pursuant to a 1991 agreement with environmental groups and the EPA. The scrubbers eliminate more than 90 percent of sulfur dioxide (SO<sub>2</sub>) from plant emissions and, in conjunction with the plant’s use of low-sulfur coal, resulted in NGS becoming a top performer in its class in reducing SO<sub>2</sub> emissions.

In the 1990 Amendments to the Clean Air Act, Congress added a new Section 169B, which directed EPA to undertake a comprehensive, five-year visibility research program and issue Phase II regulations to deal with regional haze. Although that program did not materialize due to a lack of funding, Section 169B also established the Grand Canyon Visibility Transport Commission (“GCVTC”) and charged it with the responsibility of assessing existing visibility conditions and recommending measures to improve visibility in 16 Class I areas on the Colorado Plateau, including the Grand Canyon. After extensive technical studies and a stakeholder process conducted over a five-year period, the GCVTC issued its final report in 1996. Salt River Project and the other utility participants of NGS all were active participants in the process.

According to the GCVTC’s final report, visibility impairment in Class I areas on the Colorado Plateau is caused almost exclusively by three types of air pollutants in roughly equal proportions: dust particles, sulfates, and elemental and organic carbon. On average, nitrate particles are only minor contributors to visibility impairment on the Colorado Plateau. Sulfate and nitrate particles are formed in the atmosphere from emissions of SO<sub>2</sub> and NO<sub>x</sub> resulting from fossil fuel combustion, including coal-fired power plants. Dust and carbon particles originate from both natural and man-made sources such as forest fires, soil erosion, mobile sources, and emissions from various small and large industrial sources.

EPA promulgated its regional haze rules in 1999, incorporating many of the recommendations of the GCVTC. EPA issued revised rules in 2005 (the “BART Rules”). The BART Rules establish a starting point for States to develop their own “reasonable progress” state implementation plans (SIPs) to achieve the national visibility goal in Class I areas by 2064. 40 C.F.R. § 51.308(d)(1). Under the BART Rules, each state is given the flexibility to determine emission limitations that represent BART for certain stationary sources within the State. Under the Tribal Authority Rule (“TAR”), EPA asserts the authority to promulgate a federal implementation plan (FIP) for sources like NGS that are located on an Indian reservation, if EPA determines such regulations are “necessary or appropriate to protect air quality” and the tribe has not submitted a Tribal Implementation Plan (“TIP”). 40 C.F.R. § 49.11(a). The Navajo Nation has not submitted a regional haze TIP applicable to NGS.<sup>2</sup> In its Advanced Notice of Proposed Rulemaking, EPA determined that it has the authority to promulgate a FIP to establish BART requirements for NGS. 74 Fed. Reg.

<sup>2</sup>Under the lease agreement between the Navajo Nation and the participants in NGS, the Navajo Nation agreed that it “will not directly or indirectly regulate or attempt to regulate the Lessees in the construction, maintenance or operation of the Navajo Generating Station and transmission systems of the Lessees, the construction, maintenance or operation of the fuel transportation system of the Lessees or the Fuel Transporter.”



44313, 44315 (Aug. 28, 2009). EPA thus has undertaken a task that typically would be performed by a State or a tribe. By stepping into this role, EPA is obligated to comply with the criteria and process established in the Clean Air Act and its own regulations for determining BART.

NGS is one of only two “BART-eligible” sources on the Navajo Reservation.<sup>3</sup> BART-eligible sources, generally, are the class of large stationary sources that were put in operation between August 7, 1962 and August 7, 1977, and that fall within one of several listed source categories. 42 U.S.C. § 7491(b)(2)(A); 40 C.F.R. § 51.301. BART applies to such sources whose emissions, as determined by the State, “may reasonably be anticipated to cause or contribute to any impairment of visibility in any mandatory Class I Federal area.” 42 U.S.C. § 7491(b)(2)(A); 40 C.F.R. § 51.308(e)(1)(ii).

The BART determination now being considered by EPA for NGS is being done pursuant to the regional haze program, which is intended to address *visibility*. While Congress granted EPA broad authority under the Clean Air Act to address visibility in Class I areas, Section 169A of the Clean Air Act also made clear that decisions by states—or in this case EPA—regarding “reasonable progress” and what constitutes BART must take into consideration “the costs of compliance, the energy and nonair quality environmental impacts of compliance, any existing pollution control technology in use at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.” 42 U.S.C. § 7491(g)(2); 40 C.F.R. § 51.301. Thus, just as EPA designed the BART Rules to give the states maximum flexibility in meeting the visibility goal, EPA also should exercise that flexibility. Such an approach would be consistent with President Obama’s January 18, 2011 Executive Order on Improving Regulation and Regulatory Review, which is premised on the principle that:

Our regulatory system must protect public health, welfare, safety, and our environment while promoting economic growth, innovation, competitiveness, and job creation. It must be based on the best available science. It must allow for public participation and an open exchange of ideas. It must promote predictability and reduce uncertainty. It must identify and use the best, most innovative, and least burdensome tools for achieving regulatory ends. It must take into account benefits and costs, both quantitative and qualitative. It must ensure that regulations are accessible, consistent, written in plain language, and easy to understand. It must measure, and seek to improve, the actual results of regulatory requirements.

For NO<sub>x</sub> emissions from coal-fired electric generating units (EGUs), the BART Rules specifically established presumptive BART limits through notice-and-comment rulemaking. The presumptive NO<sub>x</sub> emissions limits for coal-fired EGUs vary according to individual source characteristics and type of fuel burned (bituminous, sub-bituminous, lignite, etc.). The presumptive BART limit applicable to the EGUs present at NGS is based intentionally and expressly on combustion controls such as low-NO<sub>x</sub> burners with separated over-fire air (LNB/SOFA) only; the presumptive BART limit is not based on post-combustion controls such as selective catalytic reduction (SCR). 70 Fed. Reg. 39104, 39172 (July 6, 2005). *With the installation of LNB/SOFA, NGS meets or exceeds the presumptive BART limits established by EPA.*

#### **BART for NGS**

Pursuant to the BART Rules, Salt River Project completed a BART analysis and submitted it to EPA in December 2008. That analysis concluded that BART for NGS could be satisfied by installing LNB/SOFA, and the NGS participants decided to proceed proactively with that installation ahead of a final determination by EPA. Even after Salt River Project completed additional analyses at EPA’s request, the conclusion remained that BART for NGS is LNB/SOFA. Salt River Project’s analyses took into account all five factors set out in EPA’s BART Rules and Salt River Project continues to believe that BART for NGS can be satisfied by LNB/SOFA, especially in light of the unique role that the plant plays in the southwest.

The NGS participants recently completed the installation of LNB/SOFA on all three units at a combined cost of approximately \$45 million. Those advanced combustion controls change the way fuel and air combust in the furnace, reducing NO<sub>x</sub> emissions by about 40 percent, or 13,000 tons per year.

The primary alternative to reducing NO<sub>x</sub> emissions would be the installation of SCR. Utilizing a catalyst, this technology promotes a chemical reaction between the

<sup>3</sup>The other is the Four Corners Power Plant. Salt River Project also has an ownership interest in that plant.

NO<sub>x</sub> and ammonia, resulting in the elimination of NO<sub>x</sub> and ammonia and the formation of nitrogen and water. While SCRs could offer some additional reduction of NO<sub>x</sub> emissions over LNB/SOFA, factoring in all related equipment associated with SCRs, including the possible added requirement of new particulate matter controls due to likely increases in sulfuric acid mist emissions, the cost to retrofit NGS beyond LNB/SOFA could reach over \$1 billion and the incremental improvement in Class I areas would be imperceptible to the human eye. This results because, as discussed above, NO<sub>x</sub> emissions are responsible for only a small fraction of the regional haze sometimes observed in Class I areas within the Colorado Plateau, and because power plant emissions only account for a fraction of the NO<sub>x</sub> emissions in the region.

An order to install SCR during the current rulemaking process, especially before the lease and rights-of-way are renewed, could leave the viability of NGS in jeopardy. At a minimum, economic studies done by CAP indicate that costs for water delivery to its customers would increase significantly.

#### **Current Challenges Faced by NGS Participants**

As indicated above, the participants in NGS face a number of uncertainties in addition to the ongoing BART process at this time. The initial term of the plant site lease with the Navajo Nation and the existing right-of-way for the plant site expire in 2019. Additional rights-of-way for the associated transmission lines, and for the railroad, which brings the coal to the plant from the Kayenta mine, expire over the following few years. Other agreements for the coal and water supplies for the plant also will need to be extended or negotiated.

Salt River Project is engaged on behalf of the participants in discussions with the Navajo Nation over the terms of the lease extension. After those discussions are completed, the Navajo Nation will submit the lease to the U.S. Department of Interior Bureau of Indian Affairs for review and approval, and Salt River Project will submit applications to renew the rights-of-way. Both of those actions are anticipated to trigger the need for NEPA compliance, which will take several years to complete and the outcome of that process is difficult to predict at this time.

Although the NGS participants are committed to negotiating a lease extension with the Navajo Nation and successfully completing the NEPA process to secure the necessary renewals for the continued operation of NGS, it would be difficult for the participants to justify an investment of potentially more than \$1 billion at NGS for emission controls with the uncertainties that the plant currently faces. When combined with the other costs the plant participants could expect to incur for other environmental regulations (such as EPA's proposed rules on hazardous air pollutants (the EGU MACT rule), coal combustion residuals and cooling water intake structures), the uncertainty only increases. For this reason, the NGS participants initiated a stakeholder process to look at options and encourage the development of creative alternatives. That process has been important to get all of the issues on to the table and discuss points of agreement, but final principles of agreement have not yet been reached.

#### **Summary**

In summary I would like to emphasize the following points:

- NGS is a crucial electric generating facility that provides round-the-clock service to millions of people throughout Arizona, California and Nevada.
- NGS is the primary energy source for the CAP, a vital provider of water for millions of people in Arizona and 10 Native American communities.
- As the plant's largest participant, the United States has an important stake in the ongoing operation and future of NGS.
- The economic welfare of the Navajo Nation and the Hopi Tribe are dependent upon the continued operation of NGS.
- The continued operation of NGS is central to the ability of the United States to meet various Indian water rights settlement obligations.
- The BART determination now being considered by EPA for NGS is being done pursuant to the regional haze program, which is intended to address visibility.
- According to the GCVTC's final report, nitrate particles are only minor contributors to visibility impairment on the Colorado Plateau.
- Based upon the results from a BART analysis performed by Salt River Project in 2008 in accordance with the BART Rules, BART for NGS should be the installation of LNB/SOFA.
- In advance of an EPA determination, the NGS participants voluntarily invested \$45 million in LNB/SOFA technology. Installation was completed on all three units in April 2011.

- The estimated cost of an SCR installation at NGS would exceed \$1 billion. Given prevailing uncertainties related to continued NGS operation beyond 2019, if the EPA renders a determination that SCR is required at NGS, then the participants may be unable to justify continued operation.
- Scientific studies have demonstrated that the human eye cannot detect visibility distinctions between a \$45 million LNB/SOFA technology investment and a \$1+ billion SCR technology investment.
- SRP believes that the LNB/SOFA technology choice is the appropriate BART determination for NGS.

Chairmen McClintock and Young and Members of the subcommittees, thank you again for the opportunity to testify before you today on this important issue. I would be happy to answer any questions.

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Mr. McCLINTOCK. Thank you, Mr. Silverman. Our next witness is Mr. Vernon Masayesva, Executive Director of the Black Mesa Trust, from Flagstaff, Arizona, to testify. Welcome.

**STATEMENT OF VERNON MASAYESVA, EXECUTIVE DIRECTOR,  
BLACK MESA TRUST, FLAGSTAFF, ARIZONA**

Mr. MASAYESVA. I have a very long last name which is very hard to pronounce, and so by the time that I introduce myself, I lost a minute. We are here because of the threat of the Navajo Generating Station closing, and there is a warning sign out there that if this happens, there is going to be an economic meltdown on the Hopi Reservation where I live.

Unfortunately, the issue is framed purely as an economic issue. The cultural values, traditions, is absent from the discussion. So it is not a balanced debate. It is very important to understand that the Black Mesa coal is the footstool of the Central Arizona Project, and in order to understand that, we have to have a good understanding of how the Hopis got into this mess, and who got us into this mess.

And it begins from the early 1900s, when there were water wars fought between the seven states. Black Mesa coal came into the picture in the 1960s when efforts to generate hydroelectric power to move a man-made river by damming up the Grand Canyon had failed.

The idea of using coal to generate power was conceived in the United States Department of the Interior, but before the Navajo Generating Station could be built, two things had to happen.

The Navajo Nation had to waive its claim to 50,000 acre-feet of Arizona's share of the Upper Basin River. Incidentally, that resolution is expiring in 2019, and that to me is a big issue before you.

The Hopi and Navajo had to be convinced to open up their land for coal mining. Both objectives were achieved with a letter secured by a lawyer for the Hopi Tribe named John Boyden, who single-handedly negotiated a sweetheart deal with Central Royalty, a Peabody subsidiary.

Under the terms of the lease, which was amended a number of times, Peabody secured rights to 670 million tons of coal on 68,000 acres of Hopi and Navajo Reservation. The Hopi Council did not know at the time that Mr. Boyden was billing Peabody for expenses during the lease negotiations.

The lease gave Peabody unlimited access to ancient waters stored below the ground in an aquifer for a price of \$1.67 per acre-

foot. Around 1985, the price went up to \$150 per acre-foot, which is still a bargain price.

That slurry ended on December 31, 2005, but not until 45 billion gallons of pristine water was wasted, enough water to sustain 10,000 Hopis for over 300 years, gone in just 35 years, all to preserve and protect aquifers under Central Arizona.

Now 40 years later the Hopi and Navajo Nation people are finally waking up and what they see is appalling. Slowly, they are beginning to understand the magnitude of the damage caused by the world's largest strip mining under the watchful eyes of the Secretary of the Interior.

What is the damage that concerns us? Thousands of Hopi ancestral villages and burial sites have now been destroyed by strip mining. Failure of the government to protect the Navajo aquifer and the cultural resources of the Hopi-Navajo.

The Federal Government has never required Peabody to impose a groundwater reclamation plan and bond by the way, and then there are the health impacts on Black Mesa from Peabody's blasting and coal dust.

A grassroots movement is building among the Hopi and Navajo to shut the mining down, and to begin a transition into clean energy sources. As you can see the debate over the best way to eliminate nitrogen pollution is not the only issue facing NGS owners, CAP operators, and Peabody.

Important regulations control toxic mercury, coal, and ash, and global warming is just around the corner. Then there is the matter of the conflict between the Department of the Interior, and the Bureau of Reclamation is playing in this whole scenario. They are the hundred percent owners—

Mr. McCLINTOCK. Mr. Masayesva, I am going to have to interrupt. We are out of time, but we will come back to you during questioning.

Mr. MASAYESVA. Thank you.

[The prepared statement of Mr. Masayesva follows:]

**Statement of Vernon Masayesva, Hopi Tribal Member, Kykotsmovi, Arizona**

Hello, my name is Vernon Masayesva, a Coyote clan member of the Hopi Tribe. I am here to speak in my behalf as a concerned citizen.

Black Mesa coal and Glen Canyon Dam are the footstools of Central Arizona Project.

The initial plan to dam up the Grand Canyon to create hydroelectric power needed to push water up-hill to Phoenix and Tucson through CAP canal failed.

So a plan was conceived in the Office of Secretary of Interior to build Navajo Generating Station using coal from Hopi and Navajo lands, and water stored in the Dam called Lake Powell.

Before the project could move forward, two things needed to happen:

1. The Navajo Nation had to give up their claim to Arizona's share of Upper Basin Colorado River.
2. Navajo and Hopi Tribe had to open up their lands to coal mining

So, the Secretary sent his envoy carrying a resolution to the Navajo capitol. The purpose of the resolution was to waive Navajo water claim to Arizona's Colorado River share of the Upper Basin in return for job preference and economic benefits.

The Navajo Council reluctantly passed the resolution suspending their claim to 50,000 acre-feet of water for 50 years.

Suspension will end in 2019 along with land leased to NGS owners and a right-of-way to deliver coal to NGS.

A former lawyer for the Hopi Tribal, John Boyden, now deceased, joined the circle of architects. His mission was to persuade the Hopi Tribal Council to open the door to mining.

John Boyden convinced the Council to give Sentry Royalty, a subsidiary of Peabody Coal Co, exclusive rights to explore and develop coal on Black Mesa and delivered to NGS and Mohave Generating Station located in Nevada.

Coal would be delivered to NGS by rail. As 273 mile slurry line would provide to MGS. The Hopi Tribal Council initially turned down the slurry operation, but changed their minds when confronted by Boyden.

Peabody currently has rights to about 620 million tons of coal on a 68,000 acre leasehold.

The Hopi, like the Navajo, were drawn into the triangle of deceit, not to get rich, but to subsidize owners and operators of generating station, mining company and CAP.

Hopi was also promised economic prosperity and jobs. Today only about a dozen work at the mine. I am not aware of any Hopi who works at NGS.

In 1970, mining started. Coal was transported 273 miles via coal slurry pipeline to MGS across state line.

4000 acre-feet of ancient pristine fossil water from a 15,000 to 35,000 year old aquifer was used annually to operate the slurry.

The price of water approved by Secretary Udall in his capacity as trustee of Indian Tribes' natural resources, was \$1.67 for each acre-foot of water (325,000 gallons equal an acre-foot). Coal was sold at 3.33% of the market value.

The slurry was forced to close in 2005 but not before over 45 billion gallons of sole-source drinking water was lost, enough water to serve 10,000 Hopis for at least 300 years at the present use, which is about 350 acre-feet per year.

Six years later, NGS began generating power to run 14 pumping stations bringing water to Phoenix, Arizona from the mighty Colorado.

Now, 40 years later, the grassroots are realizing the magnitude of destruction caused by the world's largest strip mining on Black Mesa and they are shocked and angry. Here are some examples:

- Over-drafting of non-renewable water stored in Navajo aquifer and failure of US Office of Surface Mining Reclamation and Enforcement to require Peabody to post groundwater reclamation plan and bond.
- Waters from Black Mesa basin that used to water Hopi corn fields in Moencopi shut down by construction of over 160 impoundment ponds
- Evidence of contamination of pristine fossil water stored in the N-aquifer, waters which was put into the ground during the last ice-age.
- Destruction of unknown number of Hopi ancestral villages and burial sites, which the elders call a "living museum, a cathedral and an academy of our oral traditions."

In a 20 year survey, starting in 1968, an archaeological field school hired by Peabody, found 1,026 historic and 1,596 pre-historic sites, of which only 168 sites were excavated. Only 178 burial sites were found.

What happened to the rest of the remains of Hopi ancestors and the ancestral villages has yet to be revealed.

For me, this is like tearing pages from our history book, like tearing pages from the Torah, Koran, and the Bible. It is so because Black Mesa is a shrine, a temple we call Tuuwansavi, Earth Center, a safe homeland, a sacred land.

Last year the Hopi people pleaded with President Obama to end the destruction. They have yet to receive a response. I will leave a copy of the letter for the record.

The controversy EPA's proposal to require NGS owners to install Selective Catalytic Reducers in their plants to reduce nitrogen oxide has brought us here.

Owners are saying that if EPA's proposal prevails, NGS will be shut down. This will cause a domino effect. Mining will end. Hopi economy will be devastated. Hundreds of jobs will be lost.

The price of water delivered to Phoenix and Tucson and other Southern Indian Tribes will rise astronomically along with the cost of power to millions of rate-payers, businesses and farmers.

The debate over BART to improve visibility is just one issue. Next to come are regulations to limit mercury, and carbon dioxide.

And there are many controversial issues facing Peabody Coal Co. The cost of resolving these issues will have a direct economic impact on NGS because the two are Siamese twins. Once cannot survive without the other.

The other issue is the conflicted role of the Bureau of Reclamation (BOR). BOR owns CAP, a majority share of NGS. BOR buys coal from Peabody, co-regulate the mine and is responsible for 24.3% of pollution.

Black Mesa Trust's mission, of which I am the director was founded in 1998, is to preserve waters and land on Black Mesa using ancient wisdom and modern science, has prepared a proposal to bring multiple solutions to multiple issues.

For example BMT proposes that NGS transition away from coal to clean and cleaner fuel sources, specifically solar and natural gas in 10 years.

In the process of transitioning, create alternative sources of revenue and jobs for the Hopi and Navajo nations with the help of NGS owners and managers of CAP.

This includes building a 1000 plus MW solar plant on Hopi and another one on Navajo. A construction of 550 KV transmission line alongside the existing El Dorado line which runs from Cameron, near Flagstaff, to the Four Corners power plant through Hopi and Navajo lands.

This will open up a bottle neck and bring green power to market.

These projects can be done in partnership with NGS owners. Solar powered plants can be used to help meet Arizona Corporation Commissions' mandate that a percentage of power come from renewable energy.

Unfortunately, the debate over nitrogen pollution is being used to create further conflict and alarm. It has pitted Navajo against Navajo and could very well pit Hopi against Hopi, and Hopi against Navajo!

This is morally and ethically wrong especially when it is so unnecessary.

Together we can save NGS and guarantee that customers of CAP and customers of NGS will continue receiving water and electricity at reasonable cost.

Together, we can finally bring economic justice to Hopi and Navajo, create economic prosperity and hundreds of jobs to Arizonans including Hopi and Navajo people, who are experiencing the highest unemployment rate, 85% on Hopi.

Together we can establish an international clean energy showcase on the Colorado Plateau which some Hopis call a "Learning Plaza".

Instead of putting our energy and money fighting over EPA's proposal, we need to turn the negative energy into positive energy and bring about a win-win resolution for everyone.

Kwaq kwa, Thank you.

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Mr. MCCLINTOCK. Thank you for joining us, and our next witness is Mr. Marshall Johnson, a member of The Navajo Nation from Kykotsmovi, Arizona. Welcome.

**STATEMENT OF MARSHALL JOHNSON, NAVAJO INDIVIDUAL,  
KYKOTSMOVI, ARIZONA**

Mr. JOHNSON. Thank you. Mr. Chairman, and Members of the Committees, thank you for the opportunity to speak here before you. My name is Marshall Johnson, and I am from Black Mesa, Arizona, and originally from Forest Lake.

I am the founder and director of To Nizhoni Ani, a grassroots organization whose mission is to preserve and protect the environment of Black Mesa. To begin, I want to say that the work that the EPA is doing is important for people everywhere, not just indigenous people.

We must get a handle on our emissions, and the degradation of our air is a direct violation of human rights, the right to breathe clean air. That said, I would like to express the vision of the people of Black Mesa everywhere they support our work.

One, CAP, the Central Arizona Project, must become self-sufficient. Navajos can no longer carry the burden of the most expensive water project in the world. The time is now for CAP to become self-sufficient.

Two, the site of the Navajo Generating Station just begin transitioning to the renewable energy generation site. It must be fully operational within five years. It will replace the energy generating loss when lost coal resources are depleted. We are not saying shutting down NGS.

Three, there are 40,000 acres of ground fills available on Black Mesa, just as legislators and predominant Arizonans rallied and

lobbied for CAP to be built, I want to see your support for such a renewable energy generation project such as solar on Black Mesa.

Now, let me turn to the issues of the Navajo Generating Station operation, and the agency who helped set this entire operation into motion decades ago for the Navajo people, the Bureau of Reclamation, the Department of the Interior.

The Navajo Nation was lobbied to waive their water rights to the Navajo Generating Station operation in the amount of 50,000 acre-feet, and approved the site of the Navajo Generating Station Power Plant, and provide coal source for the NGS operation.

In short, the Navajos have been carrying the burden of the operation of NGS and CAP. The coal used to power NGS comes from an operation on Black Mesa. Peabody Energy recently has its lava permit remanded. Peabody's operation is responsible for depleting, depressurizing, and contaminating, and damaging, our only drinking water for Black Mesa residents, including the Hopis.

There is no bond in place for the water, and to this day Peabody has not returned the water in quality and in quantity. The Navajo coal is a source of power for NGS, and NGS emits toxic pollutants into our air; nitrogen oxide, mercury, arsenic, carbon dioxide.

According to the recent study on health disparities on The Navajo Nation, asthma was rarely seen in The Navajo Nation in 1970. Today, 6 out of 10 Navajo surveyed indicate having asthma or some other respiratory problem.

Navajo water is another source of the operation at NGS. Navajo waived 50,000 acre-feet of water for the operation for NGS, and this is Navajo water, free of charge to the NGS operation.

It has been more than 10 years since subsidence was first documented in sink holes on Black Mesa, but today we continue to feel the impacts of over-draft of the only water source. There is no benefit to the Navajo people for the entire operation. We are still in extreme poverty and experiencing extreme health impacts.

[The prepared statement of Mr. Johnson follows:]

**Statement of Marshall Johnson, Kykotsmovi, Arizona**

**Transition Plan of To Nizhoni Ani regarding Navajo Generating Station and related operations and resources**

**Summary:**

For over fifty years, the Navajo Nation has been largely dependent on a coal-based industrial economy. While revenues from development of coal resources account for a substantial portion of tribal budgets, coal development has had a substantial, and some would say irreparable, impact on tribal health, culture, land, air, and water. Further, the impacts are not limited to tribal lands as the effects of hazardous air and green-house gas emissions, toxic water borne pollution, massive degradation of aquifers used for drinking water, and contamination of soil, air and water from toxic coal combustion waste (CCW) disposal has dispersed into adjacent non-indigenous communities.

Situated in the Four Corners region of New Mexico and Arizona, the Dine homelands encompass an existing, sprawling coal-industrial complex. The Navajo Mine operated by BHP Billiton serves the Four Corners Power Plant (FCPP) in Fruitland, New Mexico; Kayenta and Black Mesa mines operated by Peabody Energy serves Navajo Generating Station (NGS) in Page, Arizona. The construction and operation of these facilities have been central in the economies of the Navajo Nation. Energy is exported from these facilities to Southern California, Texas, Southern Arizona, and Nevada.

The Power Plants at NGS and FCPP will not sustain the Dine in perpetuity. Once the fossil fuel supplied by the tribes is extracted, the powerful utility companies will be looking for other locations to continue their operations. The Dine will have no

leverage to level the playing field and no plan in place to sustain tribal governance as it currently exists.

After decades of exploitation by mining and energy companies, a combination of factors make now the ideal time for the Navajo Nations to transition to a more sustainable clean-energy economy.

#### **Best Available Retrofit Technology:**

Under the federal Clean Air Act (CAA), the Four Corners and Navajo power plants are subject to requirements for Best Available Retrofit Technology (BART) in order to comply with federal regional haze requirements. The proposed BART determination for the FCPP, which was issued by EPA Region 9 in October 2010, will likely require the installation of Selective Catalytic Reduction (SCR) at all five units. Estimated cost for the FCPP to install SCR is \$717 million for all five units.

The owners of the rapidly aging FCPP and NGS are faced with significant decisions about whether to commit financing to pollution-control technology upgrades for the facilities, or retire them and replace their output with modern, clean energy sources. EPA has determined it is necessary for the owners of the FCPP to upgrade pollution controls to reduce haze in the region. The ruling proposal calls for the likely installation of selective catalytic reduction controls (SCR), which could cost hundreds of millions of dollars.

Rather than incur such costly upgrades for plants that will eventually be phased out anyway, the Navajo and Hopi would benefit instead from a move toward newer, cleaner and more sustainable energy sources of which economic equity should be included.

With significant investment to bring these plants into compliance with required regulatory protections, it is entirely possible that the owners will determine that the FCPP and NGS have exhausted their economically useful lives and that continuing to operate them would be unprofitable. Utilities around the country are having the same internal debates, and several major owners of FCPP and NGS have already made a decision to abandon their stakes in the projects.

According to the EPA website, asthma disproportionately affects children, families with lower incomes, and minorities. "While asthma was a rare diagnosis in many HIS areas before 1975, asthma prevalence and hospitalizations increased dramatically among AI/AN populations during the 1980s." (IHS 2006). Between 1972-74 and 1996-98, Navajo Area age-adjusted death rates for cancer have increased from 43.7 to 87.5 deaths per 100,000 populations (IHS 2006).

In addition, TNA has engaged community members across the northwest and central region of the Navajo Nation (in the area of NGS) in a survey that is meant to assess the need for a more comprehensive health study primarily focused on respiratory and heart disease and may include cancer. 141 surveys were returned by adult community members from 13 communities in the Northwest region of the Navajo Nation (Kaibeto, Chilchinbito, Pinon, Navajo Mt. Coppermine, Lechee, Dennehotso, Kitsillie/Black Mesa, Tonalea, Tuba City, Bittersprings, CedarRidge, and Shonto). The survey was conducted from March to May, 2011. The survey asks community members to assess the number of family members with asthma and respiratory problems and to identify the number of members with respiratory problems over the age of 25 years and under the age of 25 years. It also asks community members to identify distance to nearest hospital facilities and what other kinds of ways they address these problems besides modern methods.

#### **Survey Results:**

Community	13 communities in Northwest and Central Navajo Reservation:
Number of family members with respiratory problems	60% yes, at least one 38% none 42% with more than one member
Under 25 years of age	50% under age of 20 years
Over 25 years of age	42% over age of 20 years
Diagnosed in last 10 years	26% of those with respiratory problems diagnosed in last 10 years
Over 50 years of age	26% of those with respiratory problems are over 50 years of age



### Coal Mining a Legacy of Non-Compliance:

Part of the transition strategy is to compel meaningful and timely reclamation, closure, and clean-up of the tens-of-thousands of acres of mine lands used for coal-fired power plants. Actual clean-up and reclamation of mined lands (which could take decades) not only creates jobs and a transitional revenue stream, but in some instances may present important renewable energy site and location opportunities on mined-lands (i.e. brown fields).

Peabody's Kayenta Mining Operation covers approximately 44,000 acres and has produced approximately 8.5 million tons of coal per year. Peabody's 44,073 acre Kayenta Mine mining operation continues to supply coal exclusively to the Navajo Generating station and has done so since 1973. NGS became operational in 1971 and was based in part on a resolution from Navajo Nation which waived claims of 50,000 acre feet of Navajo water in the upper Colorado River basin for 50 years or the life of Navajo Generating Station.

Tens of millions of tons of coal combustion waste (CCW), the toxic by-product of burning coal in power plants, has been disposed of in insufficiently regulated landfills and dumped back into the mines or on-site on the Navajo Nation. This CCW contains toxic pollutants such as mercury, cadmium, barium, and arsenic, which cause cancer and various other serious health effects. These contaminants can leach into groundwater from the landfills and mines where they are dumped, and can migrate to drinking water sources, posing significant public health concerns.

Peabody's 18,000 acre Black Mesa mining operation supplied coal to the Mohave Generating Station from 1970 to December 2005. The Black Mesa mine became non-operational in 2005 after closure of Mohave in 2005 due to the Station's inability to comply with the Clean Air Act.

In addition to the coal mining at the Black Mesa Mine, Peabody has also pumped an average of 4000–6000 acre-feet per year. That is more than 1.3 billion gallons of potable water annually from the Navajo Aquifer (N-Aquifer) between 1969 to 2005 a span of 35 years. This water was used to transport pulverized coal in a pipeline (Black Mesa Pipeline) 273 miles to the Laughlin, NV, and the location of the Mohave Generating Station.

The N-aquifer is the primary source of water for municipal users and tribal members within the 5,400 square mile Black Mesa area. All of the Hopi and many of the Navajo who live in the region take their water, which they use for drinking, subsistence farming and for religious purposes, from the same source. Since Peabody began using N-aquifer water for its coal slurry operations, water levels have decreased by more than 100 feet in some wells and discharge has slackened by more than 50 percent in majority of monitored springs. There are reports that washes along the mesa's southern cliffs are losing outflow. There are also signs that the aquifer is being contaminated in places by low-quality water from overlying basins, which leaks down in response to the stress caused by pumping. Peabody's ongoing groundwater pumping, which is not covered by a reclamation bond, undercuts the sustainability of North America's oldest cultures, and continues to have a significant impact on tribal communities throughout the region.

In 2010, an independent scientist at the University of Arizona completed a study investigating both Peabody's mine and the tribal communities' impact on the N-aquifer. This study demonstrated the following mine-related impacts and OSM's (coincidental) discretionary decisions and actions:

**1. In 1989, OSM set a damage-threshold for spring discharge at a 10% reduction to discharge caused by the mine.**

As of 2009, Moenkopi Spring (sixty miles southwest of the mine) had declined by more than 26%. OSM maintains, however, that the decline is caused by tribal pumping or recent drought conditions.

The University of Arizona study demonstrated that the *declining* rate of discharge from Moenkopi Spring expresses a strong, statistically significant relationship with the rate of Peabody's *increasing* withdrawals. Further, the spring has no statistically significant relationship with either local municipal withdrawals or local rates of precipitation.

In 2008, OSM concluded that "there have been and will be no impacts to these springs attributable to mining" (OSM-CHIA 2008: 86). Subsequently, OSM removed the oversight of Moenkopi Spring from its regulatory purview.

**2. In 1989, OSM determined that water level decline at the community of Kayenta (20 miles north of the mine) would be caused almost entirely by Kayenta's groundwater pumping.**

As of 2009, the water level at Kayenta had dropped more than 106 feet; the aquifer's structural stability is currently at risk of compaction at Kayenta.

The University of Arizona study demonstrated a statistically significant relationship between Kayenta's declining water level and Peabody's increasing withdrawals. Further, there is no statistically significant relationship between this decline and Kayenta's withdrawals. In fact, the rate of Kayenta's withdrawals expresses a slightly decreasing trend since 1984 although the water level has continued to fall.

In 2008, OSM concluded that the mine had not adversely affected the N-aquifer and completely removed *structural stability* from its regulatory purview.

### 3. In 2008, OSM implemented Peabody's \$3 million groundwater model for regulatory purposes.

According to the model report, "a regional scale model cannot currently be developed for the basin that will accurately predict the impacts of pumping on individual springs" (HSIGeoTrans & WEHE 1999: 5–23). Similarly, the model cannot accurately simulate groundwater discharge to streams.

Nonetheless, in 2008, OSM determined that, rather than using actual groundwater monitoring data, it will use the simulation results from Peabody's groundwater model for its annual evaluation of the mine's impact on springs and streams.

Water is scarce in the desert Southwest, and large volumes of water derived from local watersheds serve the needs of the mines and cool the coal plants, drawing down aquifers, degrading river water quality and depleting one of the region's most valuable and scarce resources. Fallout from smokestack pollution and the vast quantities of CCW that have been dumped into mines over the past 45–50 years have degraded the quality of the remaining water supplies. Health advisories have been issued for most streams, rivers and lakes in the Four Corners, warning the public against neurological and cardiovascular damage from consuming local fish due to mercury contamination (in part due to mercury emissions from FCPP and NGS). The true costs associated with these environmental and public health impacts have never been internalized by the operators of the coal complex.

The following table illustrates only one example of the gap in water prices among Dine living on the Reservation and those living off the reservation. Dine in Pinon, Az. (central Navajo Reservation) pay at least 20 times more per gallon than do residents in Glendale, Az (Phoenix area).

AZ Regional Water prices:

Location	Price	Unit	Conversion
Glendale, Az	\$2.00	1000 gal.	\$.01/ 5gal
Pinon, Az	\$.01	1 gal.	\$.01/ 1gal
Kaibeto	\$.04	1 gal.	\$.04/ 1gal
Tonalea	\$2.00	55gal	\$.01, and .275
Flagstaff	\$2.82	1000gal	\$.01/4gal

### Transition the Navajo Nation for the sustainability of all Nations:

The Navajo Nation is the size of Scotland. It is blessed with an abundance of resources that could provide the foundation necessary for a transition to renewable energy development. The Navajo Nation encompasses regions with ample wind, solar, and geothermal resources, along with vast expanses of land, including large reclaimed coal-mining tracts that are ideal for locating renewable energy facilities. The region's solar potential is some of the best in the world and certain portions of reservation lands have wind resource ratings capable of supporting utility-scale projects. Additionally, as a result of all three power plants' extensive interconnections to the electric grid there is a network of power lines whose capacity would be freed up for an expansion of renewable energy by phasing out the three coal-burning plants.

Utility-scale development of either wind or solar energy resources alone has potential to offset job and revenue losses from the phase-out of the existing coal plants. An analysis by the US Department of Energy (DOE), for example, determined that constructing a wind energy project in Navajo County could generate up to 140 construction and operations jobs and more than \$14 million in economic activity.

If the Dine are to see their existence into the future they must develop clean energy economies instead continuing to advance a steadily declining coal-based economy.

Beyond the tangible benefits, a transition away from the unfulfilling history of coal and toward clean energy aligns more closely to Dine fundamental laws and values.

Building a new clean energy economy, one in which the viability of the Navajo Nation is included must be based on the following:

- Acknowledging the real value associated with land, water, air and other natural resources on Dine lands.
- Acknowledging the significant adverse environmental and health impacts of a coal based economy and the reliance on the FCPP and NGS and related mine operations.
- Acknowledging that benefits from the sale of Dine raw resources is directly disproportionate to the profits of the sale or the recipient of cheap electricity.
- Creating legislation that would provide the Navajo Nation the financial, political and regulatory means to pursue real solutions in transitioning from fossil fuel electricity
- Developing privately-owned and tribal-owned clean energy generation resources on Dine lands, such as wind and solar; and,
- Subsidizing clean energy facilities rather than fossil fuel facilities;

The biggest question Dine face along with the rest of the world is, what happens after all the fossil fuel is gone. We have no choice but to embrace the renewable technology available and move forward with it.

**Position of To Nizhoni Ani:**

1. It is the position of To Nizhoni Ani that a decision by EPA that would require the Best Available Retrofit Technology otherwise known as BART that requires at minimum SCR for the FCPP and NGS would be the most beneficial in terms of the issues of the regional haze and visibility. More importantly, a BART decision would also reduce the health impacts from the pollutants for Navajos living in the region.
2. In lieu of declining coal resources, the Navajo Nation must work towards incorporating into recent expired leases, a plan to transition these areas into a solar generation facility and to target brownfields instead of undeveloped lands. The purpose of this plan is 1) to ensure continued revenues and jobs for the Navajo Nation and 2) to eliminate health impacts to the people.
3. The Navajo Nation must begin incorporating a plan for continued revenues and jobs in place of the declining coal mined at Kayenta and the Navajo Mine. Currently the development of a Solar Energy Generation Facility on brown fields, is being explored by grassroots groups, Black Mesa Water Coalition and To Nizhoni Ani. At least 6,000 acres of mined lands is available at this time. This alone is enough for more than 1000 MW of power. A total of 68,000 acres of land is held in lease by Peabody Western Coal Company. While some mining on hundreds of acres of lease land has been complete for more than 15 years, reclamation has not been completed by Peabody and none of the lands have been transferred back to the Navajo Nation, to be given back to the local residents for use.

Currently the Black Mesa Water Coalition and To Nizhoni Ani has completed a Solar Potential Study, conducted dozens of community meetings to residents in the mine lease area as well as residents in communities throughout Black Mesa. The purpose of these community meetings is to educate for the purpose of mobilizing the community.

4. Installation of Solar facilities on the CAP canals to provide additional power to power the pumps that push the water to Phoenix and Tucson or other power users. This would help eliminate the evaporation of 75,000 acre feet of water annually.
5. Make CAP self-sufficient.

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Mr. McCLINTOCK. Thank you very much for your testimony. Our next witness is Mr. David Modeer, General Manager of the Central Arizona Project, from Phoenix, Arizona. Welcome.

**STATEMENT OF DAVID MODEER, GENERAL MANAGER,  
CENTRAL ARIZONA PROJECT, PHOENIX, ARIZONA**

Mr. MODEER. Thank you, Chairs of the Committees, and Ranking Members, and Members of the Arizona Delegation, for allowing us to be here to discuss this issue with you today. I would first like to recognize our board president, Pamela Pickard, who represents

the leadership of our board of directors, who is so engaged in trying to resolve this difficult issue.

I think that it is important to understand a little bit about the history of this Central Arizona Project. It has a long history, and it is a very successful one, but it did not come without a number of compromises required by the State of Arizona.

Two major compromises were needed in order to receive the authorization and funding by the Congress of the United States, the first being that Arizona would have to become junior priority user of Colorado River Water, a significant concession.

The second was the manner in which power would be generated to move water from the Colorado River, 336 miles, 3,000 feet uphill. The original concept was to construct hydropower facilities along the Grand Canyon, and not in the Grand Canyon, but coming closely on the heels of the finish of the completion of the Grand Canyon Dam, and was not viewed very favorably.

Therefore, Secretary of the Interior Stewart Udall at that time brokered an environmental compromise that would allow the Federal Government, through the Bureau of Reclamation, to participate in the construction of the Navajo Generating Station.

As a result of that decision the Bureau of Reclamation owns 24.3 percent of the Navajo Generating Station to the benefit of the Central Arizona Project. For years the operators of the Navajo Generating Station have provided low cost reliable power, and have been attentive to the environment.

In the 1990s, over \$500 million was invested to deal with sulfur dioxide emissions. More recently the owners have voluntarily installed low NO<sub>x</sub> burners separated on over-fire air at a cost of \$46 million.

The Central Arizona Project uses water that results in a one percent increase. However, in 2009 the EPA has indicated that the installation of no NO<sub>x</sub> burners would probably not be sufficient and they would require selective catalytic reduction installations at a cost of over \$500 million.

That results in a 17 percent increase in energy price to our users of Central Arizona Project water. With the installation of SCRs, it may require a bag house, which would control downstream particulate emissions from the plant.

That results in a 33 percent increase in energy rates to our customers. That is a significant impact on our municipalities, our industry, but more importantly has a devastating impact on agricultural use in Central and Southern Arizona that depends on Central Arizona Project water.

Such an increase would likely move Indian agriculture and non-Indian agriculture away from the ability to use Central Arizona Project water and drive them back to the unsustainable over-pumping of groundwater, the very thing that the Central Arizona Project was constructed to bring renewable water supplies into Central and Southern Arizona and prevent.

The uncertainties that have been mentioned here today regarding the future of the Navajo Generating Station and the agreements that go along with it, create the very specter that the decision made by the owners could result in the closure of the Navajo Generating Station.

That would be catastrophic for the Central Arizona Project and its users. For the Central Arizona Project, it would require us to move to the open market to find energy. That would result in a 50 to 300 percent increase over our current costs of energy.

It would also remove the ability of the Central Arizona Project to market the excess power to provide for revenue for the repayment obligations that the State of Arizona has for the construction of the Central Arizona Project canal, and it would prevent the ability for those same revenues to be used to effect Indian water rights settlements.

This is a devastating potential result for us. While looking at renewables and other types of energy far out into the future, there is no alternative to the Navajo Generating Station for the operation of a Central Arizona Project at this time, and there is no prospect for any immediate replacement of baseload power for the Central Arizona Project.

Renewables do not provide baseload power, and would not allow for the continued operation of the Central Arizona Project. Thank you for the opportunity to be here today.

[The prepared statement of Mr. Modeer follows:]

**Statement of David Modeer, General Manager, Central Arizona Project**

As General Manager of the Central Arizona Water Conservation District (CAWCD), I thank Chairman McClintock and Chairman Young, Ranking Member Napolitano and Ranking Member Boren of the Subcommittees, and other members of the two Subcommittees for the opportunity to testify today in this Oversight Hearing on "Protecting Long-term Tribal Energy, Jobs and Keeping Arizona Water and Power Costs Affordable: The Current and Future Role of the Navajo Generating Station."

CAWCD, commonly referred to as the Central Arizona Project (CAP), was established in 1971 as the state agency that manages and operates the CAP system, collects revenues from ratepayers and, since substantial project completion in 1993, repays the federal government for the reimbursable costs of construction. Our goal at CAP is to provide an affordable, reliable and sustainable supply of Colorado River water to cities, industries, farms, and Tribal communities in a service area that includes more than 80 percent of Arizona's population. We have successfully achieved this goal for the past 25 years.

**Background**

Central Arizona Project, constructed by the Bureau of Reclamation (BOR) for the State of Arizona, is a multi-purpose water resource development and management project that delivers Colorado River water into central and southern Arizona. The largest supplier of renewable water in Arizona, CAP delivers an average of over 1.5 million acre-foot of Arizona's 2.8 million acre-foot Colorado River entitlement each year to municipal and industrial users, agricultural irrigation districts, and Indian communities (see attached map). CAP meets approximately 50 percent of municipal demand within its service area, including 45 percent of the City of Phoenix's total water demand and more than 50 percent of the City of Tucson's water demand. In addition, 47 percent of the long-term CAP entitlement is dedicated to Indian Tribal use, while 41 percent of current CAP deliveries support non-Indian agricultural production.

These renewable water supplies are critical to Arizona's economy and to the economies of Native American communities throughout the state. Nearly 90% of economic activity in the State of Arizona occurs within CAP's service area. CAP also helps the State of Arizona meet its water management and regulatory objectives of reducing groundwater use and ensuring availability of groundwater as a supplemental water supply during future droughts. Achieving and maintaining these water management objectives is critical to the long-term sustainability of a state as arid as Arizona.

CAP infrastructure includes a 336-mile-long delivery system that moves water 3,000 feet uphill from the Colorado River. The system entails 14 pumping plants and one combination pumping/generating facility; 10 siphons that carry water under

riverbeds and washes; three tunnels; more than 45 turnouts that connect the CAP aqueduct with customers' water delivery systems; a large storage reservoir; and a state-of-the-art control center. A large and reliable supply of baseload power is essential to operating CAP infrastructure and delivering water to its customers, including potable water treatment plants that must supply drinking water to millions of Arizona residents every day.

CAP construction necessitated the development of new power generation facilities to provide a dedicated energy source for the operation of the system. The Colorado River Basin Project Act allowed the federal government to participate in the non-federal Navajo Generating Station (NGS), near Page, Arizona, to provide power for pumping CAP water as an alternative to building additional dams along the Colorado River. Construction of NGS was the result of an environmental compromise brokered by then-Secretary of the Interior Stewart Udall. NGS also was intended to help maintain and improve the economies of the Navajo Nation and the Hopi Tribe by providing revenues for the Tribal governments and high-paying jobs for Tribal members.

NGS was constructed by the Salt River Project Agricultural Improvement and Power District of Arizona, now part of the Salt River Project (SRP). In addition to BOR and SRP, other participants in NGS are NVEnergy (formerly Nevada Power Co.), Tucson Electric Power Co., and Los Angeles Department of Water and Power. In addition to providing CAP pumping energy, NGS also provides electricity to retail customers in Arizona, Nevada and California. BOR's share of NGS's annual output is 24.3 percent, or 546,750 kilowatts per year for the benefit of CAP.

CAP maintains an ongoing, constructive dialogue with BOR and other federal agencies, including the Environmental Protection Agency, to discuss issues of mutual interest and concern. CAP also works closely with its customers regarding their needs and concerns. Our ongoing focus includes collaborative efforts to:

- Manage water resources sustainably in partnership with CAP customers, BOR, the Colorado River states, and other stakeholders to assure long-term, affordable supplies of water;
- Maintain access to critical energy supplies, including working collaboratively with the NGS participants to reduce plant air emissions and to explore clean-energy options for the future;
- Work with Tribes and other State and Federal parties, as appropriate, to fulfill provisions of Indian water rights settlements; and
- Collaborate with other agencies on data—and information-sharing on water quality issues facing the Lower Colorado River.

In addition, CAP is currently evaluating and adopting management practices focused on energy conservation including the "maintenance excellence program" which strives to maximize efficiency of the pumping and operating systems; an extensive waste management recycling system; "Green Fridays," a modified work schedule that limits the use of the facility one day a week to reduce energy costs.

#### **Navajo Generating Station—Decisions that Impact Water and Power Costs**

**Regulatory Issues:** NGS is near numerous national parks, monuments, and wilderness areas, and controlling plant emissions has been and still remains a priority for CAP and the NGS participants. Pursuing that commitment, in the 1990's NGS participants invested more than \$400 million in scrubbers to reduce sulfur dioxide emissions. In 2008, the plant began voluntary installation of additional environmental controls to reduce smog-forming nitrogen oxide (NO<sub>x</sub>). Installation of those emissions controls is now complete. The low-NO<sub>x</sub> burners with separated over-fire air (LNB/SOFA) cost approximately \$46 million for installation on all three units at NGS. This price tag translates into expected increases in CAP energy rates of about 1 percent.

Despite these ongoing investments in air quality improvements, NGS is now the focus of additional proposed regulatory requirements. The U.S. Environmental Protection Agency (EPA) is in the process of setting new rules to control NO<sub>x</sub> emissions at coal-burning power plants, including NGS, under the Regional Haze Rule of the Clean Air Act. CAP has been doing its part to support improvements in air quality and visibility associated with NGS. It is important to note, however, that the Clean Air Act identifies factors such as compliance costs, the remaining useful life of a facility, the degree of visibility improvements that might reasonably be anticipated from the use of existing technology, and other considerations in determining the appropriate technology to achieve improved visibility. CAP urges full consideration of these factors by the EPA in their regulatory decision making regarding the NGS.

**Potential Regulatory Impacts:** While EPA is looking at low-NO<sub>x</sub> burners such as those now installed at NGS, the agency is also considering a different control system known as Selective Catalytic Reduction (SCR). In comparison to the cost impact

of low-NO<sub>x</sub> technology, SCR units alone would result in a 17% cost increase in CAP energy rates. The SCR system, combined with baghouses (which may be needed for downstream particulate control), has a potential price tag of more than \$1 billion, as much as 20 times the cost of low-NO<sub>x</sub> burners. If the SCR/baghouse option is required at NGS, CAP energy rates could climb 33 percent higher than 2010 rates (or even higher if financing of less than 20 years is required). In both instances, these higher energy costs would affect water rates for the majority of Arizona's population. Agricultural water users, both Indian and non-Indian, would be particularly hurt by these higher rates.

Impacts from such regulatory requirements extend beyond the increased costs for energy and water. As authorized by Congress, NGS power not used for CAP pumping is sold to help repay CAP construction costs and to help fund Arizona Indian water rights settlements. These amounts are not trivial. Revenues from the sale of surplus NGS power now contribute about \$22 million per year toward the \$57 million in annual repayment obligations for the CAP. In the future, new contracts for the sale of surplus NGS power are expected to contribute \$50 million or more per year toward CAP repayments and toward Indian water rights settlements, including those approved by Congress in the 2004 Arizona Water Settlements Act.

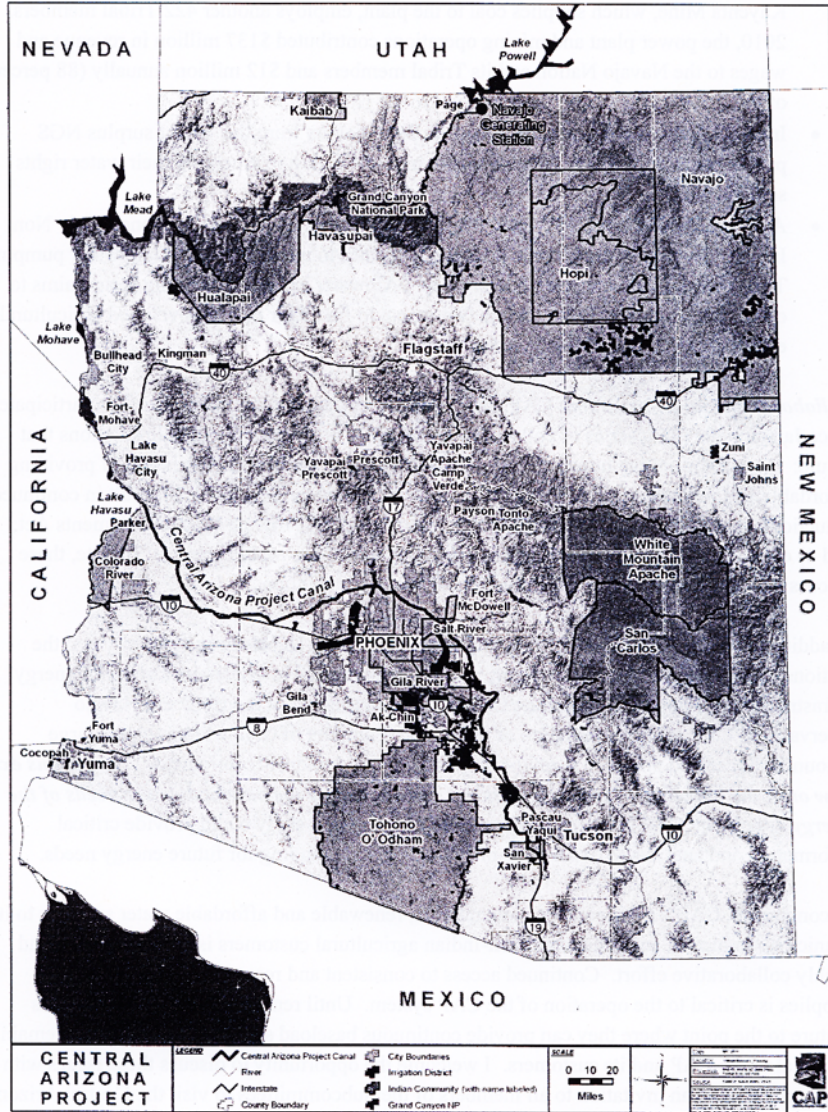
The extremely high costs of the SCR/baghouse option could jeopardize continued operation of the NGS facility, with severe economic impacts to CAP users and to the Navajo Nation and the Hopi Tribe. Because a number of critical uncertainties face the Navajo plant, including the renewal of land and water leases and future federal air quality regulations, a near-term requirement to install SCR at Navajo raises a risk of plant closure. The NGS partners operate the Navajo plant as a revenue-generating business. Rather than risk a huge and potentially unrecoverable investment in retrofitting the plant with SCR technology prior to the resolution of these uncertainties, NGS participants have indicated they may pursue the path of closing the plant and meeting their energy needs through other means. As a consumer of NGS power rather than a retail marketer of power, CAP would be catastrophically impacted by closure of NGS, as would a number of Arizona Indian tribes.

- Should the NGS facility cease operations, CAP would have to acquire a substitute source of pumping power at market rates. Using several forecasts, CAWCD estimates that CAP pumping energy costs could increase by 50 to 300 percent (rising from \$65 per acre foot to \$95—\$180 per acre foot) by 2017.
- NGS employs 545 full-time employees, nearly 80 percent of whom are Navajo. The Kayenta Mine, which supplies coal to the plant, employs another 422 Tribal members. In 2010, the power plant and mining operations contributed \$137 million in revenue and wages to the Navajo Nation and its Tribal members and \$12 million annually (88 percent of the Tribe's annual operating budget) to the Hopi Tribe.
- Indian Tribes would lose access to millions of dollars from the sale of surplus NGS power that otherwise could be available to assist with implementing their water rights settlements.
- Agricultural users of CAP water could find the use of CAP water uneconomical. Non-Indian agricultural users could be forced to return to unsustainable groundwater pumping. Tribal users, having accepted delivery of CAP water in lieu of pursuing their claims to other water rights including groundwater, could find their newly-developed agricultural enterprises to be worthless investments.

**Collaboration and Information:** CAP, along with other interested stakeholders, has participated since January 2011 in a series of collaborative dialogues to identify reasonable solutions that would: 1) meet the energy needs of CAP so that the project can fulfill its mission of providing affordable and reliable water supplies to Arizona and Tribal communities; 2) result in continued reductions in regional haze; 3) uphold provisions of the 2004 Arizona Water Settlements Act; and 4) expand clean energy opportunities, including use of renewable energy. To date, these discussions continue but have not resulted in a consensus solution.

In addition, the Department of the Interior, working with the Department of Energy and the National Renewable Energy Laboratory, is drafting a proposal to undertake a study of energy infrastructure development within the Colorado Plateau region of the Hopi and Navajo reservations. CAP supports initiation of this study. Pumping of CAP water requires large amounts of baseload power to meet the project's 24/7 operational requirements. ***No options exist now or in the immediate future of sufficient scale to supply the baseload power needs of the energy supply for CAP at a reasonable cost.*** This proposed study could provide critical information and analysis to assist CAP in evaluating and planning for future energy needs.

In conclusion, CAP's mission to provide reliable, renewable and affordable water supplies to its municipal, industrial and Indian and non-Indian agricultural customers is a multi-faceted and highly collaborative effort. Continued access to consistent and reasonably-priced energy supplies is critical to the operation of the CAP system. Until renewable energy alternatives mature to the point where they can provide continuous baseload supplies, the NGS will remain essential to the CAP and its customers. I welcome the opportunity to discuss these issues with you, and I extend an invitation to all members of the Subcommittees to visit the Central Arizona Project at an appropriate time.





Mr. McCLINTOCK. Thank you for your testimony. Our final witness is Mr. Dan Thelander, a Partner in Tempe Farming Company, from Maricopa, Arizona. Welcome.

**STATEMENT OF DAN THELANDER, PARTNER,  
TEMPE FARMING COMPANY, MARICOPA, ARIZONA**

Mr. THELANDER. Thank you, Chairman McClintock, and Members of the Subcommittees. My name is Dan Thelander, and I am a partner in our family farm, Tempe Farming Company. We farm cotton, wheat, alfalfa, on about 2,500 acres in Pinal County, which is about 40 miles south of Phoenix, Arizona.

Maricopa Stanfield Irrigation and Drainage District, MSIDD, provides our irrigation water. MSIDD covers about 70,000 acres and every year delivers about 110,000 acre-feet of groundwater, and 160,000 acre-feet from the Central Arizona Project.

As you have heard, the CAP gets its power from the Navajo Generating Station. MSIDD, the Family Farm Alliance, and many others from Arizona, have been working to raise public awareness of the huge impact that this EPA decision could have on our livelihoods.

With the already completed installation of low NO<sub>x</sub> burners at a cost of about \$45 million, the increased cost to the power customers will raise the cost of CAP water in the range of about 50 cents per acre-foot. On my farm, we use about 6,700 acre-feet of CAP water per year, which will equate to an increased annual cost of about \$3,300.

Unfortunately, with the EPA considering the second option, the SCR will bag houses, that billion-dollar cost at NGS translates into an increase of water rates to our district and my farm to the tune of at least \$16 per acre-foot.

So for the 6,700 acre-feet of CAP water that our farm buys, that equals \$107,000 every year. Power companies will have the luxury of passing along their increased costs to their hundreds-of-thousands of customers.

Can Tempe Farming pass along its \$107,000 cost increase? The answer is no. Our cotton and wheat is sold on the world market, and there is no way that I can just raise my prices just because my costs go up.

Local dairies that buy our alfalfa won't be able to raise their milk prices to pay for a huge increase in feed costs. MSIDD pays about \$41 per acre-foot of CAP water. A \$16 increase will be devastating to the farmers in my county.

The bottom line is that we will not be able to afford the water. MSIDD would have to turn to increased groundwater pumping, but the district cannot physically pump an additional 160,000 acre-feet to replace the CAP water.

So what happens then? Here is my prediction. As much as one-third of the district may go out of production for lack of water. A lot of farmers go out of business, and the lack of farming will hurt the entire community because farmers will buy less tractors, less fertilizer, less labor will be needed, which equals higher unemployment.

What would be gained by forcing NGS to do the expensive SCRs? The additions of SCRs is not for health reasons. It is for visibility

only, but the gain will be so slight that the human eye won't even be able to detect the difference.

Why would the EPA do this and cause so much economic hardship on all of us? An April 3 Time Magazine interview with EPA Administrator Lisa Jackson gives some insight into the mindset of the EPA.

Time asked her the question, "Can the United States balance environmental protection and job creation?" She answered and I quote, "They have been balanced in this country for 40 years as long as there has been an EPA. We have done it while our country has prospered."

I can tell you that if the EPA requires the additional SCRs that these goals will not be balanced in my community. Far from prospering, our farmers and businesses will struggle to make ends meet, and we will have more unemployment.

I submit to you that sometimes there is a limit to what businesses can absorb in increased costs by government regulations, and this is one of those times. Pinal County agriculture cannot absorb the huge increase in water costs that the SCRs would cause.

Chairman McClintock, and Young, and Members of the Subcommittees, please do whatever you can do to deter the EPA from forcing the expensive SCRs on the Navajo Generation Station. Thank you for inviting me here today.

[The prepared statement of Dan Thelander follows:]

**Statement of Dan Thelander, Partner, Tempe Farming Co., and Vice President of the Board of Maricopa Stanfield Irrigation District**

Chairman McClintock, Chairman Young, and Members of the Subcommittees,

My name is Dan Thelander. I am a partner in our family farm, Tempe Farming Co. We farm in Pinal County, which is about 40 miles south of Phoenix, Arizona. We produce cotton, durum wheat, barley, and alfalfa on about 2500 acres.

We are water customers of Maricopa Stanfield Irrigation and Drainage District, (MSIDD) and I serve on the Board of Directors. MSIDD serves about 70,000 acres and every year delivers about 110,000 acre feet of ground water and 160,000 acre feet from the Central Arizona Project. All together, our district and 3 other large irrigation districts in Pinal County utilize about 60% of the agricultural water that the CAP delivers annually, or about 400,000 acre feet per year to about 200,000 acres.

Most of you are aware that the Bureau of Reclamation is a part owner of the Navajo Generating Station and that the CAP uses its power to pump water from the Colorado River into the CAP Aqueduct, which in turn runs to our district. MSIDD, the Family Farm Alliance, and many others from Arizona have been working to raise public awareness of the huge impact that an EPA decision could have on our livelihoods.

Navajo Generating Station is a fairly new plant and very clean, but the EPA is debating the possibility of requiring Salt River Project, the operator of NGS, to install additional equipment to improve visibility near the plant.

Salt River Project, part owner and operator of NGS, has already completed installation of low NO<sub>x</sub> burners at a cost of about \$46,000,000. This, in turn, will be passed along to the power customers and will raise the cost of CAP water in the range of \$.50 per acre foot. On my farm, we use about 6700 acre feet of CAP water per year which will equate to an annual cost of about \$3300.

Unfortunately, the EPA is considering a second option. It is selective catalytic reduction (SCR) with bag houses. This would cost something north of \$1 billion dollars! This billion dollar cost at NGS translates into an increase of water rates to our district to the tune of at least \$16 per acre foot. When you do the math on that for 6700 acre feet of water that our farm buys, it equals \$107,000 every year.

Power companies will have the luxury of passing along the increase in costs to their hundreds of thousands of customers. Can Tempe Farming Co. pass along a \$107,000 cost increase to our customers? The answer is NO. Our cotton and wheat is sold on a world market, and there is no way that I can just raise my prices just

because my costs go up. Local dairies that buy our alfalfa won't be able to raise their milk prices to pay for a huge increase in feed costs.

MSIDD currently pays about \$41 per acre foot for CAP water. A \$16 increase will be devastating to the farmers in my county. The bottom line is we will not be able to afford the water. The CAP was supposed to reduce groundwater pumping in Central Arizona, but if farmers can't afford the water, MSIDD would have to turn to increased groundwater pumping, which. Although groundwater pumping will be much less costly than the CAP water, the district cannot physically pump an additional 160,000 acre feet to replace the CAP water. So, what happens then?

Here is my prediction:

- 1) many acres don't get farmed, possibly as much as 1/3 of the district may go out of production for lack of water (This happened in the 1980's prior to CAP water for our area. Farmers had relied totally on groundwater, and as the water table dropped, many thousands of acres were fallow)
- 2) a lot of farmers go out of business
- 3) those farmers that hang on make less money
- 4) the lack of farming hurts the entire community because the economic ripple effect means less money to buy tractors, fertilizer, seeds, and, yes, less labor needed, which all equals higher unemployment

Apart from the straight economics involved, one of the major reasons for the creation of the CAP was to preserve groundwater for future generations and for drought purposes. Since 1987, when the CAP was started, MSIDD has delivered 3.8 million acre feet of renewable CAP water, which has essentially preserved that same amount of water in underground aquifers. Prior to the CAP, groundwater levels were declining yearly.

Another resulting problem from excessive pumping was land subsidence, which was occurring regularly. If farmers cannot afford the CAP water and deliveries cease, we can expect this overdraft of groundwater and the subsidence problems to begin again. Through time, the dropping groundwater levels will increase pumping costs, which will continue to pressure farmer's ability to survive.

This is doubly frustrating because in the Arizona Water Settlements Act of 2004, farmers provided their allocation of CAP water which was used to settle claims of the Gila River Indian Community. In return for giving up their long range allocation, agriculture was promised adequate and affordable CAP water through the year 2030. Now, the same government that we struck a deal with in good faith is considering artificially driving up the cost of that water to unaffordable levels.

What would be gained by forcing NGS to do the expensive SCRs instead of the lower cost low nox burners? Less lung cancer cases or heart attacks? No, remember, the reasons cited for the additions of SCRS is not for health issues. It is for visibility reasons only, and the air will be ever so slightly clearer, so slight that the human eye couldn't even detect the difference.

Why would EPA do this, and cause so much economic hardship on all of us?

An April 3rd Time Magazine interview with EPA Administrator Lisa Jackson gives insight into the mindset at EPA. Time asked her the question, "Can the U.S. balance environmental protection and job creation?"

She answered, and I quote " They have been balanced in this country for 40 years, as long as there's been an EPA. We've done it while our country has prospered" End quote.

If the EPA requires the additional SCRs, I can tell you that those goals won't be balanced in my community.

Far from prospering, our farmers, workers, and businesses will struggle to make ends meet.

I submit to you, that some times there is a limit to what business can absorb in increased costs of government regulations, and this is one of those times. Pinal County agriculture cannot absorb the huge increase in water cost that the SCRs would cause.

Chairman McClintock, Chairman Young, and Members of the Subcommittees, please do what ever you can to deter the EPA from forcing the expensive SCRs on Navajo Generating Station.

Thank you for inviting me here today.

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Mr. McCLINTOCK. Thank you very much. We will now move to questions, and I would begin with Mr. Silverman. I want to nail this down right away. We are told, oh, the EPA doesn't intend to close the Navajo Generating Station. What is the impact of imposing a billion dollars of new requirements on that station?

Mr. SILVERMAN. Well, as stated in my testimony, we are in a very unique position at NGS. The participants are in the beginning stages of negotiating an extension of the life of the project.

Currently, it expires, the resource documents, the lease on the plant site, the grants of right-of-way for transmission and the railroad that brings coal from the Black Mesa, all of these expire in 2019 and later.

And so we are busily trying to extend that life, but we are not there yet. Once we have reached agreement on those documents, they must be submitted to the Department of the Interior, at which point a NEPA process begins, which we have estimated could take as long as six years to complete.

The participants would have no way of knowing the outcome and whether or not the plant could continue at that point. Meanwhile, the EPA might have imposed the installation of SCRs and possibly bag houses.

You could not amortize the costs, the one billion plus costs, within that few years, and so the participants would be faced—and not because the EPA has mandated it, but because they would have to make that economic determination whether to close the plant.

Mr. MCCLINTOCK. So the EPA doesn't close the plant. The EPA simply imposes such enormous additional costs on the plant that it sinks it. Is that accurate?

Mr. SILVERMAN. I might argue with your choice of words, but the outcome is the same.

Mr. MCCLINTOCK. So by imposing the costs, they end up closing the plant?

Mr. SILVERMAN. Yes, sir.

Mr. MCCLINTOCK. This is the kind of semantics that we are used to dealing with from the environmental left, and it is infuriating. You mentioned how much of the proceeds of the economic activities of the Navajo Generating Station are going to The Navajo Nation?

Mr. SILVERMAN. The total, I believe—the total that I mentioned was \$140 million.

Mr. MCCLINTOCK. So, \$140 million a year going The Navajo Nation as royalties and as fees. So if the Navajo Generating Station is forced to close because of the imposition of these regulations, what happens to that \$140 million going to The Navajo Nation?

Mr. SILVERMAN. It goes away.

Mr. MCCLINTOCK. We have been told, well, the Navajo Generating Station is one of the biggest sources of emissions among power plants in the West. Is it not also one of the biggest generators of electricity in the West?

Mr. SILVERMAN. Yes, sir, it is, and that is a dilemma in describing, for example, NO<sub>x</sub> emissions, which may because it is so big be the third largest, but if you look at it on a basis of kilowatt hours produced, actually 297th.

Mr. MCCLINTOCK. And the obvious intention by the Minority is to mislead folks into believing that this is a source of monumentally reckless emissions. In fact, have you not made enormous investments in emissions control?

Mr. SILVERMAN. Mr. Chairman, we absolutely have. It is well in excess of a half-a-billion dollars for initially the particulate control at 99-1/2 percent, and the SO<sub>2</sub> control scrubbers in the 90 percent

removal, and most recently as you have heard today, the over-fire air at \$46 million.

Mr. MCCLINTOCK. And am I correct that the new EPA considerations of the regulations is not over health related issues, but over view shed issues?

Mr. SILVERMAN. It is. In fact, a regional haze is an issue. It is a visibility issue and not a health issue.

Mr. MCCLINTOCK. And the assumption obviously is that it is the power plant rather than everything from forest fires to atmospheric conditions that is contributing to the haze in the area. Is it correct that once those billion dollars of regulatory costs are imposed in a theoretical occasion that the plant could actually remain open under that whole burden, would there be any difference visible to the naked eye in haze over the Grand Canyon?

Mr. SILVERMAN. Mr. Chairman, we have contracted with an independent consultant to perform visibility modeling based on the results, and which used EPA's only models to determine the assumptions, and we concluded that NO<sub>x</sub> reduction from installation of SCRs resulted in imperceptible visibility improvements.

Mr. MCCLINTOCK. We also have been told of the conditions of poverty still suffered by many in The Navajo Nation. What would the impact of the closure of the Navajo Station be to poverty rates in The Navajo Nation?

Mr. SILVERMAN. Well, as has been testified to today, I don't know about the poverty rate, but certainly a loss of a thousand permanent jobs, and during the course of a year, a thousand temporary jobs.

Mr. MCCLINTOCK. Thank you very much. The Chair would also add that we have been joined by Congressman Schweikert of Arizona, and I would ask for unanimous consent that he be allowed to sit with the Subcommittees and participate in the hearing. Hearing no objection, so ordered. And now I yield to the Ranking Member, Ms. Napolitano.

Mrs. NAPOLITANO. Thank you, Mr. Chair, and just as a little bit of a—not housekeeping, but rather to Mr. Thelander from the Tempe Farming, is the County of Pinal one of four to receive USDA subsidies?

Mr. THELANDER. I am sorry, Ma'am, but I could not hear your question.

Mrs. NAPOLITANO. I am sorry. The county, Pinal County, does it not receive USDA subsidies for farming?

Mr. THELANDER. Yes, our farming company does participate in government farm programs, yes, Ma'am.

Mrs. NAPOLITANO. OK. Because the USDA website indicates that it received \$443 million from 1995 to 2009, and \$38 million in 2009 alone, and Pinal County, \$668,000. So there is help in that area?

Mr. THELANDER. Yes, Ma'am, the farmers in our area have participated in government farm programs, just as they have all across the United States.

Mrs. NAPOLITANO. OK. And to Mr. Modeer and Mr. Silverman, not in percentage, but in pennies per kilowatt per hour, can you provide the following information? What is the current cost of power produced at NGS in cents per kilowatt, and the cost of power produced if SCR technology is installed? And then the cost amor-

tized over 20 years, and what alternatives do you have for replacement power, and how does the costs compare in cents per kilowatt hour? Usually it is in percentages. I want it in cents, and if you can break it down.

Mr. SILVERMAN. Well, the current number, the production costs are 3-1/2 to 3.8 cents per kilowatt hour. I would have to provide you for the record and will do that based on your other assumptions.

Mrs. NAPOLITANO. If you would, please.

Mr. SILVERMAN. In terms of replacements, currently of course coal-fired generation would not be a replacement for the Navajo. The most likely replacement would be gas-fired generation.

Renewables. There just are not enough renewables to replace 2,250 megawatts anywhere near a reasonable period of time.

Mrs. NAPOLITANO. OK. To Mr. Masayesva, how has the strip mining impacted the Hopi Tribes' groundwater supply?

Mr. MASAYESVA. The coal slurry operation consumed over 45 billion gallons of water before the slurry line was forced to shut down at the end of the December of 2005, and that amount of water as I have stated in my testimony would have sustained the entire Hopi Nation for over 300 years.

Mrs. NAPOLITANO. Thank you, and Mr. Johnson, can you put the cost of water in perspective from the Navajo aquifer, how much does the Navajo pay, and how does that compare to that of Peabody?

Mr. JOHNSON. I thank you for the question. There is an acre-foot of water, and there are 325,851 gallons. Now, if you add and price that with a penny, that is \$3,258. That is what my community is paying, and Peabody is paying at an industrial rate of \$900 per acre-foot for their mining operation.

Mrs. NAPOLITANO. That is a very stark comparison. And to Mr. Silverman and Mr. Modeer, it has been 12 years since the EPA established the Regional Haze Rule in 1999 to control pollution in a Class One area.

In the preliminary BART ruling which is due out late this summer, and the final ruling due in 2012, the owners would have to install technology within five years, or by 2017. Is this really a surprise at all after almost two decades since the Haze Rule was made that compliance would be required?

Mr. SILVERMAN. It is not a surprise, Congresswoman, but it is a dilemma as I have outlined previously with respect to the timing of the renewal of the resource documents necessary to keep the life of the Navajo Generating Station after 2019.

Mr. MODEER. Well, the Regional Haze Rule that will be made by the EPA, a preliminary ruling sometime this summer, and a final ruling sometime after that, has a significant impact.

And as I testified on the Central Arizona Project, it is our single source of power. We are the largest power consumer in Arizona, and has 95 percent of the power supply, and it has a substantial impact on the cost of our operation, and the cost of water to our areas customers who use and depend upon the reliability, and sustainability of the Central Arizona Project water.

Mrs. NAPOLITANO. Thank you.

Mr. MCCLINTOCK. Thank you very much. Mr. Gosar.

Dr. GOSAR. Mr. Silverman, and Mr. Masayesva, in your testimony, you directly stated that Native Americans have been exploited by the operators of the generating station. I was wondering if you could repeat what percentages of employees at the Navajo Generating Station are Native Americans again?

Mr. SILVERMAN. Currently, over 80 percent of NGS employees are Navajo, which equates to over 450 Navajo people.

Dr. GOSAR. And what is the average salary for these employees?

Mr. SILVERMAN. With benefits, \$105,000 a year, well above the average for the area.

Dr. GOSAR. So I am in Coconino County, and so am I am not mistaken, the average in Coconino County for the jobs that are available is about \$48,000 is it not?

Mr. SILVERMAN. That sounds consistent with our understanding.

Dr. GOSAR. Are there any other jobs on The Navajo Nation or Hopi villages that pay over a hundred-and-some-thousand dollars that you are aware of?

Mr. SILVERMAN. Not that I am aware of.

Dr. GOSAR. OK. Mr. Justice, do you happen to know what an average job in the Page area pays, excluding the plant?

Mr. JUSTICE. It would be a service entry job in the tourism industry, and I would say it would be very, very low, right at the poverty level.

Dr. GOSAR. So probably about \$20,000 or less, with no benefits?

Mr. JUSTICE. I would say so, yes, because of the jobs are part-time jobs and are seasonal.

Dr. GOSAR. And in your testimony, you testified that the owners and contractors employ more than a thousand temporary skilled workers during the annual overhauls. What happens when it coincides with the area's tourism off-season? Any idea on the average on how many Native Americans get those jobs, Mr. Silverman?

Mr. SILVERMAN. During the annual outage period, the percentage of workers at the NGS, both SRP employees and contractors, increases to around 90 percent.

Dr. GOSAR. And can you give me for those couple of months in doing that what kind of pay do those jobs provide?

Mr. SILVERMAN. On average, \$25,000 for the two months.

Dr. GOSAR. Really? Wow. And the other side keeps talking about jobs. Interesting. Now, there is another problem as I understand about renewables, is that not only are they not available, but there are also the same impediments that you are facing with the NEPA processes, because I know that the Navajo community has been trying to put up some wind generators that have been held back by the Environmental Protection Agency with regard to actually being put on-line. Are you aware of some of those same implications to you?

Mr. SILVERMAN. We are aware.

Dr. GOSAR. And there is no way—I mean, I would like an all of the above type of a policy, and so there is no way that we could actually put renewables at this stage in your judgment to facilitate that power, right?

Mr. SILVERMAN. No, sir.

Dr. GOSAR. From Mr. Modeer, how do you feel about that?

Mr. MODEER. Well, the Central Arizona Project has to have baseload power. We operate 24 hours a day, 7 days a week, and most of our pumping is done during the nighttime hours to reflect economies of electrical use.

The replacement of that kind of power with renewables simply does not work. I could be employed as we are studying internally to use for peaking powers at some point in time in the future, but it simply does not provide baseload power, and it would not be something that would be sufficient for the pumping of electrical needs of the Central Arizona Project.

Dr. GOSAR. Mr. Thelander, I know that Arizona has this history of ranchers and farmers giving up their water in heroic aspects. I mean, the Teddy Roosevelt Dam was one of those, in which everybody benefitted for the whole area.

And CAP water and Lake Powell are the same way. Isn't there an implied or actually an explicit contract with those farmers and ranchers, particularly in the Pinal area in regard to this water?

Mr. THELANDER. Yes, we heard earlier about the large water settlement that was done to settle Indian water rights, and the farmers in my area gave up our long-term right to buy CAP water in return for affordable CAP water.

And so we are supposed to have affordable water until the year 2030, but if the CAP raises the cost of water \$16 a foot, it will not be affordable, and in my opinion that is breaking the promise that was given to us when we went into this big water settlement.

Dr. GOSAR. Mr. Thelander, if we were to put the businesses in the southern part of Arizona out of business, particularly the farmers, are we able to feed ourselves in this country?

Mr. THELANDER. Well, I guess the answer would be that we can put the farmers in Pinal County out of business, and the country is not going to go hungry, but overall these things are accumulative around the country, and if we put the farmers out of business in Pinal County, there goes the alfalfa production, the corn production, that goes to dairies that provide milk products for the Phoenix area, the Arizona area.

And so, yes, it is going to make an impact, and these types of things around the country that have an impact, they all add up.

Dr. GOSAR. All right. Thank you very much.

Mr. McCLINTOCK. Mr. Grijalva.

Mr. GRIJALVA. Thank you, Mr. Chairman, and I want to thank the community members from the Hopi and The Navajo Nation for providing the Committee and the Members with the very important and necessary historic perspective on this discussion.

I fully realize and appreciate the economic realities that The Navajo Nation and the Hopi Nation face with regard to the generating station, and I say that because I think that we have a water settlement, an Indian water settlement, in Arizona because of past abuses and exploitation of a very valuable and necessary resource, which is water.

I would suggest to my good friends on the Committee that the exploitation and abuse of resources with regard to Indian country in Arizona was not limited to water, and it was extended to all extractions, including the one that we are talking about today.



Nevertheless, we are in this time now, and we have to deal with the immediate, and I was going to ask Mr. Modeer that part of the discussion today had to do partially with increasing the portfolio of energy sources.

Can you talk about that a bit, and then for both yourself and I think Mr. Silverman, to the next question, which would have to do with the alternatives to whatever rulemaking or decision making recommendation that comes out from the EPA.

We are assuming that this is going to be something that will break the bank and cause this economic collapse that we have been talking about most of the day. I don't think that is going to happen, but that is why we are here.

Discussions of alternatives that begin to reach that reasonable accommodation that we spoke of earlier, have those gone on and are all the stakeholders willing to work, and working on alternatives? So if we could begin with you, Mr. Modeer.

Mr. MODEER. For the Central Arizona Project, we have been internally doing a considerable amount of study and research on the manner in which renewables might fit into our energy portfolio for the future.

As I said earlier, I think right now we are looking at them in terms of a source for peaking power, but certainly we recognize that at some point in the future that the Navajo Generating Station may very well run out of its useful life.

So looking at the various types of energy, whether it is renewable types of energy, or whether it is modular or nuclear, or participating in other energy projects that may be constructed in the future, and something that is prudent for us to study at this point in time because it takes a significant period of time to develop those energy alternatives.

Mr. GRIJALVA. OK. There is a finite to the extraction, the coal. There is a finite point, and as you talk about a transition to the more environmentally clean technology, and we are debating which is better, and does it suffice, and you have mentioned that in your testimony, we are also talking about a transition potentially to alternative energy sources given the finite situation with the coal. Is that what you have mentioned?

Mr. MODEER. We are. I think that we have been engaged with a number of stakeholders since January of 2011 to look at what is an acceptable pathway to resolve the issues that we are in conflict with over here.

Part of that discussion involves the potential of a study by the Department of the Interior and the Department of Energy, and the National Renewable Lab is to look at how different forms of energy generation can be developed in both the Navajo and the Hopi lands, and in other parts of Arizona, to resolve some of these issues and the transition—

Mr. GRIJALVA. Do you see parallel lines that we are talking about, the potential conversation to other sources, and the potential transition to different technology? Are they parallel or are they in conflict?

Mr. MODEER. I think that is the intent that the majority of the stakeholders would like to see this process moving in parallel to

provide us the information needed to make a very thoughtful decision about where to go for the future.

Mr. GRIJALVA. We appreciate that.

Mr. SILVERMAN. I don't know that I can add to what General Manager Modeer has said. The negotiations amongst stakeholders are not concluded, and it is not clear what the outcome will be.

Mr. GRIJALVA. OK. But the process is ongoing?

Mr. SILVERMAN. The process is underway, and it is being done in good faith by all parties.

Mr. GRIJALVA. All right. Thank you, Mr. Chairman.

Mr. MCCLINTOCK. Mr. Schweikert.

Mr. SCHWEIKERT. Thank you, Mr. Chairman, and thank you for letting a financial services person come and visit your Committee. Being someone who also spends a lot of time up in Indian lands, and this is a really big deal to our state, and has a real impact, and to Mr. Modeer, help educate me a bit. The baseload for the CAP is what?

Mr. MODEER. Baseload power refers to the fact that the power is constant, and it is always available to us. It is not intermittent due to weather or nighttime, which is for solar and for when the wind doesn't blow, you don't have wind energy.

So baseload power means a constant source of power that is there 24 hours a day.

Mr. SCHWEIKERT. How big is the baseload that you all use now?

Mr. MODEER. We use almost 500 megawatts of power on an annual basis, the largest user in Arizona.

Mr. SCHWEIKERT. And you mentioned before, Mr. Modeer, that it was in the evenings that you did much of your pumping?

Mr. MODEER. That is correct. We do a majority of our pumping in the nighttime hours because it is more efficient energy wise to move water during that period of time, and certainly toward the end of the year lessens our need to go to the open market for power when we have run through our amount of the Navajo Generating Station.

Mr. SCHWEIKERT. So what do you peak at in total usage?

Mr. MODEER. We deliver a maximum of about 3,700 feet per second out of the Mark Wilmer Pumping Plant

Mr. SCHWEIKERT. But you were just addressing that you were at 500?

Mr. MODEER. 500 megawatts of power, the total for the CAP on an annual basis.

Mr. SCHWEIKERT. And do you ever use more than that?

Mr. MODEER. And our peak pumping comes out of the Mark Wilmer Station and off the Colorado River, where we have six 60,000 horsepower pumps. It consumes a tremendous amount of energy.

Mr. SCHWEIKERT. And this is for anyone in the room. If you have never gone and see the siphons and the lifts, it is stunning, the scale of it. OK. Let us say right now that, let us say, tomorrow, that we are going to move to an environment where tomorrow you have to move to alternative energies, and you need 500 megawatts.

What would it take to get there? I mean, is that even practically possible even in the near term, let alone in the long term?

Mr. MODEER. My personal opinion is that I don't believe it is practical that you could replace that much. It would take a tremen-

dous amount of a renewable energy footprint to replace that type of power.

And again it would be intermittent power. It would not provide the needed power for the continuation of the operation of the Central Arizona Project. I think that probably the Salt River Project could address what the footprint would be, but it is multiple times renewable energy times baseload energy, out of such as Navajo that would be needed to be produced to generate the same energy, and not necessary at the appropriate periods of time.

Mr. SCHWEIKERT. And this may be even a flip side question that maybe Mr. Silverman would know. If suddenly our CAP water costs went up dramatically, and this is for whoever can answer it, what does that do to a number of our water agreements and our water compacts if now all of a sudden the cost structure changes?

Mr. MODEER. Congressman, the increase in power costs for the installation of SCRs is about 17 percent, or about \$8.33 on the existing price of \$49 per acre-foot, a substantial increase.

If bag houses are required, then it is a 33 percent increase, about \$16.30, added on to the current price, and so for agriculture use, it is a significant expense, and it probably drives them off the CAP water.

If we lose the plant entirely, then you are looking at somewhere between a 50 and 300 percent increase, depending on the price of natural gas, for us to go to the open market and buy power, not counting the fact that we would lose the opportunity to sell excess power, which generates about \$55 million in revenue.

Mr. SCHWEIKERT. But Mr. Chairman and Mr. Modeer, if you then were now buying in the open market, now you are completely subject to the whims of the market. So, today these contract prices can be dramatically different than in a couple of years from now, and vice versa?

Mr. MODEER. Congressman, that is correct. If you look at the history of power costs based upon natural gas prices, they go up and down.

Mr. SCHWEIKERT. And I am down to my last 30 seconds. The Navajo Generating Station, does anyone have a guess on what the economic life is? How much time does it have left?

Mr. SILVERMAN. Our goal is to extend the life to 2044.

Mr. SCHWEIKERT. OK. And the process for that extension?

Mr. SILVERMAN. The negotiation of several agreements, plant site lease with the Navajo Tribe, and the issuance of what are called 323 grants for the plant site, transmission that supports the plant, and the railroad, to be issued by the Department of the Interior, and a water service contract extension from the Bureau of Reclamation, and of the Department of the Interior, and negotiations with Peabody Coal Company, or the Peabody Energy Company, for coal fuel to produce electricity.

Mr. SCHWEIKERT. OK. Mr. Chairman, I have no other questions and I am over my time, and I appreciate it, but even that renegotiation as you heard is going to have a lot of eyes looking at this facility, and making sure that they are in compliance and doing good things. Thank you, Mr. Chairman.

Mr. MCCLINTOCK. Thank you. In consultation with the Ranking Member of the Subcommittee, we have determined that we won't need a third round. Ms. Napolitano, you have a motion?

Mrs. NAPOLITANO. Yes, Mr. Chairman. I have a letter, or actually it is a report by Public Opinion Strategies by Fairbank, Maslin, Maullin, Metz and Associates. It has key findings from a survey of Arizona voters regarding the increased use of renewable sources for electricity production, dated March 23, indicating that out of 600 Arizonans surveyed, 87 percent believe that energy is affordable, and is important, but 63 percent agree that having more affordable electricity is not worth the pollution from coal burning power.

Mr. MCCLINTOCK. All right. Without objection, so ordered.

**[NOTE: The report has been retained in the Committee's official files.]**

Mr. MCCLINTOCK. And with that, I would like to thank this panel of witnesses for their valuable testimony. Members of the Subcommittees may have additional questions for witnesses. We would ask that you respond to these in writing. The hearing record will be open for 10 business days to receive these responses.

And the Chair would also like to thank Dr. Gosar again for his persistence in directing the Subcommittees to this matter, and if there is no further business, and without objection, the Subcommittees stand adjourned.

[Whereupon, at 4:59 p.m., the Subcommittees were adjourned.]

[Additional material submitted for the record follows:]

[A list of documents retained in the Committee's official files follows:]

- Hopi Tribe, Comments on EPA's Advanced Notice of Proposed Rulemaking for Nitrogen Oxide Emissions at the Navajo Generating Station dated March 1, 2010
- Public Opinion Strategies, Memorandum to Interested Parties dated March 23, 2011, regarding "Key Findings from a Survey of Arizona Voters Regarding Increasing the Use of Renewable Sources for Electricity Production" submitted by the Honorable Grace Napolitano

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[A letter submitted for the record by the Arizona Westside Irrigation & Electrical Districts Association follows:]

## Arizona Westside Irrigation & Electrical Districts

Aguila Irrigation District  
Buckeye Water Conservation & Drainage District  
Electrical District Number Six  
Electrical District Number Seven  
Electrical District Number Eight  
Harquahala Valley Power District



Maricopa Water District  
McMullen Valley Water Conservation & Drainage District  
Roosevelt Irrigation District  
Tonopah Irrigation District

June 7, 2011

The Honorable Tom McClintock  
Chairman  
House Subcommittee on Water and Power  
1522 Longworth House Office Building  
Washington, DC 20515

The Honorable Don Young  
Chairman  
Subcommittee on Indian and Alaska Native Affairs  
1337 Longworth House Office Building  
Washington, DC 20515

Dear Chairmen McClintock and Young:

On behalf of the Arizona Westside Irrigation and Electrical Districts (Westside Districts), I thank you for holding the May 24, 2011 hearing on the Navajo Generating Station (NGS), and the impact that new Environmental Protection Agency (EPA) requirements will have on jobs and the economy.

The Arizona Westside Irrigation and Electrical Districts (Westside Districts) are an informal coalition of thirteen agricultural districts in Maricopa, La Paz, Pinal, and Yuma Counties that contract for federal hydro-power generated primarily at Hoover Dam and Glen Canyon Dam.

The Westside Districts also purchase substantial wholesale power from Arizona Public Service Company and Salt River Project to pump groundwater for irrigation. Several of the Districts also purchase and/or deliver Central Arizona Project (CAP) water, and/or other surface water or effluent resources.

With its 2,250 megawatts of generating capacity, NGS is an important energy provider for its participants, which include the U.S. Bureau of Reclamation, Arizona Public Service Company, Salt River Project, Los Angeles Department of Water and Power, Nevada Energy, and Tucson Electric Power Company. NGS provides critical base load energy to pump CAP water to Tribal communities, farmers, and cities in Arizona. In addition, NGS provides energy to meet the utilities' needs to serve more than 3 million electric customers in Arizona, California and Nevada.

The Arizona Westside Irrigation & Electrical Districts are an informal coalition of contractors of federal hydropower used to support irrigated agriculture in western Arizona.

1850 North Central Avenue, Suite 1100, Phoenix, Arizona 85004  
Phone (602) 604-2156 FAX (602) 274-9135

The NGS participants, and the customers they serve, face financial and resource supply uncertainty as a result of a potential EPA requirement to install expensive new emission controls. Such a requirement threatens the long-term viability of the plant, the regional economy, energy prices, and jobs. As highlighted in hearing testimony by Salt River Project and others, NGS is especially significant to Tribal employment. Revenues generated by the sale of surplus power from NGS also help fund repayment of the federal debt for the CAP, underwrite the cost of delivering CAP water to Arizona Tribes, fund the construction of CAP water delivery facilities for these Tribes, and provide settlement funds for Arizona Indian water settlements.

The participants in NGS have consistently ensured that the plant complies with applicable current environmental regulations, and have invested hundreds of millions of dollars in new technology retrofits to reduce environmental impacts. However, to address regional haze requirements under the *Clean Air Act*, the EPA is proposing to now require the additional installation of Selective Catalytic Reduction (SCR) technology at the NGS – at a cost of approximately \$1 billion or more.

Salt River Project, which is the operating agent for the NGS participants, completed a 2008 analysis that concluded that regional haze reduction requirements could be satisfied by installing low-NOx burners with separated over-fire air (LNB/SOFA) technology. The NGS participants decided to install LNB/SOFA ahead of a final determination by the EPA, at a cost of approximately \$45 million. Installation was completed in April 2011, and the new controls reduce NOx emissions by about 40 percent, or 13,000 tons per year.

While the further addition of SCR may offer marginal additional reduction of NOx emissions over LNB/SOFA, we understand that **the incremental regional haze/visibility improvements from that extra \$1 billion expenditure would be imperceptible to the human eye!**

We understand that the SCR requirement is currently in the rulemaking process, placing the operating future of NGS at risk and causing great uncertainty about costs for water delivery. With additional costs that NGS may incur for other environmental regulations pending at EPA, the uncertainty only increases.

NGS is the primary (95%) energy source for the CAP, a vital provider of water for millions of Arizonans and 10 Tribal communities. Should NGS be shut down, and customers be required to replace inexpensive NGS power with more costly power from the open market, regional energy and water rates would increase, and the regional economy would be significantly and adversely impacted. Alternatively, if the CAP pays its share of an SCR upgrade, it will be forced to increase water prices significantly, causing great harm to CAP water customers.

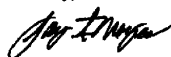
Given that visibility distinctions between the \$45 million LNB/SOFA technology and the more than \$1 billion SCR retrofit would be undetectable to the human eye, the Westside Districts concur with the assessment of Salt River Project and others that LNB/SOFA is the appropriate solution for reducing NGS impacts on visibility.

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Chairmen McClintock and Young, thank you for allowing us to submit comments for the hearing record, and for your attention to this critical issue.

Sincerely,



Jay I. Moyes  
For Arizona Westside Irrigation  
& Electrical Districts Association

[A statement submitted for the record by G. Brad Brown, Senior Vice President for Southwest Operations, on behalf of Peabody Energy, follows:]

**Statement submitted for the record by G. Brad Brown, Senior Vice President for Southwest Operations, on Behalf of Peabody Energy**

Mr. Chairman and distinguished members of the Committee, my name is Brad Brown, and I am Senior Vice President for Peabody's Southwest operations.

I want to thank the Committee for providing Peabody this opportunity to offer written testimony to address the crucial subject of protecting long-term tribal energy jobs and the role of the Navajo Generating Station.

By way of brief introduction, I am responsible for safety, engineering, environmental and financial activities associated with the Kayenta Mine in Arizona in addition to our Lee Ranch and El Segundo operations in New Mexico. I have been engaged in a variety of Southwest operations assignments throughout my 35-year tenure with Peabody.

I grew up on the reservation, and have been honored to live and work with the Navajo and Hopi people. This gives me unique perspective into the importance of balancing stakeholder needs to maintain the vital value chain of assets—the Kayenta Mine, Navajo Generating Station and Central Arizona Project—that together deliver life-giving energy and water as part of an enormous Southwest economic growth engine.

Peabody is the world's largest private-sector coal company<sup>1</sup> and a global leader in clean coal solutions. Our operations fuel 10 percent of U.S. electricity and 2 percent of global power. We ship nearly a quarter billion tons of coal to customers in more than 25 countries on six continents each year<sup>2</sup>—nearly 75 pounds of coal for every man, woman and child in the world.<sup>3</sup>

Our reach extends to nations representing more than half the world's population, and we have access to some of the most rapidly growing markets for electricity, steel and coal conversion projects. We employ 7,200 workers, and our operations contributed more than \$16 billion in direct and implied economic benefits this past year, which includes nearly \$370 million in Arizona alone.

Around the world, Peabody continues to demonstrate financial and industry leadership: We are a member of the Standard and Poor's 500 Index, a Fortune 500 company, and ranked 21 on the Forbes 2010 listing of America's Best Big Companies. Peabody is named on the BusinessWeek 50 list of best large U.S. companies and in 2010 achieved Coaltrans honors as the world's leading coal company for the past 30 years.

This past year was the safest in Peabody's history, and our credentials in the area of corporate and social responsibility continue to be recognized. Peabody was honored by the U.S. Foreign Policy Association for international corporate and social responsibility, and earned Communitas honors for ethical and environmental responsibility in 2011. Dual honors also were earned for directing the first land restoration project in Mongolia's history, capping more than 30 major awards for safety, financial, environmental excellence and corporate responsibility in 2010.

There are four areas that I will address in this testimony:

- The role Kayenta Mine plays in delivering electricity and water to the Southwest while creating jobs and enormous economic growth;
- Kayenta Mine's record of excellence in operations, compliance, and environmental and community stewardship;
- Energy alternatives for the Navajo Generating Station; and
- Balanced regulation that puts people and technology first.

I'll address each of these one at a time.

**Kayenta Mine: Delivering Electricity and Water to the Southwest**

More than a half century ago, leaders from the Navajo Nation, the Hopi Tribe, Peabody Energy, Salt River Project and the federal government came together with a bold and unprecedented plan to deliver electricity and water to the Southwest.

The vision included development of a large coal mine to fuel a major 2,250 megawatt power plant that would deliver electricity to Arizona, California and Nevada. Importantly, the plant also would provide power to move 1.5 million acre-feet of water each year from the Colorado River to cities, tribal communities, and agricultural districts in the central and southern region of Arizona through a complex sys-

<sup>1</sup> SEC filings and Peabody analysis (values on a short-ton basis).

<sup>2</sup> Peabody Form 10-K for the Fiscal Year Ended Dec. 31, 2010.

<sup>3</sup> SEC filings and Peabody analysis (values on a short-ton basis).

tem of aqueducts. These projects were contemplated when the need for electricity was doubling each decade and sparsely populated Sunbelt states were experiencing large population increases.<sup>4</sup>

In the Spring of 1961, Peabody acquired its first prospecting permit from the Navajo Nation, which paved the way for drilling and evaluation of the coal resources on Black Mesa in Northeast Arizona.

As was the practice at that time for Indian coal leases, the permits included a form of lease agreement with financial terms pre-established by the U.S. Department of the Interior's Bureau of Indian Affairs in consultation with the Tribe. The permit and lease provisions were prescribed by the Bureau of Indian Affairs and terms were largely non-negotiable.

A second drilling and exploration permit was signed with both the Navajo and Hopi in the summer of 1964 for coal that was jointly owned by the tribes. Here, too, the form of lease to be executed with the tribes was predetermined by the Bureau of Indian Affairs with the input of tribal officials and was largely non-negotiable.

At the time, the royalty provisions included in these leases were more lucrative for the tribes than the prevailing royalty rates for federal and Indian coal leases in the Western United States, including the federal coal leases that the U.S. Department of the Interior was issuing at the same time in the vast Powder River Basin.<sup>5</sup>

The Colorado River Basin Project Act of 1968 authorized the United States to participate as an owner in the Navajo Generating Station to provide power for the water delivery through what is called the Central Arizona Project. The project provides renewable water to 80 percent of the state's population, and was negotiated and approved by then U.S. Secretary of the Interior Stewart Udall. The Central Arizona Project is Arizona's largest electricity user, and transports water from the Colorado River to Phoenix and Tucson through a 336-mile system of canals.

Peabody signed a letter of intent with Salt River Project in 1968 and executed a coal supply agreement in the summer of 1970. Kayenta Mine was the sister operation to the Black Mesa Mine, which also is located in Peabody's lease area on the Navajo and Hopi reservations. The Black Mesa Mine was developed three years before Kayenta Mine to fuel the Mohave Generating Station in Laughlin, Nev., operated by Southern California Edison. Together these projects were among the most complex greenfield energy developments in the history of the Southwest.

In those early days, the Black Mesa was extremely remote. There were few roads and little infrastructure. Tribal families cooked over wood fires, heated their hogans with wood or coal and hauled water from local springs. Many young fathers were forced to leave the reservation in search of work in larger cities far away, and children were frequently sent to Bureau of Indian Affairs boarding schools, a combination that eroded the important family structure.

Development of the Black Mesa Complex required creating 150 miles of roads, bringing power to the top of the mesa and building water wells for mining and domestic needs. A massive, sustained training program was implemented for hundreds of workers that literally trained shepherds to operate multi-million dollar draglines and other high-tech mining equipment. Tens of thousands of hours were tracked annually in those early days of training.

The Black Mesa Mine operated from 1970 to 2005, shipping approximately 5 million tons of coal annually to the Mohave Station. Mine operations were suspended after the power plant owners elected to close the facility. Discussions continue with both tribes to resume Black Mesa Mine's operations to fuel electricity generation or other coal-related projects.

The Kayenta Mine began operating in 1970 as the sole supplier of coal to the Navajo Generating Station near Page, Ariz. Today the mine produces approximately 8 million tons of low-sulfur coal each year that is transported to the plant via an 83-mile closed loop rail. Coal reserves are available within the existing Peabody lease area to fuel the Navajo Station for another 30 years. Peabody's lease agreements with the Navajo and Hopi remain in effect as long as the mine operates.

Kayenta Mine employs more than 400 workers and about 90 percent of the workforce is Native American. Employees are well compensated, and jobs at the Kayenta Mine are highly sought after: Wages and benefits average \$80,000 annually for rep-

<sup>4</sup>Peabody Energy Celebrating 125 Years,' copyright Peabody Energy.

<sup>5</sup>U.S. Department of the Interior, MMS, Reports of the Division of Minerals Revenue Management: American Indian Coal Royalties Calendar Years 1928-2000; [http://www.onrr.gov/stats/pdfdocs/comm\\_inc.pdf](http://www.onrr.gov/stats/pdfdocs/comm_inc.pdf); Mineral Revenues 1995, Table 46 (General Federal and Indian Mineral Lease Terms).



resented workers, which is four times the median household income on the Navajo reservation.<sup>6</sup>

Since many employees support their extended families, the benefits of employment are far-reaching. Excellent career opportunities provide personal and professional satisfaction, and importantly, keep families together living and working on their traditional homeland and preserving longstanding cultural ways.

Mining is a powerful economic force in the region, annually generating nearly \$370 million in direct and indirect economic benefits.<sup>7</sup> This includes \$92 million in direct economic impacts each year through wages and benefits, tribal royalty and business payments, water fees, Navajo Transmission Utility Authority revenues and scholarships. The operations also generate nearly \$24 million annually in property taxes and state sales tax. All told, mining on Black Mesa has delivered more than \$3.1 billion in direct economic benefits to tribal and regional communities since the operations began.

### **Excellence in Operations, Compliance, and Environmental and Community Stewardship**

There is a well known Navajo saying that, “We do not inherit the land from our ancestors, we borrow it from our children.”

Similarly, Peabody recognizes that it operates as a guest on reservation lands, temporarily using the land for social and economic benefit prescribed by the tribes. Mined lands are restored for productive, sustainable use.

Kayenta Mine is perennially recognized among the safest large surface operations in the nation. For example, workers achieved more than 1 million operating hours without a lost-time incident during 2009, and the mine’s 2010 safety rate was 0.42 incidents per 200,000 hours worked, which is 89 percent lower than the U.S. industry average.<sup>8</sup> Best practices are used for engineering and mine planning, reclamation planning and environmental monitoring, and all of these activities are carried out with respect for traditional ways.

Even before the U.S. Surface Mine Control and Reclamation Act was put in place in 1977, Peabody pledged to restore mined lands to a condition that would be equal to or better than before mining occurred. Through careful consultation with the tribes, traditional healers, herbalists and range experts, Peabody created an award-winning restoration program that is globally recognized.

Based on the wishes of the tribes, lands are restored for livestock grazing, cultural plant use and wildlife habitat. A first-of-its-kind cultural plant program restores herbs, shrubs and trees used for medicinal and ceremonial purposes, and the program has earned numerous awards, including several honors from the U.S. Department of the Interior.

Reclaimed lands are carefully monitored for a minimum period of 10 years before being permanently released back to the tribes. Restored lands are as much as 20 times more productive for grazing than native range. The quality of the land is crucial for traditional people residing on Black Mesa, who make their livelihood through sheep and cattle ranching.

Peabody has reclaimed nearly 330 acres of cultural plant sites through the complex and restored more than 10,000 acres of hardy rangeland at Kayenta Mine to date. The company also has created an award-winning managed grazing program that offers range management education for lease area residents and access to restored lands under Peabody’s control. The program was developed through broad consultation with Black Mesa residents, the Navajo Nation, the Hopi Tribe, the U.S. Office of Surface Mining and the Bureau of Indian Affairs.

### **Archaeological Study**

As Peabody has advanced best practices in land restoration, it also has advanced a much deeper understanding of the Anasazi people. Over a period of three decades, the company conducted what became known as the largest continuous archaeological investigation in North America.

The project, known as the Black Mesa Archaeology Project, was led by Southern Illinois University’s Center for Archaeological Investigations. It began in 1967 and involved researchers from a dozen universities.

The entire lease area of 65,000 acres was surveyed by 700 scholars and scientists, and researchers identified approximately 2,500 sites of interest. These included small pottery sites with surface features and larger sites with multiple family dwell-

<sup>6</sup>Dine’ Development Corporation, Window Rock, Ariz.

<sup>7</sup>Peabody historical analysis of employee wages and benefits, tribal payments, NTUA revenue, water fees and scholarships.

<sup>8</sup>U.S. Mine Safety and Health Administration data, 2011.

ings. Ultimately 220 sites were excavated, and 1 million artifacts were identified and remain the property of the Navajo and Hopi. These activities carefully followed federal and tribal regulatory requirements to protect historic sites. The archaeological project is recognized as an industry model by the U.S. Department of the Interior and is the subject of more than 300 publications.

According to Dr. George J. Gumerman, Southern Illinois University's past Director for the Center for Archaeological Investigations who led the investigation:

"The unusual aspect of the Black Mesa Archaeological Project is that Peabody went beyond the letter of the law in exploring and collecting the artifacts of the extinct people of Black Mesa. Peabody helped us discover how people really lived, and it changed the way we look at the people of pre-historic Southwest. . . This project gave us a social history of how the average people lived back then and helped to understand their day-to-day lives."

Elsewhere in the lease area, the company also has developed a number of programs to improve the quality of life for some 200 Navajo families residing within the lease area. Basic services such as potable water, road grading and maintenance and free coal for home heating are offered. The company also assists residents during inclement weather with snow plowing and delivery of water and hay for livestock.

Peabody has further assisted the Navajo Tribal Utility Authority with an electricity project that brought electricity access to residents on and adjacent to the east side of the lease area by providing a right of way, route clearing and road building. Additional water delivery programs for lease area residents are being discussed with the Navajo Nation.

Peabody's collection of socially responsible practices on Black Mesa, including training and employment practices, land restoration, archaeological and cultural preservation and range management, is recognized globally. Peabody was the only mining company in the world recognized for sustainable practices at the Energy Globe Awards in Brussels among nearly 100 nations.

#### **Environmental Compliance**

Demonstrating corporate responsibility means achieving good stewardship. Strong environmental compliance is well documented at the Kayenta Mine through multiple examinations involving a broad group of federal and tribal regulatory authorities. The most recent example can be found in the U.S. Department of the Interior's stakeholder process that resulted in development of an Environmental Impact Statement (EIS) on renewal of the Kayenta Mine operations permit that was published in December 2008.

The EIS represented an extensive four-year public stakeholder process with the U.S. Department of the Interior, the U.S. Environmental Protection Agency, the Navajo and Hopi, numerous other consulting agencies, and the public.

Many other multi-year, multi-media examinations have reviewed Peabody's environmental compliance on Black Mesa in conjunction with rigorous monthly, quarterly and annual environmental monitoring and reporting. A multi-media monitoring system on site continues to provide air, water, vegetation, soils, overburden and cultural resources data for constant benchmarking.

#### **Water Use**

A minimal amount of water is used at the Kayenta Mine for dust suppression and potable uses. Based on its lease agreements, Peabody pays the tribes more than \$1.1 million annually to use approximately 1,200 acre-feet of water each year. This represents a 70 percent reduction in annual water use following the suspension of activities at the Black Mesa Mine at the end of 2005.

Water is sourced from the Navajo Aquifer, an enormous resource spanning 7,500 square miles in the Four Corners region that is naturally replenished through the hydrologic cycle. The Navajo Aquifer holds 400 million acre-feet of water, which is some 17 times the size of Lake Powell at full pool. Studies demonstrate that mining will use less than one-tenth of one percent of the volume of water stored in the aquifer over the life of the operations and that the aquifer will recharge rapidly.

Since the suspension of mining activities at Black Mesa Mine, the Navajo Aquifer has recovered nearly 200 feet beneath the Kayenta Mine permit area in the confined area of the aquifer demonstrating rapid recovery of the resource. Studies show that any drawdown by Peabody has not adversely impacted community water sources, including those at the nearby Forest Lake Chapter.

The latest reports from the U.S. Office of Surface Mining and the U.S. Geological Survey also continue to conclude that the Navajo Aquifer is healthy and robust and water quality is excellent.<sup>9</sup>

There are no significant trends indicating adverse impacts to domestic water supplies, spring flow or stream flow. These findings cap 50 years of well documented government, tribal and private study of the Navajo Aquifer to assess its relationship to shallow wells and surface water flows and to ensure tribal water resources are protected.

Importantly, the lease agreements specify that if at any time the U.S. Department of the Interior determines the aquifer has been damaged due to water use from mining, Peabody must fund development of a replacement water source for the tribes.

#### **Energy Alternatives for the Navajo Station**

The Navajo Generating Station delivers 2,250 megawatts of power to customers in Arizona, California and Nevada. A plant of this size can create electricity for more than 2 million families.

The Navajo Station owners are considering a variety of options to update the plant to achieve Best Available Retrofit Technology (BART) requirements under the Clean Air Act. Among them: integrating solar power into the coal plant, using stand alone renewable generation or distributed generation including solar or wind that could help service the electric load for the existing water pumps within the Central Arizona Project.

Peabody believes that all forms of energy are needed to meet long-term energy needs of the Southwest, and that society does not face a choice between coal, wind or solar power. We must, however, recognize both the advantages and limitations of each.

Renewables do not offer baseload power of the scale needed to replace the Navajo Station. Because renewable power cannot be stored, it requires baseload backup when the sun is clouded over or winds are calm.

Even if solar were used to replace a portion of Navajo Station's capacity, the state's best solar profile is near Phoenix, which is hundreds of miles south of the reservation.<sup>10</sup>

The sheer scale of the Navajo Station far exceeds the capacity of proven renewable sources, making it unrealistic to suggest that renewables could take the place of the plant's baseload power. Replacing the three 750-megawatt coal units for the plant with solar panels, for instance, would require some 1.3 million solar panels covering nearly 25,000 acres or nearly 40 square miles, which is more than 83 times the footprint of the Navajo Station.<sup>11</sup> Each solar panel is estimated at approximately 8 square feet in size.

Prematurely ending power plant operations also would result in enormous loss of jobs, revenues, and economic benefits to the Navajo and Hopi and the Southwest region. The vast majority of jobs created for solar energy would be for laborers who would be needed to wash solar panels versus the skilled positions needed for the mine and power plant operations.

Solar power fuels less than one percent of U.S. electricity<sup>12</sup> whereas coal fuels nearly half of U.S. electricity and is by far, the affordable energy alternative at scale, fueling the lowest cost electricity in the United States: The 10 states that use the highest percentage of coal have electricity rates that average less than half of the cost of other states that rely on more expensive fuels like natural gas.<sup>13</sup> And this past decade, the cost of natural gas averaged nearly four times the delivered cost of coal.<sup>14</sup>

Only 39 percent of Arizona's electricity is fueled by coal, and the state pays on average 9.7 cents per kilowatt hour. This compares to other western states like Wyoming, where 89 percent of the state's electricity is fueled by coal and consumers

<sup>9</sup>Macy, J.P., Groundwater, Surface-Water, and Water-Chemistry Data, Black Mesa Area, Northeastern Arizona—2008–2009: U.S. Geological Survey Open File Report 2010–1038, 43 p., published in 2010. U.S. Office of Surface Mining "Report on Its Review and Analysis of Peabody Western Coal Company's 2009 Annual Hydrological Data Report and The U.S. Geological Survey's Ground Water, Surface Water, and Water-Chemistry Data, Black Mesa Area, Northeastern Arizona—2008–2009," published August, 2010.

<sup>10</sup>Photovoltaic Solar Resources, Billy Roberts, October 2008; National Renewable Energy Laboratory, U.S. Department of Energy.

<sup>11</sup>Based on calculations using Solaripedia data; [http://www.solaripedia.com/13/303/3431/sarnia\\_solar\\_farm\\_photovoltaics.html](http://www.solaripedia.com/13/303/3431/sarnia_solar_farm_photovoltaics.html).

<sup>12</sup>U.S. Energy Information Administration; Electricity in the United States, 2009.

<sup>13</sup>U.S. Energy Information Administration, March 2011.

<sup>14</sup>Ventyx, Monthly Plant Fuel Purchase Price.

enjoy costs that are 36 percent lower.<sup>15</sup> In California, where just 1 percent of electricity is fueled by coal, energy costs are even more punishing, with consumers facing the second-highest electricity prices in the nation. Their costs average 13.8 cents per kilowatt hour.

#### **Balanced Regulation that Puts People and Technology First**

Peabody believes that technology is the solution for continuous environmental improvement to address both regulated emissions and carbon dioxide (CO<sub>2</sub>). Technology has enabled U.S. coal-fueled generation to achieve a strong and improving environmental track record driven by tens of billions of dollars invested in clean coal technologies by the nation's utilities.

U.S. coal use and gross domestic product have tripled since 1970, as emissions of sulfur dioxide, nitrogen oxides and particulates per megawatt hour have been reduced more than 80 percent.<sup>16</sup> The next generation of supercritical, gasification and carbon capture and storage technologies will continue to build on this progress.

The BART process for Navajo Station means that the technology must be available, affordable and deployable. Salt River Project has just completed a \$45 million retrofit of low-nitrogen oxide (NO<sub>x</sub>) burners on each of its 750 megawatt units that reduce NO<sub>x</sub> emissions by at least 40 percent. For the station owners to invest another \$1.1 billion in retrofit technologies, they must be given the time needed to extend their plant site lease and renew rights of way to ensure long-term operating certainty.

The U.S. Environmental Protection Agency (EPA) must move carefully and within a reasonable timeframe to balance the human and societal costs with meaningful environmental improvement mandated by additional emission controls. Premature shutdown of Navajo Station would in turn, cause closure of the Kayenta Mine, which has no access to any other coal customer. It is unclear what replacement source could power the Central Arizona Project.

Moving regulations forward too fast, and without proper consideration of people and economies is the reason why a bipartisan group of 22 attorneys general across the country have sent a letter to EPA Administrator Lisa Jackson, calling on EPA to defer rapid implementation of carbon regulations to avoid the so-called 'regulatory train wreck.' The attorneys general want to ensure Congress has the opportunity to evaluate the need and timing for these rules. EPA also has come under pressure from 23 state legislative chambers in 15 states adopting formal resolutions to block a regulatory disaster.

We cannot allow a similar train wreck in the Southwest. Forcing the Navajo Station to close prematurely will shut out hundreds of reservation jobs and billions of dollars in revenues in coming decades. These assets and benefits will never be replaced at this scale because there are no viable energy alternatives on reservation lands that come close to the value of coal. Coal is the sustainable resource providing vital power and water that enables Southwest families to live in the arid desert.

At a time when unemployment in reservation communities is hovering at 50 percent, and Arizona's fragile economy is still recovering from the economic recession, it is crucial to maintain the value chain of assets associated with the Navajo Generating Station.

Thank you for the opportunity to testify on one of the most crucial energy issues faced in the Southwest.

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<sup>15</sup> U.S. Energy Information Administration, March 2011.

<sup>16</sup> U.S. Energy Information Administration, Annual Energy Review, June 2009; Peabody analysis of U.S. Environmental Protection Agency Air Emissions Trend Data for sulfur dioxide, nitrogen oxides and particulates.

[A letter submitted for the record by Leisa B. Brug, Director, Energy Policy Advisor to Governor Janice K. Brewer, State of Arizona, follows:]

JANICE K. BREWER  
GOVERNOR



LEISA B. BRUG  
DIRECTOR

June 3, 2011

The Honorable Tom McClintock  
428 Cannon HOB  
Washington, DC 20515

The Honorable Don Young  
2314 Rayburn House Office Building  
Washington, DC 20515

Mr. Chairmen:

Thank you for this opportunity to provide testimony on the Navajo Generating Station (NGS) in Northern Arizona. This crucial power source is a 2,250 megawatt plant that provides power to customers throughout the southwest, as well as to the Central Arizona Project, a key source of water for central and southern Arizona. The plant also provides significant revenues to the Navajo Nation and Hopi Tribe, as well as other governmental entities in Arizona.

The United States Environmental Protection Agency (EPA) is expected to issue a proposed Best Available Retrofit Technology (BART) rule for NGS in the summer or fall of 2011 to reduce NOx emissions at the plant. NGS's owners, recognizing the value of reducing NOx emissions from the plant, voluntarily embarked on the early installation of emission controls at the plant. This solution, the installation of combustion controls, cost the plant owners about \$45 million, and was completed in April 2011. Other solutions that have been advocated by environmental activists could cost between \$600 million and \$1 billion. With the uncertainties related to the continued operation of the plant beyond 2019 still unresolved, such astronomical costs cannot be accommodated by NGS, and the imposition of such costs puts the future operation of the power plant at risk.

The effects of a shutdown of NGS would be far-reaching and of great concern to the State of Arizona. There are no readily available alternatives to replace NGS. Renewable energy sources such as wind or solar – while valuable additions to Arizona's electricity production portfolio – simply cannot replace baseload generation due to their intermittent nature and resulting low capacity factors. Moreover, such renewable resources, contrary to statements by certain advocates, will not generate the employment that NGS, and the mine that supplies it, provide to Northern Arizona's rural and tribal economies. And finally, replacing NGS would have a devastating impact on the cost of a key water supply for central and southern Arizona municipalities, Indian Tribes and agricultural users.

Arizona, like most of the rest of the nation, has lost thousands of jobs over the past few years. Statewide, the unemployment level has retreated modestly to just below 10 percent. However, in the rural tribal economy in Northern Arizona, the unemployment level is much higher. The economy remains fragile, and NGS is a major employer, especially for members of the Navajo Nation. The Kayenta coal mine, which provides the coal required for operation of NGS would likely be shut down if NGS ceases operation. It also is a major employer for the Navajo Nation and provides a significant source of revenues to both the Navajo Nation and Hopi Tribe from the sale of coal. Between the plant and the mine, they employ almost 1,000 individuals (approximately 80% of whom are Navajo) in high-paying jobs, provide the bulk of revenues needed by the Hopi Tribe to run its governmental operation, and provide a significant source of revenue for the Navajo Nation. Those high-paying jobs at NGS and the Kayenta mine further support countless other jobs in and near the City of Page, Arizona and on the Hopi Reservation.

Without the jobs NGS and the Kayenta coal mine provide, those workers will almost certainly be added to the state's unemployment rolls and become reliant on federal and state-offered social services. In this time of economic distress, it is unacceptable and an outrage to eliminate employment opportunities that cannot be replicated for these citizens. The loss of NGS and the mine also would mean decreased tax revenues for the state and the City of Page at the same time the demand for state services provided to low income families, such as Medicaid, unemployment cash assistance, and welfare services would increase.

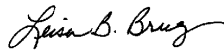
The second major concern raised by the potential imposition of \$600 million - \$1 billion of emission controls (or even a shutdown of NGS) involves the need to power the Central Arizona Project (CAP). CAP relies on NGS to provide about 95% of the power for its operations to move Colorado River water to central Arizona, the metropolitan Phoenix and Tucson areas, and hundreds of thousands of acres of agricultural lands in central and southern Arizona. CAP also plays a critical role in the implementation of many Indian water rights settlements by delivering water to numerous Indian tribes. If the NGS owners are required to spend \$600 million to \$1 billion for emission controls, the resulting impact would be up to a 33% increase in rates for the delivery of water by CAP. If NGS were to cease operations, CAP could be forced to double or triple its water delivery rates to cover the increased cost of energy for its operations. Such large increases in water delivery rates likely will drive farmers out of business or at a minimum force them back to pumping groundwater, which would further strain an already depleted groundwater supply.

A shutdown of NGS would also impact the repayment obligation for construction costs of the CAP and impact the funding costs of Indian water right settlements in Arizona. Currently, revenues from the sale of surplus NGS power contribute about \$22 million per year toward CAP's \$57 million annual repayment obligation. Revenues from the sale of surplus NGS power in the future are projected to contribute as much as \$50 million annually towards the CAP repayment obligation as well as cover the cost of Indian water rights settlements in Arizona. The continued operation of NGS is critical not only to CAP operations and the ability of CAP to meet its water delivery obligations, but also to CAP's finances and to the fulfillment of commitments made in numerous Indian water rights settlements to which the United States is a party.

Finally, without the availability of CAP water at a reasonable cost, the settlement of several of Arizona's Indian Tribes' water rights claims are threatened. As deemed by Congress under the Arizona Water Settlements Act (P.L. 108-451), 102,000 acre-feet per annum (AFA) and 28,200 AFA of CAP water was reallocated to the Gila River Indian Community and the Tohono O'odham tribe respectively to settle their water rights claims. This Settlement also required the Secretary of the Interior to reallocate 67,300 AFA of CAP water to Indian Tribes within Arizona. Of that amount, 23,782 AFA has already been reallocated to the White Mountain Apache Tribe to settle its water rights claims. The remaining 43,518 AFA is currently committed to be used to settle the water rights claims of most, if not all, of the 12 Indian tribes in Arizona whose claims remain unresolved. This includes the Navajo Nation and the Hopi Tribe.

These effects could destroy the heart of Arizona's economy – agriculture, ranching, and mining. Indeed, Arizona has long touted the "5 C's" upon which our state was built: copper, cattle, cotton, citrus and climate. Without the operation of NGS, the first 4 of these "5 C's" are in serious jeopardy.

Sincerely,



Leisa B. Brug, Director  
Energy Policy Advisor to Governor Janice K. Brewer

[A letter submitted for the record by Anna Frazier, Coordinator, Dine' Citizens Against Ruining Our Environment, follows:]

**Statement submitted for the record by Anna Frazier, Coordinator, Dine' Citizens Against Ruining our Environment (Dine' CARE), Winslow, Arizona**

**WATER IS LIFE**

According to our earliest teachings, water is the blood of the land, carrying life and nourishment to the rest of natural creation. Flowing in beauty, there are female and male waters. Where they touch is a sacred place for reproduction and generation of new life. Their merger symbolizes fertility and the renewal of life in Fourth World.

Deriving our original authority from the rainbow of sovereignty, the Navajo Nation possesses aboriginal water rights that antedate and predate the United States of America and the State of Arizona. Based on the federal recognition of our inherent tribal sovereign status, we as a tribal nation maintain a special and unique treaty and trust responsibility relationship with the federal government that is based and rooted in the mutually ratified treaties of 1849 and 1868. We further have prior and paramount First Nation water rights through the applicable 1908 Winters Doctrine and the 1963 U.S. Supreme Court case of *Arizona v. California*.

Yet our tribal reserved water rights and historic uses are threatened to be severely limited and unjustifiably quantified by the Northeastern Arizona Indian Water Rights Settlement Agreement of 2010 and its horrific Navajo Generating Station water provisions which if fully approved, will continue and extend into perpetuity the illegal Navajo water rights waivers of 1968 and 1969 for the sole use and benefit of NGS and the racist company town of Page. Although the 50-year Navajo water rights waivers appertaining to the industrial and municipal operations of the Navajo Generating Station and the City of Page are due to expire in 2019 and 2020 (if the aforementioned agreement and its NGS water provisions are not approved by Congress and other entities), these waivers are still unconscionable and represent fundamental violations of basic human rights. Such gross human rights violations are strictly prohibited under the United Nations Declaration on the Rights of Indigenous Peoples as ratified by the U.N. General Assembly in 2007. Health impacts resulting from the pollution and toxic waste (coal combustion waste) generated by the Navajo Generating Station needs to be included in this discussion. The health impacts are disproportionately borne by the Navajo and Hopi communities with little or no access to health care. On April 13, 2005, U.S. Senate Committee on Indian Affairs oversight hearing on Indian health care issues, Anslem Roanhorse, Jr., the Navajo Nation Division of Health and Human Service Director testified the Navajo Indian Health Service is 55% funded and there is a 17–20% vacancy rate for doctors and nurses on Navajo. Furthermore, the legislation reauthorizing Indian Health care Improvement Act, last reauthorized in 1999, was finally reauthorized in 2010.

The Navajo Nation has tried to protect its communities from the toxic stew that makes up coal combustion waste. Unfortunately, the responsible federal agencies are ignoring a human health crisis in the making with no oversight. Incidentally, none of the electric power generated by the massive power plant on our land go to our people. The Navajo Nation is an energy export zone where all the power goes off our reservation and we are left with Superfund sites. This is an environmental justice issue where Native Americans are burdened with disproportionate pollutants.

In due consideration of the foregoing, we request a full congressional investigation of and hearings into why the Navajo Nation has not been able to fully assert its inherent national sovereign rights to at least 10 million acre-feet of water per year to the Colorado River main stem and tributaries that are located between and within the Four Sacred Mountains of Dine Bi Keyah. We further request immediate congressional authorization of an expedited official order directing that fair and just compensation and subsequent damages be assessed and paid in full for the loss and wastage of valuable tribal water resources due to the aggregate effect of the above-mentioned waivers.

Lastly, we respectfully request that the subject waivers be reevaluated and investigated forthwith by Congress' General Accounting Office.

[A statement submitted for the record by Niger Innis, Co-Chairman, Affordable Power Alliance, follows:]

**Statement submitted for the record by Niger Innis, Co-Chairman,  
Affordable Power Alliance, Las Vegas, Nevada**

Chairman McClintock, Chairman Young, Members of the Subcommittees, my name is Niger Innis. I am the Co-Chairman of the Affordable Power Alliance, a coalition of civil rights, social justice, and senior advocacy organizations formed to address the problem of rising energy costs. Among the member organizations of the Affordable Power Alliance are the 60 Plus Association, the National Black Chamber of Commerce, the National Hispanic Christian Leadership Conference, the Congress of Racial Equality, and the High Impact Leadership Coalition. These varied organizations within the Alliance represent millions of Americans from the African American, Latino, senior citizen, and small business communities.

Chairman McClintock and Chairman Young, I thank you for holding this timely hearing and request that this testimony be entered into the record of this joint hearing. The Affordable Power Alliance has a vital interest in the outcome of the decision from the U.S. Environmental Protection Agency (EPA) on emissions controls upgrades that may be mandated for the Navajo Generating Station (NGS), not only because thousands of our supporters live and work in the affected areas of Arizona and New Mexico, but also because we recognize that higher energy prices anywhere in America hurt people everywhere in America.

We know that EPA is currently evaluating controls on NO<sub>x</sub> emissions from NGS under EPA's Regional Haze rules to protect visibility in nearby areas like Grand Canyon National Park. We have examined EPA's "Advanced Notice of Proposed Rulemaking Regarding Best Available Retrofit Technology for Nitrogen Oxide Emissions at the Navajo Generating Station Docket Number EPA-R09-OAR-2009-0598."

From studying that document, we know that if the NGS must make retrofits outlined in that proposed rule, it would raise NGS energy prices to its customers, which will mean higher costs of water for the Central Arizona Project, which will mean higher costs for the wheat farmer in Maricopa County, which will mean higher costs for the pasta company near Phoenix, which will mean higher food bills from Los Angeles to Bangor, and from Fairbanks to Miami. We know that this hypothetical example of one microcosm will be multiplied many times by reality if the EPA imposes the most stringent of its proposed rules. Unaffordable energy affects everything everywhere. When it comes to energy, there is no local impact. Energy is the basic resource. What hurts one hurts all.

The Affordable Power Alliance also realizes that there is a more ominous potential outcome of EPA action: the cost of meeting a draconian retrofit rule could mean shutting down the Navajo Generating Station, which would mean destroying the incomes of hundreds of Navajo and Hopi people it now employs, and the loss of revenue due to the consequent termination of the current long-term coal mining contract with Peabody Western Coal Company's Kayenta operation to mine coal owned by the Navajo Nation and the Hopi Tribal Council to fuel the NGS.

A more widespread catastrophic outcome could be the shutdown of the waterflow to the Central Arizona Project, or at least a desperate scramble to find affordable power to keep the pumps going. The CAP was authorized by President Lyndon B. Johnson, who signed a bill in 1968 approving its construction, providing for the Bureau of Reclamation of the Department of the Interior to fund and construct CAP and an operating entity to later repay some of the construction cost. Various water authorities, known as the participants, now manage the CAP. It's now the largest irrigation system in America, watering a million acres of agricultural lands, and providing municipal water to Phoenix and Tucson.

Here's the catch: the power that drives the pumps within CAP to move water from the Colorado River into the interior of the state comes from the Navajo Generating Station (NGS), a 2,250 megawatt coal-fired steam plant operated by the Salt River Project (SRP) on Reservation land under a lease from the Navajo Nation.

We note that an article in the September 2010 Family Farm Alliance Water Review stated, "The NGS participants have installed state of the art controls for sulfur dioxide emissions and are achieving high levels of particulate emissions control"—that's voluntarily, and at a cost of \$46 million. But then the article observes that "NGS is the only plant to have had such controls installed exclusively for visibility purposes." Such responsible management should be rewarded, but it looks like the old saying "No good deed shall go unpunished," is the operative principle of the federal government in dealing with the NGS.

Although this hearing does not specifically cover it, there are two coal-fired power plants located on Navajo Reservation land, the Navajo Generating Station and the



Four Corners Power Plant (“FCPP”). It is worth listening to the Navajo view of EPA’s proposal. In a March, 2010 report to the EPA, the Navajo Nation explained their situation.

“No entity has a greater interest in NGS and FCPP than the Navajo Nation. Accordingly, the Nation believes it is important to lay out in broad strokes the interests of the Nation implicated by this rulemaking. NGS and FCPP are located on Navajo lands pursuant to lease agreements with the Navajo Nation. The Plants provide hundreds of skilled jobs on the Navajo Reservation, where unemployment approaches fifty percent. The Nation’s most valuable saleable natural resource is its coal reserves, and the Plants were located to take advantage of and provide a market for Navajo coal. The income these two Plants provide to the Nation, both directly and indirectly, contributes substantially to the Nation’s economic viability and thus, ultimately, to its sustainability as an independent sovereign.

—*Response to Dr. Anita Lee (Air-3), U.S. Environmental Protection Agency Region IX, dated March 1, 2010 by Dr. Joe Shirley, Jr., President of the Navajo Nation, and Ben Shelly, Vice President.*

Likewise, the Hopi Tribal Council responded to the EPA with deep concern for its survival:

The fundamental problem with attempting to achieve greater visibility improvements in the subject Class I areas through an SCR [very expensive equipment] requirement at NGS is the simple fact that visibility impairment is primarily caused, not by NGS and other power plants, but instead originates from other haze and particulate sources such as automobile emissions that occur in Los Angeles and migrate to class I Areas, and more localized sources such as dust and smoke from forest fires and controlled burns. According to the Salt River Project [one of the participants] analysis, power plants contribute only a small fraction of the haze problem in the Grand Canyon and other Class I Areas. If this finding is accurate, the huge costs of EPA’s NGS SCR proposal are not justified by the small incremental benefits achieved. This is especially true given the potential catastrophic economic outcome for the Hopi and Navajo Tribes and in light of the Trust responsibility of the United States to protect the Hopi Tribe and its assets from outright destruction or other harm. Even larger visibility improvements would not justify the economic devastation that would be imposed on the Hopi people and their homeland by an EPA SCR requirement at NGS.

—*Response to Jarod Blumenfeld, Administrator, USEPA, Region IX, dated March 1, 2010, by LeRoy N. Shingoitewa, Chairman of the Hopi Tribe, and Herman G. Honanie, Vice-Chairman.*

We, the people of the Affordable Power Alliance, would like to see the United States Congress take swift and decisive action to put an end to the abuse of political power that looms behind the EPA’s anti-energy NGS rulemaking proposal. We ask that Congress restore our peoples’ ability to create an economy based on access to the natural resources, particularly energy resources, which are an integral part of our custom, culture, tradition, and right to the pursuit of happiness.

Our commitment in response, as we clearly see in the Navajo Nation and the Hopi Tribal Council, is to be good and responsible stewards who will make sure that our energy activities are sustainable environmentally, economically, culturally and in concert with the tenet of protecting our heritage for future generations with abundant, affordable energy.

Thank you again, Chairman McClintock and Chairman Young, for holding this hearing and giving the Affordable Power Alliance the privilege and honor of presenting written testimony on behalf of our members, our fellow minorities in the Navajo Nation and the Hopi Tribe, and all our fellow citizens who need and deserve an energy policy that is affordable by all Americans.

