White Paper

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

Prepared for:

Nevada State Office of Energy and
Governor's Office of Economic Development

DOE Grant DE-EE0005461 Enhancing Commercial Building Retrofits
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.

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.

THE $20 BILLION BONANZA

SWEEP
Southwest Energy Efficiency Project

Best Practice Electric Utility Energy Efficiency Programs and Their Benefits for the Southwest

Nevada Highlights

The Bottom Line: Households and businesses in Nevada can save $3.4 billion through greater commitment to energy efficiency.

Energy efficiency is the lowest-cost, cleanest, and least risky resource available to electric utilities in Nevada. By implementing best practice energy efficiency programs, electric utilities in Nevada would:

- Save their customers **$3.4 billion net**
- **Cut electricity use in 2020 by 22%** and peak demand by 21%
- **Avoid 4 large power plants**
- Save 7 billion kilowatt hours per year by 2020, equivalent to **the electricity use of 550,000 typical households**
- Support **4,680 new jobs** and boost economic activity in the state
- Cut air pollution and **improve public health**
- Reduce CO_2 emissions by nearly 4.4 million metric tons per year by 2020, equivalent to taking **870,000 passenger vehicles off the road**
- Reduce water consumption by **2.4 billion gallons** per year by 2020

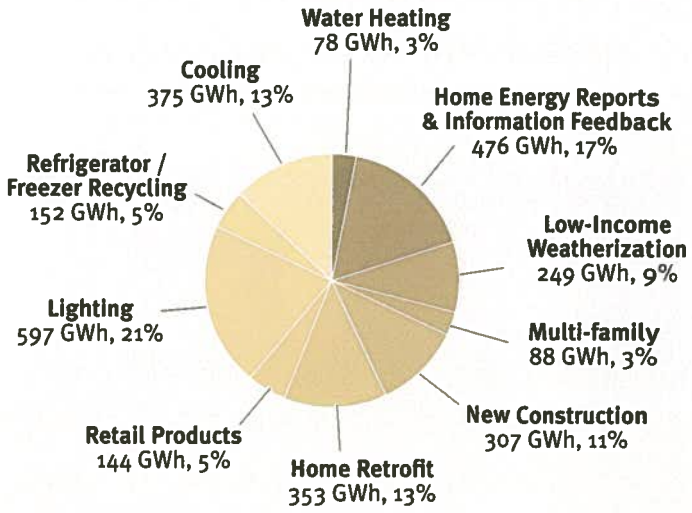
We'll Get There by Employing Best Practices

To reap the benefits listed above, Nevada utilities should ramp up their energy efficiency funding significantly during 2013–2020.

Best Practice utility energy efficiency programs include education, technical assistance and financial incentives for all customers.

Utilities should promote all cost-effective energy efficiency measures including energy-efficient lighting, appliances, air conditioning systems, electronic devices, control systems, building envelope retrofits and better performing new homes and commercial buildings.

TOTAL RESIDENTIAL ELECTRICITY SAVINGS IN 2020 BY PROGRAM (GWh)



TOTAL COMMERCIAL & INDUSTRIAL ELECTRICITY SAVINGS IN 2020 BY PROGRAM (GWh)