

White Paper

Assessment and Recommendations: Alignment of Nevada Economic Development Policy & Energy Policy

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Governor's Office of Economic Development**

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Through Streamlined Standards and Policy Incentives

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Executive Summary

The authors wish to express their gratitude to all of the team partners and stakeholders who participated in efforts to develop and review the content of this document. The findings and recommendations represent positions that were supported by a majority of the participants or were “compromise” positions. Individual stakeholders, however, have expressed to the authors their lack of support for some of the specific findings and recommendations contained herein. Therefore, it should be noted that participation as a team member or stakeholder does not convey individual support for all aspects of this document.

The process of comparing Nevada Energy Policy and Economic Development Policy was somewhat challenging. While current economic development strategy is mostly embodied or summarized in a policy document (“Moving Nevada Forward: A Plan for Excellence in Economic Development 2012-2014”), there is no comprehensive state energy policy document. Rather, energy policy is expressed in various provisions of the Nevada Revised Statutes (NRS), Nevada Administrative Code (NAC) and Public Utility Commission of Nevada (PUCN) rulings.

At the highest level of expression (NRS 701.010 Legislative Findings; state policy), it would appear that energy policy is closely aligned with economic development policy. The areas of policy alignment for both energy and economic development policies can be summarized in the following broad high-level goals:

- 1) Increase the number of jobs in Nevada.
- 2) Grow the Nevada economy.
- 3) Lower energy costs (from what these cost levels might otherwise be) for businesses and residents in Nevada.
- 4) Increase stability and predictability of energy costs.
- 5) Reduce environmental impacts related to energy production and consumption, particularly in those circumstances where environmental impacts could adversely affect future growth and/or where reductions in environmental impacts could positively affect future economic growth.

However, the devil is in the details and at the implementation level it appears there are specific elements of state energy policy that deviate from the high-level ideals set forth in NRS 701.010.

For example, two key elements of Nevada’s current economic development policy are job creation and economic impact. A shortcoming in many of the economic impact analyses currently presented to support various energy policy decisions is the failure to consider **net** economic impact; specifically, the analyses fail to consider how the rate impacts of various actions feed back into the broader economy.

Rate increases or decreases can have three general types of economic impacts:

- 1) Effect on utility bills, which affects the rate of economic activity and growth of the state's economy;
- 2) Effect on utility bills can affect the profitability of existing business operations and therefore their competitiveness and future growth potential; and
- 3) Effect on the ability of Nevada to attract new businesses and support retention and expansion of existing businesses.

Without tools that analyze all of these economic impacts, energy efficiency has likely been overlooked as a key energy and economic development resource for Nevada. Further, as an expression of policy, Nevada had not established energy efficiency as a high priority resource (for example, as would be evidenced by an integrated resource planning objective of acquiring all cost-effective energy efficiency). It is the opinion of the authors that the greatest omission in Nevada's current energy policy is the failure to promote energy efficiency as the priority resource, or even among the top resources, for meeting Nevada's future energy needs.

Additionally, levels of future risk associated with various energy supply choices seem to typically not be fully considered, or at least no attempt is made to quantify the risks into the economic analyses. Risks can include potential fuel supply disruption, fuel price volatility, and political decisions. At one of the stakeholder meetings held to discuss policy recommendations, one participant asked, "Does anyone present believe there will not be some form of carbon tax within the next decade?" Not one stakeholder present responded. And yet, policy decisions are being made now that do not appear to include a carbon tax as a cost/risk element even though investments are contemplated that will involve fossil fuel-based energy supply sources with useful lives of several decades.

The authors have concluded that the state's high-level economic development and energy goals can be achieved by accomplishing the following more-specific objectives:

- 1) Increase aggregate electricity consumption in Nevada while reducing individual user's average electricity consumption. This could be accomplished, for example, by attracting more electricity-intensive businesses (i.e. data centers); more residents; increased adoption of electric vehicles; and switching "fuels" where beneficial.
- 2) Reduce peak demand for electricity relative to total or average consumption to improve the utilization of existing electricity generation, transmission and distribution infrastructure which should translate into lower electricity rates and/or aggregate utility bills for Nevada customers.
- 3) Reduce average energy consumption (metrics: per capita, per square foot, per employee, per mile traveled). Energy efficiency continues to represent the most cost-effective and lowest-risk means of meeting Nevada's energy needs.
- 4) Reduce air emissions related to energy production and consumption.
- 5) Reduce water consumption related to energy production and consumption. Water is considered a precious commodity in Nevada and is one of the resources that can constrain economic development and growth.

To achieve these objectives, the following set of eight policy recommendations has been developed:

1. Support the adoption and implementation of cost-effective energy efficiency building codes and standards and work to help ensure compliance.

New buildings typically will have useful economic lives of at least 30 years, with 50 - 100 years being more representative of the likely range of the expected useful lives. Investment in more energy-efficient building design and equipment from the outset is typically the most thorough and cost-effective approach.

2. Develop and implement a pilot utility on-bill financing program for energy-efficiency improvements.

Utility on-bill financing (OBF) has been a low-risk, low-default mechanism for overcoming two of the major barriers to energy-efficiency improvements: 1) upfront investment and 2) access to financing. Unlike other methods of financing energy efficiency improvements, properly designed OBF can be the “democratizing factor” that opens the potential for energy-efficiency improvements to nearly all consumers. The goal of a pilot project is to demonstrate the beneficial impact of allowing building owners/operators to make energy efficiency improvements without needing to use their own capital for the upfront costs and without applying traditional lending qualification criteria.

3. Develop and adopt policies and measures to accelerate the acquisition and use of alternative fuel vehicles (AFVs) in Nevada – particularly in metro areas.

Increased use of AFV’s can assist with several of the specific objectives identified above as important to Nevada policy alignment, specifically:

- increase aggregate electricity consumption in Nevada;
- reduce peak demand for electricity relative to total or average consumption;
- reduce emissions related to transportation (especially in the potential non-attainment basins of Las Vegas and Reno metropolitan areas);
- reduce carbon footprint of vehicles by reducing vehicle emissions (metrics: tons of carbon emitted);
- reduce average energy consumption (metrics: per capita, per square foot, per employee, per mile traveled);
- reduce dependence on foreign transportation fuels; and
- create jobs involved in the installation of charging and fueling stations.

Governors from eight states recently announced an initiative to put 3.3 million zero-emission vehicles on the roads in their states by 2025. Nevada was not one of them.

4. **Develop an outreach program to accelerate implementation of energy efficiency improvements in existing Commercial Buildings through a state-supported and well-defined Energy Savings Performance Contracting process.**

Performance contracting involves an energy service company (ESCO) designing a package of energy cost reduction measures, installing or implementing those cost reduction measures, and guaranteeing the savings that will be achieved by the cost reductions. The owner pays for the package over time using the stream of revenue resulting from the energy cost savings resulting from the guaranteed energy reduction measures. NSOE should lead an effort to increase the awareness of performance contracting by establishing a formalized, systematic method of defining and communicating the correct process to be used by contractors and building owners who employ performance contracts to achieve energy efficiency improvements, with emphasis on risk mitigation.

5. **Implement alternative ways of incentivizing investor-owned utilities (IOUs) to increase their demand side management (DSM) programs.**

As the American Council for an Energy Efficient Economy (ACEEE) has observed:

“The obligation to earn a profit drives utilities to increase revenues by selling more electricity. Given this, investment in energy efficiency raises financial concerns for IOUs. IOUs need to be able to recover the money they invest in efficiency from ratepayers and just like investments in new power plants; they need to be able to earn a return on investments in energy efficiency. Further, the threat of reduced sales if an energy efficiency program is successful threatens to cut into utility profits.

In the traditional regulatory structure these concerns hinder a utility’s willingness to invest in energy efficiency. No single policy mechanism can adequately remove the existing biases against utility investment in energy efficiency. However, several policies, when used in combination, can properly align financial incentives to remove the major market barriers to energy efficiency. These include cost recovery, decoupling and providing shareholder incentives.”

Nevada has attempted to address these concerns in a couple of ways. In July 2010 the Public Utilities Commission of Nevada (PUCN), directed by 2009 legislation, adopted a lost revenue recovery mechanism providing for annual recovery of NV Energy’s efficiency program expenses and its fixed cost revenues lost from the reduced sales caused by the efficiency programs. A previous 5% additional rate of return incentive was eliminated, and instead a party may file a request for an incentive on a program-by-program basis. The lost revenue recovery policy, however, has been more complex to implement and more controversial than was anticipated at the time of its adoption. There is broad sentiment that the current lost revenue recovery mechanism needs to be replaced.

It is recommended that alternative ways of encouraging IOU investment in DSM programs be considered to determine what combination of provisions would best encourage accelerated implementation of energy efficiency/DSM programs in Nevada. Most likely, a combination of approaches is needed: one mechanism to offset the lost recovery of fixed costs that results from successful DSM and another mechanism to share the benefits of successful DSM between ratepayers and the utilities. The decoupling mechanism currently being used in Nevada by Southwest Gas is one candidate for offsetting 'lost revenue'.

6. Support the Location and Expansion in Nevada of the Supply Chains of Goods and Services for Energy Efficiency

As discussed in the description of Current Economic Development Policy in this report, renewable energy component manufacturing, advancing and internationalizing geothermal development and energy efficiency upgrading are targeted by the State as areas for economic opportunity. GOED should expand this strategy to specifically include opportunities in the energy-efficiency supply chain. GOED and/or NSOE may be able to identify grant opportunities that would include promotion of Nevada energy-related businesses.

7. Utilize better decision support tools when considering energy policy and economic policy decisions.

Funding should be pursued to develop an "open" Computable General Equilibrium (CGE) model for use by utilities, the PUCN, and stakeholders in energy decisions. The University Center for Economic Development at the University of Nevada, Reno is completing a background study and roadmap for developing a CGE model for use in estimating economic impacts related to various energy decisions, including fossil-fuels generation, renewable energy electricity generation and energy efficiency programs. This analytical tool would have the capability of comparing the economic and net employment impacts of various policies regarding the mix of fossil fuels, renewable energy resources, and energy efficiency measures to meet electricity needs in Nevada.

Utilizing a CGE model to compare all energy policy decisions (fossil-fuels, renewable and efficiency) could result in making better-informed policy decisions. Presumably, this would also lead to higher rates of economic growth for the State and to prioritization of lowest-cost lowest-risk resources.

8. Establish Energy-Efficiency Targets for Nevada, Followed By Recommended Methods for Achieving Those Targets

From the recently published "2013 City Energy Efficiency Scorecard" by ACEEE:

Energy efficiency may be the cheapest, most abundant and most underutilized resource for local economic and community development. Considerable evidence documents that investments in energy efficiency can improve community self-

reliance and resilience; save money for households, business and anchor institutions, and local governments; create local jobs; extend the life of and reduce the costs and risks of critical infrastructure investments; catalyze local economic reinvestment; improve livability and the local asset value of the built environment; and protect human health and the natural environment through reducing emissions of critical pollutants and greenhouse gases.

At a September 2013 meeting of stakeholders, there seemed to be general consensus that Nevada should establish energy efficiency targets and then consider the various ways of achieving those targets. Methods for achieving energy efficiency targets include various incentives, use of alternatives to the Total Resource Cost test, mandates (with predetermined consequences if goals are not achieved), and/or utilizing some sort of carbon tax and letting market forces allocate energy resources, including energy efficiency. Mandates are already used by many states with Energy Efficiency Resource Standards (EERS) being the most prevalent form for mandating energy efficiency targets. Importantly, states that have implemented EERSs now represent 61 percent of total electricity sales in the U.S.

In the 2013 session, the Nevada Legislature passed AB 428 creating a Legislative Committee on Energy. Since much of Nevada's energy policy is set forth in Nevada Revised Statutes, it is recommended that the energy efficiency goal-setting process be referred to the Legislative Committee on Energy, with support from GOED and NSOE, as well as the involvement of any other entities and individuals the Committee identifies.

Next Steps

The Nevada State Office of Energy is forming working groups to help implement these eight policy recommendations. Next to be developed are time frames, definitions of "success", milestones, and reporting processes. These elements are absolutely necessary for the working groups to achieve meaningful and timely results.

While the working groups take on these tasks, due to time considerations, we encourage the interim Legislative Committee on Energy to engage the working groups and consider any legislation needed to implement these recommendations. The next session of the Nevada Legislature in 2015 can be a "watershed point" for advancing energy efficiency and optimizing the economic benefits of energy efficiency for all Nevadans.

I. Introduction

In October 2011, the Department of Energy awarded a State Energy Program Special Project Grant to the Nevada State Office of Energy (NSOE). The proposal submitted to DOE was designed around a team approach that included NSOE, the Governor's Office of Economic Development (GOED), NV Energy, the Business Environmental Program (BEP) at the University of Nevada, Reno (UNR) and the Nevada Chapter of the Associated General Contractors of America (AGC). NV Energy agreed to provide in-kind match that was key to Nevada receiving this grant award. NSOE subsequently awarded a sub-grant to UNR to conduct research and perform studies in support of the grant's objectives. The purpose of the grant is to analyze and initiate a process to enact methods designed to significantly alter the regulatory and policy-based environment for commercial building energy-efficiency retrofits in Nevada through a paradigm shift in the way that commercial building retrofit projects are evaluated from both an energy-savings and financial return perspective, and in the quantity of projects that are implemented.

The scope of the project includes identifying barriers to implementation of energy efficiency improvements in commercial buildings; reviewing and documenting alignment and conflicts between energy policy and economic development policy; and developing an inter-related and comprehensive set of recommended policies, standards, laws, ordinances, financial incentives and/or practices that will increase the implementation of energy efficiency retrofits in commercial buildings. The process directed by the grant includes vetting of the proposed recommendations with key stakeholders and creating a plan for implementation of the final recommendations. The recommendations should foster implementation of commercial building energy efficiency retrofits on a much grander scale than has been achieved in the state before, particularly in the private sector.

The purpose of this White Paper is to document the results of research and findings related to the grant's objectives and to provide a forum and focus for key stakeholder discussion of alternatives and recommendations presented.

The project timeframe continues through October 2013. Beyond the current White Paper, the project team will continue to make technical recommendations and provide implementation advice in regard to the project scope and objectives. Because the research and stakeholder process has uncovered many additional ideas and suggestions outside the initial project scope and objectives, provisions will also be made by NSOE to concurrently explore and receive feedback on those ideas and suggestions.

II. Current Economic Development Policy and Energy Policy in Nevada (2013)

Much of Nevada's current energy policy was developed prior to the beginning of the Great Recession, while current economic development policy was developed as a result of the Great Recession. Nevada does not have a comprehensive energy plan document. Instead, energy policy is set forth in various parts of Nevada Revised Statutes, Administrative Code and PUCN decisions. Several bills incorporating

significant changes to energy policy and economic development policy were enacted in 2013. While there are some specific connections between Nevada energy policy and economic development policy, like the green building tax incentives, renewable energy and manufacturing tax abatement, revolving loan funds, etc., we have been unable to identify any prior, specific, broad efforts to align these two policy areas. Below are summaries of some of the key aspects of economic development policy and energy policy in Nevada. Significant differences in the economic environment in Nevada in the periods before and since the onset of the Great Recession include:

- 1) Prior to the Great Recession, demand for electricity was growing in Nevada, so financial analysis for renewable energy projects and energy efficiency projects included “avoided costs for new fossil-fuel generating facilities”. Since the inception of the Great Recession, demand for electricity in Nevada has been flat or decreasing.
- 2) Prior to the Great Recession, job creation was not a significant concern, since Nevada had been among the fastest growing states for several decades. Since the inception of the Great Recession, Nevada has led the nation with the highest unemployment rate.
- 3) Approximately coincident with the Great Recession, the long-term trend for natural gas prices began to shift from increasing prices to flat/declining prices, partially as result of what was occurring in the economy but, more importantly, as a result of certain technologies (improved horizontal drilling techniques and fracturing of oil and gas-bearing geological structures) being applied to several shale structures in the U.S. and Canada.

Current Economic Development Policy

In February 2012, the Governor’s Office of Economic Development (GOED) released its new plan for economic development in the State of Nevada, entitled “Moving Nevada Forward: A Plan for Excellence in Economic Development 2012-2014.”¹ The plan presents three goals (Why We’re Doing It – p.17):

- 1) Facilitate job growth (50,000 jobs by 2014 mentioned in the Governor’s speech);
- 2) Help speed the recovery from the current recession, and
- 3) Foster a long-term vibrant sustainable economy.

The plan targets a number of key industries: *Aerospace Defense, Business IT Ecosystems, **Clean Energy*** (emphasis added), *Health & Medical Services, Logistics & Operations, Mining, Materials & Manufacturing, and Tourism, Entertainment & Gambling* (p.32-33).

In the section “Nevada’s Assets” the plan cites:

- *National leader in use of geothermal energy* (p.12);
 - *National leader in use of solar energy* (p.12); and
 - *Nevada ranked #1 for LEED-certified buildings [per capita] (U.S. Green Building Council²)* (p.13).
- Authors’ note:** Nevada has more square footage of LEED buildings per capita than any other state.

¹ The full GOED plan can be found at http://nv.diversifynevada.com/documents/state_plan/2012_NVGOED_StatePlan_Full.pdf.

² <http://greendashboard.dc.gov/Energy/LEEDBuildings>

In the section “Liabilities” the plan cites:

- *Higher energy costs than most neighboring states (p.14).*

Authors’ note: In the last few years, Nevada’s competitive position appears to have improved – to “the middle of the pack”. The following information was provided by NV Energy.

Table 5.6.A. Average Retail Price of Electricity to Ultimate Customers by End-Use, by State, 13-Jun								
(cents per Kilowatthour)								
Per U.S. Energy Information Administration								
	Residential	Commercial	Industrial	Transportation	All Sectors	All Sectors		
						12-Dec	11-Dec	
Mountain	11.84	9.87	6.97	10.96	9.72	8.37	8.07	This chart represents rates at a point in time.
Arizona	12.18	10.55	7.14	0	10.89	8.98	8.73	As of June 2013, Nevada's average retail price for all sectors was 5.1% lower than the Mountain states, 43.2% lower than California, and 11.9% lower than the U.S.
Colorado	12.42	10.49	7.7	11	10.34	9.08	9.02	
Idaho	10.19	7.98	6.97	0	8	6.9	6.13	
Montana	11.06	9.81	5.62	0	8.77	8.36	8.28	As of June 2013, Nevada's average retail price for industrial customers was 2.6% higher than the Mountain states, 41.6% lower than California states, and .3% higher than the U.S.
Nevada	11.56	8.38	7.15	8.2	9.22	8.36	7.97	
New Mexico	12.48	10.18	6.91	0	9.86	8.56	8.39	
Utah	10.83	9.2	6.57	11.5	8.82	7.41	6.98	Residential rates in Arizona and Nevada are higher because of the impact of summer usage on residential costs to serve.
Wyoming	10.77	8.82	6.38	0	7.47	7.23	6.76	
Pacific	14.82	14.67	8.8	7.49	13.36	10.76	10.29	
California	17.5	16.94	12.25	7.44	16.22	12.83	12.02	As of June, Nevada's average retail price for residential customers was 2.4% lower than California, and 7.8% lower than the U.S.
Oregon	10.16	8.43	5.88	8.93	8.28	8.33	8.23	
Washington	8.82	7.62	4.04	8.5	6.81	7.07	7.07	
U.S. Total	12.54	10.7	7.13	10.7	10.47	9.65	9.53	

Table 5.6.B. Average Retail Price of Electricity to Ultimate Customers by End-Use, by State, Year-to-Date through June 2013								
(cents per Kilowatthour)								
Per U.S. Energy Information Administration								
	Residential	Commercial	Industrial	Transportation	All Sectors	All Sectors		
						12-Dec	11-Dec	
Mountain	10.97	9.15	6.17	10.18	8.86	8.81	8.63	This chart represents rates charged over a period of time. In this case, January 2013 through Jun-13
Arizona	11.39	9.71	6.4	0	9.85	9.8	9.71	Thru June 2013, Nevada's average retail price for all sectors was 4.4% lower than the Mountain states, 38.5% lower than California, and 14.2% lower than the U.S.
Colorado	11.55	9.61	7.07	10.54	9.54	9.34	9.39	
Idaho	8.8	7.12	5.76	0	7.21	6.89	6.44	
Montana	10.16	9.46	5.24	0	8.47	8.26	8.23	Thru June 2013, Nevada's average retail price for industrial customers was 8.3% lower than the Mountain states, 46.2% lower than California, and 15% lower than the U.S.
Nevada	11.7	8.71	5.66	7.62	8.47	8.94	8.97	
New Mexico	11.44	9.4	6.22	0	8.98	8.82	8.74	
Utah	10.07	8.25	5.74	10.17	7.95	7.85	7.13	Thru June 2013, Nevada's average retail price for residential customers was 6.7% higher than the Mountain states, 27.2% lower than California, and 1.7% lower than the U.S.
Wyoming	9.88	8.48	6.37	0	7.48	7.19	6.58	
Pacific	13.14	11.86	7.73	7.34	11.43	11.52	11.01	
California	16.07	13.39	10.51	7.28	13.77	13.75	13.05	
Oregon	9.79	8.36	5.72	8.81	8.3	8.25	8.04	
Washington	8.56	7.73	4.08	8.29	7.02	6.93	6.78	
U.S. Total	11.9	10.13	6.66	10.36	9.87	9.87	9.9	

Numbers do not include taxes. Nevada's numbers do not include franchise taxes or the UEC. The REPR, TRED and EE rates are included.

However, the relative position of Nevada’s electricity rates, according to Site Selection website, is not as favorable as indicated above.³ The Nevada page on the Site Selector website, updated in January 2013, indicates an average industrial retail electricity rate of \$0.0825 per kWh, which is second highest only to California and well above the comparable rate for other states in the western region. Differences between published rates and site selector analyses are explained in a document published by Unique

³ <http://www.siteselection.com/issues/2013/jan/data/Nevada.pdf#search>

Infrastructure Group.⁴ Factors such as demand, facility, and transmission charges are considered as part of power costs by site selectors.

For energy-intensive businesses (i.e. data centers and manufacturing) considering location in Nevada, 1) the cost of electricity, 2) the accessibility and transparency of that cost information and 3) the long-term stability of rates are of significant concern as key areas where firms need to minimize operating expenses and manage risk. In many cases, tax incentives are needed either in addition to competitive power rates or to offset rate advantages other states or regions may have. While developers of the largest data centers may contact states and utilities to negotiate power rates and incentives, the many small to medium size data centers (1-10 MW) tend to simply select or eliminate locations from consideration based upon public data accessible on the Internet. An industry observer has advised that the cutoff from consideration for electrical rates seems to be below the \$0.06/kWh level. Duke power, as an example, uses competitive rates as a factor in trying to attract data centers to its service territory.⁵

GOED identifies some key tactics for implementation of the plan, including the following:

- *GOED and the Governor's Office of Energy will partner to study the necessary **business model for energy exports** (emphasis added) and Nevada's capabilities in that area. Also examined will be how Nevada might partner with neighboring states to improve Nevada's energy costs, including a consideration of project development, operations, and transmission. (p.31)*

In the section of the report "Targeted Sectors and Opportunities," GOED provides some specifics in regard to the Clean Energy Sector (p.32):

- *Renewable component manufacturing;*
- *Expanding transmission capacity;*
- *Advancing and internationalizing geothermal development;*
- *Energy efficiency upgrading.*

In the section "Metrics and Accountability" GOED states: "For each of the seven sectors, then, GOED will determine the return on investment by tracking and reporting the following performance measures:

- *Job growth;*
- *Business formation;*
- *Wages and salaries;*
- *Economic impact growth; and*
- *State share of national sector." (p.60)*

⁴ <http://www.cfroundtable.org/meetings/032511/CFRT%20March-25-2011%20preso.pdf>

⁵ <http://www.duke-energy.com/economic-development/data-centers-site-selection.asp>

New legislation in 2013 that has impact on economic development policy as it relates to energy includes the following:

SB 123 (included in this paper as Appendix C): SB 123 calls for NV Energy to close down its coal-fired electricity generation facilities and replace them with renewables and natural gas fired generating facilities. Of note, certain requirements are placed upon the Public Utilities Commission:

Sec. 16. NRS 704.746 is hereby amended to read as follows:

~

8. The Commission shall, after a hearing, review and accept or modify an emissions reduction and capacity replacement plan which includes each element required by section 7 of this act. In considering whether to accept or modify an emissions reduction and capacity replacement plan, the Commission shall consider:

- (a) The cost to the customers of the electric utility to implement the plan;*
- (b) Whether the plan provides the greatest economic benefit to this State;*
- (c) Whether the plan provides the greatest opportunities for the creation of new jobs in this State; and*
- (d) Whether the plan represents the best value to the customers of the electric utility.⁶*

These requirements mostly parallel requirements placed upon the electric utility in evaluating proposals from any new renewable energy facilities. Interestingly, these evaluation requirements were not used in evaluating energy efficiency as a potential resource for consideration in replacing the coal-fired electricity generation.

AB 239 (included in this paper as Appendix D): AB 239 includes quite a few important policy elements, from changes in tax abatements, to permissible uses of money in the Renewable Energy Fund, to providing a low electricity rate as an incentive to attract businesses to the state where this could make a difference in their decision to locate to Nevada, to not requiring renewable generating facilities to be included in a utilities Integrated Resource Plan if the facility is solely to provide electricity outside the State of Nevada, local government planning and approval processes for utility projects. Of greatest significance for economic development policy is the Economic Development Electric Rate Rider Program. Apparently in recognition of the economic development hurdle posed by high electric rates, this legislation allows for rates to be subsidized over the next five years for those commercial and industrial customers interested in locating to Nevada when those customers can demonstrate that the incentive rates are necessary to make Nevada competitive with other potential locations.

⁶ Senate Bill No. 123 – Senator Atkinson, p. 17

Current Energy Policy

Nevada energy policy is mostly reflected in various provisions of the Nevada Revised Statutes (NRS) and the Nevada Administrative Code (NAC), as follows:

NRS Chapter 701 – Energy Policy deals with organization of the Nevada State Office of Energy, renewable energy, energy efficiency and energy conservation, and energy development projects. While all of NRS.701 can be found at <http://www.leg.state.nv.us/NRS/NRS-701.html>, Section 701.010 is included below.

NRS 701.010 Legislative findings; state policy.

1. The Legislature finds that:

(a) Energy is essential to the economy of the State and to the health, safety and welfare of the people of the State.

(b) The State has a responsibility to encourage the maintenance of a reliable and economical supply of energy at a level which is consistent with the protection of environmental quality.

(c) The State has a responsibility to encourage the utilization of a wide range of measures which reduce wasteful uses of energy resources.

(d) The State and the public have an interest in encouraging public utilities to promote and take actions toward energy conservation.

(e) Planning for energy conservation and future energy requirements should include consideration of state, regional and local plans for land use, urban expansion, transportation systems, environmental protection and economic development.

(f) Government and private enterprise need to accelerate research and development of sources of renewable energy and to improve technology related to the research and development of existing sources of energy.

(g) While government and private enterprise are seeking to accelerate research and development of sources of renewable energy, they must also prepare for and respond to the advent of competition within the electrical energy industry and are, therefore, encouraged to maximize the use of indigenous energy resources to the extent competitively and economically feasible.

(h) Prevention of delays and interruptions in providing energy, protecting environmental values and conserving energy require expanded authority and capability within State Government.

2. It is the policy of this State to encourage participation with all levels of government and private enterprise in cooperative state, regional and national programs to assure adequate supplies of energy resources and markets for such energy resources.

3. It is the policy of this State to assign the responsibility for managing and conserving energy and its sources to agencies whose other programs are similar, to avoid duplication of effort in developing policies and programs for energy.

(Added to NRS by 1977, 1163; A 1983, 2092; 1995, 311; [2001, 3263](#); [2007, 2973](#))

NRS 701.190 – Preparation of a comprehensive state energy plan was adopted by the State Legislature in 1977, and amended in 1979, 2001, 2009 and 2011. To date, it appears that the Legislature has not provided sufficient resources for the consistent and thorough update of the plan; a current comprehensive state energy plan does not exist.

NRS 701.220 - Adoption of regulations for energy conservation in building; exemptions; applicability and enforcement; procedures for adoption requires the State adopt the most current version of the International Energy Conservation Code (IECC) every three years. Nevada adopted the 2009 IECC in 2011 effective statewide on July 1, 2012. The Nevada State Office of Energy plans to adopt the 2012 Code in 2014.

Recently, the City of Las Vegas changed its codes to eliminate the requirement for building renovation projects to comply with the 2009 IECC. The City would not require certain projects to comply with the energy code adopted by the State of Nevada. All the implications of this have not yet been determined.

Within NRS 701, there are also numerous provisions dealing with renewable energy and energy conservation, including formation of panels and task forces, revolving loan funds, and energy development projects.

NRS 701A - Energy Related Tax Incentives. This chapter of NRS deals with adoption of a green building rating system and then provides for tax exemptions for certain businesses, facilities systems, devices, and renewable energy facilities, and the creation and administration of a renewable energy fund. It calls for partial tax abatement (property taxes) for qualifying buildings and facilities. In the specific area of energy efficiency in the renovation of existing buildings, currently only buildings and structures used by manufacturers can qualify.

NRS 701B - Renewable Energy Programs. This chapter of NRS sets forth provisions of a solar energy systems incentive program, a solar thermal systems demonstration program, a renewable energy school pilot program, a wind energy systems demonstration program, a waterpower energy systems demonstration program, and a green jobs initiative. It sets forth the rules for these various programs, including incentives, cost recovery by the utility and issuance of portfolio energy credits.

Perhaps the most significant provisions in NRS setting forth energy policy are within **NRS Chapter 704 – Regulation of Public Utilities Generally**, which can be found at <http://www.leg.state.nv.us/NRS/NRS-704.html>. Provisions that are key to Nevada energy policy include:

- **NRS 704.669 Regulation of sale of geothermal energy to public.**
- **NRS 704.701-704.787 Electric Service**, including provisions about setting rates, resource planning, hearing processes, disclosures to customers, net metering, portfolio standards and energy efficiency and conservation programs.
- **NRS 704.9901-704.992 Natural Gas Service** addresses taxes and fees, billing requirements, reporting requirements and programs to support conservation.

Specific details within sections of NRS regarding Electric Service may have greater policy implications for Nevada than any other provisions within NRS. NRS 704.7821 is included in Appendix A in its entirety because of its relevance to Nevada policy. Several key excerpts are presented below.

NRS 704.7821 - Establishment of portfolio standard; requirements; treatment of certain solar energy systems; portfolio energy credits; renewable energy contracts and energy efficiency contracts; exemptions; regulations.

1. For each provider of electric service, the Commission shall establish a portfolio standard. The portfolio standard must require each provider to generate, acquire or save electricity from portfolio energy systems or efficiency measures in an amount that is:

~

(d) For calendar years 2011 and 2012, not less than 15 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.

(e) For calendar years 2013 and 2014, not less than 18 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.

(f) For calendar years 2015 through 2019, inclusive, not less than 20 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.

(g) For calendar years 2020 through 2024, inclusive, not less than 22 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.

(h) For calendar year 2025 and for each calendar year thereafter, not less than 25 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.

2. In addition to the requirements set forth in subsection 1, the portfolio standard for each provider must require that:

(a) Of the total amount of electricity that the provider is required to generate, acquire or save from portfolio energy systems or efficiency measures during each calendar year, not less than:

(1) For calendar years 2009 through 2015, inclusive, 5 percent of that amount must be generated or acquired from solar renewable energy systems.

(2) For calendar year 2016 and for each calendar year thereafter, 6 percent of that amount must be generated or acquired from solar renewable energy systems.

(b) Of the total amount of electricity that the provider is required to generate, acquire or save from portfolio energy systems or efficiency measures during each calendar year, not more than 25 percent of that amount may be based on energy efficiency measures. If the provider intends to use energy efficiency measures to comply with its portfolio standard during any calendar year, of the total amount of electricity saved from energy efficiency measures for which the provider seeks to obtain portfolio

energy credits pursuant to this paragraph, at least 50 percent of that amount must be saved from energy efficiency measures installed at service locations of residential customers of the provider, unless a different percentage is approved by the Commission. **[Note: Legislation passed in 2013 phases out the energy efficiency component of the RPS.]**

The remaining key element from the section of NRS on electric service is NRS 704.785, included in Appendix B in its entirety:

NRS 704.785 - Adoption of regulations authorizing electric utility to recover amount based on effects of implementing energy efficiency and conservation programs; limitations.

1. The Commission shall adopt regulations authorizing an electric utility to recover an amount based on the measurable and verifiable effects of the implementation by the electric utility of energy efficiency and conservation programs approved by the Commission, which:

(a) Must include:

(1) The costs reasonably incurred by the electric utility in implementing and administering the energy efficiency and conservation programs; and

(2) Any financial disincentives relating to other supply alternatives caused or created by the reasonable implementation of the energy efficiency and conservation programs; and

(b) May include any financial incentives to support the promotion of the participation of the customers of the electric utility in the energy efficiency and conservation programs.

2. When considering whether to approve an energy efficiency or conservation program proposed by an electric utility as part of a plan filed pursuant to [NRS 704.741](#), the Commission shall consider the effect of any recovery by the electric utility pursuant to this section on the rates of the customers of the electric utility.

3. The regulations adopted pursuant to this section must not:

(a) Affect the electric utility's incentives and allowed returns in areas not affected by the implementation of energy efficiency and conservation programs; or

(b) Authorize the electric utility to earn more than the rate of return authorized by the Commission in the most recently completed rate case of the electric utility.

4. As used in this section, "electric utility" has the meaning ascribed to it in [NRS 704.187](#).

(Added to NRS by [2009, 1391](#))

NRS 704B – Providers of New Electric Resources. This chapter of NRS sets forth provisions for the development of new electricity generation assets, including definition of who is authorized as a provider to sell electricity to "eligible customers" (commercial or industrial customers with an average annual load of one megawatt or more, or governmental entities providing educational or health care services,

with an average annual load of one megawatt or more). This was adopted during a period of high growth in Nevada when the utilities were importing a significant portion of the power they were providing to customers. Currently there appears to be some question over the interpretation of NRS 704B, particularly about whether companies that might locate new operations in Nevada could qualify as eligible customers, thereby being able to develop new generation facilities and/or import power from out of state without first becoming an NV Energy customer, but simply paying a wheeling fee for the delivery of power using NV Energy transmission infrastructure while also being required to meet Nevada's renewable portfolio standard requirements.

Other portions of Nevada energy policy can be found in **Nevada Administrative Code (NAC) Chapter 704 – Regulation of Public Utilities Generally** and in rulings by the Nevada Public Utility Commission, both of which tend to augment and/or better define what is found in the various sections of Nevada Revised Statutes referenced above.

SB 252 (included in this paper as Appendix E): SB 252 revises the Nevada Renewable Portfolio Standard (RPS) by revising provisions relating to implementation of energy efficiency to comply with a portion of the RPS requirements. While this is primarily energy policy, questions have arisen about the impact of this legislation on electric rates and the implications this will have on job creation and upon the economy.

AB 428 (included in this paper as Appendix F): AB 428 revises provisions of the Solar Energy System Incentives Program, the Wind energy System Demonstration Program and the Waterpower Energy Systems Demonstration Program. It also requires the Public Utilities Commission to open an investigatory docket relating to the costs and benefits attributable to net metering. As with SB 252, these changes are mostly to energy policy, but there are implications for the impact on job creation and the economy of the State. AB 428 also calls for the formation of an Interim Legislative Committee on Energy.

Sec. 25.4. 1. The Committee may:

(a) Evaluate, review and comment upon matters related to energy policy within this State, including, without limitation:

- (1) Policies, plans or programs relating to the production, consumption or use of energy in this State;*
- (2) Legislative measures regarding energy policy;*
- (3) The effect of any policy, plan, program or legislation on rates or rate payers;*
- (4) The effect of any policy, plan, program or legislation on economic development in this State;*
- (5) The effect of any policy, plan, program or legislation on the environment;*
- (6) Any contracts or requests for proposals relating to the purchase of capacity;*
- (7) The effect of any policy, plan, program or legislation which provides for the construction or acquisition of facilities for the generation of electricity;*
- (8) The effect of any policy, plan, program or legislation on the development of a market in this State for electricity generated from renewable energy;*
- (9) The infrastructure and transmission requirements of any policy, plan, program or legislation; and*

- (10) Any other matters or topics that, in the determination of the Committee, affect energy policy in this State.*
- (b) Conduct investigations and hold hearings in connection with its duties pursuant to this section.*
- (c) Request that the Legislative Counsel Bureau assist in the research, investigations, hearings and reviews of the Committee.*
- (d) Make recommendations to the Legislature concerning the manner in which energy policy may be implemented or improved.⁷*

Observations About Nevada Energy Policy and Nevada Economic Development Policy

Implicit in Nevada's prior policy was an assumption that renewable energy should be given "transition priority" as a supply resource over energy efficiency as well as over fossil-fuel generated electricity to the extent that renewable energy supplants fossil-fuel generated electricity. This was reflected in the Renewable Portfolio Standard (RPS) schedule for increasing the percentage of retail electricity provided from renewable sources from 2007 through 2025, including energy efficiency included **as an option** [emphasis added] to meet up to twenty-five percent (25%) of the renewable energy requirement. Legislation passed in the 2013 Legislative session is phasing out energy efficiency as a component of the RPS. It is important to note the findings of the National Action Plan for Energy Efficiency, which used the following criteria to determine whether a state had a policy that recognized cost-effective energy efficiency as a high-priority resource: "A state was considered to have 'completely' established energy efficiency as a high-priority resource, equivalent or superior to supply resources, if there was a clearly established policy to that effect (such as an integrated resource planning objective of acquiring all cost-effective energy efficiency)."⁸ Nevada fails to meet that standard.

Energy-efficiency projects proposed by investor-owned utilities (IOUs) as part of their demand-side management (DSM) programs are evaluated in Nevada primarily using a Total Resource Cost (TRC) standard. There is no such evaluation standard for renewable sources of electricity due to the statutory requirements of the RPS. Additionally, for IOUs to receive energy efficiency credit for commercial projects, there must be an equivalent amount of residential energy efficiency measures achieved as set forth in NRS 704.7821, section 2(b). This requirement could constrain NV Energy's efforts to implement energy efficiency in commercial buildings in Nevada.

There appears to be little or no recognition of relative costs of the various sources of energy in support of these preferences. While the value of energy efficiency programs has been analyzed utilizing **net** job creation and economic impact, it appears that most of the analyses to determine the value of renewable energy projects have been done using a **gross** job creation and economic impact approach. Gross analysis considers only the benefits resulting from the project and does not deduct the foregone benefits of the alternative. For example, in a gross analysis for a renewable energy project, the job creation and economic impact figures would not deduct the number of jobs and the economic impact

⁷ AB 428, p.20

⁸ National Action Plan for Energy Efficiency Vision for 2025; A Framework for Change, (November 2008), U.S. Department of Energy and U.S. Environmental Protection Agency, Appendix D (p.D-2), www.epa.gov/eeactionplan

that would have resulted from either a natural-gas fired generating facility or from an energy-efficiency alternative to reduce electricity consumption by the same amount, nor would it consider the potentially negative job and economic impacts on the economy of the service region as a whole from higher electricity rates which often accompany the pursuit of renewable energy project development.

In the end, Nevada's key energy policies, reflected through the Renewable Portfolio Standard and the rebates offered through the Incentive Programs, provide preference to renewable energy for a growing percentage of electricity production in Nevada. By comparison, twenty-three states have adopted a stand-alone Energy Efficiency Resource Standard that sets forth annual energy efficiency targets for long-term periods of time (3+ years), achieved through use of energy efficiency measures.⁹

Perhaps the new Legislative Committee on Energy (AB 428) will consider elevating the priority of energy efficiency in Nevada, or at least consider the net job creation and economic impacts of energy efficiency as a resource as compared to renewable energy and fossil fuels.

III. Areas of Alignment and Conflict Between Economic Development Policy and Energy Policy

Areas of alignment: There seems to be policy alignment at the highest levels, such as between the economic development policy goals (as reflected in metrics and accountability) and the state energy policy as set forth in NRS 701.010.

Areas of conflict: There is reasonable question whether the specific provisions and the implicit policy preferences set forth in NRS 704.7821 (the portfolio standards) conflict with both the state's economic development policy and with the high-level energy policy set forth in NRS 701.010.

Cost Comparison

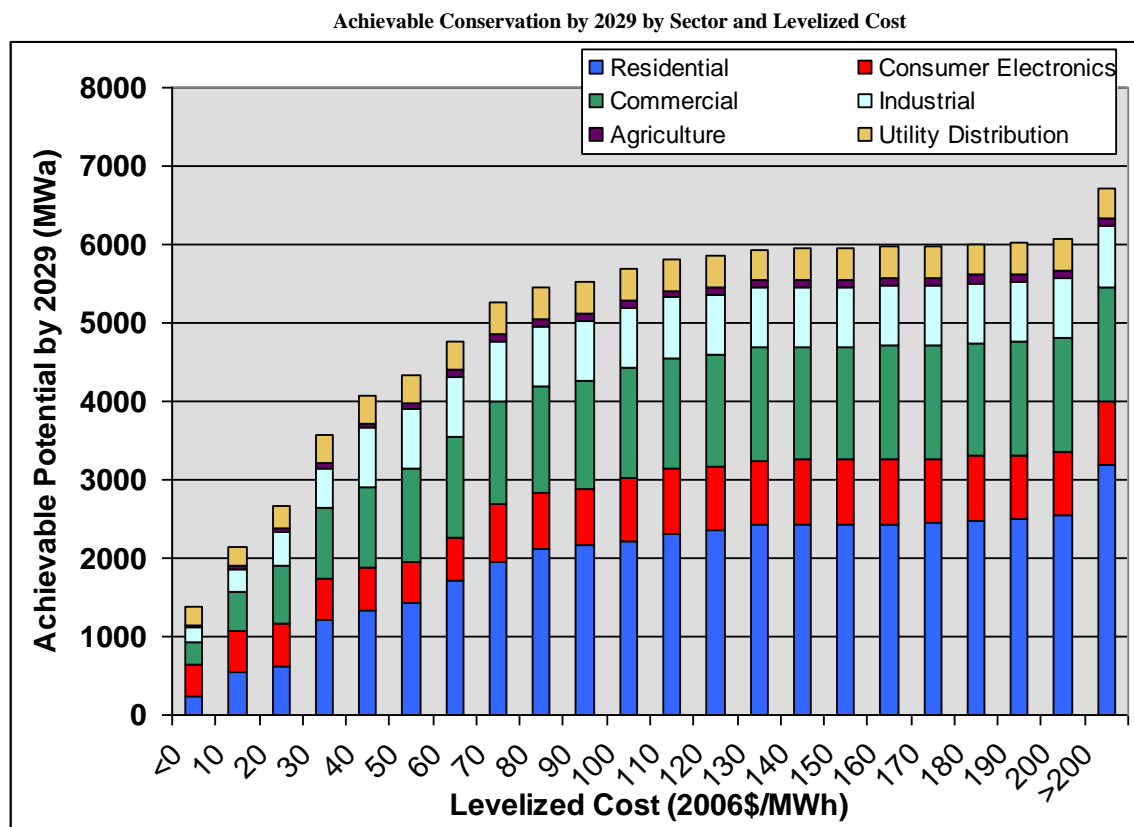
To evaluate the alignment of economic development policy and energy policy, one has to understand the relative costs of providing electrical service. These costs are reflected in utility rates and utility bills, both of which have economic impacts.

From Neal Elliott et al:¹⁰ "For example, efficiency programs can save energy at a cost of about 3 cents per kilowatt-hour (kWh), while building new power plants typically deliver energy at a cost of about 7 cents per kWh (Fredrick et al, 2009)." This estimate represents some of the most cost-effective energy efficiency measures. A better representation of the continuum of technically feasible energy efficiency

⁹ "State Energy Efficiency Resource Standards (EERS)", Policy Brief (July 2013), American Council for an Energy Efficient Economy

¹⁰ "A Defining Framework for Intelligent Efficiency", Neal Elliott et al, (2012), American Council for an Energy-Efficient Economy, p.44

measures over the various levels of investment (converted to levelized cost per megawatt hour of annual savings) is presented by the Northwest Power and Conservation Council (Council) in their sixth annual power plan¹¹, as shown in the following figure:



Source:

Sixth Northwest Conservation and Electric Power Plan

While this figure represents achievable conservation in the Pacific Northwest (primarily served by Bonneville Power Administration), the shape of the curve should be quite similar for the State of Nevada – indicating that there is significant energy efficiency (5,500 MW per year) that can be achieved at an investment level of up to \$90/MWh (\$0.09/kwh) levelized cost equivalent. This graph also shows that in the Northwest, by 2029 energy efficiency could meet (reduce) the demand for 1,400 MW per year at a levelized cost of under \$0.01 per kwh.

The Council's conclusions included the following¹²:

The resource strategy can be summarized in five specific recommendations:

1. Improved efficiency of electricity use is by far the lowest-cost and lowest-risk resource available to the region. Cost-effective efficiency should be developed

¹¹ Northwest Power and Conservation Council, "Sixth Northwest Conservation and Electric Power Plan", (February 2010), p. 4-6, <http://www.nwcouncil.org/energy/powerplan/6/final/SixthPowerPlan.pdf>

¹² Ibid, pp. 3-4

aggressively and on a consistent basis for the foreseeable future. The Council's plan demonstrates that cost-effective efficiency improvements could on average meet 85 percent of the region's growth in energy needs over the next 20 years.

2. Renewable resource development is required by resource portfolio standards in three of the four Northwest states. The most readily available and cost-effective renewable resource is wind power and it is being developed rapidly. Wind requires additional strategies to integrate its variable output into the power system and, in addition, it provides little capacity value for the region. The region needs to devote significant effort to expanding the supply of cost-effective renewable resources, many of which may be small scale and local in nature.
3. Remaining needs for new energy and capacity should be based on natural gas-fired generation until more attractive technologies become available. The resource strategy does not include any additional coal-fired generation to serve the region's needs. Further, the Council's plan demonstrates that meeting the Northwest power system's share of carbon reductions called for in some state, regional, and federal carbon-reduction goals will require reduced reliance on the region's existing coal plants.
4. The challenges of wind integration and the need for additional within-hour reserves initially should be addressed through improvements in system operating procedures and business practices. Changes in wind forecasting, reserve sharing among control areas, scheduling the system on a shorter time scale, and advancing dynamic scheduling can all help address wind integration and contribute to a more efficient use of existing system flexibility. The region is already making significant progress in these areas.
5. Finally, the Council's resource strategy calls for efforts to expand long-term resource alternatives. The region should demonstrate the potential of smart-grid applications to improve the operation and reliability of the regional power system and to access the potential of consumers to provide demand response for the capacity and flexibility of the power system. The region should continue to assess new efficiency opportunities, expand the availability of cost-effective renewable energy technologies, and monitor development of carbon capture and sequestration, advanced nuclear technologies, and other low-carbon or no-carbon resources.

For comparison, EPA published comparable 2010 cost data ranges (levelized cost of energy) for renewable energy as follows¹³: (\$/MWh)

- Wind 84-142
- Solar - PV 132-298
- Solar thermal (CSP) 109-335
- Geothermal 59-94

¹³ <http://www.epa.gov/cleanenergy/energy-resources/renewabledatabase.html>

Recent renewable energy projects in Nevada provide electricity to NV Energy at the following costs¹⁴:

Project	First Year Price	Year Signed	Capacity (MW)	Technology
Tonopah Solar Energy	\$134.95/MWh	2010	110	Solar Thermal (w/storage)
Silver State Solar North	\$132/MWh	2010	50	PV
Fotowatio Apex Solar	\$128.5/MWh	2011	20	PV
Mountain View Solar	\$116.5/MWh	2011	20	PV
FRV Spectrum Solar	\$111/MWh	2011	30	PV
Spring Valley Wind	\$98/MWh	2010	150	Wind
ORNI 32	\$92/MWh	2011	51	Geothermal
ORNI 42	\$88/MWh	2010	25	Geothermal
ORNI 39	\$86/MWh	2010	51	Geothermal
Waste Management NRE	\$81/MWh	2010	3.2	Landfill Gas

Pricing is subject to 1% annual escalation after the first year.

The U.S. Energy Information Administration prepares projections of costs of new generation resources. From the 2012 projections for 2017 comes the following table:¹⁵

Regional Variation in Levelized Cost of New Generation Resources, 2017					
			Range for Total System Levelized Costs (2010 \$/megawatthour)		
			for Plants Entering Service in 2017		
Plant Type			Minimum	Average	Maximum
Dispatchable Technologies					
Conventional Coal			90.5	97.7	114.3
Advanced Coal			102.5	110.9	124
Advanced Coal with CCS			127.7	138.8	158.2
Natural Gas-fired					
	Conventional Combined Cycle		59.5	66.1	81
	Advanced Combined Cycle		56.8	63.1	76.4
	Advanced CC with CCS		80.1	90.1	108.5
	Conventional Combustion Turbine		91.9	127.9	152.4
	Advanced Combustion Turbine		77.7	101.8	122.6
Advanced Nuclear			107.2	111.4	118.7
Geothermal			84	98.2	112
Biomass			97.8	115.4	136.7
Non-Dispatchable Technologies					
Wind			77	96	112.2
Solar PV ¹			119	152.7	238.8
Solar Thermal			176.1	242	386.2
Hydro ²			57.8	88.9	147.6
¹ Costs are expressed in terms of net AC power available to the grid for the installed capacity.					
² As modeled, hydro is assumed to have seasonal storage so that it can be dispatched within a season, but overall operation is limited by resources available by site and season.					
Source: U.S. Energy Information Administration, Annual Energy Outlook 2012, June 2012, DOE/EIA-0383(2012)					

¹⁴ Source: Nevada Public Utilities Commission

¹⁵ U.S. Energy Information Administration, "Levelized Cost of New Generation Resources in the Annual Energy Outlook 2012", http://www.eia.gov/forecasts/aeo/pdf/electricity_generation.pdf

As is apparent from comparison of the Levelized Cost of Achievable Conservation (p. 16) in comparison with the cost of other sources of electricity (above), energy efficiency can offer the least expensive (and lowest risk) resource, but various types of energy efficiency need to be individually evaluated. Natural gas fired generation currently is the next least expensive generation resource, with geothermal and conventional coal somewhat higher. While energy efficiency costs are relatively straightforward, many would argue that the cost of fossil-fuel fired electricity generation does not reflect some of the external environmental costs, just as wind and solar do not include the standby generating capacity costs that are necessary when these renewable resources are employed.

NRS 704.7821, section 2.(a) includes specific goals for solar of five percent for years 2009-2015 and six percent for years 2016 and thereafter, in spite of the fact that solar continues to be the most expensive of the primary sources of renewable energy. While the cost of solar continues to trend down, questions about PV efficiency in environments where temperatures are higher than at the national testing facility (southern Nevada versus Colorado) have recently arisen.

Currently it appears that NV Energy is the only entity in Nevada tracking and reporting reductions achieved through energy efficiency (from their Demand Side Management (DSM) program). There is no statewide system for tracking savings from transitioning to the 2009 IECC, from LEED buildings, from electric cooperatives, etc. The DSM numbers are not insignificant, as shown below:

Nevada Power Company DSM Portfolio		2006	2007	2008	2009	2010	2011	2012
DSM Programs Demand Reduction (KW)	Year	22,667	30,168	42,995	48,201	35,411	33,544	100,618
	Cumulative	42,340	72,508	115,503	163,704	199,115	232,659	333,277
DSM Programs Energy Savings (MWh)	Year	145,320	193,406	303,325	332,596	238,758	220,717	102,928
	Cumulative	212,791	406,197	709,522	1,042,118	1,280,876	1,501,593	1,604,521
DSM Program Budget (\$000)		Year	\$20,494	\$23,166	\$44,902	\$47,610	\$38,722	\$35,538
Sierra Pacific Power Company DSM Portfolio		2006	2007	2008	2009	2010	2011	2012
DSM Programs Demand Reduction (KW)	Year	14,319	8,721	30,934	19,006	17,186	7,938	23,371
	Cumulative	21,463	30,184	61,118	80,124	97,310	105,248	128,619
DSM Programs Energy Savings (MWh)	Year	70,328	59,518	103,936	102,806	89,439	57,474	27,819
	Cumulative	115,885	175,403	279,339	382,145	471,584	529,058	556,877
DSM Program Budget (\$000)		Year	\$4,513	\$4,103	\$8,371	\$9,853	\$9,211	\$6,307
		* Includes estimates for 2012 based on Targets						
Combined NPC & SPPC DSM Portfolio		2006	2007	2008	2009	2010	2011	2012
DSM Programs Demand Reduction (KW)	Year	36,986	38,889	73,929	67,207	52,597	41,482	123,989
	Cumulative	63,803	102,692	176,621	243,828	296,425	337,907	461,896
DSM Programs Energy Savings (MWh)	Year	215,648	252,924	407,261	435,402	328,197	278,191	130,747
	Cumulative	328,676	581,600	988,861	1,424,263	1,752,460	2,030,651	2,161,398

It is interesting to note the change in the trajectory of investment in DSM and the coincidence of the switch in the energy-efficiency incentive program for NV Energy from enhanced return on investment to lost revenue recovery that became effective in 2010 as a result of 2009 legislation.

When the DSM energy efficiency is considered as part of the portfolio for meeting electricity needs, as shown below, it is apparent that energy efficiency continues to provide a growing proportion of the electricity “generating capacity” and portfolio in Nevada. However, it is still less than the contribution

from renewable, and certainly less than the amount of electricity generated by NV Energy's coal-fired plants, which are now planned to be phased out and replaced by gas-fired generation and renewables.

Nevada Electricity Portfolio Overview										
					Other		Other			
Capacity		Coal	Petroleum	Nat. Gas	Gases	Hydro	Renewables ^b	Subtotal	EE - DSM ^c	Total
2010 Electrical Generating Capability (MW) ^a		2,873	45	6,996		1,051	456	11,421	296	11,717
	%	24.5%	0.4%	59.7%	0.0%	9.0%	3.9%		2.5%	100.0%
2011 Electrical Generating Capability (MW) ^a		2,873	45	7,419		1,051	459	11,847	338	12,185
	%	23.6%	0.4%	60.9%	0.0%	8.6%	3.8%		2.8%	100.0%
					Other		Other			
Demand		Coal	Petroleum	Nat. Gas	Gases	Hydro	Renewables ^b	Subtotal	EE - DSM ^c	Total
2010 Portolio Performance (GWh) ^a		6,997	11	23,688	6	2,157	2,287	35,146	1,752	36,898
	%	19.0%	0.0%	64.2%	0.0%	5.8%	6.2%		4.7%	100.0%
2011 Portolio Performance (GWh) ^a		5,391	15	21,785	7	2,197	2,956	32,351	2,031	34,382
	%	15.7%	0.0%	63.4%	0.0%	6.4%	8.6%		5.9%	100.0%
Notes:										
^a All above data except EE-DSM (Energy Efficiency Demand Side management) is from U.S. Energy Information Administration "Electric Power Monthly										
^b Other renewables includes wood and wood-derived fuels, other biomass, geothermal, solar thermal and photovoltaics and wind.										
^c Energy efficiency (demand reduction and energy savings) figures represent only the amounts from the NV Energy Demand Side Management programs. Not included are energy efficiency savings from any energy efficiency measures not receiving a subsidy from NV Energy that would qualify the measure for inclusion in the DSM tracking. Therefore energy efficiency may be significantly understated.										

Job Creation

While rate impact (i.e. present worth of revenue requirements) is one aspect that is considered by the Public Utilities Commission of Nevada (PUCN) for the power-generation and energy efficiency programs, and job creation is another consideration, the impact of rate changes on overall job creation and retention, not just in the energy sector, should be emphasized. Rate changes can have three general types of economic impacts:

- 1) Rates, and their effect on utility bills, can affect the amount of money expended on energy within the state's economy, thereby increasing or decreasing the amount of money spent in other sectors of the economy. Expenditures in different industry sectors have different levels of economic impact.
- 2) Rates, and their effect on bills, can affect the profitability of existing business operations, and therefore their competitiveness and their rates of growth.
- 3) Electricity rates can affect the ability of Nevada to attract new businesses and support retention and expansion of existing businesses.

The impact of electricity rates on business attraction, retention and expansion will vary by industry, determined by sensitivity to electricity rates relative to other factors determining location.

There are a number of studies establishing a basis for net job creation and positive economic impact from energy efficiency (i.e. David Roland-Holst¹⁶, and Casey Bell¹⁷). Specific to Nevada, the recent

¹⁶ David Roland-Holst, "Energy Efficiency, Innovation, and Job Creation in California", (2008), Center for Energy, Resources and Economic Sustainability

Southwest Energy Efficiency Project (SWEEP) report by Howard Geller¹⁸ includes estimates of the economic impact of energy efficiency implementation in Nevada (High Efficiency Scenario) using an input-output model (IMPLAN) that estimates **net** impacts:

Year	Net Jobs Gain	Change in Wage and Salary Compensation (million \$)	Change in Gross State Product (million \$)
2015	1,820	\$92	\$91
2020	4,680	\$246	\$284

Notes: Dollar figures are in millions of 2010 dollars while employment reflects actual job count.

All of these studies estimate the economic impact (including job creation) from the energy efficiency implementation (direct, indirect and induced), and deduct the impact resulting from funds being redirected away from other activities. For example, in the Geller analysis, while there are projected gains in 11 industrial sectors (i.e. Services, Construction, Retail), two sectors (Other Mining and the Electric Utility) have net job losses, reductions in wage and salary compensation, and result in reductions in gross state product within their specific sectors. But the bottom line of these analyses is that the net impacts of energy efficiency are always positive.

On the other hand, there appears to be considerable controversy over the net job creation and economic impact associated with renewable energy projects. Many of the studies done on job creation and economic impact of renewable energy projects have only examined gross impacts. A 2012 NREL study¹⁹ included the following explanation and footnote:

The analysis employs the Jobs and Economic Development Impacts (JEDI) models to estimate the *gross* jobs, earnings, and economic output supported by the construction and operation of solar photovoltaic (PV) and large wind (greater than 1 MW) projects funded by the \$1603 grant program.*

*As a gross analysis, this analysis does not include impacts from displaced energy or associated jobs, earnings, and output related to existing or planned energy generation resources (e.g., jobs lost in the operation of natural gas or coal plants due to the need for less electricity production from these plants, given increased generation from wind) or increases or decreases in jobs related to changes in electric utility revenues and consumer energy bills, among other impacts.

Within Nevada, the Nevada Policy Research Institute has been critical of subsidies for “clean energy,” although their specific examples all involve renewable energy rather than energy efficiency. In an article by Kyle Gillis²⁰, the complaint leveled is that the investment in renewable energy projects has resulted in a cost of \$4.6 million per permanent job created, while increasing electricity rates for all rate payers.

¹⁷ Casey Bell. “How does energy efficiency create jobs?” (2012) American Council for an Energy-Efficient Economy

¹⁸ Howard Geller, “The \$20 Billion Bonanza: Best Practice Electric Utility Energy Efficiency Programs and Their Benefits for the Southwest”, (2012), p.145, <http://www.swenergy.org/programs/utilities/20BBonanza.htm>,

¹⁹ Daniel Steinberg, Porro and Goldberg, “Preliminary Analysis of the Jobs and Economic Impacts of Renewable Energy Projects Supported by the \$1603 Treasury Grant Program” (2012), National Renewable Energy Laboratory, <http://www.nrel.gov/docs/fy12osti/52739.pdf>

²⁰ Kyle Gillis, “\$1.3 billion in “clean energy” subsidies produce 288 permanent jobs, quadruple cost of electricity in Nevada”, (2012), Nevada Journal

NPRI was highly critical of SB 123, saying that it would impose significant rate hikes on ratepayers and result in negative economic impact and job loss.²¹

There has been criticism in other states that the econometric analyses used to support renewable energy legislation do not recognize all of the costs associated with the renewable energy projects.

Rate Impact and Economic Impact

The present worth of revenue requirements for various energy proposals is part of the Nevada PUC evaluation process. In other words, what change in revenues will be required by the utility company to compensate for the present value of current and future expenditures (both capital costs and operating expenses) in order for their investors to maintain the same return on investment? This analysis results in a rate impact.

As mentioned above, rate changes can have three general types of economic impacts:

- 1) Effect on utility bills, which affects the rate of economic activity and growth of the state's economy;
- 2) Effect on utility bills can affect the profitability of existing business operations, and therefore their competitiveness and future growth; and
- 3) Effect on the ability of Nevada to attract new businesses and support retention and expansion of existing businesses.

The first type of impact is the easiest to include in an input-output or other type of economic model. It is essentially a funds-flow analysis based upon aggregate utility bills. The second and third types of impacts are more difficult to model because they result from sensitivity to electric rates. It is difficult to segregate this effect from other factors influencing long-term growth in a state or region, and therefore more difficult to determine appropriate algorithms that reflect these factors over time. Nonetheless, these appear to be real factors affecting long-term economic development.

There currently is not a common analytical tool utilized to estimate and compare the economic impact and job creation that might result from policy decisions related to energy efficiency, renewable energy and conventional (fossil-fuel) energy projects in Nevada – and that includes how rate impacts affect future economic performance. Of course, there should be other considerations besides estimated economic impacts and job creation, such as those described below.

²¹ Geoffrey Lawrence, "NV Energy plan would impose big, new hidden costs on ratepayers", Nevada Policy Research Institute, 2013, <http://www.npri.org/issues/publication/nv-energy-plan-would-impose-big-new-hidden-costs-on-ratepayers>

Other Considerations

Risk mitigation through diversity of energy sources. If electric utilities, and therefore utility customers, are too reliant on a single source of energy (i.e. natural gas), the economy is at risk of significant damage if something occurs to affect either the supply and/or the price of that energy source. For example, in addition to all of the problems associated with radioactive contamination, Japan today has only two nuclear power plants in operation (of the 54 nuclear power plants that supplied 30 percent of Japan's electricity prior to the March 2011 earthquake and tsunami). Prior to the natural disaster, Japan was planning on increasing its dependence upon nuclear power for up to 50 percent of its electricity needs. Now all of that is being reconsidered, and in the meantime, electricity consumption across the country has been significantly curtailed. Another example of risk for a particular energy source is the volatility of natural gas prices in the U.S. between 1998 and 2012. During this period, average monthly natural gas wellhead prices rose from around \$2 per million Btu's in 1998 to around \$8 in 2000, dropped back to just above \$2 in 2002 before escalating to around \$11 in late 2005, dropped below \$6 in 2007 and then peaked again around \$11 in 2008 before dropping back under \$2 in 2012 and then rising more than 50 percent again to \$3.35 by the end of the year. Electric utilities looked at coal-fired generation as a "safe haven" during some of these periods of rapid escalation of natural gas prices.

As these two examples demonstrate, natural disasters and economic events can both pose risks. These risks can be mitigated through diversity of sources of energy, the ability to "switch" relatively quickly from one source to another, stockpiling inventories of fuels, distributed generation, and a variety of other strategies. These strategies need to be balanced against cost, for if the cost of risk mitigation is too great, it may have impacts on money retained within the state and business profitability as mentioned previously.

Carbon tax or cap-and-trade. Another risk, from a financial or economic impact perspective, is the potential for cost escalation and/or restriction of the use of fossil fuels. Rising sea levels and climate change are likely to result in political decisions leading to restrictions on use and/or increased costs associated with fossil fuels – with the greatest restrictions and/or price increases likely to be associated with carbon dioxide (CO₂) emission levels.

Already, the first mandatory, market-based CO₂ emissions cap and reduction program for the electric power sector was established by the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. These nine states joined together in 2003 to create the Regional Greenhouse Gas Initiative (RGGI) and first auctioned CO₂ emissions allowances in 2008. According to the RGGI website, the states have been investing more than half of the total CO₂ allowance proceeds in energy efficiency, including grants for large-scale efficiency projects in commercial and industrial facilities.

In 2006, California passed Assembly Bill 32, the Global Warming Solutions Act, which also called for creating a market-based system for reducing emissions of greenhouse gases (GHG) from the electric power sector and others. The legislation calls for emissions to be reduced to 1990 levels by the year

2020. The first auction of emission allowances occurred in 2012. California is working with British Columbia, Ontario, Quebec, and Manitoba through the Western Climate Initiative to develop a harmonized cap and trade program.

These efforts to cap and reduce CO₂ emissions are likely to proliferate at the state level in the absence of a federal plan. Such efforts could occur during the lifetime of any new electricity generating facilities coming on line from this point forward, so some “risk factor” should be ascribed to new or reconditioned fossil-fuel generating facilities. In the Sixth Northwest Conservation and Electric Power Plan, a scenario of carbon costs escalating from \$0 at present in the Northwest to \$47 per ton by 2030 was employed to reflect a reasonable representation of the cost uncertainty associated with carbon fuels. During a June 2013 auction of CO₂ allowances by RGGI, the clearing price was \$3.21. In California, an August 2013 auction of greenhouse gas allowances reported a clearing price of \$12.22 for 2013 vintage allowances.

Natural gas supply concerns (production levels, transmission and storage capacity). The recent low prices for natural gas reflect, in large part, the increase in supply that has occurred as a result of the use of hydraulic fracturing techniques (fracking) utilized to release natural gas from shale structures, compounded by a warmer winter. Rachel Young, Elliott and Kushler recently reported: *“The warmer winter of 2011 and 2012 caused a significant increase in the working storage of natural gas.”*²² Young, et al, go on to point out: *“High levels of storage help meet potential increases in demand; however, the amount of storage may not be enough to ensure that all demands are met. Even if production levels are high enough to prevent price spikes, there are still distribution constraints.”*²³ Debra Gallo, Director of State Government Regulatory Affairs for Southwest Gas Corporation, recently indicated that Nevada did not have any near-term pipeline capacity issues (October 15, 2012 telephone interview). She did point out that there are some geographic areas of Nevada currently without existing gas distribution infrastructure.

Shifts in transportation energy use, impacts on the economy and on commercial building energy efficiency. If a broad interpretation of commercial building energy efficiency includes improving how people and goods and services get to and from commercial buildings, as part of the energy footprint of these buildings, then transportation-related considerations should be part of this project. Certainly the shifts in transportation fuels will have economic impacts, which will affect demand for economical commercial building space in Nevada, thereby coming full circle to implementation of energy efficiency in commercial buildings. Great use of electric vehicles is projected to increase baseload demand for electricity, which will have an effect of making energy efficiency in commercial buildings easier to justify using the TRC (Total Resource Cost) standard.

There will be shifts in electricity demand and natural gas demand as the result of the transition from gasoline and diesel-powered vehicles to Alternative Fuel Vehicles (AFVs). In an article by Steve

²² Rachel Young, Elliott, and Kushler, “Saving Money and Reducing Risk: How Energy Efficiency Enhances the Benefits of the Natural Gas Boom”, American Council for and Energy-Efficient Economy (2012), p.9, <http://aceee.org/files/pdf/white-paper/saving-money-reducing-risk.pdf>

²³ Ibid

Hargreaves published in CNN Money, based upon interviews with 500 utility company executives, the following was reported: *"Bullish on electric cars: Utility executives believe electric cars will eat up 7% of the nation's power supply by 2025. To use that much juice, Black & Veatch estimates there would need to be 65 million electric cars on the road. Last year under 20,000 were sold."*²⁴

One of the major considerations is air quality in the two major metropolitan areas of Nevada. A significant portion of the ozone in the Las Vegas and Reno metro areas is from tailpipe exhaust. "The estimated greenhouse emissions rates for the composite PEVs(Plug-in Electric Vehicles) and average light duty truck are about 55% of those for gasoline vehicles."²⁵ As coal-fired power plants are retired, the comparative advantage of PEVs will improve. Further, most of the fossil-fuel power plants generating electricity are located outside the Las Vegas and Reno air basins. This result mitigates the risk to future economic growth posed by non-attainment status in the two largest metropolitan areas of the State. Natural-gas powered vehicles are being utilized extensively at the Port of Los Angeles, primarily due to their lower emissions compared to gasoline and diesel-powered vehicles.

"According to a study on behalf of the California Energy Commission, natural gas vehicles can reduce greenhouse gas emissions by 29 percent compared to gasoline vehicles and up to 22 percent when compared to diesel vehicles".²⁶ Natural gas vehicles also have an octane rating of 120(+) per the Alternative Fuels Data Center/US Department of Energy – Energy Efficiency & Renewable Energy versus an octane rating 84 to 93 for gasoline engines.²⁷ A higher octane rating allows a vehicle's engine to make better use of the fuel resulting in better performance.

Electric vehicles are more energy efficient than their equivalent internal-combustion-engine counterparts, so will result in lower average energy consumption per capita and per mile driven. "PEVs are found to be more efficient overall (well-to-wheels), requiring about 60% of the energy per mile that is needed by gasoline vehicles."²⁸

With Nevada being the most urbanized state in the U.S. and with both of the state's major metropolitan areas having air quality issues, there is a significant possibility that Nevada could be a leader in the adoption of AFVs. The implications of these changes on the general economy, and on electricity peak demand, capacity and costs should be considered.

The required infrastructure for AFVs will result in job creation, primarily from the installation of electric vehicle supply equipment (EVSE, aka: charging stations), natural gas vehicle refueling appliances (VRA), and home refueling appliances (HRA). If Nevada could leverage a focus on AFV's into attraction of some

²⁴ Steve Hargreaves, "'Significant' rise in electric bills seen", (June 2012), CNN Money, http://money.cnn.com/2012/06/04/news/economy/electric-utility-bills/index.htm?iid=HP_LN

²⁵ Colorado Electric Vehicle and Infrastructure Readiness Plan, p.97

²⁶ TIAX Report – "Full Fuel Cycle Assessment: Well-To-Wheels Energy Inputs, Emissions, and Water Impacts," (2007) (Prepared for California Energy Commission)

²⁷ <http://www.afdc.energy.gov>

²⁸ Ibid, p. 96

portion of the AFV infrastructure and/or vehicle research and development, manufacturing and/or technical support, the resultant economic impact and job creation could be very significant.

Additionally, if the transition to PEV's includes provisions that cause recharging to occur primarily during periods of off-peak electricity demand, the potential result is greater sales of electricity without the need for additional investment in generating, transmission and distribution infrastructure. This will allow for the recapture of, and return on electric utility infrastructure investment being spread over a larger number of kilowatt hours, which should result in lower electricity rates than would otherwise occur.

Water Consumption. Water is one of the natural resources that either is or has the potential to be a constraint on economic development and growth in Nevada. Water is also very closely tied to most methods of the production of energy. Below is a summary of water consumption associated with various sources of meeting the demand for electricity:²⁹

Biomass:

- Typical plant is closed loop cooling with wet towers with majority lost to evaporation 500-600gal/MWh
- Dry cooling is 100 gal/MWh though most new facilities are wet cooling

Coal:

- 61% have closed loop cooling and 39% have open loop cooling
- Closed loop cooling uses 500-600 gal/MWh with most lost to evaporation
- Open loop cooling uses 300 gal/MWh with most lost to evaporation

Nuclear:

- 62% of US plants have closed loop cooling with 38% open loop cooling
- Closed loop cooling uses 700-1100 gal/MWh with most lost to evaporation
- Open loop cooling uses 20,000-60,000 gal/MWh with ~400 gal/MWh lost to evaporation (predominantly once through cooling)

Natural Gas:

- 60% have closed loop cooling with 31% using wet cooling towers (numbers aren't clarified why they don't add up to 100% in the study)
- Dry cooling draws 100 gal/MWh and loses 50-70 gal/MWh
- Wet cooling draws 230 gal MWh and loses 180 gal/MWh

Wind:

- None

²⁹Source: U.S. EIA

<http://www.civilsocietyinstitute.org/media/pdfs/091912%20Hidden%20Costs%20of%20Electricity%20report%20FI%20NAL2.pdf>

Solar:

- PV – none
- Concentrated Solar varies depending on the technology as the number in the study is significantly higher than the project from Solar Reserve in Tonopah.

Energy Efficiency:

- None

Energy-related primary businesses. The Governor’s Office of Economic Development is aware that the location of energy industry manufacturing and infrastructure can significantly influence the state’s economy and job creation. GOED has been actively supporting efforts to attract and/or grow energy companies’ operations, other than just generation, to Nevada. This would include production of energy-efficiency equipment and technologies, renewable energy equipment, and the location of company headquarters (and all the administrative functions associated therewith). For example, Nevada has been on the forefront of M&V innovation in several ways. NV Energy has been moving towards more detailed data collection with the installation of new meters that allow for tracking and reporting of electricity consumption in short time increments (15 minutes). The smart meter program in NV Energy’s service territory puts Nevada ahead of much of the nation. ADM Associates, a consulting firm providing energy efficiency program evaluation and research, is a national leader in M&V. The firm has an office in Reno (one of five offices), and Don Dohrmann, one of the firm’s founders, resides and works in Reno. On its website, ADM cites some of its most important innovations:³⁰

- ADM Associates, Inc. developed the first hourly building energy simulation model, based on DOE-2 algorithms.
- ADM Associates, Inc. developed the Variable Degree Method for the United States Department of Energy. This methodology was the basis for the ECM development for the compliance method for Title 24 for small buildings.
- ADM Associates, Inc. developed several state-of-the-art methodologies for conducting end-use metering, data retrieval, and data processing.
- ADM Associates, Inc. developed a system for modeling 8,760 hour, annual load shapes by end-use and building type.

Some entities have developed web-based systems that allow customers to track energy use on individual circuits. There are devices that can track energy consumption by installing measurement devices “at the plug”. Load IQ, a Nevada-based company spun out of the Desert Research Institute, has developed unique equipment and software (and filed for patent protection) for tracking energy use by numerous individual devices and systems on a single circuit.³¹ With support from the U.S. Department of Energy, NIREC, and a variety of other partners, Load IQ has deployed their systems in a number of different structures. Recently, the Electric Power Research Institute (EPRI) completed a project with Load IQ. Pacific Northwest national laboratory (PNNL) is currently in the process of evaluating a spectrum of Non-Intrusive Measurement Devices, including the Load IQ equipment, to assess their accuracy.

³⁰ <http://admenergy.com>

³¹ <http://www.loadiq.com/>

Resource Action Programs, based in Sparks, Nevada, provide Energy Efficiency school kits and education programs for utilities throughout the U.S. ElectraTherm and General Energy Efficiency, both based in Reno, Nevada, are representative of other companies based in Nevada that are providing energy-efficiency products throughout the world.

Production of fossil fuels within the state, should exploration efforts lead to the discovery and development of significant reserves, could also significantly change the economics of energy in Nevada, as it has in other states producing fossil fuels. In each of these instances, the energy-related infrastructure increases the amount of funds spent within the state and slows the rate of economic leakage outside of the state's economy.

Summary of Areas of Policy Alignment and Conflict:

The areas of policy alignment for both energy and economic development policies can be summarized in the following broad high-level goals:

- 1) Increase the number of jobs in Nevada.
- 2) Grow the Nevada economy.
- 3) Lower energy costs for businesses and residents in Nevada.
- 4) Increase stability and predictability of energy costs.
- 5) Reduce environmental impacts related to energy production and consumption, particularly in those circumstances where environmental impacts could adversely affect future growth and/or where reductions in environmental impacts could positively affect future economic growth.

These broad high-level goals can be achieved by accomplishing the following more-specific objectives:

- 1) Increase aggregate electricity consumption in Nevada while reducing average electricity consumption (more electricity-intensive businesses (i.e. data centers); more residents; increased adoption of electric vehicles; switch "fuels" where beneficial.
- 2) Reduce peak demand for electricity relative to total or average consumption to improve the utilization of existing electricity generation, transmission and distribution infrastructure which should translate into lower electricity rates and/or aggregate utility bills for Nevada customers.
- 3) Reduce average energy consumption (metrics: per capita, per square foot, per employee, per mile traveled). Energy efficiency continues to represent the most cost-effective and lowest-risk means of meeting Nevada's energy needs.
- 4) Reduce emissions related to energy production and consumption. Las Vegas received re-designation as attainment for the 1997 ozone National Ambient Air Quality Standard (NAAQS) from EPA. That 8-hr. standard was 80 ppb. The 2008 NAAQS is 75 ppb, and Washoe and Clark County have both been designated attainment for that standard. However, Clark County had a bad ozone season in 2012 with 19 exceedances. EPA is now considering studies which indicate health effects at lower levels, so it is possible the 2014 rule will be 70 ppb at the highest and

may be lower. The proposed standard, which would identify the range they are considering and seek public comment, is due out in 2013.

- 5) Reduce water consumption related to energy production and consumption. Water is considered a precious commodity in Nevada and is one of the resources that can constrain economic development and growth.

IV. Recommendations

The following recommendations are presented as ways to accomplish specific objectives set forth above, and thereby achieve the broad high-level goals. For each recommendation, there is an “implementation” suggestion. These are intended to be relatively general in nature. The Nevada State Office of Energy has indicated that it wishes to be responsible for the revising and providing greater detail to the implementation suggestions following publication of this white paper.

1. **Support the adoption and implementation of cost-effective energy efficiency building codes and standards and work to help ensure compliance.**

New buildings typically will have useful economic lives of at least 30 years, with 50 - 100 years being more representative of the likely range of the expected useful lives. If these structures are not built utilizing the best practical technologies for energy efficiency and healthy, productive environments, these are lost opportunities. Whereas buildings can be retrofitted and some equipment can be upgraded later at a reasonable cost, the incremental cost to upgrade the building envelope and key operating systems is typically significantly greater than incorporating investments in more energy-efficient design and equipment from the outset. Moreover, more efficient new building stock will increase the “market pressure” on owners of older buildings both to lower operating expenses and to improve the environments (occupant comfort, better lighting, etc.). New energy efficiency building codes are applicable to those portions of existing commercial buildings that are remodeled, and most of the “skills” needed for construction of new energy-efficient buildings should easily translate to refurbishing of existing buildings.

New buildings represent increased energy demand, so energy efficiency included in building design and construction does not result in reduction of existing energy demand but rather a reduction in the amount of additional energy that will be needed.

The pushback that typically occurs from the development and construction industries against stricter building codes, which can increase initial construction costs, could be mitigated by better data collection by the real estate industry in regard to energy efficiency measures and net operating costs as they relate to building values. This data would allow real estate appraisers to better recognize the value associated with energy efficient buildings, which in turn would assist with financing the incremental costs associated with building codes that result in improved energy efficiency.

Nevada should continue to support adoption of the IECC on a three-year cycle, as well as to develop some measures to enforce implementation by local jurisdictions.

Implementation: This recommendation can be implemented by the Nevada State Office of Energy (NSOE) pursuant to NRS 701.220. However, in order for NSOE to continue its responsibility for the

adoption and implementation and enforcement of new building codes in Nevada, legislative action is likely to be needed to provide necessary funding.

Much was accomplished by NSOE in its adoption and support for implementation of the 2009 IECC utilizing federal funds that came to Nevada through the U.S. Department of Energy. However, this was the first time that energy efficiency codes were adopted at the State level, the federal funding was “one-time” funding, and much remains to be done. Going forward, NSOE will need to:

- a. Provide training for design and construction professionals for new energy efficiency codes (2012 IECC and beyond);
- b. Implement compliance tracking, which is a major concern for most states adopting new energy codes, and Nevada is no exception. Nevada needs to adopt and fund energy savings verification protocols for conservation measures, practices and programs when current verification methods appear problematic or expensive or verification methods do not exist; and
- c. Develop a comprehensive library of estimates of savings from conservation measures and savings evaluation and measurement protocols.

These efforts will require a commitment of additional resources for the NSOE, not only for the adoption of new energy codes, but more importantly, to provide the support and training necessary for widespread implementation of the new codes. Recommended minimum funding for these efforts is \$112,900 annually, although \$150,000-\$180,000 would probably be a better range looking forward. (See Appendix B for budget details). If not funded through the General Fund, a potential source of funding for this would be a public benefits charge on utility bills (not preferred by the utilities). This would best be implemented through legislation.

Pacific Northwest National Laboratory published a draft report estimating job creation associated with adoption and implementation of new energy codes in Nevada.³² Based upon only residential construction at a rate of 6,400 new housing units state-wide per year, the job creation estimate was 1,365 full-time construction jobs associated with implementation of the new codes and 115 new jobs created annually thereafter for each year that the new codes are implemented as a result of future consumer spending being redirected from paying utility bills to other spending that has greater economic impact within the state. If a window of only 10 years is considered, the recurring job creation would be 1,150 new jobs as a result of energy savings for a combined total of 2,515 jobs resulting from each year’s energy codes budget. The investment for NSOE to continue with its adoption of, and implementation support for new building codes, therefore, is less than \$45 per new job created each year and subsequent decade of continuing job creation – at current homebuilding levels. As demand for new housing ramps up from its recession-level base, the cost per job will decrease proportionately. Because the analysis for commercial and industrial construction involves a significantly broader range of building sizes, uses and construction

³² “Potential Job Creation in Nevada as a Result of Adopting New Residential Building energy Codes”, Pacific Northwest national Laboratory (2012), <http://www.energycodes.gov/adoption/analysis/jobs>

alternatives, PNNL did not conduct a parallel analysis for commercial/industrial construction. However, the economic advantages of incorporating energy efficiency from the design stage should be in the same order of magnitude.

NSOE will need to determine how to respond to the recent action by the City Council of the City of Las Vegas in regard to not supporting the statewide adoption of the 2009 IECC. Part of the consideration will be determining what liability Nevada and Las Vegas may have in regard to ARRA funds accepted that required both adoption of the 2009 IECC and reaching a certain level of compliance by 2017. Another portion might be determining what liability exposure the City, developers, design professionals and contractors may have for not complying with the State energy codes.

2. Develop and implement a pilot utility on-bill financing program for energy-efficiency improvements.

A conundrum of energy efficiency is that those who “cannot afford” to implement energy efficiency to retrofit existing buildings can be the very customers who essentially pay for the energy and money savings achieved by others. This has led to the Bureau of Consumer Protection questioning and sometimes opposing energy efficiency programs in Nevada. From the Sixth Northwest Conservation and Electric Power Plan: “The nature of efficiency improvement is that the total cost is recovered over a smaller number of sales. Average cost per kilowatt-hour sold will increase, but because the total consumption is reduced, average consumer electricity bills will be smaller. Consumers who choose not to improve their efficiency of use could see their bills increase. However, if the region does not capture the efficiency, the higher cost of new generating resources will increase everyone’s bills.”³³

Utility on-bill financing (OBF) can overcome two of the major barriers to energy-efficiency improvements: 1) initial investment and 2) access to financing. Unlike other methods of financing energy efficiency improvements, properly designed OBF can be the “democratizing factor” that opens the potential for energy-efficiency improvements to nearly all consumers. The goal of a pilot project, therefore, is to demonstrate the beneficial impact of allowing building owners and facility operators to make energy efficiency improvements without needing to use their own capital for the upfront costs.

The most successful financing programs for energy efficiency incorporate these key principles: a) qualifying processes are simple and do not act as barriers; b) the net result of energy efficiency implementation and the financing obligation is the same or lower monthly utility costs to the business; c) structure of the obligation and billing/collection processes are designed both for simplicity and to keep default rates as low as possible; d) participating utilities are not burdened

³³ Northwest Power and Conservation Council, “Sixth Northwest Conservation and Electric Power Plan”, (February 2010), p. 10-5, <http://www.nwcouncil.org/energy/powerplan/6/final/SixthPowerPlan.pdf>

with regulatory processes designed for financial institutions, e) contractor participants are prescreened and continuously monitored to minimize bad recommendations and substandard work; f) the utilities are adequately rewarded for their expenditures and investment.³⁴

It is recommended that a Nevada OBF electricity energy efficiency pilot program be implemented for small commercial customers. Key features should include:

- 1) Qualifying process:
 - a) Customer must have been in business for at least one year;
 - b) Customer must have not been 60 days or more in arrears on their utility bill during the last six months and must be current at the times of application for, and approval of, OBF;
 - c) The projected average monthly dollar savings from the proposed energy-efficiency improvements must be equal to or exceed the fully amortized loan payment, so that no participant increases their monthly operating expense (which typically requires a low, or zero, percent interest rate).

Note that these recommendations do not include a property appraisal. In Nevada, this is significant since many properties have negative, zero or very little equity. Also, these processes recommended for the pilot OBF do not involve typical bank-loan qualifying processes which are often burdensome, time consuming and extend the approval process over a long period.

- 2) Financial obligation and collection process:
 - a) The obligation goes with the meter/billing address. It is an on-tariff program.
 - b) The “invoice” for payment is included on the utility bill (one bill, one payment).
 - c) Non-payment can result in termination of service.
 - d) Partial payments are prorated between utility charges and the finance charges.
 - e) There is a UCC fixture filing on all the equipment financed by the program.

Risk is typically reduced by keeping repayment terms at 5-7 years or less. The intent of these recommendations is that the current occupant and any future occupants who will benefit from energy-efficiency savings will also become responsible for repaying the investment required to achieve those savings until the obligation is fully repaid. Until the obligation is fully repaid, the customer’s average monthly utility bill will be no higher than it would have otherwise been, with significant reduction in the bill after the obligation is fully satisfied. Through this process, loan losses should be insignificant. Since monthly utility bills remain at historic levels after the upgrades, there should be little to no disincentive for a new customer to purchase or lease that property and assume the debt obligation.

³⁴ National Action Plan for Energy Efficiency - Vision for 2025: A Framework for Change, U.S. DOE and U.S EPA (2008). “Utility and other program administrator incentives for energy efficiency savings reviewed and established as necessary.”

- 3) Regulatory environment: The participating utility(ies) shall not be classified/treated as financial institutions and subject to regulations pertaining thereto, such as truth in lending laws, etc.
- 4) Contractor approval and oversight:
 - a) The utility will be responsible for maintaining a list of qualified contractors, with published transparent processes for being approved and for remaining on the list, and conversely, for removal from the list. Being on the list shall be construed as a privilege and not as a right.
 - b) Standardized processes will be established and published for evaluating proposed projects, overseeing/evaluating work, and commissioning projects when finished (prior to payment to the contractors). Measurement and verification (M&V) processes will be established including a period of time prior to project implementation to establish baseline building performance. Contractors will need to provide proof of appropriate bonding, and the processes might include some contract retention percentage until post-installation M&V confirms actual performance of the energy-efficiency improvements.

If the utilities are going to be key participants in the billing and collection of on-bill payments, then they need to have control over the other significant aspects of the project that are key to insuring good project design and installation, and conversely, avoiding and/or mitigating poor project design and installation. Utilities have the unique expertise to establish contractor qualifications and to maintain contractor approval and oversight. The costs to the utility associated with this effort need to be recoverable.

- 5) Capitalizing the pilot program:

It is recommended that a pilot program be implemented for small commercial customers (ex., under 400,000 kWh) at an initial level of \$1M per year for three years. Assuming average project sizes of \$5,000, this funding should be sufficient for approximately 200 participants per year. A very low, or zero, percent interest rate should be applied to the OBF repayment under the pilot. For purposes of simplicity, the initial pilot should focus on one or two industry types. Convenience stores and small grocery stores are two recommended industry candidates.

Funding can come from one or a mix of the following potential sources:

- a) NSOE funds (i.e., some portions of the revolving loan fund and/or the renewable energy fund);
- b) NV Energy funds, using only ratepayer funds from commercial building ratepayers;
- c) Bank Community Reinvestment Act (CRA) funds ; and/or
- d) Other appropriate sources.

Currently, NV Energy funds the Sure Bet Direct Install program for small commercial customers at a level of approximately \$500,000 per year. The program provides direct financing of up to 90 percent of total energy efficiency project costs and assists approximately 100 customers per year currently. If the program were modified to provide direct financing (i.e., subsidy) at a lower level 25-30 percent instead, the balance on the projects could be financed using OBF. The lower subsidy would allow NV Energy to provide partial funding to capitalize the OBF loan pool.

Ideally, the \$1M level of initial capital for the pilot project will be sufficient to allow for a number of projects in different regions of Nevada and testing at leased and non-leased properties. Based on experience with OBF in other states, consideration may also be given to allowing for the participation of a small number of public buildings, but not so many that the pilot project capital is all used on a small handful of large projects.

- 6) **Benefits to NV Energy:** Nearly every entity involved in promoting energy efficiency recognizes that utility companies can be key to implementation of energy efficiency. For an implementation model that involves the utilities to work well, there must be a financial incentive to the utilities for their participation. Utilities are in the business of selling energy. If efficiency is to be considered as another resource, then the financial treatment of efficiency must be similar to the treatment of the production, transmission and distribution of energy. Direct costs incurred must be recovered and investments made must receive a return on the investment commensurate with the risk and the expected/approved rate of return on investment to shareholders.

Implementation: Enabling legislation or PUCN authorization; NV Energy and NSOE participation in the development of guidelines, rules and regulations with PUCN oversight and approval.

Legislation may be required to allow the Public Utilities Commission of Nevada (PUCN) to authorize Nevada electric utilities to implement a pilot on-bill financing program. An initial target participation rate should be established and a date should be set by which the program becomes fully operational.

3. Develop and adopt policies and measures to accelerate the acquisition and use of alternative fuel vehicles (AFVs) in Nevada – particularly in metro areas.

Higher use of AFV's can assist with several of the specific objectives identified above as important to Nevada policy alignment, specifically:

- increase aggregate electricity consumption in Nevada;
- reduce peak demand for electricity relative to total or average consumption;
- reduce emissions related to energy production and consumption (especially in the potential non-attainment basins of Las Vegas and Reno metropolitan areas);

- reduce average energy consumption (metrics: per capita, per square foot, per employee, per mile traveled);
- reduce dependence on foreign transportation fuels;
- reduce carbon footprint of vehicles by reducing vehicle emissions (metrics: tons of carbon emitted); and
- create jobs involved in the installation of charging and fueling stations.

This may be “a natural” for Nevada, which is the most urbanized state in the country. Even without new economic or population growth, AFV’s will increase the demand for natural gas and electricity. For the electric system, this can address the issue of flat electricity demand reducing the avoided-cost justification for energy efficiency. This increase in natural gas and electricity consumption may be accomplished with minimal impact on peak demand – thereby resulting in better utilization in system infrastructures. Since a significant portion of the ozone in the Las Vegas and Reno metro areas is from tailpipe exhaust, increased use of AFV’s will significantly improve the air quality in these metro areas. These results mitigate the risk to future economic growth posed by non-attainment status in the two largest metropolitan areas of the state.

Below are some of the specific steps that Nevada could take to accelerate AFV adoption:

- Adoption of VRA/NRA (natural gas vehicle refueling appliance and home refueling appliance) and EVSE (electric vehicle supply equipment) requirement in applicable governing codes.³⁵ “Encouraging the adoption of EVSE requirements in building codes can save money, ensure new building stock is EVSE-ready, and indirectly encourage the existing building stock to become PEV-ready too. Pre-wiring or installing EVSE during construction is significantly cheaper than retro-fitting old buildings due to the potential for retrenching, rewiring or

³⁵ As a starting point for EVSE language, here is language from Lancaster, California:

“Electric Vehicle Charging Stations (EVCS). New residential development shall provide for EVCS in the manner prescribed as follows:

A. Garages serving each new single-family residence and each unit of a duplex shall be constructed with a gang box (4 inches by 4 inches) connected to a conduit linking the garage to the electrical service, in a manner approved by the building and safety official, to allow for the future installation of electric vehicle supply equipment to provide an EVCS for use by the resident.

B. In new multiple-family projects of 10 dwelling units or less, 20% of the total parking spaces required (all of the 20% shall be located within the required covered parking) shall be provided with a gang box (4 inches by 4 inches) connected to a conduit linking the covered parking spaces or garages with the electrical service, in a manner approved by the building and safety official, to allow for the future installation of electric vehicle supply equipment to provide EVCSs at such time as it is needed for use by residents. EVCSs shall be provided in disabled person parking spaces in accordance with state requirements. (footnote continued on following page)

²⁷ (continued) C. In new multiple-family projects of more than 10 dwelling units, 10% of the total parking spaces required (all of the 10% shall be located within the required covered parking) shall be provided with a gang box (4 inches by 4 inches) connected to a conduit linking the covered parking spaces or garages with the electrical service, in a manner approved by the building and safety official. Of the total gang boxes provided, 50% shall have the necessary electric vehicle supply equipment installed to provide active EVCSs ready for use by residents. The remainder shall be installed at such time as they are needed for use by residents. EVCSs shall be provided in disabled person parking spaces in accordance with state requirements.”

upgrades to electrical panels.”³⁶ An EVSE provision should include demand-response (DR) capability, time-of-use rate structure and/or other provisions to cause the charging of PEVs to primarily occur during periods other than peak demand.

- Individuals or entities selling electricity for electric vehicle charging or natural gas for vehicle fuel shall not be subject to utility regulation. For example, in California, such a provider is protected as follows: “A corporation or individual that owns, controls, operates, or manages a facility that supplies electricity to the public exclusively to charge light-duty battery electric and plug-in hybrid electric vehicles, or compressed natural gas vehicles, is not defined as a public utility.”³⁷
- A requirement that public entities that own or operate five or more vehicles have a goal of a minimum of 20% alternative fuel vehicles, and that they conduct a total-cost-of-ownership analysis prior to making vehicle purchase decisions. This analysis should include a cost discount or premium related to risk associated with fuel cost volatility and/or future risk.
- Provide incentives (rebates) for VRA, HRA and EVSE purchase and installation for existing building stock including single family residences, multi-family housing, and commercial buildings. The source of funds could be a portion of the sales tax on AFV’s, VFA’s/HR’s and EVSE’s.
- A goal for EVSE equipped public parking at state, county and city facilities, airports and mass-transit locations, beginning at 1% of parking spaces and increased annually to exceed the estimated Nevada PEV registration percentages by 1%.
- Reduce the registration fees for AFV’s. Make the registration-fee reductions proportionate to the reduction in the emissions footprint for these vehicles compared to their gasoline and diesel-powered ICE counterparts. Justification is that gasoline and diesel-powered ICEs have a public health cost associated with air quality that they do not pay, which impact will be mitigated by AFVs.

Implementation: Legislation

³⁶ Ibid p. 66

³⁷ California Public Utilities Codes, p. 216

4. **Develop an outreach program to accelerate implementation of energy efficiency improvements in existing Commercial Buildings through a state-supported and well-defined Energy Savings Performance Contracting process.**

A Performance Contract, also called a Guaranteed Energy Savings Contract, is a design-build process with a single point of responsibility. An Energy Service Company (pre-qualified by the state) designs and proposes a package of energy cost reduction measures, installs or implements those cost reduction measures, and guarantees the savings that will be achieved by the cost reductions. The owner pays for the package over time using the stream of revenue resulting from the guaranteed energy reduction measures.

To ensure that commercial building owners understand the Performance Contracting process and to ensure that energy efficiency savings from a Performance Contract are realized by the owners, the NSOE should take the lead in establishing a formalized, systematic method of defining and communicating the correct process to be used by contractors and building owners who employ Performance Contracts to achieve energy efficiency improvements, with emphasis on risk mitigation. NSOE efforts should include:

- Reviewing and ensuring effective legislation for a Performance Contracting program implementation for commercial buildings;
- Establishing a point-of-contact within the NSOE for Performance Contracting guidance and information;
- Providing training and education on Performance Contracting, as well as guidelines and template documents for use by commercial building owners;
- Issuing a RFP to pre-qualify Energy Service Companies and Third Party Consultants, maintaining lists of the prequalified companies, and communicating the results to commercial building owners.

Implementation: Website, outreach, marketing, and training, facilitated by the NSOE in partnership with the Nevada Chapter of the Energy Services Coalition <http://www.energyservicescoalition.org>.

5. **Implement alternative ways of incentivizing investor-owned utilities (IOUs) to increase their demand side management (DSM) programs.**

As the American Council for an Energy Efficient Economy (ACEEE) has observed:

“The obligation to earn a profit drives utilities to increase revenues by selling more electricity. Given this, investment in energy efficiency raises financial concerns for IOUs.. IOUs need to be able to recover the money they invest in efficiency from ratepayers and just like investments in new power plants; they need to be able to earn a return on investments in energy efficiency. Further, the threat of reduced sales if an energy efficiency program is successful threatens to cut into utility profits.

In the traditional regulatory structure these concerns hinder a utility's willingness to invest in energy efficiency. No single policy mechanism can adequately remove the existing biases against utility investment in energy efficiency. However, several policies, when used in combination, can properly align financial incentives to remove the major market barriers to energy efficiency. These include cost recovery, decoupling and providing shareholder incentives."³⁸

Nevada has attempted to address these concerns in a couple of ways. In July 2010 the Public Utilities Commission of Nevada (PUCN), directed by 2009 legislation, adopted a lost revenue recovery mechanism providing for annual recovery of NV Energy's efficiency program expenses and its fixed cost revenues lost from the reduced sales caused by the efficiency programs. A previous 5% additional rate of return incentive was eliminated, and instead a party may file a request for an incentive on a program-by-program basis. The lost revenue recovery policy, however, has been more complex to implement and certainly more controversial than was anticipated by most people at the time of its adoption. Questions have been raised about attribution of reductions in electricity consumption to DSM programs rather than to other potential causes (weather, the economy, non-DSM measures, etc.).

What incentive(s) would best encourage DSM while preserving acceptable returns for the utilities, result in the best impact for ratepayers and result in the best outcome for Nevada's economy and job creation? The challenge is that each alternative will have different outcomes and be perceived differently by the various stakeholders.

It is recommended that alternative ways of encouraging IOU investment in DSM programs be considered to determine what combination of provisions would best encourage accelerated implementation of DSM programs in Nevada. Most likely there is needed a combination of one mechanism to offset the lost revenue recovery of fixed costs that results from successful DSM and another mechanism to share the benefits of successful DSM. The decoupling mechanism currently being used in Nevada by Southwest Gas is one candidate for offsetting 'lost revenue'. There is broad sentiment that the current lost revenue mechanism needs to be replaced.

Implementation: Legislation designed by the PUCN to remove the requirement for the 'lost revenue recovery' followed by PUCN regulation to implement a better incentive program.

³⁸ "Overcoming Market Barriers and using Market Forces to Advance Energy Efficiency", American Council for an Energy-Efficient Economy (March 2013), p. xi.

6. Support the Location and Expansion in Nevada of the Supply Chains of Goods and Services for Energy Efficiency

As mentioned in the description of Current Economic Development Policy in this report, renewable energy component manufacturing, advancing and internationalizing geothermal development and energy efficiency upgrading are targeted by the State as areas for economic opportunity. GOED should expand this strategy to specifically include opportunities in the energy-efficiency supply chain. Perhaps GOED and/or NSOE could look for grant opportunities that would include promotion of Nevada businesses in this area.

7. Utilize better decision support tools when considering energy policy and economic policy decisions.

The University Center for Economic Development at the University of Nevada, Reno is completing a background study and roadmap for developing a Computable General Equilibrium (CGE) model for use in estimating impacts related to various energy decisions, including fossil-fuels generation, renewable energy electricity generation and energy efficiency programs. This analytical tool would have the capability of comparing policies regarding the mix of fossil fuels, renewable energy options and energy efficiency to meet electricity needs in Nevada.

Energy is a crucial element of any economy. In addition, energy markets suffer from many types of market failures. Because of this, governments have intervened with many types of energy policies from monopoly regulation and oversight to creating cap and trade markets for air pollutants to setting of renewable portfolio standards. In order to find the most efficient and effective government interventions, economists have created a wide variety of models used to investigate economic impacts, costs and benefits of these policy interventions. One very successful model in the realm of energy economic models is the computable general equilibrium model. The pervasiveness of energy in the economy and the complex interaction that can come about from a change in energy prices, taxes or availability make the computable general equilibrium model a natural match for investigating the big picture outcomes of policy interventions. This is because the computable general equilibrium model is capable of modeling complex feedbacks and interactions amongst multiple sectors, product markets, labor and capital markets and government actions.

On the other hand, linear Input-Output models have several shortcomings, such as no supply constraints, they don't reflect price changes, and there is no substitution of inputs.

From Inter-American Development Bank's website:³⁹

A CGE model is one of the most rigorous, cutting-edge quantitative methods to evaluate the impact of economic and policy shocks -particularly policy reforms- in the economy as a whole. Because of its nature, this tool is significantly useful for policy design.

CGE modeling reproduces -in the most possible realistic manner- the structure of the whole economy and therefore the nature of all existing economic transactions among diverse economic agents (productive sectors, households, and the government, among others). Moreover, **CGE analysis, in comparison to other available techniques, captures a wider set of economic impacts derived from a shock or the implementation of a specific policy reform . . .** In that sense, the CGE approach is especially useful when the expected effects of policy implementation are complex and materialize through different transmission channels.

Ian Sue Wing makes the following statement about the benefits and limitations of using a CGE model:⁴⁰

The advantage of this approach is its ability to measure policies' ultimate impact on aggregate welfare in a theoretically consistent way, by quantifying the change in the income and consumption of the representative agent that result from the interactions and feedbacks among all of the markets in the economy. Yet this very facility is at the root of the "black box" criticism raised in the introduction, as it creates the temptation for some policymakers and analysts to treat CGE models as a sort of economic crystal ball. Yet CGE models' usefulness in policy analysis owes less to their predictive accuracy, and more to their ability to shed light on the economic mechanisms through which price and quantity adjustments are transmitted among markets. Therefore, while on a superficial level CGE models can be thought of as a pseudo-empirical tool to quantify the impacts of imposing or removing policy distortions in a "what-if" manner, they should properly be regarded as computational laboratories within which to analyze the dynamics of the economic interactions from which these impacts arise (Francois 2001).

The UNR development team has experience in developing CGE models for analysis of water markets, and could apply this expertise to energy decisions. Specific objectives are:

- a. To validate the IMPLAN input-output model data for development of a CGE model and to collect the necessary energy and emissions data for Nevada;
- b. To develop CGE models for static analysis of energy projects in the State of Nevada; and

³⁹ <http://www.iadb.org/en/topics/trade/understanding-a-computable-general-equilibrium-model,1283.html>

⁴⁰ Ian sue Wing, "Computable General Equilibrium Models and Their Use in Economy-Wide Policy Analysis" (2004), MIT Joint Program on the Science and Policy of Global Change, http://web.mit.edu/globalchange/www/MITJPSPGC_TechNote6.pdf

- c. To develop a dynamic state of Nevada CGE Model (the NV EE-CGE); for analysis of energy projects in the State of Nevada and regions of the state as desired.

Utilizing a CGE model to compare all energy policy decisions (fossil-fuels, renewable and efficiency) could result in making better-informed policy decisions. One would hope that this would lead to higher rates of economic growth for the State and to prioritization of lowest-cost lowest-risk resources.

Recommendation: Funding should be pursued to develop an “open” CGE model for use by utilities, the PUCN, and stakeholders in energy decisions. A problem with some of the proprietary models is that other interested entities can’t check on assumptions, algorithms used, and other considerations in reaching “findings”. Such a decision support tool, if available to all interested parties, will help to avoid duplication of effort and coordination of model parameters.

Implementation: The background study and roadmap should be completed in the 4th quarter of 2013, and will be published by UNR and released to NSOE. UNR will reach out to NV Energy and the Public Utilities Commission of Nevada to engage them in advisory roles regarding future model development.

8. Establish Energy-Efficiency Targets for Nevada, Followed By Recommended Methods of Achieving Those Targets

From the recently published “The 2013 City Energy Efficiency Scorecard:”

Energy efficiency may be the cheapest, most abundant and most underutilized resource for local economic and community development. Considerable evidence documents that investments in energy efficiency can improve community self-reliance and resilience; save money for households, business and anchor institutions, and local governments; create local jobs; extend the life of and reduce the costs and risks of critical infrastructure investments; catalyze local economic reinvestment; improve livability and the local asset value of the built environment; and protect human health and the natural environment through reducing emissions of critical pollutants and greenhouse gases.”⁴¹

Establishing Energy Efficiency Targets

At a September 2013 meeting of stakeholders, there seemed to be general consensus that Nevada should establish energy efficiency targets and then consider the various ways of achieving those targets.

⁴¹ Eric Mackres, Johnson, Downs Cluett, Vaidyanathan and Shultz, “The 2013 City Energy Efficiency Scorecard,” American Council for an Energy-Efficient Economy, 2013, p. vii

Key questions for Nevada include:

- 1) Who should be involved in the process of setting energy efficiency targets?
- 2) What should that process entail? And,
- 3) How quickly can energy efficiency targets be established?

Who should be involved in the process? Since much of Nevada’s energy policy is set forth in Nevada Revised Statutes, and since legislation passed in 2013 (AB 428) establishing a Legislative Committee on Energy, this process should be referred to this Legislative Committee, with support from GOED and NSOE, as well as the involvement of any other entities and individuals the Committee identifies.

What should the process entail? Our recommendation is that, ultimately, this process would have the benefit of the CGE model as a decision support tool, with the benefit of estimates of impacts on utility rates, the economy and job creation. However, until this tool is developed for Nevada, there are some other methods that could be used to establish energy efficiency targets for the State.

- a) Carry-over from the Renewable Portfolio Standard: Since the RPS allowed for up to 25% of the renewable targets to be met through energy efficiency prior to the passage of SB 123, the energy efficiency component of retail electricity sales could become stand-alone targets:

<u>Time Frame</u>	<u>Renewable Component</u>	<u>Energy Efficiency (25% of RPS)</u>
2013-2014	18% +	4.5% or more
2015-2019	20% +	5.0% or more
2020-2024	22% +	5.5% of more
2025 and thereafter	25% +	6.25% of more

- b) Emulate targets set by other nearby states: The American Council for and Energy-Efficient Economy (ACEEE) published a paper recently entitled “State Energy Efficiency Resource Standards (EERS)”, which is the most common way of expressing a state energy efficiency target.⁴² It states that twenty-five states have enacted long-term binding energy saving targets (including Nevada – prior to recognition that SB 123 removed the energy efficiency component of the RPS). In this region, Arizona, California, Colorado, New Mexico, Oregon and Washington all have energy efficiency targets, as follows:

Arizona	Electric and Nat. Gas IOUs, Co-ops (~59%) Electric: Annual savings targets began at 1.25% of sales in 2011, ramping up to 2.5% in 2016 through 2020 for cumulative electricity savings of 22% or retail sales, of which 2% may come from peak demand reduction. Natural Gas: ~0.6% annual savings for cumulative savings of 6% by 2020.
California	Electric and nat. Gas IOUs (~79%) Electric: ~0.85% annual savings through 2020. Demand reduction of 4,541 MW through 2020. Natural Gas: Annual reduction of 0.40% in 2014.

⁴² “State Energy Efficiency Resource Standards”, ACEEE, July 2013

Colorado	Electric and Nat. Gas IOUs (~57%) Electric: Black Hills follows PSCo savings targets of 0.8% of sales in 2011, increasing to 1.35% of sales in 2015 and 1.66% of sales in 2019. Natural Gas: Savings targets commensurate with spending targets (at least 0.5% of prior year's revenue).
New Mexico	Electric IOUs (68%) Electricity: 5% reduction from 2005 total retail electricity sales by 2014, and an 8% reduction by 2020. 2020 targets were lowered by 10% as part of compromise legislation that established fixed rider tariff for energy efficiency programs. Utilities must acquire all cost-effective and achievable energy efficiency resources.
Oregon (100%)	Electric: Targets are equivalent to 0.8% of 2009 electric sales in 2010, ramping up to 1% in 2013 and 2014. Natural Gas: 0.2% of sales in 2010 ramping up to 0.4% in 2014.
Washington	Electric IOUs, Co-ops, Muni's (~81%) Biennial and Ten-Year Goals vary by utility. Law requires savings targets to be based on the Northwest Power Plan, which estimates potential annual savings of about 1.5% through 2030 for Washington utilities. All cost-effective conservation required.

c) Emulate states served by MidAmerica Energy (i.e. Illinois and Iowa)

Illinois	Electric and Nat. Gas Utilities with over 100,000 customers (~89%) Electric: 0.2% annual savings in 2008, ramping up to 1% in 2012, 2% in 2015 and thereafter. Annual peak demand reduction of 0.1% through 2018. Natural Gas: 8.5% cumulative savings by 2020 (0.2% annual savings in 2011, ramping up to 1.5% in 2019). Energy efficiency measures may not exceed an established cost-cap.
Iowa	Electric and Nat. Gas Statewide Goal (100%), set in 2009 Electric: Varies by utility from 1-1.5% annually by 2013. Natural Gas: Varies by utility from 0.74-1.2% annually by 2013. The next round of targets are under discussion, to be finalized by the end of 2013.

How quickly can energy efficiency targets be established? AB 428 sets forth a time frame for the Legislative Energy Committee to meet, as follows (Section 25.3. 1.) "Except as otherwise ordered by the Legislative Commission, the members of the Committee shall meet not earlier than November 1 of each odd-numbered year and not later than August 31 of the following even-numbered year at the times and places specified by a call of the Chair or a majority of the Committee." Based upon this time frame, energy efficiency targets for Nevada could be recommended by the Legislative Energy Committee to the next Nevada Legislature (2015).

In future years, after a CGE decision support tool is developed and found to be useful (i.e. “approved” by the PUCN), the Legislative Energy Committee could review and revise energy efficiency targets based upon a number of key considerations including economic, environmental and health impacts and risk mitigation.

Methods for Achieving Energy Efficiency Targets

Alternative methods for achieving energy efficiency targets include various incentives, mandates, or utilizing some sort of carbon tax and letting market forces allocate energy resources, including energy efficiency.

Incentives typically include such options as providing energy utilities with enhanced return on investment or bonuses for achieving and surpassing energy efficiency targets. Arizona set energy efficiency goals and then offered utilities a bounty (ten percent of the value of the energy cost savings) for exceeding 125 percent of the state-set efficiency goals. One utility earned a \$2.5 million bonus in 2009⁴³. Many states help provide financing options, including on-bill repayment, energy saving performance contracting (ESCOs), and property assessed clean energy (PACE).⁴⁴ If only incentives are used, it will be very important to have systems to track energy efficiency results to compare against targets. If targets are not achieved, steps would be needed to increase existing incentives or add new incentives.

Mandates are used by many states. Energy Efficiency Resource Standard (EERS) seem to be the most prevalent form of energy efficiency mandate, with states setting binding targets representing 61% of electricity sales in the U.S.⁴⁵ Important for the implementation of any mandate is to predefine consequences if goals are not achieved.

Without a CGE model, the best approach in the near term would likely be to review what other states have been able to achieve and then select a package of incentives and/or mandates that seem to fit Nevada’s circumstances. Unfortunately, as we’ve seen in the past, people can utilize static models to come to very different conclusions with the same underlying circumstances.

Next Steps

NSOE is forming working groups to help implement the policy recommendations. The groups and designated group leaders are set forth in the table below. To be developed are time frames, definitions of “success”, milestones, and reporting processes. These elements are absolutely necessary for the working groups to achieve meaningful and timely results.

⁴³ “An Energy Efficiency Primer for Governors”, National Governors Association, September 2013, p. 10

⁴⁴ Ibid, p. 13

⁴⁵ “State Energy Efficiency Resource Standards”, ACEEE, July 2013, p.1

WORKING GROUPS		Energy Office	NV Energy	SW Gas	SWEEP	UNR	BCP	PUC	GOED	AGC	Washoe Co	NREA	S. Well
1	Support the adoption and implementation of cost-effective energy efficiency building codes and standards and work to help ensure compliance.	X			X				X	X *			
2	Develop and implement a pilot utility on-bill financing program for energy-efficiency improvements.	X	X	X	X	X *	X	X				X	
3	Develop and adopt policies and measures to accelerate the acquisition and use of alternative fuel vehicles (AFVs) in Nevada – particularly in metro areas.	X	X	X					X *				
4	Develop an outreach program to accelerate implementation of energy efficiency improvements in existing Commercial Buildings through a state-supported and well-defined Energy Savings Performance	X *			X					X			
5	Consider alternative ways of incentivizing investor owned utilities (IOUs) to increase their demand side management (DSM) programs.	X	X	X	X *		X	X					
6	Support the Location and Expansion in Nevada of the Supply Chains of Goods and Services for Energy Efficiency	X	X	X					X *				
7	Utilize better decision support tools when considering energy policy and economic policy decisions.	X	X	X	X	X *	X	X					
8	Investigate the Potential Impacts of an Energy Efficiency Resource Standard (EERS) in Nevada.	X	X	X	X *						X	X	X
* Group Leader													

While the working groups take on these tasks, due to time considerations, we encourage the Legislature Interim Energy Committee to consider legislation needed to implement these recommendations. The next session of the Nevada legislature in 2015 will be critical to optimizing the economic benefits associated with energy efficiency for Nevadans. It will be a “watershed point” for energy efficiency state policy options.

Appendix A

NRS.704.7821

NRS 704.7821 - Establishment of portfolio standard; requirements; treatment of certain solar energy systems; portfolio energy credits; renewable energy contracts and energy efficiency contracts; exemptions; regulations.

1. For each provider of electric service, the Commission shall establish a portfolio standard. The portfolio standard must require each provider to generate, acquire or save electricity from portfolio energy systems or efficiency measures in an amount that is:

(a) For calendar years 2005 and 2006, not less than 6 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.

(b) For calendar years 2007 and 2008, not less than 9 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.

(c) For calendar years 2009 and 2010, not less than 12 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.

(d) For calendar years 2011 and 2012, not less than 15 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.

(e) For calendar years 2013 and 2014, not less than 18 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.

(f) For calendar years 2015 through 2019, inclusive, not less than 20 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.

(g) For calendar years 2020 through 2024, inclusive, not less than 22 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.

(h) For calendar year 2025 and for each calendar year thereafter, not less than 25 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.

2. In addition to the requirements set forth in subsection 1, the portfolio standard for each provider must require that:

(a) Of the total amount of electricity that the provider is required to generate, acquire or save from portfolio energy systems or efficiency measures during each calendar year, not less than:

(1) For calendar years 2009 through 2015, inclusive, 5 percent of that amount must be generated or acquired from solar renewable energy systems.

(2) For calendar year 2016 and for each calendar year thereafter, 6 percent of that amount must be generated or acquired from solar renewable energy systems.

(b) Of the total amount of electricity that the provider is required to generate, acquire or save from portfolio energy systems or efficiency measures during each calendar year, not more than 25 percent of that amount may be based on energy efficiency measures. If the provider intends to use energy efficiency measures to comply with its portfolio standard during any calendar year, of the total amount of electricity saved from energy efficiency measures for which the provider seeks to obtain portfolio energy credits pursuant to this paragraph, at least 50 percent of that amount must be saved from energy efficiency measures installed at service locations of residential customers of the provider, unless a different percentage is approved by the Commission.

(c) If the provider acquires or saves electricity from a portfolio energy system or efficiency measure pursuant to a renewable energy contract or energy efficiency contract with another party:

(1) The term of the contract must be not less than 10 years, unless the other party agrees to a contract with a shorter term; and

(2) The terms and conditions of the contract must be just and reasonable, as determined by the Commission. If the provider is a utility provider and the Commission approves the terms and conditions of the contract between the utility provider and the other party, the contract and its terms and conditions shall be deemed to be a prudent investment and the utility provider may recover all just and reasonable costs associated with the contract.

3. If, for the benefit of one or more retail customers in this State, the provider has paid for or directly reimbursed, in whole or in part, the costs of the acquisition or installation of a solar energy system which qualifies as a renewable energy system and which reduces the consumption of electricity, the total reduction in the consumption of electricity during each calendar year that results from the solar energy system shall be deemed to be electricity that the provider generated or acquired from a renewable energy system for the purposes of complying with its portfolio standard.

4. The Commission shall adopt regulations that establish a system of portfolio energy credits that may be used by a provider to comply with its portfolio standard.

5. Except as otherwise provided in subsection 6, each provider shall comply with its portfolio standard during each calendar year.

6. If, for any calendar year, a provider is unable to comply with its portfolio standard through the generation of electricity from its own renewable energy systems or, if applicable, through the use of portfolio energy credits, the provider shall take actions to acquire or save electricity pursuant to one or more renewable energy contracts or energy efficiency contracts. If the Commission determines that, for a calendar year, there is not or will not be a sufficient supply of electricity or a sufficient amount of energy savings made available to the provider pursuant to renewable energy contracts and energy efficiency contracts with just and reasonable terms and conditions, the Commission shall exempt the provider, for that calendar year, from the remaining requirements of its portfolio standard or from any appropriate portion thereof, as determined by the Commission.

7. The Commission shall adopt regulations that establish:

(a) Standards for the determination of just and reasonable terms and conditions for the renewable energy contracts and energy efficiency contracts that a provider must enter into to comply with its portfolio standard.

(b) Methods to classify the financial impact of each long-term renewable energy contract and energy efficiency contract as an additional imputed debt of a utility provider. The regulations must allow the utility provider to propose an amount to be added to the cost of the contract, at the time the contract is approved by the Commission, equal to a compensating component in the capital structure of the utility provider. In evaluating any proposal made by a utility provider pursuant to this paragraph, the Commission shall consider the effect that the proposal will have on the rates paid by the retail customers of the utility provider.

8. Except as otherwise provided in [NRS 704.78213](#), the provisions of this section do not apply to a provider of new electric resources as defined in [NRS 704B.130](#).

9. As used in this section:

(a) "Energy efficiency contract" means a contract to attain energy savings from one or more energy efficiency measures owned, operated or controlled by other parties.

(b) "Renewable energy contract" means a contract to acquire electricity from one or more renewable energy systems owned, operated or controlled by other parties.

(c) “Terms and conditions” includes, without limitation, the price that a provider must pay to acquire electricity pursuant to a renewable energy contract or to attain energy savings pursuant to an energy efficiency contract.

(Added to NRS by [2001, 2528](#); A [2003, 1866](#), [1876](#); [2005, 22nd Special Session, 82](#); [2007, 414](#); [2009, 996](#), [1399](#))

Appendix B

Proposed Budget Details: Nevada Energy Codes Collaborative

Proposed Annual Budget for Nevada Energy Code Collaborative

Purpose	Proposed Cost	Total Per Section	Description
1 Funding to Maintain the Collaborative		\$ 9,500.00	
Meetings	\$ 5,000.00		Two face-to-face meetings and two video conference. A total of four (quarterly) meetings and related travel expenses. Preparation for meetings, review draft minutes, pursue funding opportunities for the collaborative and assist with the drafting of agenda's, marketing materials, and arranging meeting logistics.
NSOE Coordinator	\$ 4,500.00		(total salary@5% x fringe @ 31.2%)
2 Training		\$ 83,000.00	The 2012 IECC will be adopted as the statewide minimum standard and in effect 7/1/2014.
Commercial Provisions of the 2012 IECC	\$ 9,000.00		Six full-day sessions includes travel costs. (3 in southern Nevada and 3 in the north)
Residential Provisions of the 2012 IECC	\$ 9,000.00		Six full-day sessions includes travel costs. (3 in southern Nevada and 3 in the north)
Industry Specific Training	\$ 2,000.00		Two 1/2 days includes travel costs.
Rural Training	\$ 40,000.00		Twelve full-day sessions includes travel costs. (6 residential and 6 commercial)
On-site field training	\$ 5,000.00		Blower door, duct blaster.
Webinar Trainings	\$ 12,000.00		24 one-hour monthly webinar to cover code specific topics/issues. Includes prep, delivery and follow-up Q&A at approximately \$500 per session.
Video Production	\$ 6,000.00		A master DVD on the Commercial and Residential 2012 IECC - 8 modules total.
3 Marketing		\$ 8,000.00	To deliver the context to the various stakeholders.
Public process	\$ 2,500.00		Marketing for consumer code awareness and adoption process of the latest code, includes print materials and postage.
Industry	\$ 1,500.00		Marketing for the building industry professionals for training purposes, awareness of the state's adoption of the latest code, includes e-mail campaigns, develop fliers, print materials, checklists, etc.
Elected Officials	\$ 1,500.00		Marketing for code awareness and adoption process of the latest code, includes print materials and postage.
Rural Nevada	\$ 2,500.00		Marketing for rural Nevada in consideration gold mining activities, potential permit fees, market training and meetings for discussions in one-on-one type settings, provide input on building codes.
4 Other		\$ 12,400.00	
SWEET and/or other Representative	\$ -		Arranging ECC meetings, agendas, minutes, and work in collaboration with the NSOE to maintain the service list of contacts, ensure ECC meets quarterly and provide other national reports, developments, and materials on the status of energy codes. Includes
UNR - BEP and/or other Partners	\$ 12,000.00		Support of the code adoption, target market, and trainings. Cost includes travel to face-to-face meetings and to some training events.
Support to Local Jurisdictions	\$ -		Provide support to local jurisdictions as needed to measure and verify compliance.
Materials and Supplies	\$ 400.00		For meetings, trainings or conference call charges.
Total:		\$ 112,900.00	

Appendix C

SB 123

Senate Bill No. 123—Senator Atkinson
Joint Sponsors: Assemblymen Bobzien and Kirkpatrick
CHAPTER.....

AN ACT relating to energy; requiring certain electric utilities in this State to file with the Public Utilities Commission of Nevada an emissions reduction and capacity replacement plan; prescribing the minimum requirements of such a plan; providing for the recovery of certain costs relating to an emissions reduction and capacity replacement plan; prescribing the powers and duties of the Commission and the Division of Environmental Protection of the State Department of Conservation and Natural Resources with respect to such a plan; providing for the mitigation of certain amounts in excess of a utility's total revenue requirement; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Section 7 of this bill requires an electric utility which primarily serves densely populated counties (currently only Clark County) and which, in the most recently completed calendar year or in any other calendar year within the 7 calendar years immediately preceding the most recently completed calendar year, had a gross operating revenue of \$250,000,000 or more in this State to submit to the Public Utilities Commission of Nevada a comprehensive plan for the reduction of emissions from coal-fired electric generating plants and the replacement of the capacity of such plants with increased capacity from renewable energy facilities and other electric generating plants. **Section 7** prescribes the minimum requirements of such an emissions reduction and capacity replacement plan, which include: (1) the retirement or elimination of not less than 800 megawatts of coal-fired electric generating capacity on or before December 31, 2019; (2) the construction or acquisition of, or contracting for, 350 megawatts of electric generating capacity from renewable energy facilities; and (3) the construction or acquisition of 550 megawatts of electric generating capacity from other electric generating plants. **Section 9** of this bill provides for the recovery of certain costs incurred by an electric utility in carrying out an emissions reduction and capacity replacement plan.

Sections 10, 18 and 19 of this bill provide that the Division of Environmental Protection of the State Department of Conservation and Natural Resources has exclusive jurisdiction to supervise and regulate the remediation of any site previously used for the production of electricity from a coal-fired electric generating plant, including authority to regulate and supervise the remediation of surface water and groundwater and solid-waste disposal operations located at such a site. Additionally, **sections 10 and 20** of this bill provide that the Division has exclusive authority to regulate emissions from any renewable energy facility or electric generating plant constructed on a site previously used for the production of electricity from a coal-fired electric generating plant.

Section 12 of this bill establishes provisions concerning the filing of an amendment to a utility's emissions reduction and capacity replacement plan for purposes of the Commission's approval and acceptance of certain contracts

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between the utility and a renewable energy facility. **Section 12.5** of this bill provides that if the Commission deems inadequate any portion of a utility's emissions reduction and capacity replacement plan or an amendment to the plan, the Commission may recommend a modification to the plan or amendment, and the utility may accept the modification or withdraw the proposed plan or amendment. Existing law establishes provisions governing public hearings on the adequacy of a utility's plan to increase its supply of electricity or decrease demands made on its system. (NRS 704.746) **Section 16** of this bill authorizes the Commission to give preference to the measures and sources of supply that provide the greatest opportunity for the creation of new jobs in this State. **Section 16** also requires the Commission, after a hearing, to review and accept or modify an emissions reduction and capacity replacement plan. **Section 16** requires the Commission, in reviewing such a plan, to consider: (1) the cost to the customers of the electric utility to implement the plan; (2) whether the plan provides the greatest economic benefit to this State; (3) whether the plan provides the greatest opportunities for the creation of new jobs in this State; and (4) whether the plan represents the best value to the customers of the electric utility.

Existing law requires the Commission to issue an order to accept as filed a utility's plan to increase its supply of electricity or to decrease demands on its system or to specify any portions of such a plan as inadequate. (NRS 704.751) **Section 17** of this bill revises the time in which a utility may file an amendment to its plan and also requires that any order issued by the Commission accepting an element of an emissions reduction and capacity replacement plan must authorize a utility to construct or to acquire and own electric generating plants necessary to implement the utility's emissions reduction and capacity replacement plan. **Section 22** of this bill provides that this bill becomes effective upon passage and approval.

EXPLANATION – Matter in *bolded italics* is new; matter between brackets [omitted material] is material to be omitted.

THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN
SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

Section 1. Chapter 704 of NRS is hereby amended by adding thereto the provisions set forth as sections 2 to 13, inclusive, of this act.

Sec. 2. *As used in sections 2 to 13, inclusive, of this act, unless the context otherwise requires, the words and terms defined in sections 2.5 to 6, inclusive, of this act have the meanings ascribed to them in those sections.*

Sec. 2.5. *“Coal-fired electric generating plant” means an electric generating plant which burns coal to produce electricity and which is owned, in whole or in part, by an electric utility.*

Sec. 3. (Deleted by amendment.)

Sec. 4. *“Electric utility” means an electric utility that primarily serves densely populated counties, as that term is defined in paragraph (c) of subsection 17 of NRS 704.110.*

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Sec. 5. “Emissions reduction and capacity replacement plan” means a plan filed by an electric utility with the Commission pursuant to section 7 of this act.

Sec. 6. “Renewable energy facility” means an electric generating facility that uses renewable energy to produce electricity. As used in this section, “renewable energy” has the meaning ascribed to it in NRS 704.7811.

Sec. 7. 1. An electric utility shall file with the Commission, as part of the plan required to be submitted pursuant to NRS 704.741, a comprehensive plan for the reduction of emissions from coal-fired electric generating plants and the replacement of the capacity of such plants with increased capacity from renewable energy facilities and other electric generating plants.

2. The emissions reduction and capacity replacement plan must provide:

(a) For the retirement or elimination of:

(1) Not less than 300 megawatts of coal-fired electric generating capacity on or before December 31, 2014;

(2) In addition to the generating capacity retired or eliminated pursuant to subparagraph (1), not less than 250 megawatts of coal-fired electric generating capacity on or before December 31, 2017; and

(3) In addition to the generating capacity retired or eliminated pursuant to subparagraphs (1) and (2), not less than 250 megawatts of coal-fired electric generating capacity on or before December 31, 2019.

□ For the purposes of this paragraph, the generating capacity of a coal-fired electric generating plant must be determined by reference to the most recent resource plan filed by the electric utility pursuant to NRS 704.741 and accepted by the Commission pursuant to NRS 704.751.

(b) For the construction or acquisition of, or contracting for, 350 megawatts of electric generating capacity from renewable energy facilities. The electric utility shall:

(1) Issue a request for proposals for 100 megawatts of electric generating capacity from new renewable energy facilities on or before December 31, 2014;

(2) In addition to the request for proposals issued pursuant to subparagraph (1), issue a request for proposals for 100 megawatts of electric generating capacity from new renewable energy facilities on or before December 31, 2015;

(3) In addition to the requests for proposals issued pursuant to subparagraphs (1) and (2), issue a request for proposals for 100

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megawatts of electric generating capacity from new renewable energy facilities on or before December 31, 2016;

(4) Review each proposal received pursuant to subparagraphs (1), (2) and (3) and identify those renewable energy facilities that will provide:

(I) The greatest economic benefit to this State;

(II) The greatest opportunity for the creation of new jobs in this State; and

(III) The best value to customers of the electric utility;

(5) Negotiate, in good faith, to construct, acquire or contract with the renewable energy facilities identified pursuant to subparagraph (4), and file with the Commission an amendment to the plan each time the utility wishes to construct, acquire or contract with such facilities; and

(6) Begin, on or before December 31, 2017, the construction or acquisition of a portion of new renewable energy facilities with a generating capacity of 50 megawatts to be owned and operated by the electric utility, and complete construction of such facilities on or before December 31, 2021.

☐ *For the purposes of this paragraph, the generating capacity of a renewable energy facility must be determined by the nameplate capacity of the facility.*

(c) For the electric utility to construct or acquire and own electric generating plants with an electric generating capacity of 550 megawatts, which must be constructed or acquired to replace, in an orderly and structured manner, the coal-fired electric generating capacity retired or eliminated pursuant to paragraph (a).

(d) If the plan includes the construction or acquisition of one or more natural gas-fired electric generating plants, a strategy for the commercially reasonable physical procurement of fixed-price natural gas by the electric utility.

(e) A plan for tracking and specifying the accounting treatment for all costs associated with the decommissioning of the coal-fired electric generating plants identified for retirement or elimination.

☐ *For the purposes of this subsection, an electric utility shall be deemed to own, acquire, retire or eliminate only its pro rata portion of any electric generating facility that is not wholly owned by the electric utility and, except as otherwise provided in paragraph (b), "capacity" means an amount of firm electric generating capacity used by the electric utility for the purpose of*

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preparing a plan filed with the Commission pursuant to NRS 704.736 to 704.754, inclusive.

3. In addition to the requirements for an emissions reduction and capacity replacement plan set forth in subsection 2, the plan may include additional utility facilities, electric generating plants, elements or programs necessary to carry out the plan, including, without limitation:

(a) The construction of natural gas pipelines necessary for the operation of any new natural gas-fired electric generating plants included in the plan;

(b) Entering into contracts for the transportation of natural gas necessary for the operation of any natural gas-fired electric generating plants included in the plan; and

(c) The construction of transmission lines and related infrastructure necessary for the operation or interconnection of any electric generating plants included in the plan.

Sec. 8. (Deleted by amendment.)

Sec. 9. *An electric utility shall, upon the completion of construction or acquisition of any electric generating plant or other facility constructed or acquired pursuant to an emissions reduction and capacity replacement plan accepted by the Commission pursuant to NRS 704.751, begin recording in a regulatory asset, with carrying charges, an amount that reflects a return on the electric utility's investment in the facility, depreciation of the utility's investment in the facility and the cost of operating and maintaining the facility.*

Sec. 10. 1. *To ensure the remediation and, when possible, the reuse of any site used for the production of electricity from a coal-fired electric generating plant in this State, the Division of Environmental Protection of the State Department of Conservation and Natural Resources has exclusive jurisdiction to supervise and regulate the remediation of such sites, including, without limitation, exclusive authority to regulate and supervise the remediation of surface water and groundwater and solid-waste disposal operations located at such a site.*

2. The Division of Environmental Protection has exclusive authority to regulate emissions from any electric generating plant constructed on a site previously used for the production of electricity from a coal-fired electric generating plant.

Sec. 11. *If, in any general rate proceeding filed by an electric utility before June 1, 2018, the utility includes a request for recovery of any amount related to the implementation of an emissions reduction and capacity replacement plan and recovery*

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of such an amount would result in an increase in the electric utility's total revenue requirement of more than 5 percent, the utility must propose a method or mechanism by which such excess may be mitigated. The Commission may accept or reject such a rate method or mechanism. If the mitigation method or mechanism is approved by the Commission, the utility shall record any deferred revenue in a regulatory asset account and may calculate carrying charges on the unamortized balance of the regulatory asset.

Sec. 12. 1. *An electric utility shall file with the Commission an amendment to the utility's emissions reduction and capacity replacement plan each time the utility requests approval and acceptance by the Commission of any contract with a new renewable energy facility as the result of a request for proposals pursuant to the current emissions reduction and capacity replacement plan. The Commission may approve and accept the renewable energy facility if the Commission determines that:*

(a) The facility is a renewable energy system as defined in NRS 704.7815; and

(b) The terms and conditions of the contract are just and reasonable and satisfy the capacity requirements set forth in subsection 2 of section 7 of this act.

2. In considering a contract pursuant to subsection 1, the Commission shall, in addition to considering the cost to customers of the electric utility, give consideration to those contracts or renewable energy facilities that will provide:

(a) The greatest economic benefit to this State;

(b) The greatest opportunity for the creation of new jobs in this State; and

(c) The best value to customers of the electric utility.

Sec. 12.5. *If the Commission deems inadequate any portion of an emissions reduction and capacity replacement plan or any amendment to the plan, the Commission may recommend to the electric utility a modification of that portion of the plan or amendment, and the electric utility may:*

1. Accept the modification; or

2. Withdraw the proposed plan or amendment.

Sec. 13. *The Commission shall adopt any regulations necessary to carry out the provisions of sections 2 to 13, inclusive, of this act.*

Sec. 14. (Deleted by amendment.)

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Sec. 15. NRS 704.110 is hereby amended to read as follows:

704.110 Except as otherwise provided in NRS 704.075 and 704.68861 to 704.68887, inclusive, or as may otherwise be provided by the Commission pursuant to NRS 704.095 or 704.097:

1. If a public utility files with the Commission an application to make changes in any schedule, including, without limitation, changes that will result in a discontinuance, modification or restriction of service, the Commission shall investigate the propriety of the proposed changes to determine whether to approve or disapprove the proposed changes. If an electric utility files such an application and the application is a general rate application or an annual deferred energy accounting adjustment application, the Consumer's Advocate shall be deemed a party of record.
 2. Except as otherwise provided in subsection 3, if a public utility files with the Commission an application to make changes in any schedule, the Commission shall, not later than 210 days after the date on which the application is filed, issue a written order approving or disapproving, in whole or in part, the proposed changes.
 3. If a public utility files with the Commission a general rate application, the public utility shall submit with its application a statement showing the recorded results of revenues, expenses, investments and costs of capital for its most recent 12 months for which data were available when the application was prepared. Except as otherwise provided in subsection 4, in determining whether to approve or disapprove any increased rates, the Commission shall consider evidence in support of the increased rates based upon actual recorded results of operations for the same 12 months, adjusted for increased revenues, any increased investment in facilities, increased expenses for depreciation, certain other operating expenses as approved by the Commission and changes in the costs of securities which are known and are measurable with reasonable accuracy at the time of filing and which will become effective within 6 months after the last month of those 12 months, but the public utility shall not place into effect any increased rates until the changes have been experienced and certified by the public utility to the Commission and the Commission has approved the increased rates. The Commission shall also consider evidence supporting expenses for depreciation, calculated on an annual basis, applicable to major components of the public utility's plant placed into service during the recorded test period or the period for certification as set forth in the application. Adjustments to revenues, operating expenses and costs of securities
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must be calculated on an annual basis. Within 90 days after the date on which the certification required by this subsection is filed with the Commission, or within the period set forth in subsection 2, whichever time is longer, the Commission shall make such order in reference to the increased rates as is required by this chapter. The following public utilities shall each file a general rate application pursuant to this subsection based on the following schedule:

(a) An electric utility that primarily serves less densely populated counties shall file a general rate application not later than 5 p.m. on or before the first Monday in June 2010, and at least once every 36 months thereafter.

(b) An electric utility that primarily serves densely populated counties shall file a general rate application not later than 5 p.m. on or before the first Monday in June 2011, and at least once every 36 months thereafter.

(c) A public utility that furnishes water for municipal, industrial or domestic purposes or services for the disposal of sewage, or both, which had an annual gross operating revenue of \$2,000,000 or more for at least 1 year during the immediately preceding 3 years and which had not filed a general rate application with the Commission on or after July 1, 2005, shall file a general rate application on or before June 30, 2008, and at least once every 36 months thereafter unless waived by the Commission pursuant to standards adopted by regulation of the Commission. If a public utility furnishes both water and services for the disposal of sewage, its annual gross operating revenue for each service must be considered separately for determining whether the public utility meets the requirements of this paragraph for either service.

(d) A public utility that furnishes water for municipal, industrial or domestic purposes or services for the disposal of sewage, or both, which had an annual gross operating revenue of \$2,000,000 or more for at least 1 year during the immediately preceding 3 years and which had filed a general rate application with the Commission on or after July 1, 2005, shall file a general rate application on or before June 30, 2009, and at least once every 36 months thereafter unless waived by the Commission pursuant to standards adopted by regulation of the Commission. If a public utility furnishes both water and services for the disposal of sewage, its annual gross operating revenue for each service must be considered separately for determining whether the public utility meets the requirements of this paragraph for either service.

□ The Commission shall adopt regulations setting forth standards for waivers pursuant to paragraphs (c) and (d) and for including the

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costs incurred by the public utility in preparing and presenting the general rate application before the effective date of any change in rates.

4. In addition to submitting the statement required pursuant to subsection 3, a public utility may submit with its general rate application a statement showing the effects, on an annualized basis, of all expected changes in circumstances. If such a statement is filed, it must include all increases and decreases in revenue and expenses which may occur within 210 days after the date on which its general rate application is filed with the Commission if such expected changes in circumstances are reasonably known and are measurable with reasonable accuracy. If a public utility submits such a statement, the public utility has the burden of proving that the expected changes in circumstances set forth in the statement are reasonably known and are measurable with reasonable accuracy. The Commission shall consider expected changes in circumstances to be reasonably known and measurable with reasonable accuracy if the expected changes in circumstances consist of specific and identifiable events or programs rather than general trends, patterns or developments, have an objectively high probability of occurring to the degree, in the amount and at the time expected, are primarily measurable by recorded or verifiable revenues and expenses and are easily and objectively calculated, with the calculation of the expected changes relying only secondarily on estimates, forecasts, projections or budgets. If the Commission determines that the public utility has met its burden of proof:

(a) The Commission shall consider the statement submitted pursuant to this subsection and evidence relevant to the statement, including all reasonable projected or forecasted offsets in revenue and expenses that are directly attributable to or associated with the expected changes in circumstances under consideration, in addition to the statement required pursuant to subsection 3 as evidence in establishing just and reasonable rates for the public utility; and

(b) The public utility is not required to file with the Commission the certification that would otherwise be required pursuant to subsection 3.

5. If a public utility files with the Commission an application to make changes in any schedule and the Commission does not issue a final written order regarding the proposed changes within the time required by this section, the proposed changes shall be deemed to be approved by the Commission.

6. If a public utility files with the Commission a general rate application, the public utility shall not file with the Commission

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another general rate application until all pending general rate applications filed by that public utility have been decided by the Commission unless, after application and hearing, the Commission determines that a substantial financial emergency would exist if the public utility is not permitted to file another general rate application sooner. The provisions of this subsection do not prohibit the public utility from filing with the Commission, while a general rate application is pending, an application to recover the increased cost of purchased fuel, purchased power, or natural gas purchased for resale pursuant to subsection 7, a quarterly rate adjustment pursuant to subsection 8 or 10, any information relating to deferred accounting requirements pursuant to NRS 704.185 or an annual deferred energy accounting adjustment application pursuant to NRS 704.187, if the public utility is otherwise authorized to so file by those provisions.

7. A public utility may file an application to recover the increased cost of purchased fuel, purchased power, or natural gas purchased for resale once every 30 days. The provisions of this subsection do not apply to:

(a) An electric utility which is required to adjust its rates on a quarterly basis pursuant to subsection 10; or

(b) A public utility which purchases natural gas for resale and which adjusts its rates on a quarterly basis pursuant to subsection 8.

8. A public utility which purchases natural gas for resale must request approval from the Commission to adjust its rates on a quarterly basis between annual rate adjustment applications based on changes in the public utility's recorded costs of natural gas purchased for resale. A public utility which purchases natural gas for resale and which adjusts its rates on a quarterly basis may request approval from the Commission to make quarterly adjustments to its deferred energy accounting adjustment. The Commission shall approve or deny such a request not later than 120 days after the application is filed with the Commission. The Commission may approve the request if the Commission finds that approval of the request is in the public interest. If the Commission approves a request to make quarterly adjustments to the deferred energy accounting adjustment of a public utility pursuant to this subsection, any quarterly adjustment to the deferred energy accounting adjustment must not exceed 2.5 cents per therm of natural gas. If the balance of the public utility's deferred account varies by less than 5 percent from the public utility's annual recorded costs of natural gas which are used to calculate quarterly

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rate adjustments, the deferred energy accounting adjustment must be set to zero cents per therm of natural gas.

9. If the Commission approves a request to make any rate adjustments on a quarterly basis pursuant to subsection 8:

(a) The public utility shall file written notice with the Commission before the public utility makes a quarterly rate adjustment. A quarterly rate adjustment is not subject to the requirements for notice and a hearing pursuant to NRS 703.320 or the requirements for a consumer session pursuant to subsection 1 of NRS 704.069.

(b) The public utility shall provide written notice of each quarterly rate adjustment to its customers by including the written notice with a customer's regular monthly bill. The public utility shall begin providing such written notice to its customers not later than 30 days after the date on which the public utility files its written notice with the Commission pursuant to paragraph (a). The written notice that is included with a customer's regular monthly bill:

(1) Must be printed separately on fluorescent-colored paper and must not be attached to the pages of the bill; and

(2) Must include the following:

(I) The total amount of the increase or decrease in the public utility's revenues from the rate adjustment, stated in dollars and as a percentage;

(II) The amount of the monthly increase or decrease in charges for each class of customer or class of service, stated in dollars and as a percentage;

(III) A statement that customers may send written comments or protests regarding the rate adjustment to the Commission;

(IV) A statement that the transactions and recorded costs of natural gas which are the basis for any quarterly rate adjustment will be reviewed for reasonableness and prudence in the next proceeding held by the Commission to review the annual rate adjustment application pursuant to paragraph (d); and

(V) Any other information required by the Commission.

(c) The public utility shall file an annual rate adjustment application with the Commission. The annual rate adjustment application is subject to the requirements for notice and a hearing pursuant to NRS 703.320 and the requirements for a consumer session pursuant to subsection 1 of NRS 704.069.

(d) The proceeding regarding the annual rate adjustment application must include a review of each quarterly rate adjustment

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and the transactions and recorded costs of natural gas included in each quarterly filing and the annual rate adjustment application. There is no presumption of reasonableness or prudence for any quarterly rate adjustment or for any transactions or recorded costs of natural gas included in any quarterly rate adjustment or the annual rate adjustment application, and the public utility has the burden of proving reasonableness and prudence in the proceeding.

(e) The Commission shall not allow the public utility to recover any recorded costs of natural gas which were the result of any practice or transaction that was unreasonable or was undertaken, managed or performed imprudently by the public utility, and the Commission shall order the public utility to adjust its rates if the Commission determines that any recorded costs of natural gas included in any quarterly rate adjustment or the annual rate adjustment application were not reasonable or prudent.

10. An electric utility shall adjust its rates on a quarterly basis based on changes in the electric utility's recorded costs of purchased fuel or purchased power. In addition to adjusting its rates on a quarterly basis, an electric utility may request approval from the Commission to make quarterly adjustments to its deferred energy accounting adjustment. The Commission shall approve or deny such a request not later than 120 days after the application is filed with the Commission. The Commission may approve the request if the Commission finds that approval of the request is in the public interest. If the Commission approves a request to make quarterly adjustments to the deferred energy accounting adjustment of an electric utility pursuant to this subsection, any quarterly adjustment to the deferred energy accounting adjustment must not exceed 0.25 cents per kilowatt-hour of electricity. If the balance of the electric utility's deferred account varies by less than 5 percent from the electric utility's annual recorded costs for purchased fuel or purchased power which are used to calculate quarterly rate adjustments, the deferred energy accounting adjustment must be set to zero cents per kilowatt-hour of electricity.

11. A quarterly rate adjustment filed pursuant to subsection 10 is subject to the following requirements:

(a) The electric utility shall file written notice with the Commission on or before August 15, 2007, and every quarter thereafter of the quarterly rate adjustment to be made by the electric utility for the following quarter. The first quarterly rate adjustment by the electric utility will take effect on October 1, 2007, and each subsequent quarterly rate adjustment will take effect every quarter thereafter. The first quarterly adjustment to a deferred energy

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accounting adjustment must be made pursuant to an order issued by the Commission approving the application of an electric utility to make quarterly adjustments to its deferred energy accounting adjustment. A quarterly rate adjustment is not subject to the requirements for notice and a hearing pursuant to NRS 703.320 or the requirements for a consumer session pursuant to subsection 1 of NRS 704.069.

(b) The electric utility shall provide written notice of each quarterly rate adjustment to its customers by including the written notice with a customer's regular monthly bill. The electric utility shall begin providing such written notice to its customers not later than 30 days after the date on which the electric utility files a written notice with the Commission pursuant to paragraph (a). The written notice that is included with a customer's regular monthly bill:

(1) Must be printed separately on fluorescent-colored paper and must not be attached to the pages of the bill; and

(2) Must include the following:

(I) The total amount of the increase or decrease in the electric utility's revenues from the rate adjustment, stated in dollars and as a percentage;

(II) The amount of the monthly increase or decrease in charges for each class of customer or class of service, stated in dollars and as a percentage;

(III) A statement that customers may send written comments or protests regarding the rate adjustment to the Commission;

(IV) A statement that the transactions and recorded costs of purchased fuel or purchased power which are the basis for any quarterly rate adjustment will be reviewed for reasonableness and prudence in the next proceeding held by the Commission to review the annual deferred energy accounting adjustment application pursuant to paragraph (d); and

(V) Any other information required by the Commission.

(c) The electric utility shall file an annual deferred energy accounting adjustment application pursuant to NRS 704.187 with the Commission. The annual deferred energy accounting adjustment application is subject to the requirements for notice and a hearing pursuant to NRS 703.320 and the requirements for a consumer session pursuant to subsection 1 of NRS 704.069.

(d) The proceeding regarding the annual deferred energy accounting adjustment application must include a review of each quarterly rate adjustment and the transactions and recorded costs of purchased fuel and purchased power included in each quarterly

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filing and the annual deferred energy accounting adjustment application. There is no presumption of reasonableness or prudence for any quarterly rate adjustment or for any transactions or recorded costs of purchased fuel and purchased power included in any quarterly rate adjustment or the annual deferred energy accounting adjustment application, and the electric utility has the burden of proving reasonableness and prudence in the proceeding.

(e) The Commission shall not allow the electric utility to recover any recorded costs of purchased fuel and purchased power which were the result of any practice or transaction that was unreasonable or was undertaken, managed or performed imprudently by the electric utility, and the Commission shall order the electric utility to adjust its rates if the Commission determines that any recorded costs of purchased fuel and purchased power included in any quarterly rate adjustment or the annual deferred energy accounting adjustment application were not reasonable or prudent.

12. If an electric utility files an annual deferred energy accounting adjustment application pursuant to subsection 11 and NRS 704.187 while a general rate application is pending, the electric utility shall:

(a) Submit with its annual deferred energy accounting adjustment application information relating to the cost of service and rate design; and

(b) Supplement its general rate application with the same information, if such information was not submitted with the general rate application.

13. A utility facility identified in a 3-year plan submitted pursuant to NRS 704.741 and accepted by the Commission for acquisition or construction pursuant to NRS 704.751 and the regulations adopted pursuant thereto , *or the retirement or elimination of a utility facility identified in an emissions reduction and capacity replacement plan submitted pursuant to section 7 of this act and accepted by the Commission for retirement or elimination pursuant to NRS 704.751 and the regulations adopted pursuant thereto*, shall be deemed to be a prudent investment. The utility may recover all just and reasonable costs of planning and constructing , *or retiring or eliminating, as applicable*, such a facility.

14. In regard to any rate or schedule approved or disapproved pursuant to this section, the Commission may, after a hearing:

(a) Upon the request of the utility, approve a new rate but delay the implementation of that new rate:

(1) Until a date determined by the Commission; and

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(2) Under conditions as determined by the Commission, including, without limitation, a requirement that interest charges be included in the collection of the new rate; and

(b) Authorize a utility to implement a reduced rate for low income residential customers.

15. The Commission may, upon request and for good cause shown, permit a public utility which purchases natural gas for resale or an electric utility to make a quarterly adjustment to its deferred energy accounting adjustment in excess of the maximum allowable adjustment pursuant to subsection 8 or 10.

16. A public utility which purchases natural gas for resale or an electric utility that makes quarterly adjustments to its deferred energy accounting adjustment pursuant to subsection 8 or 10 may submit to the Commission for approval an application to discontinue making quarterly adjustments to its deferred energy accounting adjustment and to subsequently make annual adjustments to its deferred energy accounting adjustment. The Commission may approve an application submitted pursuant to this subsection if the Commission finds that approval of the application is in the public interest.

17. As used in this section:

(a) "Deferred energy accounting adjustment" means the rate of a public utility which purchases natural gas for resale or an electric utility that is calculated by dividing the balance of a deferred account during a specified period by the total therms or kilowatt hours which have been sold in the geographical area to which the rate applies during the specified period.

(b) "Electric utility" has the meaning ascribed to it in NRS 704.187.

(c) "Electric utility that primarily serves densely populated counties" means an electric utility that, with regard to the provision of electric service, derives more of its annual gross operating revenue in this State from customers located in counties whose population is 700,000 or more than it does from customers located in counties whose population is less than 700,000.

(d) "Electric utility that primarily serves less densely populated counties" means an electric utility that, with regard to the provision of electric service, derives more of its annual gross operating revenue in this State from customers located in counties whose population is less than 700,000 than it does from customers located in counties whose population is 700,000 or more.

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Sec. 16. NRS 704.746 is hereby amended to read as follows:

704.746 1. After a utility has filed its plan pursuant to NRS 704.741, the Commission shall convene a public hearing on the adequacy of the plan.

2. The Commission shall determine the parties to the public hearing on the adequacy of the plan. A person or governmental entity may petition the Commission for leave to intervene as a party. The Commission must grant a petition to intervene as a party in the hearing if the person or entity has relevant material evidence to provide concerning the adequacy of the plan. The Commission may limit participation of an intervener in the hearing to avoid duplication and may prohibit continued participation in the hearing by an intervener if the Commission determines that continued participation will unduly broaden the issues, will not provide additional relevant material evidence or is not necessary to further the public interest.

3. In addition to any party to the hearing, any interested person may make comments to the Commission regarding the contents and adequacy of the plan.

4. After the hearing, the Commission shall determine whether:

(a) The forecast requirements of the utility are based on substantially accurate data and an adequate method of forecasting.

(b) The plan identifies and takes into account any present and projected reductions in the demand for energy that may result from measures to improve energy efficiency in the industrial, commercial, residential and energy producing sectors of the area being served.

(c) The plan adequately demonstrates the economic, environmental and other benefits to this State and to the customers of the utility, associated with the following possible measures and sources of supply:

(1) Improvements in energy efficiency;

(2) Pooling of power;

(3) Purchases of power from neighboring states or countries;

(4) Facilities that operate on solar or geothermal energy or wind;

(5) Facilities that operate on the principle of cogeneration or hydrogeneration;

(6) Other generation facilities; and

(7) Other transmission facilities.

5. The Commission may give preference to the measures and sources of supply set forth in paragraph (c) of subsection 4 that:

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- (a) Provide the greatest economic and environmental benefits to the State;
 - (b) Are consistent with the provisions of this section; **[and]**
 - (c) Provide levels of service that are adequate and reliable **[.]** ;
- and**
- (d) Provide the greatest opportunity for the creation of new jobs in this State.***

6. The Commission shall:

- (a) Adopt regulations which determine the level of preference to be given to those measures and sources of supply; and
- (b) Consider the value to the public of using water efficiently when it is determining those preferences.

7. The Commission shall:

- (a) Consider the level of financial commitment from developers of renewable energy projects in each renewable energy zone, as designated pursuant to subsection 2 of NRS 704.741; and
- (b) Adopt regulations establishing a process for considering such commitments including, without limitation, contracts for the sale of energy, leases of land and mineral rights, cash deposits and letters of credit.

8. The Commission shall, after a hearing, review and accept or modify an emissions reduction and capacity replacement plan which includes each element required by section 7 of this act. In considering whether to accept or modify an emissions reduction and capacity replacement plan, the Commission shall consider:

- (a) The cost to the customers of the electric utility to implement the plan;***
- (b) Whether the plan provides the greatest economic benefit to this State;***
- (c) Whether the plan provides the greatest opportunities for the creation of new jobs in this State; and***
- (d) Whether the plan represents the best value to the customers of the electric utility.***

Sec. 17. NRS 704.751 is hereby amended to read as follows:

704.751 1. After a utility has filed the plan required pursuant to NRS 704.741, the Commission shall issue an order accepting the plan as filed or specifying any portions of the plan it deems to be inadequate:

- (a) Within 135 days for any portion of the plan relating to the energy supply plan for the utility for the 3 years covered by the plan; and
- (b) Within 180 days for all portions of the plan not described in paragraph (a).

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2. If a utility files an amendment to a plan, the Commission shall issue an order accepting the amendment as filed or specifying any portions of the amendment it deems to be inadequate [within] :
(a) *Within* 135 days [of] *after* the filing of the amendment [.] ;

or

(b) *Within 180 days after the filing of the amendment for all portions of the amendment which contain an element of the emissions reduction and capacity replacement plan.*

3. All prudent and reasonable expenditures made to develop the utility's plan, including environmental, engineering and other studies, must be recovered from the rates charged to the utility's customers.

4. The Commission may accept a transmission plan submitted pursuant to subsection 4 of NRS 704.741 for a renewable energy zone if the Commission determines that the construction or expansion of transmission facilities would facilitate the utility meeting the portfolio standard, as defined in NRS 704.7805.

5. The Commission shall adopt regulations establishing the criteria for determining the adequacy of a transmission plan submitted pursuant to subsection 4 of NRS 704.741.

6. Any order issued by the Commission accepting an element of an emissions reduction and capacity replacement plan must include provisions authorizing the electric utility to construct or acquire and own electric generating plants necessary to meet the capacity amounts approved in, and carry out the provisions of, the plan. As used in this subsection, "capacity" means an amount of firm electric generating capacity used by the electric utility for the purpose of preparing a plan filed with the Commission pursuant to NRS 704.736 to 704.754, inclusive.

Sec. 18. NRS 704.7588 is hereby amended to read as follows:

704.7588 Except as otherwise provided in NRS 704.7591 [.]

and sections 2 to 13, inclusive, of this act:

1. Before July 1, 2003, an electric utility shall not dispose of a generation asset.

2. On or after July 1, 2003, an electric utility shall not dispose of a generation asset unless, before the disposal, the Commission approves the disposal by a written order issued in accordance with the provisions of this section.

3. Not sooner than January 1, 2003, an electric utility may file with the Commission an application to dispose of a generation asset on or after July 1, 2003. If an electric utility files such an application, the Commission shall not approve the application unless the Commission finds that the disposal of the generation asset

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will be in the public interest. The Commission shall issue a written order approving or disapproving the application. The Commission may base its approval of the application upon such terms, conditions or modifications as the Commission deems appropriate.

4. If an electric utility files an application to dispose of a generation asset, the Consumer's Advocate shall be deemed a party of record.

5. If the Commission approves an application to dispose of a generation asset before July 1, 2003, the order of the Commission approving the application:

(a) May not become effective sooner than July 1, 2003;

(b) Does not create any vested rights before the effective date of the order; and

(c) For the purposes of NRS 703.373, shall be deemed a final decision on the date on which the order is issued by the Commission.

Sec. 19. NRS 444.495 is hereby amended to read as follows:

444.495 "Solid waste management authority" means:

1. ~~[The]~~ *Except as otherwise provided in subsection 2, the* district board of health in any area in which a health district has been created pursuant to NRS 439.362 or 439.370 and in any area over which the board has authority pursuant to an interlocal agreement, if the board has adopted all regulations that are necessary to carry out the provisions of NRS 444.440 to 444.620, inclusive.

2. In all other areas of the State ~~[.]~~ *and pursuant to section 10 of this act, at any site previously used for the production of electricity from a coal-fired electric generating plant in this State,* the Division of Environmental Protection of the State Department of Conservation and Natural Resources.

Sec. 20. NRS 445B.500 is hereby amended to read as follows:

445B.500 1. Except as otherwise provided in this section and in NRS 445B.310 ~~[.]~~ *and section 10 of this act:*

(a) The district board of health, county board of health or board of county commissioners in each county whose population is 100,000 or more shall establish a program for the control of air pollution and administer the program within its jurisdiction unless superseded.

(b) The program:

(1) Must include, without limitation, standards for the control of emissions, emergency procedures and variance procedures established by ordinance or local regulation which are equivalent to or stricter than those established by statute or state regulation;

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(2) May, in a county whose population is 700,000 or more, include requirements for the creation, receipt and exchange for consideration of credits to reduce and control air contaminants in accordance with NRS 445B.508; and

(3) Must provide for adequate administration, enforcement, financing and staff.

(c) The district board of health, county board of health or board of county commissioners is designated as the air pollution control agency of the county for the purposes of NRS 445B.100 to 445B.640, inclusive, and the Federal Act insofar as it pertains to local programs, and that agency is authorized to take all action necessary to secure for the county the benefits of the Federal Act.

(d) Powers and responsibilities provided for in NRS 445B.210, 445B.240 to 445B.470, inclusive, 445B.560, 445B.570, 445B.580 and 445B.640 are binding upon and inure to the benefit of local air pollution control authorities within their jurisdiction.

2. The local air pollution control board shall carry out all provisions of NRS 445B.215 with the exception that notices of public hearings must be given in any newspaper, qualified pursuant to the provisions of chapter 238 of NRS, once a week for 3 weeks. The notice must specify with particularity the reasons for the proposed regulations and provide other informative details. NRS 445B.215 does not apply to the adoption of existing regulations upon transfer of authority as provided in NRS 445B.610.

3. In a county whose population is 700,000 or more, the local air pollution control board may delegate to an independent hearing officer or hearing board its authority to determine violations and levy administrative penalties for violations of the provisions of NRS 445B.100 to 445B.450, inclusive, and 445B.500 to 445B.640, inclusive, or any regulation adopted pursuant to those sections. If such a delegation is made, 17.5 percent of any penalty collected must be deposited in the county treasury in an account to be administered by the local air pollution control board to a maximum of \$17,500 per year. The money in the account may only be used to defray the administrative expenses incurred by the local air pollution control board in enforcing the provisions of NRS 445B.100 to 445B.640, inclusive. The remainder of the penalty must be deposited in the county school district fund of the county where the violation occurred and must be accounted for separately in the fund. A school district may spend the money received pursuant to this section only in accordance with an annual spending plan that is approved by the local air pollution control board and shall submit an annual report to that board detailing the expenditures of the school

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district under the plan. A local air pollution control board shall approve an annual spending plan if the proposed expenditures set forth in the plan are reasonable and limited to:

- (a) Programs of education on topics relating to air quality; and
- (b) Projects to improve air quality, including, without limitation, the purchase and installation of equipment to retrofit school buses of the school district to use biodiesel, compressed natural gas or a similar fuel formulated to reduce emissions from the amount of emissions produced by the use of traditional fuels such as gasoline and diesel fuel,

☐ which are consistent with the state implementation plan adopted by this State pursuant to 42 U.S.C. §§ 7410 and 7502.

4. Any county whose population is less than 100,000 or any city may meet the requirements of this section for administration and enforcement through cooperative or interlocal agreement with one or more other counties, or through agreement with the State, or may establish its own program for the control of air pollution. If the county establishes such a program, it is subject to the approval of the Commission.

5. No district board of health, county board of health or board of county commissioners may adopt any regulation or establish a compliance schedule, variance order or other enforcement action relating to the control of emissions from plants which generate electricity by using steam produced by the burning of fossil fuel.

6. As used in this section, "plants which generate electricity by using steam produced by the burning of fossil fuel" means plants that burn fossil fuels in a boiler to produce steam for the production of electricity. The term does not include any plant which uses technology for a simple or combined cycle combustion turbine, regardless of whether the plant includes duct burners.

Sec. 21. (Deleted by amendment.)

Sec. 21.5. The amendatory provisions of this act do not prohibit an electric utility, as defined in section 4 of this act, from requesting pursuant to NRS 704.736 to 704.751, inclusive, or the Public Utilities Commission of Nevada from authorizing, the issuance by the electric utility of requests for proposals for renewable energy facilities in addition to any requests for proposals necessary to carry out the provisions of paragraph (b) of subsection 2 of section 7 of this act, but the electric utility must demonstrate that the issuance of any such request for proposals for renewable energy facilities complies with the requirements of NRS 704.7801 to 704.7828, inclusive.

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Sec. 22. This act becomes effective upon passage and approval.

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Appendix D

AB 239

Assembly Bill No. 239—Assemblywoman Kirkpatrick
CHAPTER.....

AN ACT relating to energy; authorizing the Director of the Office of Energy to charge and collect certain fees from applicants for certain energy-related tax incentives; revising provisions relating to eligibility for and approval of applicants for certain energy-related tax incentives; revising permissible uses of money in the Renewable Energy Fund; revising provisions relating to land use planning and the granting by local governments of permits for the construction of certain utility projects; establishing the Economic Development Electric Rate Rider Program; requiring the Public Utilities Commission of Nevada, in consultation with the Office of Economic Development, to administer the Program; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Existing law authorizes the Director of the Office of Energy to grant partial abatements of certain taxes to eligible applicants. (NRS 701A.110, 701A.115, 701A.360, 701A.390) **Sections 1, 2 and 7** of this bill authorize the Director to charge and collect a fee from each applicant in an amount not to exceed the actual cost to the Director of processing the application. **Section 3** of this bill removes from the list of persons who are eligible for a partial abatement of certain taxes a person who operates a facility for the transmission of electricity generated from renewable energy or geothermal resources. **Section 4** of this bill revises the authority of a board of county commissioners relating to the approval of an application for a partial abatement of taxes submitted by a person who operates a facility for the generation of electricity from renewable energy. **Section 4** additionally revises provisions governing the wages and benefits that must be provided to employees working on the construction of such a facility. **Section 6** of this bill removes the requirement that a certain percentage of the property taxes collected from a person who is receiving a partial abatement of taxes which would otherwise be allocated and distributed to local governments be deposited in the Renewable Energy Fund.

Section 7.5 of this bill revises the permissible uses by the Director of money in the Renewable Energy Fund.

Sections 10-21 of this bill establish the Economic Development Electric Rate Rider Program, a 5-year program to encourage the location or relocation of new commercial and industrial businesses in this State by providing discounted rates for electricity to eligible participants. **Section 14** requires the Public Utilities Commission of Nevada, in consultation with the Office of Economic Development, to administer the Program. **Section 14** additionally requires the Commission to establish an amount of electric generating capacity, not to exceed 50 megawatts, that each electric utility in this State is required to set aside for allocation pursuant to the Program. **Section 15** authorizes a person who, in anticipation of the incentive provided pursuant to the Program, locates or intends to locate a new commercial or industrial business in this State to submit an application to the Office of Economic Development to participate in the Program. **Section 15** requires an applicant to obtain initial approval and a letter of eligibility from the Office. Once an applicant has obtained initial approval and a letter of eligibility from the Office, **section 16**

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requires the Commission to establish the discounted rates for electricity available to the applicant and to establish and approve the terms of the contract which the applicant must enter into with an electric utility. **Section 17** provides that an electric utility is required to recover the amount of the discount provided to a participant from the deferred energy account of the electric utility. **Section 21** requires the Commission to prepare and submit a report to the Legislature concerning the Program.

Section 21.5 of this bill provides that a public utility is not required to include a utility facility, the construction of which has been approved by the Commission, in the integrated resource plan of the utility if the facility is not intended to serve customers in this State and the cost of the facility will not be included in the rates charged by the utility.

Existing law requires a person who wishes to obtain a permit for a utility facility to file certain applications with the Commission if a federal agency is required to conduct an environmental analysis of the proposed utility facility. (NRS 704.870) **Sections 23 and 24** of this bill require such a person to file a notice with the Commission not later than the date on which the person files with the appropriate federal agency.

Sections 27.1-27.9 of this bill revise provisions relating to land use permits for the construction of certain utility projects. **Section 27.5** requires a planning commission or governing body that is required to prepare and adopt a master plan to include in the master plan an aboveground utility plan. **Section 27.7** requires each governing body of a local government to establish a process for the issuance of: (1) permits for the construction of aboveground utility projects; (2) special use permits for the construction of aboveground utility projects which are to be constructed outside of the corridors identified in the master plan; and (3) special use permits for the construction of renewable energy generation projects with a nameplate capacity of 10 megawatts or more. **Section 27.9** provides that an applicant for such a special use permit may appeal certain decisions of the planning commission or governing body concerning the application to the Public Utilities Commission of Nevada.

EXPLANATION – Matter in ***bolded italics*** is new; matter between brackets ***[omitted material]*** is material to be omitted.

THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

Section 1. NRS 701A.110 is hereby amended to read as follows:

701A.110 1. Except as otherwise provided in this section, the Director, in consultation with the Office of Economic Development, shall grant a partial abatement from the portion of the taxes imposed pursuant to chapter 361 of NRS, other than any taxes imposed for public education, on a building or other structure that is determined to meet the equivalent of the silver level or higher by an independent contractor authorized to make that determination in accordance with the Green Building Rating System adopted by the Director pursuant to NRS 701A.100, if:

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(a) No funding is provided by any governmental entity in this State for the acquisition, design or construction of the building or

other structure or for the acquisition of any land therefor. For the purposes of this paragraph:

(1) Private activity bonds must not be considered funding provided by a governmental entity.

(2) The term "private activity bond" has the meaning ascribed to it in 26 U.S.C. § 141.

(b) The owner of the property:

(1) Submits an application for the partial abatement to the Director. If such an application is submitted for a project that has not been completed on the date of that submission and there is a significant change in the scope of the project after that date, the application must be amended to include the change or changes.

(2) Except as otherwise provided in this subparagraph, provides to the Director, within 48 months after applying for the partial abatement, proof that the building or other structure meets the equivalent of the silver level or higher, as determined by an independent contractor authorized to make that determination in accordance with the Green Building Rating System adopted by the Director pursuant to NRS 701A.100. The Director may, for good cause shown, extend the period for providing such proof.

(3) Files a copy of each application and amended application submitted to the Director pursuant to subparagraph (1) with the:

(I) Chief of the Budget Division of the Department of Administration;

(II) Department of Taxation;

(III) County assessor;

(IV) County treasurer;

(V) Office of Economic Development;

(VI) Board of county commissioners; and

(VII) City manager and city council, if any.

(c) The abatement is consistent with the State Plan for Economic Development developed by the Executive Director of the Office of Economic Development pursuant to subsection 2 of NRS 231.053.

2. As soon as practicable after the Director receives the application and proof required by subsection 1, the Director, in consultation with the Office of Economic Development, shall determine whether the building or other structure is eligible for the abatement and, if so, forward a certificate of eligibility for the abatement to the:

(a) Department of Taxation;

(b) County assessor;

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(c) County treasurer; and

(d) Office of Economic Development.

3. The Director may, with the assistance of the Chief of the

Budget Division and the Department of Taxation, publish a fiscal note that indicates an estimate of the fiscal impact of the partial abatement on the State and on each affected local government. If the Director publishes a fiscal note that estimates the fiscal impact of the partial abatement on local government, the Director shall forward a copy of the fiscal note to each affected local government. As soon as practicable after receiving a copy of a certificate of eligibility pursuant to subsection 2, the Department of Taxation shall forward a copy of the certificate to each affected local government.

4. The partial abatement:

(a) Must be for a duration of not more than 10 years and in an annual amount that equals, for a building or other structure that meets the equivalent of:

(1) The silver level, 25 percent of the portion of the taxes imposed pursuant to chapter 361 of NRS, other than any taxes imposed for public education, that would otherwise be payable for the building or other structure, excluding the associated land;

(2) The gold level, 30 percent of the portion of the taxes imposed pursuant to chapter 361 of NRS, other than any taxes imposed for public education, that would otherwise be payable for the building or other structure, excluding the associated land; or

(3) The platinum level, 35 percent of the portion of the taxes imposed pursuant to chapter 361 of NRS, other than any taxes imposed for public education, that would otherwise be payable for the building or other structure, excluding the associated land.

(b) Does not apply during any period in which the owner of the building or other structure is receiving another abatement or exemption pursuant to this chapter or NRS 361.045 to 361.159, inclusive, from the taxes imposed pursuant to chapter 361 of NRS.

(c) Terminates upon any determination by the Director that the building or other structure has ceased to meet the equivalent of the silver level or higher. The Director shall provide notice and a reasonable opportunity to cure any noncompliance issues before making a determination that the building or other structure has ceased to meet that standard. The Director shall immediately provide notice of each determination of termination to the:

(1) Department of Taxation, who shall immediately notify each affected local government of the determination;

(2) County assessor;

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(3) County treasurer; and

(4) Office of Economic Development.

(d) Must not be for an existing building or structure that is renovated.

5. If a partial abatement terminates pursuant to paragraph (c) of subsection 4, the owner of the property to which the partial abatement applied shall repay to the county treasurer the amount of the exemption that was allowed pursuant to this section before the date of that termination. The owner shall, in addition to the amount of the exemption required to be paid pursuant to this subsection, pay interest on the amount due at the rate most recently established pursuant to NRS 99.040 for each month, or portion thereof, from the last day of the month following the period for which the payment would have been made had the partial abatement not been approved until the date of payment of the tax.

6. The Director, in consultation with the Office of Economic Development, shall adopt regulations:

(a) Establishing the qualifications and methods to determine eligibility for the abatement;

(b) Prescribing such forms as will ensure that all information and other documentation necessary to make an appropriate determination is filed with the Director; and

(c) Prescribing the criteria for determining when there is a significant change in the scope of a project for the purposes of subparagraph (1) of paragraph (b) of subsection 1,

□ and the Department of Taxation shall adopt such additional regulations as it determines to be appropriate to carry out the provisions of this section.

7. The Director shall:

(a) Cooperate with the Office of Economic Development in carrying out the provisions of this section; and

(b) Submit to the Office of Economic Development an annual report, at such a time and containing such information as the Office may require, regarding the partial abatements granted pursuant to this section.

8. ***The Director may charge and collect a fee from each applicant who submits an application for a partial abatement pursuant to this section. The amount of the fee must not exceed the actual cost to the Director for processing the application and evaluating the proof submitted by the applicant pursuant to subsection 1 and making the determination concerning eligibility for the partial abatement required by subsection 2.***

9. As used in this section:

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(a) “Building or other structure” does not include any building or other structure for which the principal use is as a residential dwelling for not more than four families.

(b) “Director” means the Director of the Office of Energy appointed pursuant to NRS 701.150.

(c) "Taxes imposed for public education" means:

(1) Any ad valorem tax authorized or required by chapter 387 of NRS;

(2) Any ad valorem tax authorized or required by chapter 350 of NRS for the obligations of a school district, including, without limitation, any ad valorem tax necessary to carry out the provisions of subsection 5 of NRS 350.020; and

(3) Any other ad valorem tax for which the proceeds thereof are dedicated to the public education of pupils in kindergarten through grade 12.

Sec. 2. NRS 701A.115 is hereby amended to read as follows:

701A.115 1. Except as otherwise provided in this section, the Director of the Office of Energy shall grant a partial abatement from the portion of taxes imposed pursuant to chapter 361 of NRS, other than any taxes imposed for public education, on an existing building or other structure which is renovated for use by a manufacturer if:

(a) The building or other structure is determined after the renovation to meet the equivalent of the silver level or higher by an independent contractor authorized to make that determination in accordance with the Green Building Rating System adopted by the Director pursuant to NRS 701A.100.

(b) The applicant:

(1) Is a manufacturer who intends to locate a new manufacturing business in this State;

(2) Employs at least 25 full-time employees at the new manufacturing business in this State during the entire period in which the applicant will receive the tax abatement; and

(3) The average hourly wage that will be paid by the manufacturer to its employees in this State is at least 100 percent of the average statewide hourly wage or the average countywide hourly wage, whichever is less, excluding management and administrative employees, as established by the Employment Security Division of the Department of Employment, Training and Rehabilitation on July 1 of each fiscal year.

(c) No funding is provided by any governmental entity in this State for the acquisition, design, construction or renovation of the building or other structure or for the acquisition of any land therefore. For the purpose of this paragraph:

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(1) Private activity bonds must not be considered funding provided by a governmental entity.

(2) The term "private activity bond" has the meaning ascribed to it in 26 U.S.C. § 141.

(d) The manufacturer:

(1) Submits an application for the abatement to the Director.

If such an application is submitted for a project that has not been completed on the date of that submission and there is a significant change in the scope of the project after that date, the application must be amended to include the change or changes.

(2) Except as otherwise provided in this subparagraph, provides to the Director, within 48 months after applying for the abatement, proof that the building or other structure meets the equivalent of the silver level or higher, as determined by an independent contractor authorized to make that determination in accordance with the Green Building Rating System adopted by the Director pursuant to NRS 701A.100. The Director may, for good cause shown, extend the period for providing such proof.

(3) Files a copy of each application and amended application submitted to the Director pursuant to subparagraph (1) with the:

(I) Chief of the Budget Division of the Department of Administration;

(II) Department of Taxation;

(III) County assessor;

(IV) County treasurer;

(V) Office of Economic Development;

(VI) Board of county commissioners; and

(VII) City manager and city council, if any.

2. As soon as practicable after the Director receives an application and proof required by subsection 1, the Director shall determine whether the building or other structure is eligible for the abatement and, if so, forward a certificate of eligibility for the abatement to the:

(a) Department of Taxation;

(b) County assessor;

(c) County treasurer; and

(d) Office of Economic Development.

3. As soon as practicable after receiving a copy of:

(a) An application pursuant to subparagraph (3) of paragraph (d) of subsection 1:

(1) The Chief of the Budget Division shall publish a fiscal note that indicates an estimate of the fiscal impact of the partial abatement on the State; and

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(2) The Department of Taxation shall publish a fiscal note that indicates an estimate of the fiscal impact of the partial abatement on each affected local government, and forward a copy of the fiscal note to each affected local government.

(b) A certificate of eligibility pursuant to subsection 2, the Department of Taxation shall forward a copy of the certificate to each affected local government.

4. The partial abatement:

(a) Must be for a duration not to exceed 1 year, and in an annual amount that equals, for a building or other structure that meets the equivalent of:

(1) The silver level, 25 percent of the portion of the taxes imposed pursuant to chapter 361 of NRS, other than any taxes imposed for public education, that would otherwise be payable for the building or other structure, excluding the associated land;

(2) The gold level, 30 percent of the portion of the taxes imposed pursuant to chapter 361 of NRS, other than any taxes imposed for public education, that would otherwise be payable for the building or other structure, excluding the associated land; or

(3) The platinum level, 35 percent of the portion of the taxes imposed pursuant to chapter 361 of NRS, other than any taxes imposed for public education, that would otherwise be payable for the building or other structure, excluding the associated land.

(b) Does not apply during any period in which the owner of the building or other structure is receiving another abatement or exemption pursuant to this chapter or NRS 361.045 to 361.159, inclusive, from the taxes imposed pursuant to chapter 361 of NRS.

(c) Terminates upon any determination by the Director that the building or other structure has ceased to meet the equivalent of the silver level or higher. The Director shall provide notice and a reasonable opportunity to cure any noncompliance issues before making a determination that the building or other structure has ceased to meet that standard. The Director shall immediately provide notice of each determination of termination to the:

(1) Department of Taxation, who shall immediately notify each affected local government of the determination;

(2) County assessor;

(3) County treasurer; and

(4) Office of Economic Development.

5. The Director shall adopt regulations:

(a) Establishing the qualifications and methods to determine eligibility for the abatement;

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(b) Prescribing such forms as will ensure that all information and other documentation necessary to make an appropriate determination is filed with the Director; and

(c) Prescribing the criteria for determining when there is a significant change in the scope of a project for the purposes of subparagraph (1) of paragraph (d) of subsection 1,

□ and the Department of Taxation shall adopt such additional regulations as it determines to be appropriate to carry out the provisions of this section.

6. *The Director may charge and collect a fee from each applicant who submits an application for a partial abatement pursuant to this section. The amount of the fee must not exceed the actual cost to the Director for processing the application and evaluating the proof submitted by the applicant pursuant to subsection 1 and making the determination concerning eligibility for the partial abatement required by subsection 2.*

7. As used in this section:

(a) "Building or other structure" does not include any building or other structure for which the principal use is as a residential dwelling, even if the building or other structure is used for more than four families.

(b) "Director" means the Director of the Office of Energy appointed pursuant to NRS 701.150.

(c) "Manufacturer" means a person engaged primarily in manufacturing or processing which changes raw or unfinished materials into another form or creates another product.

(d) "Taxes imposed for public education" means:

(1) Any ad valorem tax authorized or required by chapter 387 of NRS;

(2) Any ad valorem tax authorized or required by chapter 350 of NRS for the obligations of a school district, including, without limitation, any ad valorem tax necessary to carry out the provisions of subsection 5 of NRS 350.020; and

(3) Any other ad valorem tax for which the proceeds thereof are dedicated to the public education of pupils in kindergarten through grade 12.

Sec. 2.5. NRS 701A.340 is hereby amended to read as follows:

701A.340 1. "Renewable energy" means:

(a) Biomass;

(b) Fuel cells;

(c) **Geothermal energy;**

(d) Solar energy;

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[(d)] **(e)** Waterpower; or

[(e)] **(f)** Wind.

2. The term does not include coal, natural gas, oil, propane or any other fossil fuel **[, geothermal energy]** or nuclear energy.

Sec. 3. NRS 701A.360 is hereby amended to read as follows:

701A.360 1. A person who intends to locate a facility for the generation of process heat from solar renewable energy **[.] or** a wholesale facility for the generation of electricity from renewable energy **[, a facility for the generation of electricity from geothermal resources or a facility for the transmission of electricity produced**

from renewable energy or geothermal resources] in this State may apply to the Director for a partial abatement of the local sales and use taxes, the taxes imposed pursuant to chapter 361 of NRS, or both local sales and use taxes and taxes imposed pursuant to chapter 361 of NRS. *An applicant may submit a copy of the application to the board of county commissioners at any time after the applicant has submitted the application to the Director.*

2. A facility that is owned, operated, leased or otherwise controlled by a governmental entity is not eligible for an abatement pursuant to NRS 701A.300 to 701A.390, inclusive.

3. As soon as practicable after the Director receives an application for a partial abatement, the Director shall forward a copy of the application to:

(a) The Chief of the Budget Division of the Department of Administration;

(b) The Department of Taxation;

(c) The board of county commissioners;

(d) The county assessor;

(e) The county treasurer; and

(f) The Office of Economic Development.

4. With the copy of the application forwarded to the county treasurer, the Director shall include a notice that the local jurisdiction may request a presentation regarding the facility. A request for a presentation must be made within 30 days after receipt of the application.

5. The Director shall hold a public hearing on the application. The hearing must not be held earlier than 30 days after all persons listed in subsection 3 have received a copy of the application.

Sec. 4. NRS 701A.365 is hereby amended to read as follows:

701A.365 1. Except as otherwise provided in subsection 2, the Director, in consultation with the Office of Economic Development, shall approve an application for a partial abatement pursuant to NRS 701A.300 to 701A.390, inclusive, if the Director,

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in consultation with the Office of Economic Development, makes the following determinations:

(a) The applicant has executed an agreement with the Director which must:

(1) State that the facility will, after the date on which a certificate of eligibility for the abatement is issued pursuant to NRS 701A.370, continue in operation in this State for a period specified by the Director, which must be at least 10 years, and will continue to meet the eligibility requirements for the abatement; and

(2) Bind the successors in interest in the facility for the specified period.

(b) The facility is registered pursuant to the laws of this State or the applicant commits to obtain a valid business license and all other permits required by the county, city or town in which the facility operates.

(c) No funding is or will be provided by any governmental entity in this State for the acquisition, design or construction of the facility or for the acquisition of any land therefor, except any private activity bonds as defined in 26 U.S.C. § 141.

(d) If the facility will be located in a county whose population is 100,000 or more or a city whose population is 60,000 or more, the facility meets the following requirements:

(1) There will be 75 or more full-time employees working on the construction of the facility during the second quarter of construction, including, unless waived by the Director for good cause, at least **[30] 50** percent who are residents of Nevada;

(2) Establishing the facility will require the facility to make a capital investment of at least \$10,000,000 in this State;

(3) The average hourly wage that will be paid by the facility to its employees in this State is at least 110 percent of the average statewide hourly wage, excluding management and administrative employees, as established by the Employment Security Division of the Department of Employment, Training and Rehabilitation on July 1 of each fiscal year; and

(4) **[The] Except as otherwise provided in subsection 6, the** average hourly wage of the employees working on the construction of the facility will be at least **[150] 175** percent of the average statewide hourly wage, excluding management and administrative employees, as established by the Employment Security Division of the Department of Employment, Training and Rehabilitation on July 1 of each fiscal year and:

(I) The employees working on the construction of the facility must be provided a health insurance plan that **is provided by**

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a third-party administrator and includes **[an option for]** health insurance coverage for dependents of the employees; and

(II) The cost of the benefits provided to the employees working on the construction of the facility will meet the minimum requirements for benefits established by the Director by regulation pursuant to NRS 701A.390.

(e) If the facility will be located in a county whose population is less than 100,000 or a city whose population is less than 60,000, the facility meets the following requirements:

(1) There will be 50 or more full-time employees working on the construction of the facility during the second quarter of construction, including, unless waived by the Director for good

cause, at least ~~[30]~~ **50** percent who are residents of Nevada;

(2) Establishing the facility will require the facility to make a capital investment of at least \$3,000,000 in this State;

(3) The average hourly wage that will be paid by the facility to its employees in this State is at least 110 percent of the average statewide hourly wage, excluding management and administrative employees, as established by the Employment Security Division of the Department of Employment, Training and Rehabilitation on July 1 of each fiscal year; and

(4) ~~[The]~~ **Except as otherwise provided in subsection 6, the** average hourly wage of the employees working on the construction of the facility will be at least ~~[150]~~ **175** percent of the average statewide hourly wage, excluding management and administrative employees, as established by the Employment Security Division of the Department of Employment, Training and Rehabilitation on July 1 of each fiscal year and:

(I) The employees working on the construction of the facility must be provided a health insurance plan that **is provided by a third-party administrator and** includes ~~[an option for]~~ health insurance coverage for dependents of the employees; and

(II) The cost of the benefits provided to the employees working on the construction of the facility will meet the minimum requirements for benefits established by the Director by regulation pursuant to NRS 701A.390.

(f) The financial benefits that will result to this State from the employment by the facility of the residents of this State and from capital investments by the facility in this State will exceed the loss of tax revenue that will result from the abatement.

(g) The facility is consistent with the State Plan for Economic Development developed by the Executive Director of the Office of Economic Development pursuant to subsection 2 of NRS 231.053.

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2. The Director shall not approve an application for a partial abatement of the taxes imposed pursuant to chapter 361 of NRS submitted pursuant to NRS 701A.360 by **a facility for the generation of process heat from solar renewable energy or a wholesale** facility for the generation of electricity from ~~[geothermal resources]~~ **renewable energy** unless the application is approved **or deemed approved** pursuant to this subsection. The board of county commissioners of a county must **provide notice to the Director that the board intends to consider an application and, if such notice is given, must** approve or deny the application not later than 30 days after the board receives a copy of the application. The board of county commissioners ~~[must]~~ :

(a) Shall, in considering an application pursuant to this

subsection, make a recommendation to the Director regarding the application;

(b) May, in considering an application pursuant to this subsection, deny an application only if the board of county commissioners determines, based on relevant information, that:

(1) The projected cost of the services that the local government is required to provide to the facility will exceed the amount of tax revenue that the local government is projected to receive as a result of the abatement; or

(2) The projected financial benefits that will result to the county from the employment by the facility of the residents of this State and from capital investments by the facility in the county will not exceed the projected loss of tax revenue that will result from the abatement;

(c) Must not condition the approval of the application on a requirement that the facility **[for the generation of electricity from geothermal resources]** agree to purchase, lease or otherwise acquire in its own name or on behalf of the county any infrastructure, equipment, facilities or other property in the county that is not directly related to or otherwise necessary for the construction and operation of the facility **[.]** ; *and*

(d) May, without regard to whether the board has provided notice to the Director of its intent to consider the application, make a recommendation to the Director regarding the application.

☐ If the board of county commissioners does not approve or deny the application within 30 days after the board receives *from the Director a copy of* the application, the application shall be deemed **[denied.] approved.**

3. Notwithstanding the provisions of subsection 1, the Director, in consultation with the Office of Economic Development, may, if

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the Director, in consultation with the Office, determines that such action is necessary:

(a) Approve an application for a partial abatement for a facility that does not meet the requirements set forth in paragraph (d) or (e) of subsection 1; or

(b) Add additional requirements that a facility must meet to qualify for a partial abatement.

4. The Director shall cooperate with the Office of Economic Development in carrying out the provisions of this section.

5. The Director shall submit to the Office of Economic Development an annual report, at such a time and containing such information as the Office may require, regarding the partial abatements granted pursuant to this section.

6. The provisions of subparagraph (4) of paragraph (d) of

subsection 1 and subparagraph (4) of paragraph (e) of subsection 1 concerning the average hourly wage of the employees working on the construction of a facility do not apply to the wages of an apprentice as that term is defined in NRS 610.010.

7. As used in this section, "wage" or "wages" has the meaning ascribed to it in NRS 338.010.

Sec. 5. (Deleted by amendment.)

Sec. 6. NRS 701A.385 is hereby amended to read as follows:

701A.385 Notwithstanding any statutory provision to the contrary, if the Director approves an application for a partial abatement pursuant to NRS 701A.300 to 701A.390, inclusive, of [:

1. Property taxes imposed pursuant to chapter 361 of NRS, the amount of all the property taxes which are collected from the facility for the period of the abatement must be allocated and distributed in such a manner that:

(a) Forty-five percent of that amount is deposited in the

Renewable Energy Fund created by NRS 701A.450; and

(b) Fifty-five percent of that amount is distributed to the local governmental entities that would otherwise be entitled to receive those taxes in proportion to the relative amount of those taxes those entities would otherwise be entitled to receive.

2. Local] local sales and use taxes, the State Controller shall allocate, transfer and remit an amount equal to all the sales and use taxes imposed in this State and collected from the facility for the period of the abatement in the same manner as if that amount consisted solely of the proceeds of taxes imposed by NRS 374.110 and 374.190.

Sec. 7. NRS 701A.390 is hereby amended to read as follows:

701A.390 The Director:

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1. Shall adopt regulations:

(a) Prescribing the minimum level of benefits that a facility must provide to its employees if the facility is going to use benefits paid to employees as a basis to qualify for a partial abatement pursuant to NRS 701A.300 to 701A.390, inclusive;

(b) Prescribing such requirements for an application for a partial abatement pursuant to NRS 701A.300 to 701A.390, inclusive, as will ensure that all information and other documentation necessary for the Director, in consultation with the Office of Economic Development, to make an appropriate determination is filed with the Director;

(c) Requiring each recipient of a partial abatement pursuant to NRS 701A.300 to 701A.390, inclusive, to file annually with the Director such information and documentation as may be necessary for the Director to determine whether the recipient is in compliance

with any eligibility requirements for the abatement; and
(d) Regarding the capital investment that a facility must make to meet the requirement set forth in paragraph (d) or (e) of subsection 1 of NRS 701A.365; and

2. May adopt such other regulations as the Director determines to be necessary to carry out the provisions of NRS 701A.300 to 701A.390, inclusive.

3. May charge and collect a fee from each applicant who submits an application for a partial abatement pursuant to NRS 701A.300 to 701A.390, inclusive. The amount of the fee must not exceed the actual cost to the Director for processing and approving the application.

Sec. 7.5. NRS 701A.450 is hereby amended to read as follows:

701A.450 1. The Renewable Energy Fund is hereby created.

2. The Director of the Office of Energy appointed pursuant to NRS 701.150 shall administer the Fund.

3. The interest and income earned on the money in the Fund must be credited to the Fund.

4. Not less than 75 percent of the money in the Fund must be used to offset the cost of electricity to ***or the use of electricity by*** retail customers of a public utility that is subject to the portfolio standard established by the Public Utilities Commission of Nevada pursuant to NRS 704.7821.

5. The Director of the Office of Energy may establish other uses of the money in the Fund by regulation.

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Sec. 8. Chapter 704 of NRS is hereby amended by adding thereto the provisions set forth as sections 9 to 21.5, inclusive, of this act.

Sec. 9. (Deleted by amendment.)

Sec. 10. ***As used in sections 10 to 21, inclusive, of this act, unless the context otherwise requires, the words and terms defined in sections 11, 12 and 13 of this act have the meanings ascribed to them in those sections.***

Sec. 11. ***“Electric utility” has the meaning ascribed to it in NRS 704.187.***

Sec. 12. ***“Participant” means an applicant who has received initial approval and a letter of eligibility from the Office of Economic Development pursuant to section 15 of this act and who enters into a contract approved by the Commission pursuant to section 16 of this act.***

Sec. 13. ***“Program” means the Economic Development Electric Rate Rider Program established by section 14 of this act to carry out the provisions of sections 10 to 21, inclusive, of this***

act.

Sec. 14. 1. The Economic Development Electric Rate Rider Program is hereby established for the purpose of attracting new commercial and industrial businesses to this State. The Commission, in consultation with the Office of Economic Development, shall administer the Program.

2. Each electric utility in this State shall set aside an amount of capacity determined by the Commission for allocation to new customers pursuant to the Program, but the total amount of capacity that the Commission may require to be set aside by all electric utilities in this State pursuant to this subsection must not exceed 50 megawatts.

Sec. 15. 1. A person who, in anticipation of the incentive provided pursuant to the Program, locates or intends to locate a new commercial or industrial business in this State may apply to the Office of Economic Development to participate in the Program.

2. An application to participate in the Program must be submitted on a form approved by the Office of Economic Development and must include:

(a) The name, business address and telephone number of the applicant;

(b) The location or proposed location of the applicant's facility and a detailed description of the facility;

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(c) Proof satisfactory to the Office of Economic Development that the applicant satisfies the criteria for eligibility set forth in subsection 3;

(d) An attestation, on a form approved by the Office of Economic Development, that but for the incentive provided pursuant to the Program, the applicant would not have located or intended to locate the business in this State; and

(e) Any other information required by the Office of Economic Development.

3. To be eligible for participation in the Program, an applicant must demonstrate that:

(a) The applicant is or intends to be a new commercial or industrial customer of an electric utility in this State;

(b) The applicant is not, and has not been during the immediately preceding 12 months, a customer of any other electric utility in this State;

(c) The new load to be served by the electric utility is more than 300 kilowatts;

(d) The electric utility has determined that the applicant's use of the load is not for a project, purpose or facility which carries an

abnormal risk or is seasonal, intermittent or temporary; and
(e) The applicant has applied for each economic incentive, including, without limitation, any abatement or partial abatement of taxes, offered by the State or any local government for which the applicant is eligible.

4. Upon the receipt of a completed application, the Office of Economic Development shall consider the application and make a determination of whether the applicant satisfies the criteria for eligibility. If the Office of Economic Development determines that the applicant satisfies the criteria for eligibility, the Office of Economic Development may give initial approval to the applicant.

5. If the Office of Economic Development gives initial approval to an applicant, the Office of Economic Development shall:

(a) Provide notice of the initial approval to the applicant;

(b) Issue to the applicant a letter of eligibility; and

(c) Forward a copy of the applicant's application and letter of eligibility to the Commission.

Sec. 16. 1. *Upon receipt of an application and letter of eligibility pursuant to paragraph (c) of subsection 5 of section 15 of this act, the Commission shall:*

(a) Review the application;

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(b) Establish the rates which may be charged to the applicant by the electric utility that will serve the load of the applicant; and
(c) In addition to the terms required by subsection 3, establish any additional terms which must be included in the contract between the applicant and the electric utility.

2. Before any applicant enters into a contract with an electric utility pursuant to the Program, the applicant shall:

(a) Provide to the electric utility that will serve the load of the applicant access to the applicant's facility or plans for the facility for the purpose of the electric utility making recommendations concerning the energy efficiency of the facility; and

(b) Provide proof satisfactory to the Commission that the new load under the contract will have an annual load factor of 50 percent or more for each year of the term of the contract.

3. An applicant may participate in the Program pursuant to a contract which is entered into by the applicant and the electric utility that will serve the load of the applicant and which is approved by the Commission. A contract entered into pursuant to this section must include provisions setting forth:

(a) The term of the contract, which must be 5 years;

(b) The term of the discounts applicable under the Program, which must be 4 years;

- (c) The rates to be paid for electricity by the participant;*
- (d) That the discount approved by the Commission does not apply to up-front costs, the base tariff general rate, any otherwise applicable tariff or any taxes, surcharges, amortization or program rate elements;*
- (e) The deposit requirements, which must be based on the rates applicable under the second year of the contract;*
- (f) That the participant ceases to be eligible for any discounted rates for electricity if the participant fails to satisfy any requirements set forth in the contract or sections 10 to 21, inclusive, of this act or any regulations adopted pursuant thereto; and*
- (g) Any additional requirements prescribed by the Commission.*

4. An electric utility shall prepare a contract to be entered into by the electric utility and a participant and submit the contract to the Commission for approval. Upon approval of the contract by the Commission, the electric utility and the applicant may enter into the contract and the applicant may participate in the Program. The Commission shall forward a copy of the approved contract to the Office of Economic Development.

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Sec. 17. Notwithstanding any other provision of this chapter, an electric utility that enters into a contract with a participant pursuant to section 16 of this act shall, in the manner provided pursuant to the regulations adopted by the Commission pursuant to paragraph (c) of subsection 1 of section 20 of this act, recover through a deferred energy accounting adjustment application an amount equal to the discount provided to the participant pursuant to the contract.

Sec. 18. If the Commission determines that a participant in the Program has failed to fulfill any requirement of the contract or carry out any duty imposed pursuant to the Program, the Commission shall issue an order requiring the participant to pay to the electric utility an amount equal to the rate which would have been charged but for the participant's participation in the Program.

Sec. 19. The Office of Economic Development shall not accept an application or give initial approval to any applicant for participation in the Program, and the Commission shall not approve an applicant for participation in the Program, after the earlier of December 31, 2017, or the date on which the capacity set aside for allocation pursuant to the Program is fully allocated.

Sec. 20. The Commission, in consultation with the Office of Economic Development:

1. Shall adopt regulations:

(a) Establishing the discounted electric rates that may be charged by an electric utility pursuant to the Program, which must be established as a percentage of the base tariff energy rate and for which:

(1) In the first year of a contract entered into pursuant to section 16 of this act, the reduction in the rates as a result of the discount must not exceed 30 percent of the base tariff energy rate;

(2) In the second year of a contract entered into pursuant to section 16 of this act, the reduction in the rates as a result of the discount must not exceed 20 percent of the base tariff energy rate;

(3) In the third year of a contract entered into pursuant to section 16 of this act, the reduction in the rates as a result of the discount must not exceed 20 percent of the base tariff energy rate; and

(4) In the fourth year of a contract entered into pursuant to section 16 of this act, the reduction in the rates as a result of the discount must not exceed 10 percent of the base tariff energy rate;

(b) Prescribing the form and content of the contract entered into pursuant to section 16 of this act;

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(c) Prescribing the procedure by which an electric utility is authorized to recover through a deferred energy accounting adjustment application the amount of the discount provided to a participant in the Program; and

(d) Prescribing any additional information which must be submitted by an applicant for participation in the Program.

2. May adopt any other regulations it determines are necessary to carry out the provisions of sections 10 to 21, inclusive, of this act.

Sec. 21. The Commission shall, on or before December 31, 2014, prepare a written report concerning the Program and submit the report to the Director of the Legislative Counsel Bureau for transmittal to the 78th Session of the Legislature. The report must include, without limitation, information concerning:

1. The number of participants in the Program;

2. The amount of electricity allocated pursuant to the Program;

3. The total amount of the discounts provided pursuant to the Program; and

4. The remaining amount of electricity available for allocation pursuant to the Program.

Sec. 21.5. If the Commission approves an application submitted by a public utility pursuant to NRS 704.820 to 704.900, inclusive, for a utility facility which is not intended to serve

customers in this State and the cost of which will not be included in the rates of that public utility, the public utility is not required to include the utility facility in any plan filed pursuant to NRS 704.741.

Sec. 22. NRS 704.848 is hereby amended to read as follows:

704.848 1. "Other permitting entity" means any state or local entity:

- (a) That is responsible for the enforcement of environmental laws and whose approval is required for the construction of a utility facility, including, without limitation, the State Environmental Commission, the State Department of Conservation and Natural Resources and a local air pollution control board; or
- (b) Whose approval is required for granting any variance, special use permit, conditional use permit or other special exception under NRS 278.010 to 278.319, inclusive, *and sections 27.1 to 27.9, inclusive, of this act*, or 278.640 to 278.675, inclusive, or any regulation or ordinance adopted pursuant thereto, that is required for the construction of a utility facility.

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2. The term does not include the Commission or the State Engineer.

Sec. 23. NRS 704.870 is hereby amended to read as follows:

704.870 1. Except as otherwise provided in subsection 2, a person who wishes to obtain a permit for a utility facility must file with the Commission an application, in such form as the Commission prescribes, containing:

- (a) A description of the location and of the utility facility to be built thereon;
- (b) A summary of any studies which have been made of the environmental impact of the facility; and
- (c) A description of any reasonable alternate location or locations for the proposed facility, a description of the comparative merits or detriments of each location submitted, and a statement of the reasons why the primary proposed location is best suited for the facility.

☐ A copy or copies of the studies referred to in paragraph (b) must be filed with the Commission and be available for public inspection.

2. If a person wishes to obtain a permit for a utility facility and a federal agency is required to conduct an environmental analysis of the proposed utility facility, the person must:

- (a) Not later than the date on which the person files with the appropriate federal agency an application for approval for the construction of the utility facility, file with the Commission and each other permitting entity *[an application,] a notice*, in such a form as the Commission or other permitting entity prescribes ; [,

containing:

- (1) A general description of the proposed utility facility; and
 - (2) A summary of any studies which the applicant anticipates will be made of the environmental impact of the facility;] and
- (b) Not later than 30 days after the issuance by the appropriate federal agency of [a] *either the* final environmental assessment or *final* environmental impact statement , *but not the record of decision or similar document*, relating to the construction of the utility facility:
- (1) File with the Commission an [amended] application that complies with the provisions of subsection 1; and
 - (2) File with each other permitting entity an [amended] application for a permit, license or other approval for the construction of the utility facility.
3. A copy of each application [and amended application] filed with the Commission must be filed with the Administrator of the
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Division of Environmental Protection of the State Department of Conservation and Natural Resources.

4. Each application [and amended application] filed with the Commission must be accompanied by:
- (a) Proof of service of a copy of the application [or amended application] on the clerk of each local government in the area in which any portion of the facility is to be located, both as primarily and as alternatively proposed; and
 - (b) Proof that public notice thereof was given to persons residing in the municipalities entitled to receive notice pursuant to paragraph (a) by the publication of a summary of the application [or amended application] in newspapers published and distributed in the area in which the utility facility is proposed to be located.
5. Not later than 5 business days after the Commission receives an application [or amended application] pursuant to this section, the Commission shall issue a notice concerning the [application or amended] application. Any person who wishes to become a party to a permit proceeding pursuant to NRS 704.885 must file with the Commission the appropriate document required by NRS 704.885 within the time frame set forth in the notice issued by the Commission pursuant to this subsection.

Sec. 24. NRS 704.8905 is hereby amended to read as follows:

704.8905 1. Except as otherwise required to comply with federal law:

- (a) Not later than 150 days after a person has filed an application regarding a utility facility pursuant to subsection 1 of NRS 704.870:
 - (1) The Commission shall grant or deny approval of that application; and

(2) Each other permitting entity shall, if an application for a permit, license or other approval for the construction of the utility facility was filed with the other permitting entity on or before the date on which the applicant filed the application pursuant to subsection 1 of NRS 704.870, grant or deny the application filed with the other permitting entity.

(b) Not later than 120 days after a person has filed an [amended] application regarding a utility facility pursuant to subsection 2 of NRS 704.870:

(1) The Commission shall grant or deny approval of the [amended] application; and

(2) Each other permitting entity shall, if an application for a permit, license or other approval for the construction of the utility facility was filed with the other permitting entity on or before the date on which the applicant filed with the appropriate federal agency

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an application for approval for the construction of the utility facility, grant or deny the [amended] application filed with the other permitting entity.

2. The Commission or other permitting entity shall make its determination upon the record and may grant or deny the application as filed, or grant the application upon such terms, conditions or modifications of the construction, operation or maintenance of the utility facility as the Commission or other permitting entity deems appropriate.

3. The Commission shall serve a copy of its order and any opinion issued with it upon each party to the proceeding before the Commission.

Sec. 25. NRS 119.128 is hereby amended to read as follows:

119.128 An exemption pursuant to this chapter is not an exemption from the provisions of NRS 278.010 to 278.630, inclusive [.] , and sections 27.1 to 27.9, inclusive, of this act.

Sec. 26. NRS 119.340 is hereby amended to read as follows:

119.340 The provisions of this chapter are in addition to and not a substitute for NRS 278.010 to 278.630, inclusive [.] , and sections 27.1 to 27.9, inclusive, of this act.

Sec. 27. Chapter 278 of NRS is hereby amended by adding thereto the provisions set forth as sections 27.1 to 27.9, inclusive, of this act.

Sec. 27.1. *As used in sections 27.1 to 27.9, inclusive, of this act, unless the context otherwise requires, “aboveground utility” means an aboveground electric transmission line which is designed to operate at 200 kilovolts or more and which has been approved for construction after October 1, 1991, by the State or Federal Government or a governing body.*

Sec. 27.5. 1. A planning commission or governing body that is required to prepare and adopt a master plan pursuant to the provisions of this chapter shall develop and include in that plan an aboveground utility plan as described in subsection 2. The aboveground utility plan must:

(a) In a county whose population is 700,000 or more, conform with the comprehensive regional policy plan developed pursuant to NRS 278.02528; and

(b) In a county whose population is 100,000 or more but less than 700,000, conform with the comprehensive regional plan developed pursuant to NRS 278.0272.

2. An aboveground utility plan developed by a planning commission or governing body pursuant to this section must:

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(a) Provide a process for the designation of corridors for the construction of aboveground utility projects;

(b) Be consistent with any transmission plan prepared by the Office of Energy;

(c) To ensure the continuity of transmission corridors, be consistent with the aboveground utility plan of each adjacent jurisdiction; and

(d) Be consistent with any resource management plan prepared by the Bureau of Land Management applicable to the jurisdiction of the planning commission or governing body, including, without limitation, by ensuring that the aboveground utility plan developed by the planning commission or governing body provides for connectivity between any noncontiguous transmission corridors identified in the plan prepared by the Bureau of Land Management.

3. In developing an aboveground utility plan, a planning commission or governing body shall:

(a) Cooperate with the Bureau of Land Management, the Office of Energy and the planning commission or governing body of each adjacent jurisdiction to ensure that the aboveground utility plan adopted by the planning commission or governing body is consistent with any resource management plan prepared by the Bureau of Land Management, any transmission plan adopted by the Office of Energy and the aboveground utility plan developed by the planning commission or governing body of each adjacent jurisdiction; and

(b) Submit a copy of the aboveground utility plan, including all maps and exhibits adopted as part of the plan, to the Public Utilities Commission of Nevada and the Office of Energy.

Sec. 27.7. Each governing body:

1. Shall establish a process for the issuance of a permit for

the construction of an aboveground utility project which is located in a corridor for the construction of aboveground utility projects identified in the master plan adopted by the planning commission or governing body.

2. Shall establish a process for the issuance of a special use permit for the construction of an aboveground utility project which is not located in a corridor for the construction of aboveground utility projects identified in the master plan adopted by the planning commission or governing body. The process adopted by the governing body must include, without limitation, provisions:

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(a) Requiring the planning commission or the governing body to review each completed application at a public hearing;
(b) Requiring the applicant to provide proof satisfactory to the planning commission or the governing body that the construction of the aboveground utility project does not conflict with any existing or planned infrastructure or other utility projects; and
(c) Authorizing the planning commission or the governing body to issue or deny the issuance of a special use permit for the construction of an aboveground utility project based on the proximity of the proposed site of the aboveground utility project to any school, hospital or urban residential area with a dwelling density greater than 2 units per gross acre.

3. Shall establish a process for the issuance of a special use permit for the construction of a renewable energy generation project with a nameplate capacity of 10 megawatts or more which must include, without limitation, provisions:

(a) Establishing the required contents of an application;
(b) Establishing the criteria by which the planning commission or the governing body will evaluate an application; and
(c) Requiring the planning commission or the governing body to review each completed application at a public hearing not later than 65 days after receiving the complete application.

4. May establish an expedited process for the issuance of a permit or special use permit described in subsections 1, 2 and 3 if the governing body determines that:

(a) The project will be located in an isolated or rural area; and
(b) There is minimal risk of disturbance to residents as a result of the construction of the project.

Sec. 27.9. 1. An applicant for the issuance of a special use permit for the construction of any utility project or for the construction of a renewable energy generation project with a nameplate capacity of 10 megawatts or more who:

(a) Believes that the decision of the planning commission or

governing body to approve or deny the applicant's application was not timely; or

(b) Disagrees with any conditions imposed by the special use permit issued by the planning commission or governing body,

□ may, in the manner prescribed by the Public Utilities Commission of Nevada by regulation, petition the Public Utilities Commission of Nevada to review the decision of the planning commission or governing body.

2. A petition submitted to the Public Utilities Commission of Nevada pursuant to this section must include:

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(a) The name, mailing address and telephone number of the petitioner;

(b) The name of the planning commission or governing body to whom the petitioner applied for a special use permit;

(c) A statement of the decision of the planning commission or governing body from which review is sought;

(d) A statement of the resolution sought by the petitioner;

(e) A statement of the legal basis for the resolution sought by the petitioner;

(f) A copy of the application and all supporting documents submitted by the petitioner to the planning commission or governing body;

(g) A copy of each document issued by the planning commission or governing body relating to the application; and

(h) Any other information required by the Public Utilities Commission of Nevada.

3. In any proceeding before the Public Utilities Commission of Nevada concerning a petition submitted pursuant to this section, the parties:

(a) Must include:

(1) The petitioner;

(2) The planning commission or governing body whose decision is the subject of the petition; and

(3) The Regulatory Operations Staff of the Public Utilities Commission of Nevada; and

(b) May include:

(1) The Bureau of Consumer Protection in the Office of the Attorney General, upon the filing by the Bureau of Consumer Protection of a notice to intervene; and

(2) Any other person or entity that participated in any proceeding before the planning commission or governing body relating to the application for the issuance of a special use permit, if the person or entity petitions the Public Utilities Commission of Nevada for, and is granted, leave to intervene.

4. Not later than 150 days after receiving a petition to review the decision of a planning commission or governing body, the Public Utilities Commission of Nevada shall issue an order:
(a) Approving the decision of the planning commission or governing body;
(b) Directing the planning commission or governing body to issue a special use permit with such terms and conditions as the Public Utilities Commission of Nevada determines are reasonable;
or

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(c) Directing the planning commission or governing body to modify the terms and conditions of a special use permit in the manner prescribed by the Public Utilities Commission of Nevada.
5. An order issued by the Public Utilities Commission of Nevada pursuant to this section is final for the purposes of judicial review.

6. The Public Utilities Commission of Nevada shall adopt such regulations as it determines necessary to carry out the provisions of this section.

Sec. 28. NRS 278.010 is hereby amended to read as follows:
278.010 As used in NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act**, unless the context otherwise requires, the words and terms defined in NRS 278.0105 to 278.0195, inclusive, have the meanings ascribed to them in those sections.

Sec. 29. NRS 278.016 is hereby amended to read as follows:
278.016 “Local ordinance” means an ordinance enacted by the governing body of any city or county, pursuant to the powers granted in NRS 278.010 to 278.630, inclusive **[.] , and sections 27.1 to 27.9, inclusive, of this act.**

Sec. 30. NRS 278.02327 is hereby amended to read as follows:
278.02327 1. Any application submitted to a governing body or its designee that concerns any matter relating to land use planning pursuant to NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act**, or any ordinance, resolution or regulation adopted pursuant thereto, may not be accepted by the governing body or its designee if the application is incomplete.
2. The governing body or its designee shall, within 3 working days after receiving an application of the type described in subsection 1:
(a) Review the application for completeness;
(b) Accept the application if the governing body or its designee finds that the application is complete or return the application if the governing body or its designee finds that the application is

incomplete; and

(c) If the governing body or its designee returns the application:

(1) Provide to the applicant a description of the additional information required; and

(2) If requested by the applicant, provide to the applicant a copy of the relevant provision of the ordinance, resolution or regulation which specifically requires the additional information or an explanation of why the additional information is necessary.

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Sec. 31. NRS 278.0233 is hereby amended to read as follows:

278.0233 1. Any person who has any right, title or interest in real property, and who has filed with the appropriate state or local agency an application for a permit which is required by statute or an ordinance, resolution or regulation adopted pursuant to NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** before that person may improve, convey or otherwise put that property to use, may bring an action against the agency to recover actual damages caused by:

(a) Any final action, decision or order of the agency which imposes requirements, limitations or conditions upon the use of the property in excess of those authorized by ordinances, resolutions or regulations adopted pursuant to NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** in effect on the date the application was filed, and which:

(1) Is arbitrary or capricious; or

(2) Is unlawful or exceeds lawful authority.

(b) Any final action, decision or order of the agency imposing a tax, fee or other monetary charge that is not expressly authorized by statute or that is in excess of the amount expressly authorized by statute.

(c) The failure of the agency to act on that application within the time for that action as limited by statute, ordinance or regulation.

2. An action must not be brought under subsection 1:

(a) Where the agency did not know, or reasonably could not have known, that its action, decision or order was unlawful or in excess of its authority.

(b) Based on the invalidation of an ordinance, resolution or regulation in effect on the date the application for the permit was filed.

(c) Where a lawful action, decision or order of the agency is taken or made to prevent a condition which would constitute a threat to the health, safety, morals or general welfare of the community.

(d) Where the applicant agrees in writing to extensions of time concerning his or her application.

(e) Where the applicant agrees in writing or orally on the record

during a hearing to the requirements, limitations or conditions imposed by the action, decision or order, unless the applicant expressly states in writing or orally on the record during the hearing that a requirement, limitation or condition is agreed to under protest and specifies which paragraph of subsection 1 provides cause for the protest.

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(f) For unintentional procedural or ministerial errors of the agency.

(g) Unless all administrative remedies have been exhausted.

(h) Against any individual member of the agency.

Sec. 32. NRS 278.0235 is hereby amended to read as follows:

278.0235 No action or proceeding may be commenced for the purpose of seeking judicial relief or review from or with respect to any final action, decision or order of any governing body, commission or board authorized by NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** unless the action or proceeding is commenced within 25 days after the date of filing of notice of the final action, decision or order with the clerk or secretary of the governing body, commission or board.

Sec. 33. NRS 278.024 is hereby amended to read as follows:

278.024 1. In the region of this State for which there has been created by NRS 278.780 to 278.828, inclusive, a regional planning agency, the powers conferred by NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** upon any other authority are subordinate to the powers of such regional planning agency, and may be exercised only to the extent that their exercise does not conflict with any ordinance or plan adopted by such regional planning agency. The powers conferred by NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** shall be exercised whenever appropriate in furtherance of a plan adopted by the regional planning agency.

2. Upon the adoption by a regional planning agency created by NRS 278.780 to 278.828, inclusive, of any regional plan, any plan adopted pursuant to NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** shall cease to be effective as to the territory embraced in such regional plan. Each planning commission and governing body whose previously adopted plan is so affected shall, within 90 days after the effective date of the regional plan, initiate any necessary procedure to revise its plan and any related zoning ordinances which affect adjacent territory.

Sec. 34. NRS 278.025 is hereby amended to read as follows:

278.025 1. In any region of this State for which there has been created by interstate compact a regional planning agency, the

powers conferred by NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** are subordinate to the powers of such regional planning agency, and may be exercised only to the extent that their exercise does not conflict with any ordinance or plan adopted by such regional planning agency. The

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powers conferred by NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** shall be exercised whenever appropriate in furtherance of a plan adopted by the regional planning agency.

2. Upon the adoption by a regional planning agency created by interstate compact of any regional plan or interim plan, any plan adopted pursuant to NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** shall cease to be effective as to the territory embraced in such regional or interim plan. Each planning commission and governing body whose previously adopted plan is so affected shall, within 90 days after the effective date of the regional or interim plan, initiate any necessary procedure to revise its plan and any related zoning ordinances which affect adjacent territory.

Sec. 35. NRS 278.02788 is hereby amended to read as follows:

278.02788 1. If a city has a sphere of influence that is designated in the comprehensive regional plan, the city shall adopt a master plan concerning the territory within the sphere of influence. The master plan and any ordinance required by the master plan must be consistent with the comprehensive regional plan. After adoption and certification of a master plan concerning the territory within the sphere of influence and after adopting the ordinances required by the master plan, if any, the city may exercise any power conferred pursuant to NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** within its sphere of influence.

2. If the comprehensive regional plan designates that all or part of the sphere of influence of a city is a joint planning area, the master plan and any ordinance adopted by the city pursuant to subsection 1 must be consistent with the master plan that is adopted for the joint planning area.

3. Before certification of the master plan for the sphere of influence pursuant to NRS 278.028, any action taken by the county pursuant to NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** within the sphere of influence of a city must be consistent with the comprehensive regional plan.

4. A person, county or city that is represented on the governing board and is aggrieved by a final determination of the county or, after the certification of the master plan for a sphere of influence, is

aggrieved by a final determination of the city, concerning zoning, a subdivision map, a parcel map or the use of land within the sphere of influence may appeal the decision to the regional planning commission within 30 days after the determination. A person,

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county or city that is aggrieved by the determination of the regional planning commission may appeal the decision to the governing board within 30 days after the determination. A person, county or city that is aggrieved by the determination of the governing board may seek judicial review of the decision within 25 days after the determination.

Sec. 36. NRS 278.130 is hereby amended to read as follows:

278.130 1. If the governing body of a city or county collaborates in the creation of a regional planning commission and does not create a separate city or county planning commission, the regional planning commission shall perform for the city or county all the duties and functions delegated to a city or county planning commission by the terms of NRS 278.010 to 278.630, inclusive [.] , **and sections 27.1 to 27.9, inclusive, of this act.**

2. If a regional planning commission has duties and functions pursuant to NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** which parallel the duties and functions of a city or county planning commission, the city or county planning commission has the responsibility for making decisions pertaining to planning which have a local effect, and the regional planning commission has the responsibility for making decisions pertaining to planning which have a regional or intergovernmental effect.

Sec. 37. NRS 278.140 is hereby amended to read as follows:

278.140 1. The formation of regional planning districts is authorized and a regional planning commission may be created, in accordance with the provisions of NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act**, in lieu of separate city or county planning commissions as may be required or authorized by NRS 278.010 to 278.630, inclusive [.] , **and sections 27.1 to 27.9, inclusive, of this act.**

2. Regional planning districts shall consist of a portion of a political subdivision, two or more contiguous political subdivisions or contiguous portions of two or more political subdivisions.

3. All territory embraced within a regional planning district shall be contiguous, except where the regional district is composed of two or more municipalities such territories need not be contiguous.

4. In a regional planning district, a regional planning commission shall function in all respects in accordance with the provisions of NRS 278.010 to 278.630, inclusive, **and sections 27.1**

to 27.9, inclusive, of this act, except that the plans of the regional planning commission shall coordinate the plans of any city or county planning commission within the region.

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5. Reports required by NRS 278.010 to 278.630, inclusive, *and sections 27.1 to 27.9, inclusive, of this act* to be made to a governing body of a city or a county shall be made to the governing body of each city or county within the region, and the procedure set forth in NRS 278.010 to 278.630, inclusive, *and sections 27.1 to 27.9, inclusive, of this act* for action with respect to maps or subdivisions shall not be followed by the regional planning commission for subdivisions which lie within any territory in which there exists a functioning county or city planning commission.

Sec. 38. (Deleted by amendment.)

Sec. 39. NRS 278.150 is hereby amended to read as follows:

278.150 1. The planning commission shall prepare and adopt a comprehensive, long-term general plan for the physical development of the city, county or region which in the commission's judgment bears relation to the planning thereof.

2. The plan must be known as the master plan, and must be so prepared that all or portions thereof, except as otherwise provided in subsections 3 and 4, may be adopted by the governing body, as provided in NRS 278.010 to 278.630, inclusive, *and sections 27.1 to 27.9, inclusive, of this act* as a basis for the development of the city, county or region for such reasonable period of time next ensuing after the adoption thereof as may practically be covered thereby.

3. In counties whose population is 100,000 or more but less than 700,000, if the governing body of the city or county adopts only a portion of the master plan, it shall include in that portion a conservation plan, a housing plan and a population plan as provided in NRS 278.160.

4. In counties whose population is 700,000 or more, the governing body of the city or county shall adopt a master plan for all of the city or county that must address each of the subjects set forth in subsection 1 of NRS 278.160.

Sec. 40. NRS 278.160 is hereby amended to read as follows:

278.160 1. Except as otherwise provided in subsection 4 of NRS 278.150 and subsection 3 of NRS 278.170, the master plan, with the accompanying charts, drawings, diagrams, schedules and reports, may include such of the following subject matter or portions thereof as are appropriate to the city, county or region, and as may be made the basis for the physical development thereof:

(a) Community design. Standards and principles governing the subdivision of land and suggestive patterns for community design

and development.

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(b) Conservation plan. For the conservation, development and utilization of natural resources, including, without limitation, water and its hydraulic force, underground water, water supply, solar or wind energy, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals and other natural resources. The plan must also cover the reclamation of land and waters, flood control, prevention and control of the pollution of streams and other waters, regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan, prevention, control and correction of the erosion of soils through proper clearing, grading and landscaping, beaches and shores, and protection of watersheds. The plan must also indicate the maximum tolerable level of air pollution.

(c) Economic plan. Showing recommended schedules for the allocation and expenditure of public money in order to provide for the economical and timely execution of the various components of the plan.

(d) Historic neighborhood preservation plan. The plan:

(1) Must include, without limitation:

(I) A plan to inventory historic neighborhoods.

(II) A statement of goals and methods to encourage the preservation of historic neighborhoods.

(2) May include, without limitation, the creation of a commission to monitor and promote the preservation of historic neighborhoods.

(e) Historical properties preservation plan. An inventory of significant historical, archaeological, paleontological and architectural properties as defined by a city, county or region, and a statement of methods to encourage the preservation of those properties.

(f) Housing plan. The housing plan must include, without limitation:

(1) An inventory of housing conditions, needs and plans and procedures for improving housing standards and for providing adequate housing to individuals and families in the community, regardless of income level.

(2) An inventory of existing affordable housing in the community, including, without limitation, housing that is available to rent or own, housing that is subsidized either directly or indirectly by this State, an agency or political subdivision of this State, or the Federal Government or an agency of the Federal Government, and housing that is accessible to persons with disabilities.

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- (3) An analysis of projected growth and the demographic characteristics of the community.
 - (4) A determination of the present and prospective need for affordable housing in the community.
 - (5) An analysis of any impediments to the development of affordable housing and the development of policies to mitigate those impediments.
 - (6) An analysis of the characteristics of the land that is suitable for residential development. The analysis must include, without limitation:
 - (I) A determination of whether the existing infrastructure is sufficient to sustain the current needs and projected growth of the community; and
 - (II) An inventory of available parcels that are suitable for residential development and any zoning, environmental and other land-use planning restrictions that affect such parcels.
 - (7) An analysis of the needs and appropriate methods for the construction of affordable housing or the conversion or rehabilitation of existing housing to affordable housing.
 - (8) A plan for maintaining and developing affordable housing to meet the housing needs of the community for a period of at least 5 years.
 - (g) Land use plan. An inventory and classification of types of natural land and of existing land cover and uses, and comprehensive plans for the most desirable utilization of land. The land use plan:
 - (1) Must address, if applicable:
 - (I) Mixed-use development, transit-oriented development, master-planned communities and gaming enterprise districts; and
 - (II) The coordination and compatibility of land uses with any military installation in the city, county or region, taking into account the location, purpose and stated mission of the military installation.
 - (2) May include a provision concerning the acquisition and use of land that is under federal management within the city, county or region, including, without limitation, a plan or statement of policy prepared pursuant to NRS 321.7355.
 - (h) Population plan. An estimate of the total population which the natural resources of the city, county or region will support on a continuing basis without unreasonable impairment.
 - (i) Public buildings. Showing locations and arrangement of civic centers and all other public buildings, including the architecture thereof and the landscape treatment of the grounds thereof.

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(j) Public services and facilities. Showing general plans for sewage, drainage and utilities, and rights-of-way, easements and facilities therefor, including, without limitation, any utility projects required to be reported pursuant to NRS 278.145.

(k) Recreation plan. Showing a comprehensive system of recreation areas, including, without limitation, natural reservations, parks, parkways, trails, reserved riverbank strips, beaches, playgrounds and other recreation areas, including, when practicable, the locations and proposed development thereof.

(l) Rural neighborhoods preservation plan. In any county whose population is 700,000 or more, showing general plans to preserve the character and density of rural neighborhoods.

(m) Safety plan. In any county whose population is 700,000 or more, identifying potential types of natural and man-made hazards, including, without limitation, hazards from floods, landslides or fires, or resulting from the manufacture, storage, transfer or use of bulk quantities of hazardous materials. The plan may set forth policies for avoiding or minimizing the risks from those hazards.

(n) School facilities plan. Showing the general locations of current and future school facilities based upon information furnished by the appropriate local school district.

(o) Seismic safety plan. Consisting of an identification and appraisal of seismic hazards such as susceptibility to surface ruptures from faulting, to ground shaking or to ground failures.

(p) Solid waste disposal plan. Showing general plans for the disposal of solid waste.

(q) Streets and highways plan. Showing the general locations and widths of a comprehensive system of major traffic thoroughfares and other traffic ways and of streets and the recommended treatment thereof, building line setbacks, and a system of naming or numbering streets and numbering houses, with recommendations concerning proposed changes.

(r) Transit plan. Showing a proposed multimodal system of transit lines, including mass transit, streetcar, motorcoach and trolley coach lines, paths for bicycles and pedestrians, satellite parking and related facilities.

(s) Transportation plan. Showing a comprehensive transportation system, including, without limitation, locations of rights-of-way, terminals, viaducts and grade separations. The plan may also include port, harbor, aviation and related facilities.

(t) Aboveground utility plan. Showing corridors designated for the construction of aboveground utilities.

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2. The commission may prepare and adopt, as part of the master plan, other and additional plans and reports dealing with such other subjects as may in its judgment relate to the physical development of the city, county or region, and nothing contained in NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** prohibits the preparation and adoption of any such subject as a part of the master plan.

Sec. 41. NRS 278.190 is hereby amended to read as follows:

278.190 1. The commission shall endeavor to promote public interest in and understanding of the master plan and of official plans and regulations relating thereto. As a means of furthering the purpose of a master plan, the commission shall annually make recommendations to the governing body for the implementation of the plan.

2. It also shall consult and advise with public officials and agencies, public utility companies, civic, educational, professional and other organizations, and with citizens generally with relation to the carrying out of such plans.

3. The commission, and its members, officers and employees, in the performance of their functions, may enter upon any land and make examinations and surveys and place and maintain necessary monuments and marks thereon.

4. In general, the commission shall have such power as may be necessary to enable it to fulfill its functions and carry out the provisions of NRS 278.010 to 278.630, inclusive **[.] , and sections 27.1 to 27.9, inclusive, of this act.**

Sec. 42. NRS 278.200 is hereby amended to read as follows:

278.200 The master plan shall be a map, together with such charts, drawings, diagrams, schedules, reports, ordinances, or other printed or published material, or any one or a combination of any of the foregoing as may be considered essential to the purposes of NRS 278.010 to 278.630, inclusive **[.] , and sections 27.1 to 27.9, inclusive, of this act.**

Sec. 43. NRS 278.250 is hereby amended to read as follows:

278.250 1. For the purposes of NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act**, the governing body may divide the city, county or region into zoning districts of such number, shape and area as are best suited to carry out the purposes of NRS 278.010 to 278.630, inclusive **[.] , and sections 27.1 to 27.9, inclusive, of this act.** Within the zoning district, it may regulate and restrict the erection, construction, reconstruction, alteration, repair or use of buildings, structures or land.

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2. The zoning regulations must be adopted in accordance with the master plan for land use and be designed:
- (a) To preserve the quality of air and water resources.
 - (b) To promote the conservation of open space and the protection of other natural and scenic resources from unreasonable impairment.
 - (c) To consider existing views and access to solar resources by studying the height of new buildings which will cast shadows on surrounding residential and commercial developments.
 - (d) To reduce the consumption of energy by encouraging the use of products and materials which maximize energy efficiency in the construction of buildings.
 - (e) To provide for recreational needs.
 - (f) To protect life and property in areas subject to floods, landslides and other natural disasters.
 - (g) To conform to the adopted population plan, if required by NRS 278.170.
 - (h) To develop a timely, orderly and efficient arrangement of transportation and public facilities and services, including public access and sidewalks for pedestrians, and facilities and services for bicycles.
 - (i) To ensure that the development on land is commensurate with the character and the physical limitations of the land.
 - (j) To take into account the immediate and long-range financial impact of the application of particular land to particular kinds of development, and the relative suitability of the land for development.
 - (k) To promote health and the general welfare.
 - (l) To ensure the development of an adequate supply of housing for the community, including the development of affordable housing.
 - (m) To ensure the protection of existing neighborhoods and communities, including the protection of rural preservation neighborhoods and, in counties whose population is 700,000 or more, the protection of historic neighborhoods.
 - (n) To promote systems which use solar or wind energy.
 - (o) To foster the coordination and compatibility of land uses with any military installation in the city, county or region, taking into account the location, purpose and stated mission of the military installation.

3. The zoning regulations must be adopted with reasonable consideration, among other things, to the character of the area and its peculiar suitability for particular uses, and with a view to

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conserving the value of buildings and encouraging the most appropriate use of land throughout the city, county or region.

4. In exercising the powers granted in this section, the governing body may use any controls relating to land use or principles of zoning that the governing body determines to be appropriate, including, without limitation, density bonuses, inclusionary zoning and minimum density zoning.

5. As used in this section:

(a) "Density bonus" means an incentive granted by a governing body to a developer of real property that authorizes the developer to build at a greater density than would otherwise be allowed under the master plan, in exchange for an agreement by the developer to perform certain functions that the governing body determines to be socially desirable, including, without limitation, developing an area to include a certain proportion of affordable housing.

(b) "Inclusionary zoning" means a type of zoning pursuant to which a governing body requires or provides incentives to a developer who builds residential dwellings to build a certain percentage of those dwellings as affordable housing.

(c) "Minimum density zoning" means a type of zoning pursuant to which development must be carried out at or above a certain density to maintain conformance with the master plan.

Sec. 44. NRS 278.300 is hereby amended to read as follows:
278.300 1. The board of adjustment shall have the following powers:

(a) To hear and decide appeals where it is alleged by the appellant that there is an error in any order, requirement, decision or refusal made by an administrative official or agency based on or made in the enforcement of any zoning regulation or any regulation relating to the location or soundness of structures.

(b) To hear and decide, in accordance with the provisions of any such regulation, requests for variances, or for interpretation of any map, or for decisions upon other special questions upon which the board is authorized by any such regulation to pass.

(c) Where by reason of exceptional narrowness, shallowness, or shape of a specific piece of property at the time of the enactment of the regulation, or by reason of exceptional topographic conditions or other extraordinary and exceptional situation or condition of the piece of property, the strict application of any regulation enacted under NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** would result in peculiar and exceptional practical difficulties to, or exceptional and undue hardships upon, the owner of the property, to authorize a variance from that strict

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application so as to relieve the difficulties or hardship, if the relief may be granted without substantial detriment to the public good, without substantial impairment of affected natural resources and without substantially impairing the intent and purpose of any ordinance or resolution.

(d) To hear and decide requests for special use permits or other special exceptions, in such cases and under such conditions as the regulations may prescribe.

2. The majority vote of the board of adjustment is necessary to reverse any order, requirement, decision or determination of any administrative official or agency, or to decide in favor of the appellant.

Sec. 45. NRS 278.320 is hereby amended to read as follows:

278.320 1. "Subdivision" means any land, vacant or improved, which is divided or proposed to be divided into five or more lots, parcels, sites, units or plots, for the purpose of any transfer or development, or any proposed transfer or development, unless exempted by one of the following provisions:

(a) The term "subdivision" does not apply to any division of land which is subject to the provisions of NRS 278.471 to 278.4725, inclusive.

(b) Any joint tenancy or tenancy in common shall be deemed a single interest in land.

(c) Unless a method of disposition is adopted for the purpose of evading this chapter or would have the effect of evading this chapter, the term "subdivision" does not apply to:

(1) Any division of land which is ordered by any court in this State or created by operation of law;

(2) A lien, mortgage, deed of trust or any other security instrument;

(3) A security or unit of interest in any investment trust regulated under the laws of this State or any other interest in an investment entity;

(4) Cemetery lots; or

(5) An interest in oil, gas, minerals or building materials, which are now or hereafter severed from the surface ownership of real property.

2. A common-interest community consisting of five or more units shall be deemed to be a subdivision of land within the meaning of this section, but need only comply with NRS 278.326 to 278.460, inclusive, and 278.473 to 278.490, inclusive.

3. The board of county commissioners of any county may exempt any parcel or parcels of land from the provisions of

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NRS 278.010 to 278.630, inclusive, *and sections 27.1 to 27.9, inclusive, of this act*, if:

(a) The land is owned by a railroad company or by a nonprofit corporation organized and existing pursuant to the provisions of chapter 81 or 82 of NRS which is an immediate successor in title to a railroad company, and the land was in the past used in connection with any railroad operation; and

(b) Other persons now permanently reside on the land.

4. Except as otherwise provided in subsection 5, this chapter, including, without limitation, any requirements relating to the adjustment of boundary lines or the filing of a parcel map or record of survey, does not apply to the division, exchange or transfer of land for agricultural purposes if each parcel resulting from such a division, exchange or transfer:

(a) Is 10 acres or more in size, unless local zoning laws require a larger minimum parcel size, in which case each parcel resulting from the division, exchange or transfer must comply with the parcel size required by those local zoning laws;

(b) Has a zoning classification that is consistent with the designation in the master plan, if any, regarding land use for the parcel;

(c) Can be described by reference to the standard subdivisions used in the United States Public Land Survey System;

(d) Qualifies for agricultural use assessment under NRS 361A.100 to 361A.160, inclusive, and any regulations adopted pursuant thereto; and

(e) Is accessible:

(1) By way of an existing street, road or highway;

(2) Through other adjacent lands owned by the same person;
or

(3) By way of an easement for agricultural purposes that was granted in connection with the division, exchange or transfer.

5. The exemption from the provisions of this chapter, which exemption is set forth in subsection 4, does not apply with respect to any parcel resulting from the division, exchange or transfer of agricultural lands if:

(a) Such resulting parcel ceases to qualify for agricultural use assessment under NRS 361A.100 to 361A.160, inclusive, and any regulations adopted pursuant thereto; or

(b) New commercial buildings or residential dwelling units are proposed to be constructed on the parcel after the date on which the division, exchange or transfer took place. The provisions of this paragraph do not prohibit the expansion, repair, reconstruction,

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renovation or replacement of preexisting buildings or dwelling units that are:

- (1) Dilapidated;
- (2) Dangerous;
- (3) At risk of being declared a public nuisance;
- (4) Damaged or destroyed by fire, flood, earthquake or any natural or man-made disaster; or
- (5) Otherwise in need of expansion, repair, reconstruction, renovation or replacement.

Sec. 46. NRS 278.325 is hereby amended to read as follows:

278.325 1. If a subdivision is proposed on land which is zoned for industrial or commercial development, neither the tentative nor the final map need show any division of the land into lots or parcels, but the streets and any other required improvements are subject to the requirements of NRS 278.010 to 278.630, inclusive [.] , and sections 27.1 to 27.9, inclusive, of this act.

2. No parcel of land may be sold for residential use from a subdivision whose final map does not show a division of the land into lots.

3. Except as otherwise provided in subsection 4, a boundary or line must not be created by a conveyance of a parcel from an industrial or commercial subdivision unless a professional land surveyor has surveyed the boundary or line and set the monuments. The surveyor shall file a record of the survey pursuant to the requirements set forth in NRS 625.340. Any conveyance of such a parcel must contain a legal description of the parcel that is independent of the record of survey.

4. The provisions of subsection 3 do not apply to a boundary or line that is created entirely within an existing industrial or commercial building. A certificate prepared by a professional engineer or registered architect certifying compliance with the applicable law of this State in effect at the time of the preparation of the certificate and with the building code in effect at the time the building was constructed must be attached to any document which proposes to subdivide such a building.

5. A certificate prepared pursuant to subsection 4 for a building located in a county whose population is 700,000 or more must be reviewed, approved and signed by the building official having jurisdiction over the area within which the building is situated.

Sec. 47. NRS 278.326 is hereby amended to read as follows:

278.326 1. Local subdivision ordinances shall be enacted by the governing body of every incorporated city and every county, prescribing regulations which, in addition to the provisions of

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NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** govern matters of improvements, mapping, accuracy, engineering and related subjects, but shall not be in conflict with NRS 278.010 to 278.630, inclusive **[.]**, **and sections 27.1 to 27.9, inclusive, of this act.**

2. The subdivider shall comply with the provisions of the appropriate local ordinance before the final map is approved.

Sec. 48. NRS 278.327 is hereby amended to read as follows:

278.327 Approval of any map pursuant to the provisions of NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** does not in itself prohibit the further division of the lots, parcels, sites, units or plots described, but any such further division shall conform to the applicable provisions of those sections.

Sec. 49. NRS 278.590 is hereby amended to read as follows:

278.590 1. It is unlawful for any person to contract to sell, to sell or to transfer any subdivision or any part thereof, or land divided pursuant to a parcel map or map of division into large parcels, unless:

(a) The required map thereof, in full compliance with the appropriate provisions of NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act**, and any local ordinance, has been recorded in the office of the recorder of each county in which the subdivision or land divided is located; or

(b) The person is contractually obligated to record the required map before title is transferred or possession is delivered, whichever is earlier, as provided in paragraph (a).

2. A person who violates the provisions of subsection 1 is guilty of a misdemeanor and is liable for a civil penalty of not more than \$300 for each lot or parcel sold or transferred.

3. This section does not bar any legal, equitable or summary remedy to which any aggrieved municipality or other political subdivision, or any person, may otherwise be entitled, and any such municipality or other political subdivision or person may file suit in the district court of the county in which any property attempted to be divided or sold in violation of any provision of NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act** is located to restrain or enjoin any attempted or proposed division or transfer in violation of those sections.

Sec. 50. NRS 278.630 is hereby amended to read as follows:

278.630 1. When there is no final map, parcel map or map of division into large parcels as required by the provisions of

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NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act**, then the county assessor shall:

- (a) Determine any apparent discrepancies with respect to the provisions of NRS 278.010 to 278.630, inclusive [.] , **and sections 27.1 to 27.9, inclusive, of this act**;
- (b) Report his or her determinations to the governing body of the county or city in which such apparent violation occurs in writing, including, without limitation, by noting such determinations in the appropriate parcel record of the county assessor; and
- (c) Not place on the tax roll or maps of the county assessor any land for which the county assessor has determined that a discrepancy exists with respect to the provisions of NRS 278.010 to 278.630, inclusive [.] , **and sections 27.1 to 27.9, inclusive, of this act**.

2. Upon receipt of the report, the governing body shall cause an investigation to be made by the district attorney's office when such lands are within an unincorporated area, or by the city attorney when such lands are within a city, the county recorder and any planning commission having jurisdiction over the lands in question.

3. If the report shows evidence of violation of the provisions of NRS 278.010 to 278.630, inclusive, **and sections 27.1 to 27.9, inclusive, of this act**, with respect to the division of lands or upon the filing of a verified complaint by any municipality or other political subdivision or person, firm or corporation with respect to violation of the provisions of those sections, the district attorney of each county in this State shall prosecute all such violations in respective counties in which the violations occur.

Sec. 50.5. Each planning commission, as defined in NRS 278.013, and governing body, as defined in NRS 278.015, shall adopt the aboveground utility plan required by section 27.5 of this act on or before December 31, 2014.

Sec. 51. The Public Utilities Commission of Nevada shall adopt the regulations required by sections 20 and 27.9 of this act on or before December 31, 2013.

Sec. 52. Notwithstanding any other provision of law to the contrary, any application for a partial abatement of the local sales and use taxes, the taxes imposed pursuant to chapter 361 of NRS, or both local sales and use taxes and taxes imposed pursuant to chapter 361 of NRS submitted by an applicant pursuant to NRS 701A.360 on or after the effective date of this section is subject to the provisions of NRS 701A.360, 701A.365, 701A.370, 701A.385 and 701A.390 as amended by sections 3 to 7, inclusive, of this act, and the Director of the Office of Energy shall not, before July 1, 2013,

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approve any such application submitted on or after the effective date of this section but before July 1, 2013.

Sec. 52.5. The provisions of sections 27.1 to 27.9, inclusive, of this act and the amendatory provisions of sections 28 to 50, inclusive, of this act do not apply to an application for the issuance of a special use permit for the construction of a utility project, as that term is defined in NRS 278.0195, or for the construction of a renewable energy generation project, as that term is defined in NRS 278.01735, with a nameplate capacity of 10 megawatts or more which is submitted by an applicant to a planning commission or the governing body of a local government before July 1, 2013.

Sec. 53. 1. This section and section 52 of this act become effective upon passage and approval.

2. Sections 1 to 51, inclusive, and 52.5 of this act become effective on July 1, 2013.

3. Sections 10 to 21, inclusive, of this act expire by limitation on June 30, 2018.

4. Sections 2.5 to 7, inclusive, of this act expire by limitation on June 30, 2049.

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Appendix E

SB 252

Senate Bill No. 252—Committee on
Commerce, Labor and Energy
CHAPTER.....

AN ACT relating to renewable energy; revising provisions which specify the renewable energy systems which qualify as portfolio energy systems; revising provisions relating to the implementation of energy efficiency measures by a provider of electric service for the purpose of complying with the renewable portfolio standard; revising provisions relating to the carrying forward to subsequent calendar years of the excess kilowatt-hours of electricity that a provider generates or acquires from portfolio energy systems; requiring the Public Utilities Commission of Nevada to open an investigatory docket to study, examine and review the process for the sale of portfolio energy credits; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

This bill revises provisions relating to the portfolio standard for providers of electric service, which requires that each year each provider of electric service in this State must generate or acquire from renewable energy systems or save as a result of energy efficiency measures a certain percentage of the electricity sold by the provider to its retail customers in this State.

In 2005, the 22nd Special Session of the Legislature revised the portfolio standard to authorize a provider to meet a portion of the portfolio standard through savings achieved from energy efficiency measures. (Sections 26-29 of chapter 2, Statutes of Nevada 2005, 22nd Special Session, pp. 82-84) **Section 6** of this bill revises the portfolio standard to limit the use of savings achieved from energy efficiency measures by a provider to satisfy the portfolio standard.

Section 4 of this bill revises the definition of "portfolio energy system or efficiency measure" to provide that a renewable energy system or energy efficiency measure qualifies as a portfolio energy system if: (1) the renewable energy system was placed into operation before July 1, 1997, and a provider used electricity generated or acquired from the system to satisfy the portfolio standard before July 1, 2009; (2) the renewable energy system was placed into operation on or after July 1, 1997; or (3) the energy efficiency measure was installed on or before December 31, 2019.

Existing law provides that a provider is entitled to one portfolio energy credit for each kilowatt-hour of electricity that the provider generates, acquires or saves from a portfolio energy system or efficiency measure. (NRS 704.78215) **Section 8** of this bill excludes from the calculation of portfolio energy credit certain electricity used by a portfolio energy system for its basic operations if the portfolio energy system is placed into operation on or after January 1, 2016.

Existing law provides that, for the purpose of satisfying the portfolio standard, a provider shall be deemed to have generated or acquired 2.4 kilowatt-hours of electricity from certain solar photovoltaic systems for each 1 kilowatt-hour actually generated or acquired. (NRS 704.7822) **Section 9** of this bill revises the applicability of this provision to systems that were placed into operation on or before December 31, 2015.

Existing law requires the Public Utilities Commission of Nevada to authorize a provider to carry forward into future years any excess kilowatt-hours of electricity the provider generates or acquires from portfolio energy systems if the provider exceeds the portfolio standard for any calendar year. (NRS 704.7828) **Section 11** of this bill authorizes a provider that carries forward excess kilowatt-hours of electricity in an amount that is more than 10 percent but less than 25 percent of the amount necessary to satisfy the provider's portfolio standard for the subsequent calendar year to sell the excess kilowatt-hours of electricity the provider generates or acquires from portfolio energy systems. **Section 11** requires a provider to make reasonable efforts to sell any credits which are in excess of 25 percent of the amount of portfolio energy credits necessary to comply with its portfolio standard for the subsequent calendar year.

Section 14 of this bill requires the Commission to open an investigatory docket to study, examine and review the process for the sale of portfolio energy credits and to submit a written report on the results of the investigatory docket and any recommendations for legislation to the Director of the Legislative Counsel Bureau for transmittal to the 78th Session of the Nevada Legislature.

EXPLANATION – Matter in *bolded italics* is new; matter between brackets [omitted material] is material to be omitted.

THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

Sections 1-3. (Deleted by amendment.)

Sec. 4. NRS 704.7804 is hereby amended to read as follows:

704.7804 "Portfolio energy system or efficiency measure"

means:

1. Any renewable energy system [; or

2. Any energy efficiency measure.] :

(a) Placed into operation before July 1, 1997, if a provider of electric service used electricity generated or acquired from the renewable energy system to satisfy its portfolio standard before July 1, 2009; or

(b) Placed into operation on or after July 1, 1997; or

2. Any energy efficiency measure installed on or before December 31, 2019.

Sec. 5. (Deleted by amendment.)

Sec. 6. NRS 704.7821 is hereby amended to read as follows:

704.7821 1. For each provider of electric service, the Commission shall establish a portfolio standard. The portfolio standard must require each provider to generate, acquire or save electricity from portfolio energy systems or efficiency measures in an amount that is:

(a) For calendar years 2005 and 2006, not less than 6 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.

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- (b) For calendar years 2007 and 2008, not less than 9 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.
 - (c) For calendar years 2009 and 2010, not less than 12 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.
 - (d) For calendar years 2011 and 2012, not less than 15 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.
 - (e) For calendar years 2013 and 2014, not less than 18 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.
 - (f) For calendar years 2015 through 2019, inclusive, not less than 20 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.
 - (g) For calendar years 2020 through 2024, inclusive, not less than 22 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.
 - (h) For calendar year 2025 and for each calendar year thereafter, not less than 25 percent of the total amount of electricity sold by the provider to its retail customers in this State during that calendar year.

2. In addition to the requirements set forth in subsection 1, the portfolio standard for each provider must require that:

(a) Of the total amount of electricity that the provider is required to generate, acquire or save from portfolio energy systems or efficiency measures during each calendar year, not less than:

(1) For calendar years 2009 through 2015, inclusive, 5 percent of that amount must be generated or acquired from solar renewable energy systems.

(2) For calendar year 2016 and for each calendar year thereafter, 6 percent of that amount must be generated or acquired from solar renewable energy systems.

(b) Of the total amount of electricity that the provider is required to generate, acquire or save from portfolio energy systems or efficiency measures **during** :

(1) During calendar years 2013 and 2014, not more than 25 percent of that amount may be based on energy efficiency measures;

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(2) *During each calendar year [.] 2015 to 2019, inclusive, not more than [25] 20 percent of that amount may be based on energy efficiency measures [.] ;*

(3) *During each calendar year 2020 to 2024, inclusive, not more than 10 percent of that amount may be based on energy efficiency measures; and*

(4) *For calendar year 2025 and each calendar year thereafter, no portion of that amount may be based on energy efficiency measures.*

□ If the provider intends to use energy efficiency measures to comply with its portfolio standard during any calendar year, of the total amount of electricity saved from energy efficiency measures for which the provider seeks to obtain portfolio energy credits pursuant to this paragraph, at least 50 percent of that amount must be saved from energy efficiency measures installed at service locations of residential customers of the provider, unless a different percentage is approved by the Commission.

(c) If the provider acquires or saves electricity from a portfolio energy system or efficiency measure pursuant to a renewable energy contract or energy efficiency contract with another party:

(1) The term of the contract must be not less than 10 years, unless the other party agrees to a contract with a shorter term; and

(2) The terms and conditions of the contract must be just and reasonable, as determined by the Commission. If the provider is a utility provider and the Commission approves the terms and conditions of the contract between the utility provider and the other party, the contract and its terms and conditions shall be deemed to be a prudent investment and the utility provider may recover all just and reasonable costs associated with the contract.

3. If, for the benefit of one or more retail customers in this State, the provider has paid for or directly reimbursed, in whole or in part, the costs of the acquisition or installation of a solar energy system which qualifies as a renewable energy system and which reduces the consumption of electricity, the total reduction in the consumption of electricity during each calendar year that results from the solar energy system shall be deemed to be electricity that the provider generated or acquired from a renewable energy system for the purposes of complying with its portfolio standard.

4. The Commission shall adopt regulations that establish a system of portfolio energy credits that may be used by a provider to comply with its portfolio standard.

5. Except as otherwise provided in subsection 6, each provider shall comply with its portfolio standard during each calendar year.

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6. If, for any calendar year, a provider is unable to comply with its portfolio standard through the generation of electricity from its own renewable energy systems or, if applicable, through the use of portfolio energy credits, the provider shall take actions to acquire or save electricity pursuant to one or more renewable energy contracts or energy efficiency contracts. If the Commission determines that, for a calendar year, there is not or will not be a sufficient supply of electricity or a sufficient amount of energy savings made available to the provider pursuant to renewable energy contracts and energy efficiency contracts with just and reasonable terms and conditions, the Commission shall exempt the provider, for that calendar year, from the remaining requirements of its portfolio standard or from any appropriate portion thereof, as determined by the Commission.

7. The Commission shall adopt regulations that establish:

(a) Standards for the determination of just and reasonable terms and conditions for the renewable energy contracts and energy efficiency contracts that a provider must enter into to comply with its portfolio standard.

(b) Methods to classify the financial impact of each long-term renewable energy contract and energy efficiency contract as an additional imputed debt of a utility provider. The regulations must allow the utility provider to propose an amount to be added to the cost of the contract, at the time the contract is approved by the Commission, equal to a compensating component in the capital structure of the utility provider. In evaluating any proposal made by a utility provider pursuant to this paragraph, the Commission shall consider the effect that the proposal will have on the rates paid by the retail customers of the utility provider.

8. Except as otherwise provided in NRS 704.78213, the provisions of this section do not apply to a provider of new electric resources as defined in NRS 704B.130.

9. As used in this section:

(a) "Energy efficiency contract" means a contract to attain energy savings from one or more energy efficiency measures owned, operated or controlled by other parties.

(b) "Renewable energy contract" means a contract to acquire electricity from one or more renewable energy systems owned, operated or controlled by other parties.

(c) "Terms and conditions" includes, without limitation, the price that a provider must pay to acquire electricity pursuant to a renewable energy contract or to attain energy savings pursuant to an energy efficiency contract.

Sec. 7. (Deleted by amendment.)

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Sec. 8. NRS 704.78215 is hereby amended to read as follows:

704.78215 1. Except as otherwise provided in this section or by specific statute, a provider is entitled to one portfolio energy credit for each kilowatt-hour of electricity that the provider generates, acquires or saves from a portfolio energy system or efficiency measure.

2. The Commission may adopt regulations that give a provider more than one portfolio energy credit for each kilowatt-hour of electricity saved by the provider during its peak load period from energy efficiency measures.

3. Except as otherwise provided in this subsection, for portfolio energy systems placed into operation on or after January 1, 2016, the amount of electricity generated or acquired from a portfolio energy system does not include the amount of any electricity used by the portfolio energy system for its basic operations that reduce the amount of renewable energy delivered to the transmission grid for distribution and sale to customers of the provider. The provisions of this subsection do not apply to a portfolio energy system placed into operation on or after January 1, 2016, if a provider entered into a contract for the purchase of electricity generated by the portfolio energy system on or before December 31, 2012. For the purposes of this section, the amount of any electricity used by a portfolio energy system for its basic operations does not include the electricity used by a portfolio energy system that generates electricity from geothermal energy for the extraction and transportation of geothermal brine.

Sec. 9. NRS 704.7822 is hereby amended to read as follows:

704.7822 For the purpose of complying with a portfolio standard established pursuant to NRS 704.7821 or 704.78213, a provider shall be deemed to have generated or acquired 2.4 kilowatthours of electricity from a renewable energy system for each 1.0 kilowatt-hour of actual electricity generated or acquired from a solar photovoltaic system, if:

1. The system is installed on the premises of a retail customer;

[and]

2. *The system was placed into operation on or before December 31, 2015; and*

3. On an annual basis, at least 50 percent of the electricity generated by the system is utilized by the retail customer on that premises.

Sec. 10. (Deleted by amendment.)

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Sec. 11. NRS 704.7828 is hereby amended to read as follows:

704.7828 1. The Commission shall adopt regulations to carry out and enforce the provisions of NRS 704.7801 to 704.7828, inclusive. The regulations adopted by the Commission may include any enforcement mechanisms which are necessary and reasonable to ensure that each provider of electric service complies with its portfolio standard. Such enforcement mechanisms may include, without limitation, the imposition of administrative fines.

2. If a provider exceeds the portfolio standard for any calendar year **[, the]** :

(a) The Commission shall authorize the provider to carry forward to subsequent calendar years for the purpose of complying with the portfolio standard for those subsequent calendar years any excess kilowatt-hours of electricity that the provider generates, acquires or saves from portfolio energy systems or efficiency measures **[.]** ;

(b) By more than 10 percent but less than 25 percent of the amount of portfolio energy credits necessary to comply with its portfolio standard for the subsequent calendar year, the provider may sell any portfolio energy credits which are in excess of 10 percent of the amount of portfolio energy credits necessary to comply with its portfolio standard for the subsequent calendar year; and

(c) By 25 percent or more of the amount of portfolio energy credits necessary to comply with its portfolio standard for the subsequent calendar year, the provider shall use reasonable efforts to sell any portfolio energy credits which are in excess of 25 percent of the amount of portfolio energy credits necessary to comply with its portfolio standard for the subsequent calendar year.

□ Any money received by a provider from the sale of portfolio energy credits pursuant to paragraphs (b) and (c) must be credited against the provider's costs for purchased fuel and purchased power pursuant to NRS 704.187 in the same calendar year in which the money is received, less any verified administrative costs incurred by the provider to make the sale, including any costs incurred to qualify the portfolio energy credits for potential sale regardless of whether such sales are made.

3. If a provider does not comply with its portfolio standard for any calendar year and the Commission has not exempted the provider from the requirements of its portfolio standard pursuant to NRS 704.7821 or 704.78213, the Commission:

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(a) Shall require the provider to carry forward to subsequent calendar years the amount of the deficiency in kilowatt-hours of electricity that the provider does not generate, acquire or save from portfolio energy systems or efficiency measures during a calendar year in violation of its portfolio standard; and

(b) May impose an administrative fine against the provider or take other administrative action against the provider, or do both.

4. **[The] Except as otherwise provided in subsection 5, the** Commission may impose an administrative fine against a provider based upon:

(a) Each kilowatt-hour of electricity that the provider does not generate, acquire or save from portfolio energy systems or efficiency measures during a calendar year in violation of its portfolio standard; or

(b) Any other reasonable formula adopted by the Commission.

5. ***If a provider sells any portfolio energy credits pursuant to paragraph (b) or (c) of subsection 2 in any calendar year in which the Commission determines that the provider did not comply with its portfolio standard, the Commission shall not make any adjustment to the provider's expenses or revenues and shall not impose on the provider any administrative fine authorized by this section for that calendar year if:***

(a) In the calendar year immediately preceding the calendar year in which the portfolio energy credits were sold, the amount of portfolio energy credits held by the provider and attributable to electricity generated, acquired or saved from portfolio energy systems or efficiency measures by the provider exceeded the amount of portfolio energy credits necessary to comply with the provider's portfolio standard by more than 10 percent;

(b) The price received for any portfolio energy credits sold by the provider was not lower than the most recent value of portfolio energy credits, net of any energy value if the price was for bundled energy and credits, as determined by reference to the last longterm renewable purchased power agreements approved by the Commission in the most recent proceeding that included such agreements; and

(c) The provider would have complied with the portfolio standard in the relevant year even after the sale of portfolio energy credits based on the load forecast of the provider at the time of the sale.

6. In the aggregate, the administrative fines imposed against a provider for all violations of its portfolio standard for a single calendar year must not exceed the amount which is necessary and

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reasonable to ensure that the provider complies with its portfolio standard, as determined by the Commission.

[6.] 7. If the Commission imposes an administrative fine against a utility provider:

- (a) The administrative fine is not a cost of service of the utility provider;
- (b) The utility provider shall not include any portion of the administrative fine in any application for a rate adjustment or rate increase; and
- (c) The Commission shall not allow the utility provider to recover any portion of the administrative fine from its retail customers.

[7.] 8. All administrative fines imposed and collected pursuant to this section must be deposited in the State General Fund.

Secs. 12 and 13. (Deleted by amendment.)

Sec. 14. 1. As soon as practicable after October 1, 2013, the Public Utilities Commission of Nevada shall open an investigatory docket to study, examine and review the process for the sale of portfolio energy credits, as defined in NRS 704.7803, to determine whether the process can be improved to:

- (a) Better enable providers of electric service, as defined in NRS 704.7808, to engage in the sale of portfolio energy credits; and
- (b) Provide the greatest economic benefit to customers of providers of electric service in this State.

2. The following parties may participate in the investigatory docket:

- (a) Each provider of electric service operating in this State;
- (b) The Regulatory Operations Staff of the Commission;
- (c) The Consumer's Advocate and the Bureau of Consumer Protection in the Office of the Attorney General; and
- (d) Any other interested parties.

3. The Commission shall, on or before January 31, 2015, submit a written report on the results of the investigatory docket and any recommendations for legislation to the Director of the Legislative Counsel Bureau for transmittal to the 78th Session of the Nevada Legislature.

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Appendix F

AB 428

Assembly Bill No. 428—Committee
on Commerce and Labor
CHAPTER.....

AN ACT relating to energy; revising provisions relating to the Solar Energy Systems Incentive Program, the Wind Energy Systems Demonstration Program and the Waterpower Energy Systems Demonstration Program; revising provisions governing the payment of incentives to participants in the Solar Program and the Wind Program; requiring the Public Utilities Commission of Nevada to adopt certain regulations; requiring each electric utility in this State to create a Lower Income Solar Energy Pilot Program; requiring the Consumer's Advocate of the Bureau of Consumer Protection in the Office of the Attorney General to publish certain reports; requiring the Commission to open an investigatory docket relating to the costs and benefits attributable to net metering; extending the prospective expiration of the Solar Program, the Wind Program and the Waterpower Program; establishing the Legislative Committee on Energy; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Existing law establishes the Solar Energy Systems Incentive Program, the Wind Energy Systems Demonstration Program and the Waterpower Energy Systems Demonstration Program. (NRS 701B.010-701B.290, 701B.400-701B.650, 701B.700-701B.880) **Section 3** of this bill establishes the statewide capacity floor for the Solar Program and the limits on incentives paid for each renewable energy program. **Sections 5, 19 and 26** of this bill remove the concept of a "program year" with respect to the renewable energy programs.

Sections 5-7 of this bill require the Public Utilities Commission of Nevada to adopt regulations relating to the provision of market-based incentives under the Solar Program. **Section 7** requires the Commission to review the incentives and authorizes the Commission to adjust the incentives not more frequently than annually. **Section 7** also provides for an incentive to be paid to a qualified participant in the Solar Program in one installment upon proof that the participant has installed and energized the solar energy system and for an incentive to be paid to a qualified participant over time which must be based on the performance of the solar energy system and the amount of electricity generated by the solar energy system. **Section 7** also provides for the payment of performance-based incentives to a qualified participant in the Solar Program after December 31, 2021. **Section 9** of this bill requires the Commission to establish the categories for participation in the Solar Program. **Section 9** authorizes the Commission to establish the criteria and capacity limitations for each category. **Section 11** of this bill requires a participant in the Solar Program to participate in net metering.

Section 13 of this bill requires the Commission to establish the categories for participation in the Wind Program. **Section 14** of this bill requires the Commission to adopt regulations establishing a system of incentives for participation in the Wind Program. **Section 14** further provides that the total amount of the incentive

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paid to a participant in the Wind Program with a nameplate capacity of not more than 500 kilowatts must be paid over time and be based on the performance and amount of electricity generated by the wind energy system. **Section 14** also provides for the payment of performance-based incentives to a qualified participant in the Wind Program after December 31, 2021. **Section 17** of this bill requires a participant in the Wind Program to participate in net metering.

Section 18 of this bill requires the Commission to adopt regulations to provide a system of incentives for waterpower energy systems with a nameplate capacity of not more than 500 kilowatts, and **section 20** of this bill prescribes certain limitations on such incentives. **Section 21** of this bill requires a participant in the Waterpower Program to participate in net metering.

Section 21.3 of this bill requires each electric utility in this State to create a Lower Income Solar Energy Pilot Program for the purpose of installing solar distributed generation systems within its service territory for the benefit of low-income customers.

Existing law authorizes certain qualified customers of a utility to participate in net metering. (NRS 704.766-704.775) **Section 24** of this bill authorizes a utility to assess certain charges against certain participants in net metering.

Existing law authorizes the Consumer's Advocate of the Bureau of Consumer Protection in the Office of the Attorney General to represent the public interest in any proceeding, including a proceeding to review a proposed rate of an electric utility. **Section 25.5** of this bill requires the Consumer's Advocate to publish a report containing certain information if the Consumer's Advocate declines to represent the public interest in a proceeding to review a proposed rate of an electric utility.

Section 26.5 of this bill requires the Commission to open an investigatory docket to evaluate the costs and benefits attributable to net metering in this State.

Sections 25.6-25.9 of this bill extend the prospective expiration of the Wind Program, the Waterpower Program and the Solar Program from December 31, 2021, to December 31, 2025.

Sections 25.1-25.45 and 25.55 of this bill establish the Legislative Committee on Energy and set forth the membership, duties, powers and responsibilities of the Committee.

EXPLANATION – Matter in *bolded italics* is new; matter between brackets [omitted material] is material to be omitted.

THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

Section 1. Chapter 701B of NRS is hereby amended by adding thereto the provisions set forth as sections 1.5 to 3.5, inclusive, of this act.

Sec. 1.5. 1. *As used in this chapter, unless the context otherwise requires, "installed cost" means the actual, documented cost of tangible materials and labor for the installation of a solar energy system, distributed generation system, wind energy system or waterpower energy system.*

2. *As used in this section:*

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(a) *"Distributed generation system" has the meaning ascribed to it in NRS 701B.055.*

(b) "Solar energy system" has the meaning ascribed to it in NRS 701B.150.

(c) "Waterpower energy system" has the meaning ascribed to it in NRS 701B.800.

(d) "Wind energy system" has the meaning ascribed to it in NRS 701B.560.

Sec. 2. *The Legislature hereby finds and declares that it is the policy of this State to:*

1. Expand and accelerate the development of solar distributed generation systems in this State; and

2. Establish a sustainable and self-sufficient solar renewable energy industry in this State in which solar energy systems are a viable mainstream alternative for homes, businesses and other public entities.

Sec. 3. *1. For the purposes of carrying out the Solar Energy Systems Incentive Program created by NRS 701B.240, and subject to the limitations prescribed by subsection 2, the Public Utilities Commission of Nevada shall set incentive levels and schedules, with a goal of approving solar energy systems totaling at least 250,000 kilowatts of capacity in this State for the period beginning on July 1, 2010, and ending on December 31, 2021.*

2. The Commission shall not authorize the payment of an incentive pursuant to:

(a) The Solar Energy Systems Incentive Program if the payment of the incentive would cause the total amount of incentives paid by all utilities in this State for the installation of solar energy systems and solar distributed generation systems to exceed \$255,270,000 for the period beginning on July 1, 2010, and ending on December 31, 2025.

(b) The Wind Energy Systems Demonstration Program created by NRS 701B.580 and the Waterpower Energy Systems Demonstration Program created by NRS 701B.820 if the payment of the incentive would cause the total amount of incentives paid by all utilities in this State for the installation of wind energy systems and waterpower energy systems to exceed \$40,000,000 for the period beginning on July 1, 2009, and ending on December 31, 2025. The Commission shall by regulation determine the allocation of incentives for each Program.

3. The Commission may, subject to the limitations prescribed by subsection 2, authorize the payment of performance-based incentives for the period ending on December 31, 2025.

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4. A utility may file with the Commission one combined annual plan which meets the requirements set forth in NRS 701B.230, 701B.610 and 701B.850. The Commission shall review

and approve any plan submitted pursuant to this subsection in accordance with the requirements of NRS 701B.230, 701B.610 and 701B.850, as applicable.

5. As used in this section:

(a) "Distributed generation system" has the meaning ascribed to it in NRS 701B.055.

(b) "Utility" means a public utility that supplies electricity in this State.

Sec. 3.5. *A person who submits an application to a utility pursuant to this chapter shall not make any false or misleading statement in the application or in any material which is required to be submitted with the application. As used in this section, "utility" means a public utility that supplies electricity or natural gas in this State.*

Sec. 4. NRS 701B.040 is hereby amended to read as follows:
701B.040 "Category" means one of the categories of participation in the Solar Program as set forth in **[NRS 701B.240.] regulations adopted by the Commission.**

Sec. 5. NRS 701B.200 is hereby amended to read as follows:
701B.200 The Commission shall adopt regulations necessary to carry out the provisions of NRS 701B.010 to 701B.290, inclusive, **and section 2 of this act**, including, without limitation, regulations that:

1. Establish the type of incentives available to participants in the Solar Program and the level or amount of those incentives . **[, except that the level or amount of an incentive available in a particular program year must not be based upon whether the incentive is for unused capacity reallocated from a past program year pursuant to paragraph (b) of subsection 2 of NRS 701B.260. The regulations must provide that the level or amount of the incentives must decline over time as the cost of solar energy systems and distributed generation systems decline.] The incentives must be market-based incentives that:**

(a) Do not exceed 50 percent of the installed cost of a solar energy system or distributed generation system, as determined by using the average installed cost of the solar energy systems or distributed generation systems, as applicable, installed in the immediately preceding year;

(b) Are designed to maximize the number of customer categories participating in the Solar Program based on

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demographics and location, including, without limitation, categories for public entities, customers of lower socioeconomic status, nonprofit organizations and commercial, industrial and residential customers; and

(c) Provide for a sustainable Solar Program that maintains sufficient customer participation and that provides for the measured award of incentives to as many participants as possible on or before December 31, 2021.

2. Establish the requirements for a utility's annual plan for carrying out and administering the Solar Program. A utility's annual plan must include, without limitation:

- (a) A detailed plan for advertising the Solar Program;
- (b) A detailed budget and schedule for carrying out and administering the Solar Program;
- (c) A detailed account of administrative processes and forms that will be used to carry out and administer the Solar Program, including, without limitation, a description of the application process and copies of all applications and any other forms that are necessary to apply for and participate in the Solar Program;
- (d) A detailed account of the procedures that will be used for inspection and verification of a participant's solar energy system and compliance with the Solar Program;
- (e) A detailed account of training and educational activities that will be used to carry out and administer the Solar Program; ***[and]***
- (f) ***Any other information that the Commission requires from the utility as part of the administration of the Solar Program; and***
- (g) Any other information required by the Commission.

3. Authorize a utility to recover the reasonable costs incurred in carrying out and administering the installation of distributed generation systems. ***[pursuant to paragraph (b) of subsection 1 of NRS 701B.260.]***

Sec. 6. NRS 701B.210 is hereby amended to read as follows:
701B.210 The Commission shall adopt regulations that establish:

1. The qualifications and requirements an applicant must meet to be eligible to participate in ***[each applicable category of:***

- (a) School property;***
 - (b) Public and other property; and***
 - (c) Private residential property and small business property; and]***
- the Solar Program.***

2. The form and content of the master application.

3. The process for accepting and approving applications, which must provide that applications are approved based on the

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order in which complete applications are submitted and not on a lottery process.

4. A requirement that an authorized representative of any public entity participating in the Solar Program, including participation through a third-party ownership structure, provide

the identifying number described in NRS 338.013 for such project and certify in the application and upon final completion of the solar energy system or distributed generation system that the public entity has complied with all applicable requirements of this chapter and chapter 338 of NRS.

5. A process pursuant to which the utility must transmit to the Commission for inclusion in the public records of the Commission a copy of any application by a public entity or any related material requested by the Commission which includes any redacted personal identifying information of a customer.

Sec. 7. NRS 701B.220 is hereby amended to read as follows:

701B.220 **1.** In adopting regulations for the Solar Program, the Commission shall adopt regulations establishing **[an incentive]** *the incentives* for participation in the Solar Program **[.]** , *shall consider whether such regulations ensure, to the extent practicable, the cost-effective use of such incentives and predictability for participants, rate payers and utilities and shall maximize to the extent practicable the number of customer categories participating in the Solar Program based on demographics and location, including, without limitation, categories for public entities, customers of lower socioeconomic status, nonprofit organizations and commercial, industrial and residential customers. The regulations must:*

- (a) For a solar energy system that has a generating capacity of not more than 25 kilowatts, provide for an incentive that must be paid in one installment to a participant for a solar energy system upon proof that the participant has installed and energized the solar energy system;*
- (b) For a solar energy system that has a generating capacity of more than 25 kilowatts, provide for an incentive that must be paid to a participant over time and be based on the performance of the solar energy system and the amount of electricity generated by the solar energy system;*
- (c) For a solar energy system that has a generating capacity of more than 25 kilowatts, provide for a contract to be entered into between a participant and a utility, which must include, without limitation, provisions specifying:*

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- (1) The amount of the incentive the participant will receive from the utility;*
- (2) The period in which the participant will receive an incentive from the utility, which must not exceed 5 years;*
- (3) That the payments of an incentive to the participant must be made not more frequently than quarterly; and*
- (4) That a utility must not be required to issue any new*

incentive on or after January 1, 2021, or make an incentive payment after December 31, 2025;

(d) Establish reporting requirements for each utility that participates in the Solar Program, which must include, without limitation, periodic reports of the average installed cost of the systems, the cost to the utility of carrying out the Solar Program, the effect of the Solar Program on the rates paid by customers of the utility and the annual statistical data related to the amount of incentives granted and the number of participants;

(e) Provide for a decline over time in the amount of the incentives for participation in the Solar Program as the installed costs of solar energy systems decrease and as variables, including, without limitation, system size, installation costs, market conditions and access to federal, state and other financial incentives, may require;

(f) Provide that the rate at which incentives decline over time will be published by the Commission, including publication on the Internet website maintained by the Commission, annually or on such other schedule as necessary to reflect changes in the market; and

(g) Provide that incentives must be made available only to solar energy systems with a nameplate capacity of not more than 500 kilowatts.

2. The Commission shall review the incentives for participation in the Solar Program and may adjust the amount of the incentives not more frequently than annually, as determined necessary by the Commission to reflect changes in the market for solar energy systems and demand for incentives.

3. A contract that is executed between a utility and a participant on or before December 31, 2021, providing for the payment to the participant of an incentive pursuant to paragraph (b) of subsection 1 may provide for the continued payment of such an incentive after December 31, 2021, in accordance with regulations adopted by the Commission.

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Sec. 8. NRS 701B.230 is hereby amended to read as follows:

701B.230 1. Each year on or before the date established by the Commission, a utility shall file with the Commission its annual plan for carrying out and administering the Solar Program within its service area . **[for a program year.]**

2. The Commission shall:

(a) Review each annual plan filed by a utility for compliance with the requirements established by regulation of the Commission; and

(b) Approve each annual plan with such modifications and upon

such terms and conditions as the Commission finds necessary or appropriate to facilitate the Solar Program.

3. A utility shall carry out and administer the Solar Program within its service area in accordance with the utility's annual plan as approved by the Commission.

4. A utility may recover its reasonable and prudent costs, including, without limitation, customer incentives, that are associated with carrying out and administering the Solar Program within its service area by seeking recovery of those costs in an appropriate proceeding before the Commission pursuant to NRS 704.110.

Sec. 9. NRS 701B.240 is hereby amended to read as follows:
701B.240 1. The Solar Energy Systems Incentive Program is hereby created.

2. The **[Solar Program must have three] Commission:**

(a) Shall establish categories **[as follows:**

(a) School property;

(b) Public and other property; and

(c) Private residential property and small business property.] for participation in the Solar Program with the goal of maximizing to the extent practicable the number of customer categories participating in the Solar Program based on demographics and location.

(b) May establish the criteria and capacity for each category.

3. **For the purpose of establishing categories pursuant to subsection 2, the Commission may additionally establish subcategories which may include, without limitation, schools, public property, low-income customers and nonprofit organizations, and may establish the criteria and capacity for each subcategory.**

4. To be eligible to participate in the Solar Program, a person must:

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(a) Meet the qualifications established by the Commission pursuant to NRS 701B.210;

(b) Submit an application to a utility and be selected by the **[Commission] utility** for inclusion in the Solar Program pursuant to NRS 701B.250 and 701B.255; **and**

(c) When installing the solar energy system, use an installer who has been issued a classification C-2 license with the appropriate subclassification by the State Contractors' Board pursuant to the regulations adopted by the Board . **[; and**

(d) If the person will be participating in the Solar Program in the category of school property or public and other property, provide for the public display of the solar energy system, including, without

limitation, providing for public demonstrations of the solar energy system and for hands-on experience of the solar energy system by the public.]

Sec. 10. NRS 701B.255 is hereby amended to read as follows:

701B.255 1. After reviewing an application submitted pursuant to NRS 701B.250 and ensuring that the applicant meets the qualifications and requirements to be eligible to participate in the Solar Program, a utility [may] **shall** select the applicant for participation in the Solar Program [.] , **subject to the limitations prescribed by section 3 of this act.**

2. Not later than 30 days after the date on which the utility selects an applicant, the utility shall provide written notice of the selection to the applicant.

3. After the utility selects an applicant to participate in the Solar Program, the utility [may] **shall** approve the solar energy system proposed by the applicant. Upon the utility's approval of the solar energy system:

(a) The utility shall provide to the applicant notice of the approval and the amount of incentive for which the solar energy system is eligible; and

(b) The applicant may install and energize the solar energy system.

4. Upon the completion of the installation and energizing of the solar energy system, the participant must submit to the utility an incentive claim form and any supporting information, including, without limitation, a verification of the **installed** cost of the project and a calculation of the expected system output.

5. Upon receipt of the **completed** incentive claim form and verification that the solar energy system is properly connected, the utility shall issue an incentive payment to the participant.

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6. The amount **and type** of the incentive for which an applicant is eligible must be determined on the date on which the applicant is selected for participation in the Solar Program, except that an applicant forfeits eligibility for that amount of incentive if the applicant withdraws from participation in the Solar Program or does not complete the installation of the solar energy system within 12 months after the date on which the applicant is selected for participation in the Solar Program. **[An applicant who forfeits eligibility for the incentive for which the applicant was originally determined to be eligible may become eligible for an incentive only on the date on which the applicant completes the installation of the solar energy system, and the amount of the incentive for which such an applicant is eligible must be determined on the date on which the applicant completes the installation of the solar energy system.]**

Sec. 11. NRS 701B.280 is hereby amended to read as follows:
701B.280 **[If] To be eligible for an incentive through the Solar Program,** a solar energy system **[used by a participant in the Solar Program meets] must meet** the requirements **[of NRS 704.766 to 704.775, inclusive, the participant is entitled to participate] for participation** in net metering pursuant to the provisions of NRS 704.766 to 704.775, inclusive.

Sec. 12. NRS 701B.440 is hereby amended to read as follows:
701B.440 “Category” means one of the categories of participation in the Wind Demonstration Program **[as set forth in] established by the Commission pursuant to subsection 2 of** NRS 701B.580.

Sec. 13. NRS 701B.580 is hereby amended to read as follows:
701B.580 1. The Wind Energy Systems Demonstration Program is hereby created.

2. The **[Program must have four] Commission shall establish** categories **[as follows:**

- (a) School property;**
- (b) Other public property;**
- (c) Private residential property and small business property; and**
- (d) Agricultural property.] for participation in the Program.**

3. To be eligible to participate in the Program, a person must:

- (a) Meet the qualifications established by the Commission pursuant to NRS 701B.590; and**
- (b) When installing the wind energy system, use an installer who has been issued a classification C-2 license with the appropriate subclassification by the State Contractors’ Board pursuant to the regulations adopted by the Board . [; and**

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(c) If the person will be participating in the Program in the category of school property or other public property, provide for the public display of the wind energy system, including, without limitation, providing for public demonstrations of the wind energy system and for hands-on experience of the wind energy system by the public.]

Sec. 14. NRS 701B.590 is hereby amended to read as follows:

701B.590 **1.** The Commission shall adopt regulations necessary to carry out the provisions of the Wind Energy Systems Demonstration Program Act, including, without limitation, regulations that establish:

[1.] (a) The capacity goals for the Program . [, which must be designed to meet the goal of the Legislature of the installation of not less than 5 megawatts of wind energy systems in this State by 2012 and the goals for each category of the Program.

2.] (b) A system of incentives that are based on rebates that

decline as the [capacity goals for the Program and the goals for each category of the Program are met. The rebates must be based on predicted energy savings.

3.] installed cost of wind energy systems declines and as variables, including, without limitation, system size, installation costs, market conditions and access to federal, state and other financial incentives, may require. The system of incentives must provide:

- (1) Incentives for wind energy systems with a nameplate capacity of not more than 500 kilowatts;**
- (2) That the amount of the incentive for a participant must be paid over time and be based on the performance of the wind energy system and the amount of electricity generated by the wind energy system; and**
- (3) For a contract to be entered into between a participant and a utility, which must include, without limitation, provisions specifying:**
 - (I) The amount of the incentive the participant will receive from the utility;**
 - (II) The period in which the participant will receive an incentive from the utility, which must not exceed 5 years;**
 - (III) That the payments of an incentive to the participant must be made not more frequently than quarterly; and**
 - (IV) That a utility is not required to issue any new incentive on or after January 1, 2021, or make an incentive payment after December 31, 2025.**

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(c) Reporting requirements for each utility that participates in the Program, which must include, without limitation, periodic reports of the average installed cost of the wind energy system, the cost to the utility of carrying out the Program and the effect of the Program on the rates paid by customers of the utility.

(d) The procedure for claiming incentives, including, without limitation, the form and content of the incentive claim form.

(e) The period for accepting applications, which must include a period during which a utility must accept additional applications if a previously approved applicant fails to install and energize a wind energy system within the time allowed by NRS 701B.615.

(f) The total incentive paid to a participant in the Program, which must not exceed 50 percent of the total installed cost of the wind energy system of the participant.

(g) A requirement that an authorized representative of any public entity participating in the Program, including participation through a third-party ownership structure, must provide the identifying number described in NRS 338.013 for such project and

certify in the application and upon final completion of the wind energy system that the public entity has complied with all applicable requirements of this chapter and chapter 338 of NRS. (h) A process pursuant to which the utility shall transmit to the Commission for inclusion in the public records of the Commission a copy of any application by a public entity or any related material requested by the Commission which includes any redacted personal identifying information of a customer.

2. A contract that is executed between a utility and a participant on or before December 31, 2021, providing for the payment to the participant of an incentive pursuant to subparagraph (2) of paragraph (b) of subsection 1 may provide for the continued payment of such an incentive after December 31, 2021, subject to the limitations prescribed by section 3 of this act and in accordance with regulations adopted by the Commission.

Sec. 15. NRS 701B.610 is hereby amended to read as follows:

701B.610 1. On or before February 1, 2008, and on or before February 1 of each year thereafter, each utility shall file with the Commission its annual plan for carrying out and administering the Wind Demonstration Program within its service area . **[for the following program year.]**

2. On or before July 1, 2008, and on or before July 1 of each year thereafter, the Commission shall:

(a) Review the annual plan filed by each utility for compliance with the requirements established by regulation; and

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(b) Approve the annual plan with such modifications and upon such terms and conditions as the Commission finds necessary or appropriate to facilitate the Program.

Sec. 16. NRS 701B.615 is hereby amended to read as follows:

701B.615 1. An applicant who wishes to participate in the Wind Demonstration Program must submit an application to a utility.

2. After reviewing an application submitted pursuant to subsection 1 and ensuring that the applicant meets the qualifications and requirements to be eligible to participate in the Program, a utility may select the applicant for participation in the Program.

3. Not later than 30 days after the date on which the utility selects an applicant, the utility shall provide written notice of the selection to the applicant.

4. After the utility selects an applicant to participate in the Program, the utility may approve the wind energy system proposed by the applicant. Upon the utility's approval of the wind energy system:

(a) The utility shall provide to the applicant notice of the

approval and the amount of incentive for which the wind energy system is eligible; and

(b) The applicant may install and energize the wind energy system.

5. Upon the completion of the installation and energizing of the wind energy system, the participant must submit to the utility an incentive claim form and any supporting information, including, without limitation, a verification of the **installed** cost of the project and a calculation of the expected system output.

6. Upon receipt of the incentive claim form and verification that the wind energy system is properly connected, the utility shall issue an incentive payment to the participant.

7. The amount of the incentive for which an applicant is eligible must be determined on the date on which the applicant is selected for participation in the Wind Demonstration Program, except that an applicant forfeits eligibility for that amount of incentive if the applicant withdraws from participation in the Program or does not complete the installation of the wind energy system within 12 months after the date on which the applicant is selected for participation in the Program. **[An applicant who forfeits eligibility for the incentive for which the applicant was originally determined to be eligible may become eligible for an incentive only on the date on which the applicant completes the installation of the wind energy system, and the amount of the incentive for which such**

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an applicant is eligible must be determined on the date on which the applicant completes the installation of the wind energy system.]

Sec. 17. NRS 701B.650 is hereby amended to read as follows:

701B.650 **[If] To be eligible for an incentive through the Wind Demonstration Program,** a wind energy system **[used by a participant in the Wind Demonstration Program meets] must meet** the requirements **[of NRS 704.766 to 704.775, inclusive, the participant is entitled to participate] for participation** in net metering pursuant to the provisions of NRS 704.766 to 704.775, inclusive.

Sec. 18. NRS 701B.840 is hereby amended to read as follows:

701B.840 The Commission shall adopt regulations that establish:

1. The capacity goals for the Program, which must **[be designed to meet the goal of the Legislature of the installation of not less than 5 megawatts of waterpower energy systems in this State by 2016 and the goals for each category of the Program. The regulations must]** provide that not less than 1 megawatt of capacity **[must]** be set aside for the installation of waterpower energy systems with a nameplate capacity of 100 kilowatts or less.

2. *A system of incentives for waterpower energy systems with a nameplate capacity of not more than 500 kilowatts.*

3. A system of incentives that are based on rebates that decline as the capacity goals for the Program **[and the goals for each category of the Program]** are met. The rebates must be based on predicted energy savings.

[3.] 4. The procedure for claiming incentives, including, without limitation, the form and content of the incentive claim form.

Sec. 19. NRS 701B.850 is hereby amended to read as follows:

701B.850 1. **[On] Each year on** or before **[February 21, 2008, and on or before February 1 of each subsequent year,]** **a date established by the Commission,** each utility shall file with the Commission **[for approval an] the utility's** annual plan for **[the administration and delivery of] carrying out and administering** the Waterpower Demonstration Program **in its service area** for the **[program year beginning July 1, 2008, and each subsequent year thereafter.] immediately following 12-month period prescribed by the Commission.**

2. **[On or before July 1, 2008, and on or before each July 1 of each subsequent year, the] The** Commission shall **[review] :**
(a) Review the annual plan for compliance with the requirements **[set forth] established** by regulation of the Commission **[.] ; and**

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(b) Approve the annual plan with such modifications and upon such terms and conditions as the Commission finds necessary or appropriate to facilitate the Program.

Sec. 20. NRS 701B.865 is hereby amended to read as follows:

701B.865 1. An applicant who wishes to participate in the Waterpower Demonstration Program must submit an application to a utility.

2. After reviewing an application submitted pursuant to subsection 1 and ensuring that the applicant meets the qualifications and requirements to be eligible to participate in the Program, a utility may select the applicant for participation in the Program.

3. Not later than 30 days after the date on which the utility selects an applicant, the utility shall provide written notice of the selection to the applicant.

4. After the utility selects an applicant to participate in the Program, the utility may approve the waterpower energy system proposed by the applicant. Upon the utility's approval of the waterpower energy system:

(a) The utility shall provide to the applicant notice of the approval and the amount of incentive for which the waterpower energy system is eligible; and

(b) The applicant may construct the waterpower energy system.

5. Upon the completion of the construction of a waterpower energy system, the participant must submit to the utility an incentive claim form and any supporting information, including, without limitation, a verification of the **installed** cost of the project and a calculation of the expected system output.

6. Upon receipt of the incentive claim form and verification that the waterpower energy system is properly connected, the utility shall issue an incentive payment to the participant.

7. The amount of the incentive for which an applicant is eligible must be determined on the date on which the applicant is selected for participation in the Waterpower Demonstration Program, except that :

(a) An applicant forfeits eligibility for that amount of incentive if the applicant withdraws from participation in the Program or does not complete the construction of the waterpower energy system within 12 months after the date on which the applicant is selected for participation in the Program **[An applicant who forfeits eligibility for the incentive for which the applicant was originally determined to be eligible may become eligible for an incentive only on the date on which the applicant completes the construction of the waterpower energy system, and the amount of the incentive for**

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which such an applicant is eligible must be determined on the date on which the applicant completes the construction of the waterpower energy system.] ; and

(b) No payment may be made by a utility after December 31, 2025, or made if such payment would otherwise cause the utility to exceed the limitations prescribed by section 3 of this act.

8. The total incentive paid to a participant in the Waterpower Demonstration Program must not exceed 50 percent of the total installed cost of the waterpower energy system of the participant.

9. An authorized representative of any public entity participating in the Waterpower Demonstration Program, including participation through a third-party ownership structure, shall provide the identifying number described in NRS 338.013 for such project and certify in the application and upon final completion of the waterpower energy system that the public entity has complied with all applicable requirements of this chapter and chapter 338 of NRS.

10. The Commission shall adopt regulations prescribing a process pursuant to which the utility must transmit to the Commission for inclusion in the public records of the Commission a copy of any application by a public entity or any related material requested by the Commission with any redacted personal identifying information of a customer.

Sec. 21. NRS 701B.880 is hereby amended to read as follows:
701B.880 **[If] *To be eligible for an incentive through the Waterpower Demonstration Program,*** the waterpower energy system **[used by a participant in the Waterpower Demonstration Program meets] *must meet*** the requirements **[of NRS 704.766 to 704.775, inclusive, the participant is entitled to participate] *for participation*** in net metering pursuant to the provisions of NRS 704.766 to 704.775, inclusive.

Sec. 21.3. Chapter 704 of NRS is hereby amended by adding thereto a new section to read as follows:

1. Each electric utility in this State shall create a Lower Income Solar Energy Pilot Program for the purpose of installing, before January 1, 2017, distributed generation systems with a cumulative capacity of at least 1 megawatt at locations throughout its service territory which benefit low-income customers, including, without limitation, homeless shelters, low-income housing developments and schools with significant populations of low-income pupils. Each electric utility shall submit the Program as part of its annual plan submitted pursuant to NRS 701B.230. The Commission shall approve the Program with such

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modifications and upon such terms and conditions as the Commission deems necessary or appropriate to enable the Program to meet the purposes set forth in this subsection.
2. The Office of Energy shall advise the Commission and each electric utility regarding grants and other sources of money available to defray the costs of the Program.
3. As used in this section, “distributed generation system” has the meaning ascribed to it in NRS 701B.055.

Secs. 22 and 23. (Deleted by amendment.)

Sec. 24. NRS 704.773 is hereby amended to read as follows:

704.773 1. A utility shall offer net metering, as set forth in NRS 704.775, to the customer-generators operating within its service area until the cumulative capacity of all net metering systems operating in this State is equal to **[2] 3** percent of the total peak capacity of all utilities in this State.

2. If the net metering system of a customer-generator who accepts the offer of a utility for net metering has a capacity of not more than 25 kilowatts, the utility:

(a) Shall offer to make available to the customer-generator an energy meter that is capable of registering the flow of electricity in two directions.

(b) May, at its own expense and with the written consent of the customer-generator, install one or more additional meters to monitor the flow of electricity in each direction.

(c) **[Shall] Except as otherwise provided in subsection 5, shall** not charge a customer-generator any fee or charge that would increase the customer-generator's minimum monthly charge to an amount greater than that of other customers of the utility in the same rate class as the customer-generator.

3. If the net metering system of a customer-generator who accepts the offer of a utility for net metering has a capacity of more than 25 kilowatts, the utility:

(a) May require the customer-generator to install at its own cost:

(1) An energy meter that is capable of measuring generation output and customer load; and

(2) Any upgrades to the system of the utility that are required to make the net metering system compatible with the system of the utility.

(b) Except as otherwise provided in paragraph (c) **[,] and subsection 5**, may charge the customer-generator any applicable fee or charge charged to other customers of the utility in the same rate class as the customer-generator, including, without limitation, customer, demand and facility charges.

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(c) Shall not charge the customer-generator any standby charge.

☐ At the time of installation or upgrade of any portion of a net metering system, the utility must allow a customer-generator governed by this subsection to pay the entire cost of the installation or upgrade of the portion of the net metering system.

4. If the net metering system of a customer-generator is a net metering system described in paragraph (b) or (c) of subsection 1 of NRS 704.771 and:

(a) The system is intended primarily to offset part or all of the customer-generator's requirements for electricity on property contiguous to the property on which the net metering system is located; and

(b) The customer-generator sells or transfers his or her interest in the contiguous property,

☐ the net metering system ceases to be eligible to participate in net metering.

5. **A utility shall assess against a customer-generator:**

(a) If applicable, the universal energy charge imposed pursuant to NRS 702.160; and

(b) Any charges imposed pursuant to chapter 701B of NRS or NRS 704.7827 or 704.785 which are assessed against other customers in the same rate class as the customer-generator.

☐ **For any such charges calculated on the basis of a kilowatt-hour rate, the customer-generator must only be charged with respect to kilowatt-hours of energy delivered by the utility to the customer generator.**

6. The Commission shall adopt regulations prescribing the form and substance for a net metering tariff and a standard net metering contract. The regulations must include, without limitation:
- (a) The particular provisions, limitations and responsibilities of a customer-generator which must be included in a net metering tariff with regard to:
 - (1) Metering equipment;
 - (2) Net energy metering and billing; and
 - (3) Interconnection,
 - ☐ based on the allowable size of the net metering system.
 - (b) The particular provisions, limitations and responsibilities of a customer-generator and the utility which must be included in a standard net metering contract.
 - (c) A timeline for processing applications and contracts for net metering applicants.
 - (d) Any other provisions the Commission finds necessary to carry out the provisions of NRS 704.766 to 704.775, inclusive.
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Sec. 25. (Deleted by amendment.)

Sec. 25.1. Chapter 218E of NRS is hereby amended by adding thereto the provisions set forth as sections 25.2 to 25.45, inclusive, of this act.

Sec. 25.2. *As used in sections 25.2 to 25.45, inclusive, of this act, unless the context otherwise requires, "Committee" means the Legislative Committee on Energy.*

Sec. 25.25. 1. *The Legislative Committee on Energy, consisting of six legislative members, is hereby created. The membership of the Committee consists of:*

(a) Three members appointed by the Majority Leader of the Senate, at least one of whom must be a member of the minority political party.

(b) Three members appointed by the Speaker of the Assembly, at least one of whom must be a member of the minority political party.

2. The Legislative Commission shall review and approve the budget and work program for the Committee and any changes to the budget or work program.

3. The Legislative Commission shall select the Chair and Vice Chair of the Committee from among the members of the Committee. Each Chair and Vice Chair holds office for a term of 2 years commencing on July 1 of each odd-numbered year. The office of Chair of the Committee must alternate each biennium between the Houses. If a vacancy occurs in the office of Chair or Vice Chair, the vacancy must be filled in the same manner as the original selection for the remainder of the unexpired term.

4. A member of the Committee who is not a candidate for reelection or who is defeated for reelection continues to serve after the general election until the next regular or special session convenes.

5. A vacancy on the Committee must be filled in the same manner as the original appointment for the remainder of the unexpired term.

Sec. 25.3. 1. Except as otherwise ordered by the Legislative Commission, the members of the Committee shall meet not earlier than November 1 of each odd-numbered year and not later than August 31 of the following even-numbered year at the times and places specified by a call of the Chair or a majority of the Committee.

2. The Director or the Director's designee shall act as the nonvoting recording Secretary of the Committee.

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3. Four members of the Committee constitute a quorum, and a quorum may exercise all the power and authority conferred on the Committee.

4. Except during a regular or special session, for each day or portion of a day during which a member of the Committee attends a meeting of the Committee or is otherwise engaged in the business of the Committee, the member is entitled to receive the:

(a) Compensation provided for a majority of the Legislators during the first 60 days of the preceding regular session;

(b) Per diem allowance provided for state officers and employees generally; and

(c) Travel expenses provided pursuant to NRS 218A.655.

5. All such compensation, per diem allowances and travel expenses must be paid from the Legislative Fund.

Sec. 25.4. 1. The Committee may:

(a) Evaluate, review and comment upon matters related to energy policy within this State, including, without limitation:

(1) Policies, plans or programs relating to the production, consumption or use of energy in this State;

(2) Legislative measures regarding energy policy;

(3) The effect of any policy, plan, program or legislation on rates or rate payers;

(4) The effect of any policy, plan, program or legislation on economic development in this State;

(5) The effect of any policy, plan, program or legislation on the environment;

(6) Any contracts or requests for proposals relating to the purchase of capacity;

(7) The effect of any policy, plan, program or legislation

which provides for the construction or acquisition of facilities for the generation of electricity;

(8) The effect of any policy, plan, program or legislation on the development of a market in this State for electricity generated from renewable energy;

(9) The infrastructure and transmission requirements of any policy, plan, program or legislation; and

(10) Any other matters or topics that, in the determination of the Committee, affect energy policy in this State.

(b) Conduct investigations and hold hearings in connection with its duties pursuant to this section.

(c) Request that the Legislative Counsel Bureau assist in the research, investigations, hearings and reviews of the Committee.

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(d) Make recommendations to the Legislature concerning the manner in which energy policy may be implemented or improved.

2. As used in this section, “renewable energy” has the meaning ascribed to it in NRS 701.070.

Sec. 25.45. *1. If the Committee conducts investigations or holds hearings pursuant to paragraph (b) of subsection 1 of section 25.4 of this act:*

(a) The Secretary of the Committee or, in the Secretary’s absence, a member designated by the Committee may administer oaths.

(b) The Secretary or Chair of the Committee may cause the deposition of witnesses, residing either within or without the State, to be taken in the manner prescribed by rule of court for taking depositions in civil actions in the district courts.

(c) The Chair of the Committee may issue subpoenas to compel the attendance and testimony of witnesses and the production of books, papers, accounts, department records and other documents.

2. If any witness fails or refuses to attend or testify or to produce the books, papers, accounts, department records or other documents required by the subpoena, the Chair of the Committee may report the failure or refusal to the district court by a petition which:

(a) Sets forth that:

(1) Due notice has been given of the time and place of the attendance of the witness or the production of the required books, papers, accounts, department records or other documents;

(2) The witness has been subpoenaed by the Committee pursuant to this section; and

(3) The witness has failed or refused to attend or testify or to produce the books, papers, accounts, department records or

other documents required by the subpoena before the Committee named in the subpoena; and

(b) Asks for an order of the court compelling the witness to attend and testify or to produce the required books, papers, accounts, department records or other documents before the Committee.

3. Upon such a petition, the court shall:

(a) Enter an order directing the witness:

(1) To appear before the court at a time and place to be fixed by the court in its order, the time to be not more than 10 days after the date of the order; and

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(2) To show cause why the witness has not attended or testified or produced the required books, papers, accounts, department records or other documents before the Committee; and

(b) Serve a certified copy of the order upon the witness.

4. If it appears to the court that the subpoena was regularly issued by the Committee, the court shall enter an order that the witness:

(a) Must appear before the Committee at the time and place fixed in the order;

(b) Must testify or produce the required books, papers, accounts, department records or other documents; and

(c) Upon failure to obey the order, must be dealt with as for contempt of court.

Sec. 25.5. NRS 228.390 is hereby amended to read as follows:

228.390 **1.** Except as otherwise provided in NRS 704.110 and 704.7561 to 704.7595, inclusive:

[1.] (a) The Consumer's Advocate has sole discretion to represent or refrain from representing the public interest and any class of customers in any proceeding.

[2.] (b) In exercising such discretion, the Consumer's Advocate shall consider the importance and extent of the public interest or the customers' interests involved and whether those interests would be adequately represented without his or her participation.

[3.] (c) If the Consumer's Advocate determines that there would be a conflict between the public interest and any particular class of customers or any inconsistent interests among the classes of customers involved in a particular matter, the Consumer's Advocate may choose to represent one of the interests, to represent no interest, or to represent one interest through his or her office and another or others through outside counsel engaged on a case basis.

(d) If the Consumer's Advocate declines to represent the public interest in a proceeding to review a proposed rate of an electric utility, the Consumer's Advocate shall publish a report in

support of the decision to decline such representation and make the report available to the public at the Bureau of Consumer Protection and on the Internet website maintained by the Bureau of Consumer Protection. The report must:

- (1) Identify each element of the public interest, as may be applicable to the proceeding to review a proposed rate; and*
- (2) Specify the manner in which each element of the public interest, as identified pursuant to subparagraph (1), is sufficiently represented.*

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2. As used in this section, “electric utility” has the meaning ascribed to it in NRS 704.187.

Sec. 25.55. Section 25.4 of this act is hereby amended to read as follows:

Sec. 25.4. 1. The Committee may:

(a) Evaluate, review and comment upon matters related to energy policy within this State, including, without limitation:

- (1) Policies, plans or programs relating to the production, consumption or use of energy in this State;
- (2) Legislative measures regarding energy policy;
- (3) ***The progress made by this State in satisfying the goals and objectives of Senate Bill No. 123 of the 77th Session of the Nevada Legislature;***

(4) The effect of any policy, plan, program or legislation on rates or rate payers;

[(4)] (5) The effect of any policy, plan, program or legislation on economic development in this State;

[(5)] (6) The effect of any policy, plan, program or legislation on the environment;

[(6)] (7) Any contracts or requests for proposals relating to the purchase of capacity;

[(7)] (8) The effect of any policy, plan, program or legislation which provides for the construction or acquisition of facilities for the generation of electricity;

[(8)] (9) The effect of any policy, plan, program or legislation on the development of a market in this State for electricity generated from renewable energy;

[(9)] (10) The infrastructure and transmission requirements of any policy, plan, program or legislation; and

[(10)] (11) Any other matters or topics that, in the determination of the Committee, affect energy policy in this State.

(b) Conduct investigations and hold hearings in connection with its duties pursuant to this section.

(c) Request that the Legislative Counsel Bureau assist in

the research, investigations, hearings and reviews of the Committee.

(d) Make recommendations to the Legislature concerning the manner in which energy policy may be implemented or improved.

2. As used in this section, “renewable energy” has the meaning ascribed to it in NRS 701.070.

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Sec. 25.6. Section 113 of chapter 509, Statutes of Nevada 2007, as last amended by section 49 of chapter 412, Statutes of Nevada 2011, at page 2562, is hereby amended to read as follows:
Sec. 113. 1. This act becomes effective:

(a) Upon passage and approval for the purposes of adopting regulations and taking such other actions as are necessary to carry out the provisions of this act; and

(b) For all other purposes besides those described in paragraph (a):

(1) For this section and sections 1, 30, 32, 36 to 46, inclusive, 49, 51 to 61, inclusive, 107, 109, 110 and 111 of this act, upon passage and approval.

(2) For sections 1.5 to 29, inclusive, 43.5, 47, 51.3, 51.7, 108, 112 and 112.5 of this act, on July 1, 2007.

(3) For sections 62 to 106, inclusive, of this act, on October 1, 2007.

(4) For sections 31, 32.3, 32.5, 32.7, 33, 34 and 35 of this act, on January 1, 2009.

(5) For section 48 of this act, on January 1, 2010.

(6) For section 50 of this act, on January 1, 2011.

2. Sections 62 to 75, inclusive, 77 to 82, inclusive, 85 to 94, inclusive, and 95 to 105, inclusive, of this act expire by limitation on December 31, ~~2021,~~ **2025**.

Sec. 25.7. Section 13 of chapter 246, Statutes of Nevada 2009, as last amended by section 50 of chapter 412, Statutes of Nevada 2011, at page 2563, is hereby amended to read as follows:

Sec. 13. 1. This act becomes effective on July 1, 2009.

2. Sections 2 and 3 of this act expire by limitation on December 31, ~~2021,~~ **2025**.

Sec. 25.8. Section 21 of chapter 321, Statutes of Nevada 2009, as last amended by section 51 of chapter 412, Statutes of Nevada 2011, at page 2563, is hereby amended to read as follows:

Sec. 21. 1. This section and sections 1 to 1.51, inclusive, 1.55 to 19.7, inclusive, and 19.9 to 20.9, inclusive, of this act become effective upon passage and approval.

2. Sections 1.85, 1.87, 1.92, 1.93, 1.95 and 4.3 to 9, inclusive, of this act expire by limitation on December 31,

~~[2021,]~~ 2025.

Sec. 25.9. Section 54 of chapter 412, Statutes of Nevada 2011, at page 2563, is hereby amended to read as follows:

Sec. 54. 1. This section and sections 1, 3 to 42, inclusive, 44, 45, 46, 48 to 51, inclusive, subsection 2 of
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section 52 and section 53 of this act become effective upon passage and approval.

2. Sections 2, 43, 47 and subsection 1 of section 52 of this act become effective on January 1, ~~[2022,]~~ 2026.

Sec. 26. NRS 701B.060, 701B.100, 701B.110, 701B.120, 701B.130, 701B.140, 701B.260, 701B.490 and 701B.760 are hereby repealed.

Sec. 26.5. 1. As soon as practicable after the effective date of this act, the Public Utilities Commission of Nevada shall open an investigatory docket to examine the comprehensive costs of and benefits from net metering in this State, including, without limitation, the costs and benefits to:

- (a) The State of Nevada;
- (b) Customer-generators who participate in net metering;
- (c) Customers of a utility who do not participate in net metering;
- and
- (d) Each utility which offers net metering.

2. The investigatory docket shall engage a knowledgeable and independent third party to analyze all factors that the Commission deems necessary to determine the costs and benefits described in subsection 1.

3. The following parties may participate in the investigatory docket:

- (a) Each utility in this State;
- (b) The Regulatory Operations Staff of the Commission;
- (c) The Consumer's Advocate of the Bureau of Consumer Protection in the Office of the Attorney General;
- (d) Any business operating in the State whose primary business is the installation of distributed generation systems; and
- (e) Any other interested parties.

4. On or before October 1, 2014, the Commission shall:

- (a) Prepare a written report of its findings and recommendations from the investigatory docket, including, without limitation, a calculation and determination of the total costs of and benefits from net metering.
- (b) Submit the written report to the Director of the Legislative Counsel Bureau for transmittal to the 78th Session of the Nevada Legislature.

5. If the report of the Commission concludes that there is a

material net benefit or cost attributable to net metering, the Commission shall recommend a methodology for properly allocating and apportioning all of the costs and benefits of net metering among all persons who participate in, benefit from and pay for net metering.

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metering among all persons who participate in, benefit from and pay for net metering.

6. As used in this section:

(a) "Distributed generation system" has the meaning ascribed to it in NRS 701B.055.

(b) "Net metering" has the meaning ascribed to it in NRS 704.769.

(c) "Utility" has the meaning ascribed to it in NRS 704.772.

Sec. 27. The Public Utilities Commission of Nevada shall adopt regulations to carry out the amendatory provisions of this act on or before April 30, 2014. The regulations must provide for the transition to the performance-based incentive required by NRS 701B.220, as amended by section 7 of this act, NRS 701B.590, as amended by section 14 of this act, and NRS 701B.840, as amended by section 18 of this act, for the applicable participants in the Solar Energy Systems Incentive Program, the Wind Energy Systems Demonstration Program and the Waterpower Energy Systems Demonstration Program.

Sec. 28. 1. This section and sections 1 to 25, inclusive, 26 and 27 of this act become effective:

(a) Upon passage and approval for the purpose of adopting regulations or performing any other preparatory administrative tasks necessary to carry out the provisions of this act; and

(b) On January 1, 2014, for all other purposes.

2. Sections 25.1 to 25.45, inclusive, of this act become effective on July 1, 2013.

3. Section 25.55 of this act becomes effective at 12:01 a.m. on July 1, 2013, if, and only if, Senate Bill No. 123 of this session is enacted by the Legislature and becomes effective.

4. Sections 1 to 23, inclusive, of this act expire by limitation on December 31, 2025.

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