# **Nevada's Clean Power Plan**

# The Environmental Protection Agency (EPA) is developing the Clean Power Plan standards that will reduce carbon pollution from existing power plants.

The U.S. electric generating system is responsible for roughly 31 percent of U.S. greenhouse gas emissions, primarily in the form of carbon dioxide (carbon). Carbon dioxide and other greenhouse gases are released when fossil fuels--especially coal, but also oil and natural gas--are burned to create electricity. Now, the Environmental Protection Agency is taking steps to decrease our carbon pollution.

# Why is the EPA developing the Clean Power Plan?

The Clean Air Act provides EPA the authority to regulate air pollution to protect human health. EPA already regulates power plant air pollutants, such as those that create ozone, or "smog." However, this is the first time that dangerous carbon pollution, which contributes to global warming, will be controlled. In 2007, the Supreme Court established that carbon pollution is a threat to human health and can be regulated under the Clean Air Act.<sup>1</sup>

The Clean Power Plan moves the U.S. forward by reducing carbon pollution from power plants by 30% from 2005 levels by 2030. Nevada is already experiencing impacts from climate disruption, including extreme heat events, ongoing drought in all parts of the state and increasingly destructive wildfires in places like the Spring Mountains and Lake Tahoe Basin. We have an obligation to future generations to take steps to address climate pollution that threatens our communities and our economy.

In order to reduce carbon pollution, states will need to make some changes in how electricity is generated and used. Mainly, the Clean Power Plan will lead to more use of clean renewable energy and energy efficiency, and less reliance on older, more polluting sources like coal. Fortunately, Nevada has already taken and continues to take steps in this direction.

#### How does the Clean Power Plan work?

To reach the national target of 30% carbon reduction by 2030, the EPA is developing state-specific pollution standards for carbon, including a plan for reducing pollution between now and 2030. These standards will be released when the Clean Power Plan is finalized later this summer. Each state is then responsible for developing its own unique plan for proactively meeting the required pollution limits between now and 2030. State plans will be due roughly one year after the Clean Power Plan is finalized.

The EPA released the draft Plan in June of 2014. The Plan was based upon the specific electricity mix in each state and achievable outcomes. In the draft, Nevada's target added up to a 35% reduction in carbon pollution by 2030 below 2005 levels.

Unlike many pollutants, carbon reduction can't be accomplished simply by adding pollution controls onto a power plant. Thus, most state plans will increase reliance on power sources that emit less carbon, such as natural gas; or are carbon-free, such as renewable energy. The draft rule allows for significant flexibility at the state level in how to reduce carbon.

<sup>&</sup>lt;sup>1</sup> http://www.supremecourt.gov/opinions/06pdf/05-1120.pdf

The menu of options includes:

- 1. Switching from coal to natural gas,
- 2. Increasing renewable energy such as solar, wind and geothermal,
- 3. Increasing energy efficiency and conservation, reducing the amount of power generation needed, and
- 4. Using other innovative clean energy and grid technologies and strategies.

After the release of the final standards this summer, each state will have until August 2016 to submit state plans to achieve the needed emission reductions. States will be able to tailor their plans to the pollution reduction opportunities in their state using the building blocks above. The Nevada Division of Environmental Protection (NDEP) manages Clean Air Act compliance in Nevada. However, since the Clean Power Plan has such a flexible strategy for achieving carbon emission reductions from power plants, NDEP, the Governor's Office of Energy and the Public Utilities Commission will all be involved in the plan. EPA will then review state plans to ensure they achieve the required emission reductions. If Nevada does not submit a plan, EPA will have the authority to create its own plan for our state.

## What do these new standards mean for Nevada?

Compliance: Nevada has already taken significant steps to reduce carbon pollution from existing power plants. Our state has been proactive in passing clean energy legislation for more than a decade, such as the Renewable Portfolio Standard that requires Nevada's energy mix to include an increasing amount of renewables; and 2013's Senate Bill 123, which closes the Reid Gardner coal plant by 2017 and ends coal imports by 2019, replacing them with cleaner sources. As a result, Nevada is in a strong position to comply with the final goal of a 35% reduction by 2030 as contemplated in the draft rule. Recently, NV Energy CEO Paul Caudill stated, "Here in Nevada, we have nothing to fear. The State of Nevada and NV Energy are both in great shape to meet these federal compliance requirements."<sup>2</sup>

**Opportunity:** In addition, our state's economy has the potential to benefit greatly from national carbon pollution reductions. We have significant carbon-free energy options such as solar, geothermal and wind, which we can export to other states. In fact, Nevada has already created a positive clean energy business environment that has attracted more than \$5.5 billion to develop Nevada's natural solar, wind and geothermal resources. This has resulted in a 10:1 return on the state's \$500 million tax abatement investment.

#### What do Nevadans think about the Clean Power Plan?

Nevadans overwhelmingly support expansion of renewable energy and energy efficiency. According to a recent Tarrance Group poll, 73% of Nevadans believe that it is appropriate for the government to promote the development and use of renewable energy in Nevada. In addition, the same poll found that 75% of Nevadans support the EPA's proposal for Nevada to reduce carbon pollution by 35% by 2030, with majority support across all political parties. Finally, the poll found that 72% of Nevadans believe that climate change is a serious problem.

These findings mirror a February 2014 Nevada poll that found 71% of Nevadans support the EPA in establishing standards for power plants that limit the amount of carbon pollution. The poll, conducted by American ViewPoint and Hart Research, also found that 63% believe both the state and federal governments should be responsible for addressing climate change.

#### What will it cost?

Until Nevada prepares its plan next year, cost estimates cannot be calculated accurately. That being said, we have seen electric bills stay relatively constant even as we have steadily added clean, renewable energy. Coal costs have been steadily going up, while clean energy prices have been dropping substantially in the last few

<sup>&</sup>lt;sup>2</sup> Comments to reporters at Nevada Electric Highway press conference on June 16, 2015

years. In fact, NV Energy just announced that they have secured the lowest prices in the nation for solar energy. Meanwhile, the most risky element of Nevada's electric system is our overreliance on natural gas, which can lead to rate shock when gas prices spike. The best way to avoid rate increases is to shift to modern, clean energy, including efficiency, wind, solar and geothermal that has no fuel costs at all.

The trend toward economic clean energy is evident here in Nevada. In fact, NV Energy CEO Paul Caudill recently said, "Grid-tied geothermal and solar photovoltaic power plants can now outcompete traditional thermal generation. In fact, we know in the State of Nevada we have great solar resources, and larger grid-tied solar photovoltaic solar plants produce electricity not just free of carbon emissions, but at costs, over 20-30 years, very competitive with that of natural gas-fired power plants. We are already seeing cost savings from energy efficiency and demand-side management products and programs."

Meanwhile, new companies coming to Nevada such as Apple and Tesla are requiring that the energy used by their factories and facilities be 100% clean. The future of Nevada jobs and a diversified economy is more and more tied to harnessing our home-grown natural renewable energy resources.

# The bottom line: Nevada's economic opportunity

In the past, Clean Air Act safeguards have spurred industries to develop and adopt innovative solutions to reduce pollution from power plants and, in the process, created new jobs and strengthened our economy. In fact, natural resources management spending creates jobs in engineering, manufacturing, construction, materials, operation, and maintenance. For example, in 2008, the United States' environmental technologies and services industry of 1.7 million workers generated approximately \$300 billion in revenues and led to exports of \$44 billion of goods and services, larger than exports of sectors such as plastics and rubber products.

New carbon pollution standards create a significant opportunity to not only modernize our antiquated electric system but also create more demand for Nevada's vast clean energy resources. Thanks to proactive bipartisan leadership in support of clean energy policies, Nevada is in a strong position to economically benefit from the Clean Power Plan. Nevada has already begun to reduce our carbon emissions and increase clean energy. Now, with the ability to develop our own state plan, Nevada can use this opportunity to create thousands of middle-class jobs and spur significant economic development in our state.

Nevada is already a national leader on the development of clean energy and with Nevada's Clean Power Plan we have the ability to do more!

 $<sup>^{3}</sup>$  Comments to reporters at Nevada Electric Highway press conference on June 16, 2015

# **Nevada Clean Power Plan Appendix**

Clean Power Plan history and timeline:

### Carbon Regulation<sup>4</sup>

- ➤ 2007 Supreme Court held that carbon dioxide and other greenhouse gases are defined as an air pollutant and directed the EPA to determine it's affect on public health and welfare.
- ➤ December 2009 EPA issued "endangerment and contribution" finding, stating greenhouse gases have a negative affect on public health and welfare.
- ➤ June 2012 U.S. Court of Appeals for the D.C. Circuit upheld EPA's endangerment finding, which established a phased approach for applying certain Clean Air Act permitting requirements for greenhouse gas emissions for large sources, including power plants. "The body of scientific evidence marshaled by EPA in support of the Endangerment Finding is substantial."
- > September 2013 EPA proposed carbon pollution standards for new "to be built" power plants.
- ➤ June 2014 EPA released the draft Clean Power Plan, which used the specifics of each state's energy infrastructure to achieve a 30% reduction in carbon pollution nationwide.
- ➤ December 2014 Comment period for the draft rule closed. Nevada agencies (Public Utilities Commission, Nevada Department of Environmental Protection & Governor's Office of Energy) submitted joint comments.

# Timeline for Carbon Standards for existing power plants

- August 2015 EPA will issue the revised, final rule based on comments received.
- ➤ August 2016 States must submit a compliance plan to the EPA Regional Office.
- ➤ Summer/Fall 2016 EPA Regional Offices will review and approve plans. If a state plan is not approved, in whole or in part, EPA will issue its own plan for the state.

# **Tools for Clean Power Plan Compliance**:

- *Energy Efficiency:* The investments and behavioral programs that make energy use more efficient save money for customers on electric bills and reduce the need for generation from power plants, thereby curbing emissions High efficiency heating and cooling equipment, industrial motors, appliances, and building materials save energy and money, and create jobs, while also reducing emissions. Once a leader in energy efficiency, Nevada has slipped compared to other states in recent years but could reinvest in this resource, which is the least expensive and most jobs-producing of all clean energy resources.
- *Fuel- and Emission-Free Power Sources:* Wind and solar have no emissions, and their zero fuel cost mitigates fuel price volatility. Distributed generation (rooftop solar, small-scale wind) provides the security of on-site power for commercial, industrial, and residential customers while also taking load off the grid, reducing emissions from central power plants.
- *Grid Management and Automation:* Upgrading grid technology allows electricity distribution to be managed more effectively, reducing losses, minimizing outages, and giving grid operators and customers alike valuable data for managing electricity use and reducing associated emissions.

<sup>&</sup>lt;sup>4</sup> http://www.epa.gov/ocir/hearings/pdf/2012 GHG testimony final.pdf