**FORM FOR PETITIONING THE STATE ENVIRONMENTAL COMMISSION FOR ADOPTION, FILING AMENDMENTS OR REPEAL OF COMMISSION REGULATIONS**

**Form #1**

**1. Name, Address, telephone number, date of petition, representative capacity and signature of petitioner, authorized individual, officer or attorney.**

**Name:**

Nevadans for Clean Affordable Reliable Energy (NCARE), a Nevada non-profit cooperative association[1]

Western Resource Advocates (WRA), foreign non-profit corporation registered to do business in Nevada

Bristlecone Alliance, a Nevada non-profit cooperative corporation without stock

Citizen Alert, a Nevada non-profit corporation

Nevada Conservation League (NCL), a Nevada non-profit corporation

Progressive Leadership Alliance of Nevada (PLAN), a Nevada non-profit organization

Sierra Club, a foreign non-profit corporation registered to do business in Nevada

**Address:** c/o Western Resource Advocates, 769 Basque Way, Suite 300, Carson City, NV 89706

**Telephone Numbers:** (775) 841-2400 (office); (866) 223-8365 (fax)

**Date of Petition:** July 31, 2007

**Representative capacity and signature of petitioner:**

**s/s Charles M. Benjamin**
**President/Director**

**Authorized Individual:** Charles M. Benjamin

[1] The contact persons, addresses and telephone numbers are as follows:
NCARE: Charles Benjamin, President/Director, c/o Western Resource Advocates, 769 Basque Way, Ste 300, Carson City, NV 89706, 775-841-2400
WRA: Charles Benjamin, 769 Basque Way, Ste 300, Carson City, NV 89706, 775-841-2400
Bristlecone Alliance, Delaine Spilsbury, P.O. Box 1055, McGill, NV 89301, 775-235-7557
Citizen Alert: Peggy Maze Johnson: P.O. Box 17173, Las Vegas, NV 89117, 702-807-1884
NCL, Scot Rutledge, 7473 W. Lake Mead Blvd., Ste 100, Las Vegas, NV 89128, 702-562-8147.
PLAN: Bob Fulkerson, 821 Riverside Dr., Reno, NV 89503, 775-348-7557.
Sierra Club, Lydia Ball, 732 S. Sixth St., Ste 200B, Las Vegas, NV 89101, 702-732-4450.

**2. Specific type of petitioner (individual, partnership, corporation, government agency, or other) and the exact occupation or business, including a description of the occupation or business if necessary.**

**Specific Type of Petitioner:** Non-profit cooperative associations duly organized pursuant to NRS 81.170-81.270, and foreign non-profit organizations registered to do business in Nevada.

**Occupation or Business:** Coalition of Nevada-based conservation/environmental organizations.

**3. Exact and specific nature of changes sought, including delineation of the regulations, statutory provisions of Commission decisions involved. May include a statement of the written term or substance of the proposed regulatory action, or a description of the subjects and issues involved.**

Suspension, by the Nevada Department of Environmental Protection (NDEP), of the air pollution control permitting process for any coal-fired electric generating plants to be located in the State of Nevada, pursuant to Nevada Revised Statutes (NRS) Chapter 445B, the Nevada Administrative Code (NAC) Chapter 445B and the Clean Air Act, until such time as NDEP promulgates regulations enacting a GHG emission standard as follows:

> ***New electricity generating facilities located in the State of Nevada shall emit into the atmosphere no more than 1100 pounds of carbon dioxide pollution per megawatt hour.***

Before a Nevada public utility, a cooperative generation and/or transmission electric association, a municipally-owned utility; a privately-owned "merchant" or any other electric generating facility subject to air permitting regulations under the NRS, the NAC or federal regulation constructs, operates, acquires, or makes a long-term electricity purchase from a new electricity generating facility, it must first obtain a certification from the NDEP that the electricity generating facility is designed, and will be operated, to emit into the atmosphere no more than 1100 pounds of carbon dioxide pollution per megawatt-hour. Long-term electricity

purchases that do not specify a generation source for which carbon dioxide emission rates can be determined shall be denied certification. The governing body of each municipally-owned utility shall require compliance with the emission limitations set forth above.

The NDEP, in consultation with the Nevada Public Utilities Commission, shall publish rules and regulations, and establish penalties, to implement and enforce this requirement. The NDEP shall review the emission standard at least every five (5) years and may revise the emission standard to make it more stringent as necessary and appropriate to achieve the purposes of this regulation.

For purposes of these new carbon dioxide emission standards the following definitions shall apply:

- "Long term electricity purchase" is a contract or series of contracts that allows the public utility to purchase electricity.
- "New electricity generating facility" is a power plant, located within Nevada, with a nameplate capacity rating exceeding ten (10) megawatts that has been developed to operate and produce electricity more than 2000 hours per year, and that had not as of August 1, 2007 obtained all required pre-construction permits from the NDEP or such other air quality permits as are required by the location of the facility.

**4. A statement of the need for and purpose of the proposed regulations.**

The need for the proposed regulations is to ensure that new coal-fired electricity generating units are not permitted and constructed without accounting for greenhouse gas (GHG) emissions. The State should contribute to global efforts to reduce GHG emissions, to scientifically prescribed safe levels, by enacting regulations mandating that no more than 1100 pounds of carbon dioxide pollution per megawatt-hour can be emitted from an electricity generating facility.

The United Nations' Intergovernmental Panel on Climate Change (IPCC) has announced that there is overwhelming consensus in the scientific community that global warming is occurring and that its cause is man-made. Nevertheless, Nevada is considering the permitting of 3,840 megawatts of new coal-fired generated electricity. Altogether, these proposed coal-fired electricity generating units will emit 48.6 million tons of carbon dioxide per year.[2] Nevada simply cannot afford the environmental, economic, and social costs of allowing this much GHG emissions to be released into the atmosphere over the next 50 to 75 years – the estimated life time of coal plants.

The purpose of the proposed regulations is to regulate carbon dioxide and other GHG emissions from new power plants in order to safeguard Nevada's future. The Petitioners urge the Commission to suspend the air pollution control permitting process until the State adopts regulations limiting GHG emissions from new stationary sources of pollution for the following scientific, political, and legal reasons.

## I. Nevada is potentially facing a large growth in GHG emissions.

Six new coal-fired electricity generating units are currently being considered without any precautionary regulations limiting carbon dioxide and other GHG emissions. Currently, 50 percent of Nevada's electricity comes from coal.[3] The proposed new facilities to be built in Nevada are in various stages of the air permitting and National Environmental Protection Act

[2] According to the April 2007 draft Environmental Impact Statement issued by the Bureau of Land Management (Table 4.6-31, page 4-119), the White Pine Energy Station Project will produce 20,131,362 tons of carbon dioxide ($CO_2$) per year. By dividing the yearly amount of $CO_2$ emissions by the amount of energy the power plant will produce yearly (1590 MW), on average the power plant will produce 12,661 tons of $CO_2$ per megawatt per year. This number multiplied by the total amount of electricity that may be generated by the proposed coals facilities (3,840 MW) provides a rough estimate of 48.6 million tons of $CO_2$ per year produced by the proposed coal-fired generating units. Since the technology for all the proposed coal-fired electricity generating units is similar, we can safely assume that they will emit a comparable amount of $CO_2$.

[3] Energy Information Administration, *Nevada,* http://tonto.eia.doe.gov/state/state_energy_profiles.cfm?sid=NV (last updated July 5, 2007).

(NEPA) processes. If approved, the units would further increase the State's dependence on coal. Below is an overview of each proposed unit.

- Sierra Pacific Resources has proposed to construct the Ely Energy Center. It will consist of two-750 megawatt coal-fired electricity generating units in White Pine County. The Ely Energy Center is expected to go on-line by 2013.[4]

- White Pine Energy Associates, LLC (White Pine Energy), a wholly-owned subsidiary of LS Power Associates, L.P., is proposing to construct and operate three-530 megawatt coal-fired electricity generating units in White Pine County. The project would bring on-line 1590 megawatts of coal power by 2012.[5]

- Sithe Global Power, LLC (Sithe) is proposing to construct a 750 megawatt coal-fired electricity generating unit in Lincoln County. No date has been set to bring this project on line.[6]

The Petitioners request that the air permitting process for the above proposed coal-fired electricity generating units be suspended until NDEP establishes regulations limiting GHG emissions.

Less than half of the 48.6 million tons of carbon dioxide per year emitted from these coal plants will be the result of electricity production for Nevadans. Sierra Pacific Resources' two coal-fired generating units are to provide power for the company's customers in Nevada. White Pine Energy Associates and Sithe are proposing to construct merchant coal-fired electricity generating units in Nevada. White Pine Energy Associates and Sithe currently do not have customers but are likely to provide electricity to customers outside Nevada. Thus, Nevada's lack of GHG regulations is enticing companies to construct GHG polluting facilities inside the State's borders for the purpose of out-of-state consumption. With no GHG regulations in place, Nevada will become a GHG emission sacrifice zone for the West.

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[4] Sierra Pacific Resources, *The Ely Energy Center*, http://www.sierrapacificresources.com/projects/ely/ (accessed on July 10, 2007).
[5] White Pine Energy Associates, LLC, *Application for Class I Operating Permit to Construct, http://ndep.nv.gov/bapc/download/ls/app.pdf* (accessed on July 10, 2007).
[6] Bureau of Land Management, *Toquop Energy Project*, http://www.blm.gov/nv/st/en/fo/ely_field_office/blm_programs/energy/toquop_energy.html (accessed on July 10, 2007).

Instead, Nevada has the opportunity to establish regulations before the State deepens its carbon liability. Nevada should avoid placing itself in a risky position by enacting regulations now.

## II. Nevada needs to establish GHG regulations because climate change is real and already causing severe impacts.

The Intergovernmental Panel on Climate Change (IPCC) has recently issued a series of assessment reports that add to the growing body of scientific evidence that the planet is warming and humans are largely responsible. The IPCC summary of the contribution of Working Group I (the physical science basis working group) to its Fourth Assessment Report contains findings that bear on the need for and purpose of this petition. The Fourth Assessment Report concludes, among other things:

- There is a greater than a 90% likelihood that most of the observed increases in global average temperatures since the mid-20th century are due to the observed increases in anthropogenic GHG emissions.[7]

- The global atmospheric concentration of carbon dioxide has increased from a pre-industrial value of about 280 ppm to 379 ppm in 2005.[8]

- The atmospheric concentration of carbon dioxide in 2005 exceeds by far the natural range over the last 650,000 years.[9]

- The primary source of increased atmospheric concentration of carbon dioxide since the pre-industrial period results from fossil fuel use.[10]

- Warming of the climate is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level.[11]

- At continental, regional and ocean basin scales, numerous long term changes have been observed. These include changes in the Artic temperatures and ice, widespread changes in

[7] IPCC, *Climate Change 2007: The Physical Science Basis, Summary for Policymakers*, http://www.ipcc.ch/SPM2feb07.pdf, 10 (accessed on July 10, 2007).
[8] *Id*.
[9] *Id*.
[10] *Id*.
[11] *Id*. at 5.

precipitation amounts, ocean salinity, wind patterns and aspects of extreme weather including droughts, heavy precipitation, heat waves and intensity of tropical cyclones.[12]

- For the next two decades a warming of about 0.2º C per decade is projected for a range of emission scenarios.[13]

- There is a 90% likelihood that hot extremes, heat waves, and heavy precipitation events will continue to become more frequent.[14]

- Anthropogenic warming and sea level rise would continue for centuries due to the timescales associated with climate processes and feedbacks, even if GHGs were to be stabilized.[15]

The April 2007 IPCC summary of the contribution of Working Group II (climate change impacts, adaptation and vulnerability working group) to its Fourth Assessment Report contains findings specific to North America, the West, and the Southwest that should be of particular concern to Nevadans. The findings include the following:

- Warming in western mountains is projected to cause decreased snowpack, more winter flooding, and reduced summer flows, exacerbating competition for over allocated water resources.[16]

- Cities that currently experience heat waves are expected to be further challenged by increased number, intensity and duration of heat waves during the course of the century, with potential for adverse health impacts. The growing number of elderly population will be most at risk. [17]

The May 2007 IPCC summary of the contribution of Working Group III (mitigation of climate change working group) to its Fourth Assessment Report contains the following findings:

- Global GHG emissions have grown since pre-industrial times, with an increase of 70% between 1970 and 2004.[18]

- The largest growth in global GHG emissions between 1970 – 2004 has come from the energy supply sector (an increase of 145%).[19]

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[12] *Id*. at 8.
[13] *Id*. at 12.
[14] *Id*. at 16.
[15] *Id*. at 17.
[16] IPCC, *Climate Change 2007: Climate Change Impacts, Adaptation and Vulnerability*, *Summary for Policymakers*, http://www.ipcc.ch/SPM6avr07.pdf, 12 (accessed on July 10, 2007).
[17] *Id*. at 13
[18] IPCC, *Climate Change 2007: Mitigation of Climate Change*, *Summary for Policymakers*, http://www.mnp.nl/ipcc/docs/FAR/SPM_%20WGIII_rev5.pdf, 3 (accessed on July 10, 2007).

- There is substantial economic potential for the mitigation of global GHG emissions over the coming decades that could offset projected growth of global emissions or reduce emissions below current levels.[20]

- The key mitigation technologies and practices that are currently commercially available are: improved supply and distribution efficiency, fuel switching from coal to gas, renewable heat and power (hydropower, solar, wind, geothermal and bioenergy), and early applications of carbon capture and storage.[21]

- Near-term health co-benefits from reduced air pollution as a result of actions to reduce GHG emissions can be substantial and may offset a substantial fraction of mitigation costs. [22]

- In order to stabilize the concentrations of GHGs in the atmosphere, emissions would need to peak and decline thereafter.[23]

- Climate change policies related to energy efficiency and renewable energy are often economically beneficial, improve energy security, and reduce local pollutant emissions.[24]

Other studies are also pointing to the impacts of global warming on the western part of the United States:

- "If warming continues and raises the mean winter wet-day minimum temperatures in more of the West above about -5C, snowfall declines (and rainfall increases), combined with earlier melting of the remaining accumulations of snowpack, will diminish the West's natural freshwater storage capacity. The shift from snowfall to rainfall also may be expected to increase risks of winter and spring flooding in many settings." [25]

- "It is becoming ever clearer that these projected declines in SWE (snow water equivalent), which are already well underway, will have profound consequences for water use in a region already contending with the clash between rising demands and increasing allocations of water for endangered fish and wildlife."[26]

- "We show that large wildfire activity increased suddenly and markedly in the mid-1980s, with higher large-wildfire frequency, longer wildfire durations, and longer wildfire seasons. The greatest increases occurred in mid-elevation, Northern Rockies forests, where land-use

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[19] *Id.*
[20] *Id.* at 11.
[21] *Id.* at 14.
[22] *Id.* at 17.
[23] *Id.* at 22.
[24] *Id.* at 33.
[25] *Trends in Snowfall versus Rainfall in the Western United States, Knowles, N., et al. (2006)* http://sciencepolicy.colorado.edu/admin/publicationfiles/resource-1699-2005.06.pdf
[26] *"Warming and Earlier Spring Increase Western U.S. Wildfire Activity Westerling, A., et al.* (2006) http://www.sciencemag.org/cgi/content/full/313/5789/940.

histories have relatively little effect on fire risks and are strongly associated with increased spring and summer temperatures and an earlier spring snowmelt."[27]

On July 24, 2007, the U.S. Public Interest Research Group (U.S. PIRG) Education Fund issued a report "Feeling the Heat: Global Warming and Rising Temperatures in the United States" U.S. PIRG Education Fund, July 2007. One of the findings of the report is:

> The 2006 summer heat wave was marked by above-average minimum temperatures – the lowest temperatures recorded on a given day, usually at night. The average minimum temperature was at least 0.5°F above the 30-year average at 81% of the locations studied and 9.7°F above normal in Reno, Nevada, the highest in the country. Warmer nighttime temperatures exacerbate the public health effects of heat waves, since people need cooler nighttime temperatures to recover from excessive heat exposure during the day.[28]

The State of Nevada is already experiencing the impacts of the climate change as described in the IPCC and other reports. The Sierra Nevada snowpack provides almost all of Northern Nevada with water.[29] The increase in temperatures causes more mountain precipitation to fall in the form of rain instead of snow, and snow fall becomes limited to higher elevations. Also, springtime runoff could come earlier in the year.[30] As a result of the changing snowpack conditions, water supplies will decrease. According to Michael Dettinger, a hydrologist with the Scripps Institution of Oceanography, in the West:

- The April 1st, 2007 snowpack was 20 percent less on average than it was in the 1950s and 1960s; and
- By the middle of the century, snowpack will decrease by a third.[31]

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[27] *Id.*
[28] *Feeling the Heat, Global Warming and Rising Temperatures in the United States*, U.S. PIRG Education Fund, www.uspirg.org (July 2007).
[29] Kerri L. Timmer, Sierra Nevada Alliance, *Troubled Water of the Sierra*, http://www.sierranevadaalliance.org/publications/db/pics/1111704195_9128.f_pdf.pdf, 5 (accessed on July 11, 2007).
[30] Jeff DeLong, Reno Gazette Journal, *The Warming Sierra: Water Woes Ahead*, http://news.rgj.com/apps/pbcs.dll/article?AID=/20070514/NEWS16/705140331/1016/NEWS (accessed on July 11, 2007).
[31] *Id.*

Northern Nevada communities that do not have major high-altitude reservoirs will suffer from warming temperatures. According to Ken Arnold, public works operation manager for Carson City, Nevada's capital city is already taking steps to adapt to the impacts of climate change. For example, the city is expanding the aquifer storage and recovery system to capture excess river runoff and injecting the water into storage wells for use later in the summer.[32] Williams has stated that the state officials are taking the possible impacts of climate change "very seriously."

Other parts of Nevada will also be negatively affected by climate change. According to a new report by the Natural Resource Defense Council, the Colorado River has received just over half its average flow for the past eight years.[33] Recent climate change studies, investigating the possible effects of climate change on future flows of the Colorado River, projected even further reductions in flows. Martin Hoerling of the National Oceanic and Atmospheric Administration's Earth System Research Laboratory and John Eischeid of University of Colorado's Cooperative Institute for Research in Environmental Sciences projected a reduction of up to 50 of Colorado River flows as a result of drought conditions further intensified by heat during 2035 and 2060.[34]

It is also projected that if GHG emissions continue to increase at the present rate, temperatures in the West could increase by 11.5 degrees Fahrenheit.[35]

These projections of decreased water supply and increased temperatures paint a grim picture for the Las Vegas area. Currently, the Southern Nevada Water Authority, a water wholesaler for the Las Vegas Valley, receives 90 percent of their water from surface water of the

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[32] *Id.*
[33] NRDC, *Water Officials Warned: Get Used to Drought*, Says New Climate Report, http://www.commondreams.org/news2007/0710-08.htm (accessed on July 13, 2007).
[34] Martin Hoerling and John Eischeid, *Past Peak Water in the Southwest*, http://www.livingrivers.org/pdfs/LRlibrary/ClimateChangeDocs/Hoerling2007.pdf, 3 (accessed on July 18, 2007).
[35] Natural Resource Defense Council, *In Hot Water: Water Management Strategies to Weather the Effects of Climate Change*, July 2007, http://www.nrdc.org/globalWarming/hotwater/hotwater.pdf , iv(accessed on July 11, 2007).

Colorado River.[36] Traditional water management approaches, such as dams, diversions, and groundwater, "are likely to perform more poorly in the future" and "will likely be less effective in a warmer, drier climate."[37] Las Vegas will face a hotter and drier future unless Nevada acts now by implementing regulations limiting GHG emissions in addition to water conservation efforts.[38]

Nevada's growing population is at great risk because of the dwindling water supplies and increased temperatures resulting from GHG emissions. Nevada must regulate GHG emissions now from the six coal-fired units currently at various stages of permitting in Nevada. Nevada will not be able to turn back the clock on the proposed coal-fired electricity generating units or climate change. In fact, the State may have to pay a high price for stalling regulatory action. For example, the retrofitting of existing coal-fired electricity generating units for carbon dioxide capture and sequestration may be prohibitively expensive.[39] Just as the State relies on energy demand forecasts that look 20, 30, and even 50 years into the future, Nevada should also take into account climate projections when making energy procurement decisions. The amount of GHG emissions must be a deciding factor on how new coal-fired electricity generating units are constructed and operated in Nevada. The State cannot afford to allow 48.6 million tons of carbon dioxide to be emitted per year over the next 50 to 75 years.

[36] Southern Nevada Water Authority, 2006 Water Resources Plan, Las Vegas, NV, pg. 22.
[37] NRDC, Water Officials Warned: Get Used to Drought, Says New Climate Report; http://www.commondreams.org/news2007/0710-08.htm (accessed on July 13, 2007).
[38] *See* Launce Rake, *Hotter, Dryer years in Store for LV, Study Says*, http://www.lasvegassun.com/sunbin/stories/sun/2005/sep/23/519404393.html?rocky%20mountain% 20climate%20organization (accessed on July 17, 2007).
[39] Bohm, M.C., H.J. Herzog, J.E. Parsons and R.C. Sekar, "Capture-ready coal plants - Options, technologies and economics," International Journal of Greenhouse Gas Control, Vol 1, pages 113-120, 114, (2007).

## III. There is a groundswell of political and public support for the regulation of GHG emissions.

Six Western U.S. states, two Canadian provinces, and one Mexican state have signed onto the Western Regional Climate Action Initiative (WRCAI). Although the details of the commitments ultimately elected have not yet been disclosed, it is quite possible the WRCAI will commit to GHG emission levels well below 1999 levels, consistent with the commitment California has made individually. On July 2, 2007 Governor Gibbons informed the governors of the six states that are part of WRCAI that Nevada would send observers to be part of WRCAI. Congress is also currently debating national legislation on GHG emissions. These activities demonstrate the local, regional, and national political and public will to limit GHG emissions. The State of Nevada can respond to this growing movement by suspending the processing of air permits for new coal plants until NDEP develops limits on carbon dioxide and other GHG emissions.

Developing a GHG emission standard would be consistent with other steps Nevada has taken to address climate change. The State has enacted a Renewable Portfolio Standard in which 20 percent of the states energy generated by Investor Owned Utilities must come from renewable energy sources by 2015.[40] On April 4, 2007, Governor Gibbons signed an executive order creating the Nevada Climate Change Advisory Committee. The committee was tasked with the responsibility of making recommendations about ways the State can reduce GHG emissions. The Governor stated that he was "looking forward to Nevada joining the world in its quest to reduce GHG emissions" and further explained that "[w]e live in a global society and Nevada has to be a

[40] DSIRE, *Nevada Incentives for Renewables and Efficiency*, http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=NV01R&state=NV&CurrentPageID=1&RE=1&EE=1 (accessed on July 18, 2007).

responsible member of this society."[41] The Governor also created the Nevada Renewable Energy Transmission Access Advisory Committee on May 9, 2007. The Committee will develop solutions to overcome transmission barriers to getting renewable electricity, such as solar, wind, and geothermal, generated in Nevada to market.[42] On July 2, 2007 Governor Gibbons notified the Climate Registry Steering Committee of Nevada's intention to join.

The cities of Las Vegas, Reno, Sparks, and Henderson have joined more than 400 other U.S. communities in signing the U.S. Mayors Climate Protection Agreement. The Agreement requires the cities to meet the GHG reduction targets set by the international climate agreement, the Kyoto Protocol.[43]

A few key states have enacted legislation or committed to policies that will regulate GHG emissions. California's "Global Warming Solutions Act of 2006" requires the reduction of GHG emissions by 80 percent below 1990 levels by 2050.[44] California is also regulating carbon dioxide from auto tailpipe emissions.[45] Arizona, through an executive order, has committed to reduce emissions by 50 percent of 2000 levels by 2040.[46] New Mexico has developed plans to reduce emissions by 75 percent of 2000 levels by 2050 by increasing renewable energy use, creating a "clean car" program, and mandating green buildings. Nevada would be among these leading states if it regulates GHG emissions through its air pollution permitting process.

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[41] Office of the Governor, *Governor Gibbons Creates Climate Change Advisory Committee*, http://gov.state.nv.us/PressReleases/2007/2007-04-10ClimateControlCommittee.htm (accessed on July 10, 2007)
[42] The State of Nevada, *Governor Gibbons Established Energy Transmission Access Advisory Committee*, http://gov.state.nv.us/PressReleases/2007/2007-05-09RenewableEnergyTransmissionAccessAdvisory Committee.htm (accessed on July 18, 2007).
[43] U.S. Conference of Mayors, *U.S. Mayors for Climate Protection Center*, http://www.usmayors.org/ Climate protection/ (accessed on July 18, 2007).
[44] State of California, *Gov. Schwarzenegger Signs Landmark Legislation to Reduce Greenhouse Gas Emissions*, http://gov.ca.gov/index.php?/press-release/4111/ (accessed on July 13, 2007).
[45] California Air Resources Board, *AB 1493*, http://www.arb.ca.gov/cc/ab1493.pdf (accessed on July 19, 2007).
[46] State of Arizona Executive Office, *Governor Napolitano Issues Executive Order to Promote Energy Efficiency*, http://www.governor.state.az.us/dms/upload/NR_090806_CCAG.pdf (accessed on July 13, 2007).

People in the United States are demanding national legislation as well. Currently, Congress is considering six climate change bills. One of the proposed bills, the Sanders-Boxer Global Warming Pollution Reduction Act (S.309), would establish a long-term framework to gradually reduce the nation's global warming emissions to 80 percent below 1990 levels by 2050.

Industry is even calling for climate action. The auto giant General Motors joined with PNM Resources, PG&E Corporation, Alcoa, BP America, Caterpillar Inc., Duke Energy, DuPont, FPL Group, General Electric, Lehman Brothers, and leading environmental groups in the creation of the United States Climate Action Partnership.[47] The Partnership issued a set of principles and recommendations to underscore the urgent need for a policy framework on climate change.[48]

On July 24, 2007 United States Senator Harry Reid sent a letter to the Executives of Sierra Pacific Resources, LS Power, Dynegy, and Sithe Global Power expressing his "strong opposition" to the proposed coal plants these companies plan to build in Nevada. Senator Reid's letter is attached to this petition.

Two-thirds of voters in Nevada believe that climate change is taking place and action should be taken.[49] The need for regulation of GHG emissions is commonly accepted by all sectors of society in Nevada. Nevada should respond by establishing GHG regulations before allowing the permitting of any more new coal-fired electricity generating units.

[47] U.S. Climate Action Partnership, *Home*, http://www.us-cap.org/ (accessed on July 13, 2007).
[48] U.S. Climate Action Partnership, *A Call for Action*, http://www.us-cap.org/USCAPCallForAction.pdf, 4 (accessed on July 18, 2007).
[49] Public Opinion Strategies, *Nevada: Global Warming and Public Opinion*, February 27, 2007 – March 1, 2007.

## IV. The proposed regulations on GHG emissions will place Nevada in compliance with the Clean Air Act and the Supreme Court's interpretation of the Act.

Nevada will be acting lawfully under the recent Supreme Court decision, *Massachusetts v. EPA*, and the Clean Air Act (the Act), if the State develops regulations mandating that no more than 1100 pounds of carbon dioxide pollution per megawatt-hour can be emitted from any one coal-fired electricity generating unit. Nevada, as a surrogate of EPA, has the statutory authority under the Act to regulate carbon dioxide emissions and other GHGs from coal-fired electricity generating units. NDEP does not currently regulate carbon dioxide or other GHGs emissions pursuant to the state air pollution requirements established in NRS 445B.100 through 445B.825 and 486A.010 through 468A.180.

On April 2, 2007, the U.S Supreme Court issued its landmark ruling in *Massachusetts* overturning EPA's long-held position that carbon dioxide and other GHGs are not Clean Air Act "pollutants." *Massachusetts v. EPA*, 127 S. Ct. 1438, 1460 (2007). The Court found that carbon dioxide and other GHGs are air pollutants subject to regulation under the Clean Air Act (Act). *See Id*. at 1459-60. Nevada may also have the statutory authority to regulate carbon dioxide and other GHGs under the plain meanings of the provisions and programs under the Act, such as the 1990 Amendments and Section 202 and Section 111 programs. Also, Nevada may have the ability to limit carbon dioxide under the prevention of significant deterioration (PSD) permit process for new coal-fired electricity generating units where pollutants must be analyzed and emissions limits set. Thus, the six proposed coal plants should only be permitted if: (1) new regulations limiting coal-fired electricity generating units from emitting no more than 1100 pounds of carbon dioxide pollution per megawatt-hour is adopted; and (2) the PSD permits for the power plants include an analysis and limit for carbon dioxide and other GHG emissions.

Nevada's statutory authority to regulate GHG emissions is rooted in the Act. The NDEP Bureau of Air Pollution Control implements the Act in lieu of the EPA as a delegated authority. According to 40 C.F.R. 52.1485, Nevada's state implementation plan under the Act has not been approved. Until Nevada adopts its own air pollution regulations that are approved by the EPA, NDEP is required to implement the Act including the PSD requirements when permitting new sources of pollution such as new coal-fired electricity generating units. *See* NAC 445B.221 (2007). The Act and the U.S. Supreme Court's decision in *Massachusetts* demonstrate that the NDEP has the statutory authority to regulate GHGs.

**A. Carbon dioxide is a Clean Air Act air pollutant subject to Nevada's regulations.**

*1. NDEP should respond to the recent legal developments by establishing GHG regulations.*

NDEP's failure to regulate carbon dioxide and other GHG emissions is inconsistent with the U.S. Supreme Court decision in *Massachusetts v. EPA*. The Court held that carbon dioxide and other GHGs are air pollutants as defined in § 302(g) and 42 U.S.C. § 7602(g) of the Act. *Massachusetts*, 127 S.Ct. at 1459-60. The Court based its decision on the "unambiguous" language in the Clean Air Act's "sweeping definition" of an "air pollutant." *Id*. at 1460. As a result of carbon dioxide being within the Act's broad definition of "air pollutant," the EPA has the statutory authority to regulate carbon dioxide under the Act. *Id*. at 1462. The petitioners in *Massachusetts* claimed that EPA had abdicated its rulemaking responsibilities under Section 202 of the Act by not regulating GHG emissions from new motor vehicles. *Id*. at 1446. With this ruling, it is now accepted that the EPA has the authority to issue regulations limiting carbon emissions from motor vehicles. *Id*. at 1459-63.

In accordance with *Massachusetts*, the President issued an Executive Order on May 14, 2007, confirming the Supreme Court's ruling by acknowledging the EPA's authority to regulate

GHG emissions, including carbon dioxide from motor vehicles, nonroad vehicles and engines under the CAA. The Executive Order directed the EPA to work with other federal agencies in undertaking regulatory action.[50]

*2. Carbon dioxide is an "air pollutant" subject to regulation within the meaning of the Clean Air Act.*

The Act defines "air pollutant" as "any physical, chemical, biological, radioactive (including source material, special nuclear material, and byproduct material) substance or matter which is emitted into or otherwise enters the ambient air." 42 USC § 7602(g). The Court in *Massachusetts* dispelled with EPA's claim the agency did not have to regulate carbon dioxide and other GHG emission because these gases were not air pollutants under the act. *Massachusetts*, 127 S. Ct. at 1460.

> The statutory text forecloses EPA's reading. The Clean Air Act's sweeping definition of "air pollutant" includes "*any* air pollution agent or combination of such agents, including *any* physical, chemical . . . substance or matter which is emitted into or otherwise enters the ambient air . . . ." *§ 7602(g)* (emphasis added). On its face, the definition embraces all airborne compounds of whatever stripe, and underscores that intent through the repeated use of the word "any." Carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons are without a doubt "physical [and] chemical . . . substances which [are] emitted into . . . the ambient air." The statute is unambiguous.

*Id*. According to the Court, GHGs are Clean Air Act pollutants.

There is also evidence in the specific provisions of the Act that carbon dioxide is an "air pollutant" subject to regulation. Section 821 of the 1990 Clean Air Act Amendments mandated the EPA to promulgate regulations to require certain sources, including coal-fire electric

[50] White House, *Press Release*, http://www.whitehouse.gov/news/releases/2007/05/20070514-2.html (last visited July 5, 2007); White House, *Executive Order: Cooperation Among Agencies in Protecting the Environment with Respect to Greenhouse Gas Emissions From Motor Vehicles, Nonroad Vehicles, and Nonroad Engines*, http://www.whitehouse.gov/news/releases/2007/05/20070514-1.html (accessed on July 13, 2007).

generating stations, to monitor carbon dioxide emissions and to report monitoring data to the EPA. 42 U.S.C. § 7651k. The regulations were promulgated in 1993 and set forth in 40 C.F.R. Part 75. The regulations required: (1) monitoring of carbon dioxide through installation, certification, operation, and maintenance of a continuous emission monitoring system or an alternative method (40 C.F.R. §§ 75.1(b), 75.10(a)(3)); (2) preparation and maintenance of monitoring plans (40 C.F.R. § 75.33); (3) maintenance of certain records (40 C.F.R. § 75.57); and (4) reporting of certain information to EPA, including electronic quarterly reports of carbon dioxide emissions data (40 C.F.R. §§ 75.60-64). Section 75.5, 40 C.F.R., prohibits operation of an affected source in the absence of compliance with the substantive requirements of Part 75, and provides that a violation of any requirement in Part 75 is a violation of the Act. Thus, GHG emissions are already regulated under the Act.

Carbon dioxide is also subject to regulation under two of the Act's programs. Section 202 requires standards for the emissions of "any air pollutant" from motor vehicles. 42 U.S.C. § 7521(a)(1). Section 111 requires standard of performance for emissions of "air pollutants" from new stationary sources, where air pollution "may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7411(b)(1)(A). There is a pending legal action against the Agency for its failure to establish emissions limits under Section 111. Carbon dioxide and other GHG emissions are air pollutants subject to regulation under the Act.

*3. A Federal Court of Appeals is currently considering whether GHG emissions from coal-fired electricity generating units are regulated under Section 111 of the Clean Air Act.*

*State of New York, et. al. v. EPA* is a challenge to EPA's claim that it does not have the statutory authority to regulate carbon dioxide and other GHG emissions from power plants under the Act. The case is pending before the United States Court of Appeals for the District of Columbia. The petitioners claim Section 111 of the Clean Air Act, 42 U.S.C. § 7411, requires

EPA to set performance standards applicable to new sources of air pollution. The petitioners assert that "[u]nder Section 111(b)(1)(A), the EPA must adopt performance standards for each category of sources that 'causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare.'" Petrs. Mot. Remand for Further Procs. 2 (May 2, 2007).

*State of New York* is an important case because it will decide whether carbon dioxide is subject to regulation under the Act's stationary source program. In response to *Massachusetts*, the petitioners in *State of New York* requested the Court of Appeals to vacate the EPA's determination that it lacks the authority to regulate carbon dioxide under section 111 and to remand the matter to EPA for further proceedings consistent with *Massachusetts*. Specifically, the petitioners state that the "statutory definitions of 'air pollutant' and 'welfare' that govern EPA's authority to regulate $CO_2$ emissions from motor vehicles . . . apply for all purposes under the Clean Air Act." Petrs. Mot. Remand for Further Procs. 4 (May 2, 2007). Thus petitioners are asking the U.S. Court of Appeals to decide whether the EPA's determination to not set a standard for power plant carbon dioxide emissions under Section 111 is "arbitrary, capricious, or otherwise not in accordance with law." *Id*.

*4. The recent Supreme Court decision and the statutory provisions of the Clean Air Act require Nevada to regulate GHGs.*

In accordance with *Massachusetts*, the 1990 Amendments, Section 202 and Section 111, NDEP should set limits on carbon dioxide and other GHG emissions from coal-fired electricity generating units because: (1) carbon dioxide and other GHG emissions are air pollutants under the State's air pollution regulations, and (2) these gases are subject to Nevada's regulations.

Carbon dioxide is an air pollutant under the Act and Nevada's air pollution regulations. The "sweeping definition" of "air pollutant" applies to both the federal Act and the NDEP air

pollution regulation. NRS 445B.110 defines "air contaminant" as "any substance discharged into the atmosphere except water vapor and water droplets." Furthermore, NRS 445B.115 defines "air pollution" as:

> [t]he presence in the outdoor atmosphere of one or more air contaminants or any combination thereof in such quantity and duration as may tend to: 1. Injure human health or welfare, animal or plant life or property. 2. Limit visibility or interfere with scenic, esthetic and historic values of the State. 3. Interfere with the enjoyment of life or property.

Just as the Act's definition of "air pollutant" includes carbon dioxide and other GHG emissions, Nevada's definitions of "air contaminant" and "air pollution" are inclusive of carbon dioxide and other GHG emissions.

Carbon dioxide and other GHGs are subject to regulation in Nevada because NDEP, acting on behalf of the EPA, is required to regulate carbon dioxide and other GHG emissions from power plants. In light of the Supreme Court's recent ruling NDEP, as a surrogate to the EPA, has the statutory authority to regulate GHG emissions. Just like the EPA was directed to work with other federal agencies in undertaking regulatory action to regulate GHG emissions from new motor vehicles, NDEP should be directed to undertake regulatory action to regulate GHG emissions.

Also, NDEP is required to set performance standards for carbon dioxide emissions under Section 111. The statutory authority given to the EPA in *Massachusetts* to regulate GHG emissions from motor vehicles, nonroad vehicles, and engines should apply to all provisions of the Act including Section 111. Carbon dioxide and GHG emissions are "air pollutants" which "may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7411(b)(1)(A). *Massachusetts* stated that"[t]he harms associated with climate change are serious and well recognized," reaffirming that overwhelming consensus in the international scientific

community that global warming is occurring, its cause is man-made, and the impacts are and will be devastating. *Massachusetts*, 127 S.Ct. at 1455. Thus, NDEP has the statutory authority under the Act to regulate GHGs.

**B. In accordance with its statutory obligations under the Clean Air Act, Nevada's PSD permitting process should include a BACT analysis and limit of GHG emissions.**

The State is responsible for performing a best available control technology (BACT) analysis and setting a BACT limit for GHG emissions from new coal-fired electricity generating units in order to obtain a PSD air permit. The Act and Nevada's air pollution regulations prohibit the construction of a new major stationary source of air pollutants or a major modification of an existing source in the State of Nevada except in accordance with a PSD construction permit issued by NDEP. 42 U.S.C. § 7475, 40 C.F.R. § 52.21, 40 C.F.R. 52.1485; NAC 445B.221. The PSD permits as they apply to new or modified major sources are designed to keep an attainment area in continued compliance with the Act. The air permits for the six proposed coal-fired electricity generating units should analyze and limit GHG emissions.

*I. The carbon dioxide and GHG emissions from coal-fired electricity generating units are subject to a BACT analysis and limit under the PSD permitting process.*

The PSD permit process for new coal-fired electricity generating facilities should include a BACT analysis and limit for GHG pollutants. PSD permits are issued to new major stationary sources or major modifications to existing stationary sources that can demonstrate no significant deterioration of ambient air quality in an attainment area. The BACT analysis under a PSD permit is "an emissions limitation" on new major stationary sources which analyzes "energy, environmental, and economic impacts and other costs." *See* 40 C.F.R. § 52.21(b)(12); *See also* CAA § 169(3), 42 U.S.C. §7479(3). The limitations are set by determining what is achievable for such source or modification "through application of production processes or

available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant." *Id.*

When issuing a PSD permit for a new coal-fired power plant, the NDEP should conduct a best available control technology (BACT) analysis and set a limit on carbon dioxide and other GHGs emissions. The Act's best available control technology (BACT) limitation applies to "each pollutant subject to regulation under [the Clean Air Act]." 40 C.F.R. § 52.21(b)(12). As discussed earlier "subject to regulation" applies to air pollutants that are currently being regulated. Pollutants regulated by Section 202 and Section 111 are subject to BACT. Yet air pollutants that EPA or a state possess, but have not exercised authority under the Act's provisions, are also subject to regulation. For example, EPA itself has recognized the principle that "[t]echnically, a pollutant is considered regulated once it is *subject to regulation* under the Act. A pollutant *need not be specifically regulated* by a section 111 or 112 standard to be considered regulated. (See 61 FR 38250, 38309, July 23, 1996.)" 40 CFR Part 70, Change to Definition of Major Source, 66 Fed. Reg. 59161 (Nov. 27, 2001) (emphasis added). Thus, even if carbon dioxide was not regulated under specific provisions of the Act, such as Section 111, the BACT limitation still applies.

NDEP should set a BACT emission limit for carbon dioxide in each PSD permit for new coal-fired electricity generating unit. A BACT limit is required "for each pollutant subject to regulation under [the Clean Air Act]" for which emissions exceed specified significance levels. Clean Air Act §§ 165(a), 169, 42 U.S.C. §§ 7475(a) 7479, 40 CFR 52.1485; NAC 445B.221. BACT is further required "<u>for each regulated NSR pollutant</u> that [a source] would have the potential to emit in significant amounts." 40 C.F.R. § 52.21(j)(1) (emphasis added). For any regulated NSR (new source review) pollutant that is not listed in the table at 40 C.F.R. §

52.21(b)(23)(i), a significant rate is "any net emission increase." 40 C.F.R. § 52.21(b)(23)(ii). Section 52.21(b)(50), in turn, defines "Regulated NSR pollutant" as:

> (i) Any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the Administrator (e.g., volatile organic compounds are precursors for ozone);
> (ii) Any pollutant that is subject to any standard promulgated under Section 111 of the Act;
> (iii) Any Class I or Class II substance subject to a standard promulgated under or established by title VI of the Act; or
> (iv) Any pollutant that otherwise is subject to regulation under the Act; except that any or all hazardous air pollutants either listed in section 112 of the Act or added to the list pursuant to section 112(b)(2) of the Act, which have not been delisted pursuant to section 112(b)(3) of the Act, are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Act.

40 C.F.R. § 52.21(b)(50) (emphasis added).

As a NSR pollutant, any increase of carbon dioxide from a new source would require the implementation of a BACT limit. The significance level triggering PSD applicability for a regulated NSR pollutant, other than the 15 listed in 40 C.F.R. § 52.21(b)(23)(i), is *any* net increase. 40 C.F.R. § 52.21(b)(23)(ii). Carbon dioxide is not one of the 15 pollutants listed in 40 C.F.R. § 52.21(b)(23)(i). Therefore, because carbon dioxide is a regulated NSR pollutant, as shown below, *any* increase in emissions is significant and requires a BACT limit for carbon dioxide. 42 U.S.C. §§ 7475(a)(1), (4), 7479(3); 40 C.F.R. § 52.21(j)(2); 40 C.F.R. § 52.21(b)(23)(ii). Thus, under the Act a BACT limit is required for carbon dioxide emissions from new coal-fired electricity generating units.

## *II. The PSD permits for the six proposed coal-fired electricity generating units in Nevada must include a BACT analysis and limit.*

Even if new regulations of GHG emissions are not adopted, Nevada's air pollution control permitting process should be suspended until a BACT analysis and limitation imposed on carbon dioxide and GHG emissions from any new coal-fired electricity generating unit is

developed by NDEP. NDEP's current PSD construction permitting process is unlawful because it fails to address carbon dioxide and other GHG emissions in the BACT analysis. In implementing the BACT analysis, NDEP should be evaluating IGCC, ultra supercritical coal technology, and 'capture-ready' design decisions. Thus a proper BACT analysis would consider clean fuels such as co-firing of biomass, natural gas, and renewable sources of energy as a means of mitigating carbon dioxide emissions.

All of the six coal-fired electricity generating units proposed in Nevada will emit carbon dioxide well above "any" net increase in emissions. White Pine alone will emit over 20 million tons of carbon dioxide annually, and all the proposed plants together will emit 48.6 million tons of carbon dioxide per year over the next 50 to 75 years. All current and draft air permits must address carbon dioxide because the BACT requirement applies to GHG emissions. It is recommended that the BACT limit allow no more than 1100 pounds of carbon dioxide pollution per megawatt-hour to be emitted from any new electricity generating facility.

Nevada has the statutory authority to regulate GHG emissions from new electricity generating facilities. Carbon Dioxide and other GHG emissions are air pollutants and subject to regulation under the Act and Nevada's air pollution regulations. Even if the State does not enact new GHG regulations, carbon dioxide should be analyzed and limited under BACT in order for a facility to acquire a PSD permit. The State will be acting lawfully under the recent Supreme Court decision in *Massachusetts* and the Act by moving forward with GHG regulations.

## V. Conclusion

Nevada should act on its own initiative and build a regulatory framework to limit and to reduce climate change pollution from new coal-fired electricity generating units. Now is the time to regulate the enormous volume of new greenhouse emissions that will emanate from Nevada.

The State needs to establish GHG regulations because climate change is real and already causing severe impacts. Carbon dioxide is a Clean Air Act air pollutant subject to Nevada's regulations. The State already has the statutory authority to regulate GHG. The Petitioners therefore request that the State's air pollution control permitting process reflect the international consensus that the world needs to immediately reduce GHG emissions in order to avoid the devastating environmental, social, and economic costs of climate change.

**5. A statement of the:**

**(a) Estimated economic effect of the regulation on the business which it is to regulate;**

(1) Adverse and Beneficial Effects

In order to comply with the proposed regulation, an electricity generating facility must be designed, and operated, to emit into the atmosphere no more than 1100 pounds of carbon dioxide pollution per megawatt-hour. This cannot be done via a traditional pulverized coal plant. However, the owner(s) of any proposed facilities could meet this emission standard through the construction of natural gas combined cycle plants or renewable sources. Like any alternative course of action, higher total capital costs will be incurred as compared to pulverized coal plants. But this cost is not unreasonable. (Gas-fired units are cheaper to build, but more expensive to operate.) According to the California Public Utilities Commission final decision adopting SB 1368, "While national displacement of coal may have some economic effects, this does not establish an impermissible burden…"[51]

The economic benefits of the new regulation far outweigh the upfront cost. The operating life of a new pulverized coal plant is likely to be 60 years or longer, and the 3,840 MW of power

[51] California Public Utilities Commission, "Interim Opinion on Phase 1 Issues: Greenhouse Gas Emissions Performance Standard," January 25, 2007, p. 222.

proposed in Nevada would emit 48.6 million tons of carbon dioxide per year.[52] Federal regulations of GHG emissions are expected to be enacted within this time frame. A very conservative estimate puts the cost of future carbon emissions at $12 per metric ton, which, for a 500 MW pulverized coal plant, would result in $76 million annual cost exposure. Considering that the six new coal-fired electricity generating units proposed to be built in Nevada collectively make up 3,840 MW, this conservative estimate would result in an annual additional economic burden to the utility of $583 million. On the other hand, installation of 3,750 MW of electricity generation through combined cycle natural gas would cause an economic burden of only $153 million per year, and IGCC with 90 percent carbon capture would cost as little as $30.7 million annually for its carbon emissions.[53]

A more realistic estimate of the cost of carbon was recently provided in New Mexico. State regulators have ordered electric utilities to begin taking into account the cost of carbon emissions in their Integrated Resource Plans beginning in 2010. Utilities are required to do their price sensitivity analyses with costs of $8, $20 and $40 per metric ton of $CO_2$, with $20 being perceived as the most likely base price. Beginning in 2011, the standardized cost of carbon emissions will be escalated by 2.5 percent per year.[54] Renewable energy sources that emit little to no carbon would clearly have little to no additional costs in paying for carbon emissions.

(2) Immediate and Long-Term Effects.

The immediate economic effects on the business are upfront costs associated with paying for fitting the coal plants with carbon sequestration or other $CO_2$ reducing technology, or paying

[52] Based off the expected emissions of the 1,590 MW White Pine coal plant, White Pine Draft Environmental Impact Statement, p. 4-119.
[53] Karl Bokenkamp, Hal LaFlash, Virinder Singh and Devra Wang, "Hedging Carbon Risk: Protecting Customers and Shareholders from the Financial Risk Associated with Carbon Dioxide Emissions," The Electricity Journal, Volume 18, Issue 6, July 2005, p.15.
[54] New Mexico Public Regulation Commission, "Order Approving Recommended Decision and Adopting Standardized Carbon Emission Costs for Integrated Resource Plans," June 25th, 2007.

the slightly higher capital costs of renewable energy sources. However, recent regulatory developments, and the likelihood of federal legislation on GHG emissions continue to shift the competitive balance away from new coal capacity and towards cleaner forms of power generation.[55] In the long term, the utility would most likely benefit from the new regulations because, according to the California Public Utilities Commission, "Federal regulation of emissions of GHGs in likely during [the next decade]."[56]

**(b) Estimated economic effect on the public;**

(1) Adverse and Beneficial Effects

The regulations of coal plant emissions will be almost singularly beneficial for the public due to: the threat of global climate change, the future cost of carbon, unstable fuel costs, and the health problems that emissions from traditional pulverized coal plants cause.

Global climate change: The public benefits in regards to climate change are the benefits of absence. By not emitting as much $CO_2$, the public will benefit in not needing to cope with as many of the effects and, therefore, costs associated with climate change. The Stern Review has quantified the cost of every ton of $CO_2$ that we emit today and into the future. The Review calls this price the "Social Cost of Carbon" (SCC), which is the "calculation of the damage done over time (suitably discounted) by a ton of $CO_2$ emitted this year." If climate change continues unmitigated, then the SCC is \$85/ton of $CO_2$, a number that would rise over time. If significant actions are taken to reduce carbon emissions, then the damage due to climate change will not be as immense, and the cost per ton of $CO_2$ will be less; however, it would still fall between \$25 and

[55] Eric Kane, "Dynergy: Carbon Risk Accompanies LS Power Merger," Innovest Strategic Value Advisors, March 27, 2007, p. 1.
[56] SB 1368, Section 1(e,f).

$30/ton.[57] The six new coal-fired electricity generating units proposed to be built in Nevada collectively make up 3,840 MW of power and would collectively emit 2.9 billion tons of carbon dioxide over their lifetime of approximately 60 years.[58] Considering that the installation of new coal plants would lead towards a price tag of $85/ton of $CO_2$, it is likely that the SCC of the six new coal-fired electricity generating units would be $246.5 billion. Even the lower estimate would result in an SCC of $87 billion.[59]

Future cost of carbon: The carbon costs to utilities mentioned above in Section a(1) would almost certainly be passed on to some extent to rate payers. The new regulations would prevent the worst case, highest cost carbon scenarios by ensuring that plants that emit the greatest amount of carbon would not be constructed. The regulations would therefore protect consumers from price hikes due to massive annual expenditures in paying for carbon emissions.

Unstable fuel costs: The new regulations will encourage development of renewable sources, which are immune to price instability caused by dependence on coal and natural gas. If a greater proportion of customers are depending on renewable sources for their energy, then there will be less of a chance that customers will see a sharp rise in rates if there is a dramatic change in the price of coal or natural gas. Furthermore, capital costs for new coal-fired power plants have increased 90-100 percent since 2002, and 40 percent in 2006 alone, while the cost of renewable energy continues to decrease. Many utilities have had to reassess their coal plant construction costs due to higher prices of necessary materials, and these costs will only continue

[57] Sir Nicholas Stern, "Stern Review: Frequently Asked Questions," October 30, 2006, http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics _climate_change/sternreview_faq.cfm.
[58] White Pine Draft Environmental Impact Statement, p. 4-119.
[59] Since global climate change is not a local problem, it is not possible to say that the carbon emitted by Nevada plants would result in a certain cost only to Nevada, but Nevada will certainly feel many of the effects of global climate change, and tax payers will have to pay the price. By adding excess carbon to the atmosphere, utilities are increasing the economic burden worldwide as well as in Nevada.

to rise.[60] Finally, the regulations will also encourage the implementation of efficiency measures, which are the most cost-effective method of coping with energy demands, and in most cases, result in a net economic gain.

Public health: Pulverized coal plants emit the vast majority of $SO_2$, $NO_x$ and mercury among all the types of electricity generating plants. These pollutants contribute to premature death, asthma, birth defects, loss in sensory or cognitive ability and potentially autism, to name a few negative effects.[61] The regulations will ensure that conventional pulverized coal plants will no longer be constructed, and encourage the creation of renewable energy sources, which generally emit none of the dangerous toxic chemicals. This will not only result in a healthier populace, but also prevent an overburdening of the local health care system caused by excess toxins in the air.

(2) Immediate and Long-Term Effects

It is possible that rate payers would experience a slight increase in their bills in the short term, as the utilities invest in new, cleaner technologies. In the near future, however, customers should be paying less for their power due to the regulation, because they will not have to shoulder the future cost of carbon regulation, or be affected by the rising, and often unstable, prices of fuels.

**(c) Estimated cost by the agency for enforcement of the proposed regulation.**

There would be no additional cost to the Nevada Division of Environmental Protection due to this regulation. SB 422 was recently passed in the Nevada legislature, and it required NDEP to "mandate the reporting of all GHGs emitted by each affected unit [defined as an

[60] Innovest Strategic Value Advisors Report, "TXU: Beyond Carbon Risk: Regulatory Delays and Increased Costs of Construction," February 22, 2007, http://www.net.org/documents/2007-02-22_Innovest_Report.pdf.
[61] Clear the Air, "Power Plants, Your Health and the Environment," http://www.cleartheair.org/proactive/newsroom/release.vtml?id=17320.

electricity generating unit that is at least 5 MW, sells its electricity, and created GHGs] in this State for inclusion in a registry of GHG emissions…"[62] Additionally, NDEP is already required under the Clean Air Act and Nevada statute to review applications for new sources of stationary air pollution. Therefore, the assessment, measurement, and monitoring of GHG emissions will already be occurring, and this regulation will incur no additional cost.

**6. A description of any regulations of other state or government agencies which the proposed regulation overlaps or duplicates and a statement explaining why the duplication or overlapping is necessary. If the regulation overlaps or duplicates a federal regulation, the name of the regulating federal agency.**

The proposed regulations do not overlap with any regulations of other state or government agencies in Nevada, nor do the proposed regulations overlap or duplicate a federal regulation.

**7. If the regulation includes provisions which are more stringent than a federal regulation which regulates the same activity, a summary of such provisions. The statement must include the specific citation of the federal statute or regulation requiring such adoption.**

The proposed regulations do not overlap or duplicate a federal regulation.

**8. If the regulation provides a new fee or increases an existing fee, the total annual amount the agency expects to collect and the manner in which the money will be used.**

The proposed regulations do not provide for a new fee or increases in an existing fee.

[62] Senator Titus, "Senate Bill 422," May 31, 2007.

HARRY REID
NEVADA

MAJORITY LEADER

# United States Senate

WASHINGTON, DC 20510-7012

July 24, 2007

Walter M. Higgins III
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Mr. Bruce Wrobel, Chief Executive Officer
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Dear Sirs:

I am writing to each of you regarding your company's proposal to build new coal-fired power plants in eastern Nevada and to express my strong opposition to those plants. Rather than making long-term commitments to old and inefficient combustion technologies, I believe that the goal for Nevada must be greater independence from fossil fuel and electricity imports. Nevada's financial and ratepayer resources should be heavily focused on rapid and significant investments in clean renewable energy and energy efficiency to ensure a more stable, affordable and secure energy future and to reduce the growing risks of global warming.

As I write this, tens of thousands of acres of Nevada are on fire – over 400,000 acres have already burned this year. Nearly 10 million acres across the West burned in 2006 – the highest number since records began in 1960. Scientists tell us that the same deep drought that has brought on these dangerous fire conditions may very likely be a normal condition far into the future, and that the Southwest will become increasingly drier and more arid if we and the world conduct business as usual. Studies have also shown that Lake Tahoe is warmer and its level is lower due to increasing average global and regional temperatures.

I am not a scientist, but I have spoken with many scientists about their research and know they are gravely concerned about the strong linkage between manmade greenhouse gas emissions and global warming. Neither I nor they can say without a doubt that the symptoms I described above are wholly due to global warming caused by manmade emissions. But it would be prudent for Nevada, the United States, and the entire world to begin reducing those emissions immediately and dramatically so that we can stabilize the global climate system before the middle of this century. Our nation has the moral responsibility to lead in these reductions, since more than forty percent of the carbon now in the atmosphere is related to America's industrial expansion over the last hundred years.

Fortunately, Nevada is blessed with a magnificent abundance of clean renewable energy resources that could provide most, if not all, of the energy needs of our fast growing state and perhaps beyond. However, this means making the right strategic investments now and choosing safe and sustainable technologies that will decrease emissions. According to the U.S. Department of Energy, "the solar energy resource in a 100-mile-square area of Nevada could supply the United States with all its electricity (about 800 gigawatts) using modestly efficient (10%) commercial photovoltaic modules." Similarly, the National Renewable Energy Laboratory reports that the largely untapped geothermal potential of Nevada and the Great Basin could provide tens of thousands of megawatts of baseload electricity generation as well as thermal energy within just a decade or two.

Please find enclosed a set of draft maps, prepared at my request by a variety of federal agencies with state agency assistance, of renewable energy resource areas within Nevada that are deemed "developable." These draft maps are not a formal endorsement by those agencies for specific renewable energy development in these areas, but I intend them to help direct investors, utilities and municipalities toward those areas for the best resource use that will not interfere with existing land uses or classified missions. Such information will be central to identifying where some of Nevada's potent wind resources may be developed, since very large amounts of airspace are blocked off from wind energy development due to mission-critical radar testing by the Air Force. Once the maps are final, they will be posted on a public website for further discussion and action.

It is my strong hope that the progress made to date by the utilities and federal agencies in installing significant solar electric and solar thermal production and buying renewables will grow exponentially. Such growth would create new jobs in every corner of Nevada, particularly rural areas, and encourage the development of a strong and sustainable clean energy industrial base. The state's renewable portfolio standard is a good start but should be considered a floor rather than a ceiling.

With the appropriate incentives and foresight, including decoupling electricity sales from utility return where appropriate, Nevada could and should become significantly more energy independent through greater development of renewables and penetration of energy efficiency. With an aggressive strategy, we could reduce the amount of fossil fuels – natural gas and coal – that Nevada ratepayers continue importing and paying more for every year, while, by any fair and balanced comparison, the free fuel of the sun, wind and earth continues getting cheaper. I encourage you to consider the outline of a Nevada Energy Independence plan (see enclosed) developed originally by Jon Wellinghoff,

former Nevada state consumer advocate and now a FERC Commissioner, which indicates that the state's growing demand for energy can be met largely through new renewable energy, energy efficiency and demand-side management.

As I wrote to the Governor recently, I believe Nevada should join the Western Regional Climate Initiative. It also makes sense for Nevada to work cooperatively with the Initiative states in rapidly deploying regional energy efficiency and demand-side management programs. Like several other Western states, the state of Nevada should also adopt stringent carbon emission performance standards for any new electricity generation in-state or for any necessary purchases of electricity from out of state. This will help build a West-wide pull for clean energy that Nevada is perfectly poised to satisfy and ensure that dirty power does not obtain an unfair advantage.

Meeting Nevada's demands for electricity, including the building of transmission lines to rural areas with significant renewable potential, is no easy task. But the decisions that are being made right now in boardrooms, by utility regulators, on Wall Street, and elsewhere, will affect ratepayers, the state, the West and perhaps the world for decades or longer. It is absolutely essential that in solving short-term electricity problems, we not commit our valuable and finite financial resources to technologies or energy sources that will pollute the air, increase the risks of global warming, and likely be far more expensive in the future than currently estimated.

By conservative estimates, the first phase of the coal plants proposed to be built in White Pine County will cost more than $3.25 billion to construct. Once these plants are built, Nevada's ratepayers will pay up to half a billion dollars annually for 50 years or more in fossil fuel costs. The plants are expected to burn 166 rail cars or 20,000 tons of coal every single day. That will send more than 13 million tons of pollution into the air annually. This pollution will decrease visibility for miles, including in the Great Basin and Zion National Parks, as well as depositing unhealthy levels in ecosystems near and far from the plants, and contribute to further imbalancing the global climate system. This pollution will have a negative effect on the health of the people living near the plants, on tourism, hunting and wildlife populations.

Rather than spending over $8 billion in the first ten years of these proposed coal plants' construction and operation, that money could instead be used to put a 3 kilowatt solar electric (PV) system on the roof of about 600,000 houses across the state. This is only one example of a much better way to spend finite fiscal resources. Such a shift to solar could produce 350 MW of electricity and increase the energy independence of millions of Nevadans. The solar electricity generated would be useful during peak hours, improve air quality, and never cost another penny in fuel costs. Furthermore, the cost of solar energy systems will go down dramatically and PV efficiency and output will increase.

Because I believe that renewable energy makes far more sense than coal for Nevada, I will continue my efforts at the Federal level to obtain funds for the development of renewable energy projects. I will also be working to pass long-term production and investment tax incentives and to enact energy policy changes such as a national renewable electricity standard to make Nevada's renewable efforts even more profitable.

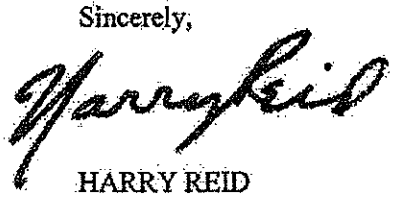
I will also introduce legislation and support efforts to increase sustainable rural economic development through renewable energy and financing of related transmission access.

But because I believe that developing renewable energy in Nevada is far preferable to coal for the sake of the economy, public health and the environment, I will use every means at my disposal to prevent the construction of new coal-fired power plants in Nevada that do not capture and permanently store greenhouse gas emissions.

I look forward to working with you, the Governor, the congressional delegation, the state assembly, the public utilities commission, financiers, and the public, on realizing the vision of making Nevada more energy independent through the use of renewable energy and energy efficiency. To that end, I hope you will join with me and other interested parties to begin what will be an important state-wide discussion on how to transform Nevada into a national and global leader in the deployment of renewable energy technology in Ely to Fallon to Pahrump and beyond.

Thank you for your time and attention to my concerns.

Sincerely,



HARRY REID

CC:

Senator John Ensign

Congressman Dean Heller

Congressman Jon Porter

Congresswoman Shelley Berkley

Governor Jim Gibbons

Lieutenant Governor Krolicki

State Controller Kim Wallin

Speaker Barbara Buckley

Assembly Minority Leader Garn Mabey

Senate Majority Leader Bill Raggio

Senate Minority Leader Dina Titus

State Senator Dean Rhoads

State Senator Randolph Townsend

Assemblyman Pete Goicoechea

Commissioner Jo Ann Kelly, Chairman
Commissioner Rebecca Wagner
Commissioner Sam Thompson

Director Hatice Gecol – State Office of Energy

Director Allen Biaggi – Department of Conservation and Natural Resources

Administrator Leo Drozdoff - Department of Environmental Protection

White Pine County Commissioner Brent Eldridge, Chairman
White Pine County Commissioner Laurie Carson
White Pine County Commissioner David Pound
White Pine County Commissioner Gary Lane
White Pine County Commissioner Raleene Makley

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Councilman Shane Bybee
Councilman Steven Marich
Councilman Rom Dicianno
Councilman Jerrold Meyer
Councilman Jim Northness

General Manager Pat Mulroy – SNWA

Colonel Michael L. Bartley, Commander, 99th Air Base Wing,

Captain Michael Glaser, Fallon Naval Air Station

Cindy Nielsen, Superintendent – Great Basin National Park

Kimball Goddard, Director – US Geological Survey –
Chief of the Nevada Water Science Center

Ron Wenker, Director – BLM – Nevada State Director

Ed Monnig, Supervisor – US Forest Service