RESTRUCTURING THE ELECTRICITY MARKET IN NEVADA?

> Possibilities, Prospects, and Pitfalls



# **Executive Summary**

#### Background

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Question 3: The Energy Choice Initiative (ECI) is a statewide constitutional ballot initiative that will be placed before Nevada's registered voters at the November 6, 2018, General Election. Question 3 seeks to amend the *Nevada Constitution* by adding a new section to its Declaration of Rights regarding the provision of electric utility service in the State. Question 3 reads:

Shall Article 1 of the *Nevada Constitution* be amended to require the Legislature to provide by law for the establishment of an open, competitive retail electric energy market that prohibits the granting of monopolies and exclusive franchises for the generation of electricity?

This policy report summarizes and evaluates the primary arguments made by supporters and opponents of Question 3, which relate to (1) electric rate behavior, and (2) whether a restructured market will promote or hinder the development of renewables in Nevada (see below).

YES on 3: "Energy choice will lower electric bills for all Nevadans."

**NO on 3**: "Dismantling Nevada's existing electricity system would cost billions of dollars....These costs would be paid for by all Nevadans in the form of higher electricity rates...."

YES on 3: "Energy choice will expand Nevada's clean energy options."

NO on 3: "Threatens Nevada's progress toward a clean energy future."

In addition, we consider additional issues surrounding restructuring, in particular, organized wholesale markets (ISO creation or participation), divestiture/stranded assets, consumer impact, and implementation. While the Guinn Center does not take a position on Question 3, we seek to inform the debate so that Nevadans better understand the issue.

In compiling this Technical Report, the Guinn Center conducted an extensive review of federal energy data and more than two dozen interviews with energy industry experts around the country, and reviewed research documenting the experiences of other states that restructured their electricity markets (and adopted "energy choice"). Following its standard protocol, the Guinn Center distributed drafts of this report to subject matter experts—some of whom support, oppose, or have remained neutral on Question 3—for review. The Guinn Center relies on these subject matter experts to review its reports for accuracy and for an assessment of balanced treatment of the subject.

Given that the evidence we reviewed is comparative and historical, rather than predictive, we cannot demonstrate conclusively that energy choice (Question 3) is either "good" or "bad" for Nevada. That can be known only with the wisdom of hindsight. The Guinn Center notes, however, that the transition to a restructured (or "energy choice") electricity is accompanied by variability in rate behavior, implementation challenges, and, for residential ratepayers, increased uncertainty resulting from heightened exposure to wholesale electric prices.

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### A Restructured Electricity Market (Energy Choice)

Historically in Nevada, the four components (i.e., generation, transmission, distribution, and retailing) of electricity delivery to the end-user (e.g., residential, business) were bundled together, with the delivery functions coordinated by a vertically integrated electric company, or utility. This means that "...the utility owns all levels of the supply chain" and retains the exclusive right to sell electricity in a designated service territory. In Nevada, the vertically integrated utility is NV Energy.

Question 3 would <u>restructure</u> the electricity market in Nevada and may require the monopoly electric utility (e.g., NV Energy) to unbundle its services. Restructuring is often referred to as retail choice, energy choice, customer choice and/or direct access. If Question 3 passes, we would expect:

- Monopoly utilities (e.g., NV Energy) likely would no longer manage or be involved in the generation of electricity and would be expected to sell their generation assets (known as "divestiture").
- New (additional) participants could enter the electricity market. These include: (1) independent
  power producers (IPPs), or owners of power plants and other generation assets; (2) competitive
  suppliers, which are brokers between the wholesale electric market and customers in the retail
  market; and (3) an independent system operator (ISO), which manages sales in an organized
  wholesale market and coordinates generation with the other components of electricity delivery—
  transmission and distribution—to ensure resource adequacy and reliability.
- Nevada would have to participate in an organized wholesale market. Currently, the monopoly utility (i.e., NV Energy) participates in a <u>traditional</u> wholesale market where utilities enter into both short- and long-term bilateral contracts to trade electric power. In contrast, if Question 3 passes, actors would be required to participate in an <u>organized</u> wholesale market, which is coordinated by an independent system operator (ISO) or regional transmission organization (RTO).

#### **Summary of Findings**

The combination of technological advances (e.g., demand side management, distributed generation), policy and regulatory actions, and the belief that choice would lead to lower electricity costs, led several states to consider restructuring their electricity markets in the mid-1990s and through the early 2000s. To date, 22 states restructured their markets (i.e., energy choice for residential, commercial, and industrial customers), and two states are considering it. Seven states later repealed it (at least, in part), and two to four are currently considering ways to repeal it. We reviewed the experiences of other states, and our conclusions are presented below.

#### **Rate Behavior**

• Most studies that evaluate rate behavior use data from the U.S. Energy information Agency (EIA) data. However, electricity rates reflect different inputs including fuel prices, weather, and

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regulatory costs, among others. As such, comparisons of energy prices over time and across states are challenging, if not impossible. In fact, EIA stated explicitly that its data should not be used for these purposes, describing it as a "proxy" that "does not capture the statewide variation in price determinants" and that any such methodology would result in an "apples-to-oranges" comparison, leading to biased results. Accordingly, we cannot make a conclusive determination as to whether restructuring, all else equal, contributes to rate increases or rate decreases.

- Research suggests that a restructured electricity market may lead to either increases or decreases in electric rates. Evidence reveals the experiences of other restructured states have been uneven; some customers benefit from energy choice, while others encounter adverse effects.
- In a restructured market with energy choice, the wholesale price of natural gas is the most important determinant of customer electricity rates. While wholesale electric costs influence electric rates in both traditionally regulated markets and restructured markets, consumers are exposed more directly to changes and volatility in commodity pricing under restructured markets. When natural gas prices are low, consumers in restructured states—by virtue of their increased exposure to the wholesale market—realize benefits from lower fuel costs. But when they rise, consumers may pay higher electricity bills. Other issues that could influence rates include stranded costs and participation in an organized wholesale market.
- Under current Nevada law, the monopoly utility (NV Energy) cannot profit from fuel and purchased power costs. However, in energy choice states, the state utility regulatory body does not retain its authority over pricing, and the Federal Energy Regulatory Commission (FERC) does not have authority over sales at retail. Under energy choice, the Public Utilities Commission of Nevada likely would no longer be able to able to intervene to protect consumers against higher rates, as that likely would undermine the intent of the initiative petition, which requires that the Nevada Legislature establish "an open, competitive retail electric energy market."
- With the exception of Maine, all states that pursued restructuring (energy choice) implemented some form of rate caps, rate freezes, and/or rate reductions to stabilize markets, protect consumers, and smooth the transition to a fully competitive market.
- Market design efforts used by states to stabilize markets also complicates efforts to evaluate rate behavior after states adopted energy choice: (1) most of the research that showed a link between restructuring and decreased electric rates was published prior to the expiration of rate caps, and to the extent that prices were found to be lower in restructured areas, these results may be skewed by the depressive effects of rate caps, freezes, and reductions; and (2) many states confronted simultaneous expirations in rate caps, freezes, and reductions—when prices became aligned more closely with wholesale costs—and volatility in those very same wholesale electric costs in electricity markets, which either exacerbated the problem or helped mitigate it.
- In short, wholesale electric prices and market design (i.e., rate caps, freezes, and reductions) influence rate behavior, and the effects are amplified in restructured ("energy choice") markets. In some restructured states, competition has not flourished for residential customers as originally

intended, and/or many residential customers have experienced electric rate price spikes resulting from the expiration of rate caps and fluctuations in wholesale market energy prices.

## Renewable Energy

- Question 3 does not explicitly require that Nevada integrate more renewables onto the grid. Research indicates there is no correlation between restructuring ("energy choice") electricity markets and increased renewables. The type of retail market model in a given state matters less than policy choices, such as a state's Renewable Portfolio Standard (RPS). (Note that voters will consider Question 6 in the 2018 General Election, which seeks to increase the state's RPS from 25 percent by 2025 to 50 percent by 2030.)
- Under a restructured market, the independent system operator (ISO) manages the organized wholesale markets and the auction process. If Question 3 passes, the choice of organized wholesale market/ISO Nevada joins could influence whether Nevada consumes more renewable energy, as the fuel portfolios differ considerably across the proposed markets.
- A related point addresses the issue of net metering, which credits solar energy system owners for the electricity they add to the grid. At present, it is not clear what will happen to net metering customers in Nevada if Question 3 passes. Central to this issue are questions of existing law, the obligations of the incumbent utility (e.g., NV Energy), and the Public Utilities Commission of Nevada's (PUCN) authority under energy or retail electric choice. In 2017, Assembly Bill (AB) 405 was enacted, which established a rate structure for net metering customers. It is not clear that approval of Question 3 would invalidate this preexisting statutory authority. But, if Question 3 passes, NV Energy likely would no longer be involved in the generation of electricity and would not provide retail rates. However, if the measure passes, the Legislature or PUCN, in theory, could enforce net metering rules on a new competitive supplier that wants to participate in the market.
- Increased renewable energy (solar) generation assets may come online regardless of whether Question 3 passes in November 2018.

#### **Consumer Impact**

- Irrespective of market structure, the procurement of electricity has different impacts across ratepayer classes. Large commercial and industrial (C&I) customers tend to enjoy lower rates, relative to their residential and small commercial counterparts, under both vertically integrated utilities and energy (retail electric) choice.
- Consumers in states with restructured markets have experienced mixed results. Residential and small commercial consumers, who typically are unfamiliar with the energy choice structure, may be disadvantaged under restructured markets in the absence of strong consumer protection regulations. Across multiple states, many consumers have been enticed by low teaser rates offered by electric suppliers to sign up for variable-rate electricity contracts, but were unaware that their bills could increase at any time, and often did, as market conditions changed.

• The most common consumer complaints are: (1) unknown fees; (2) poor customer service; (3) meter reading; (4) slamming and cramming ("Cramming is the illegal act of placing misleading charges on your bill that you did not agree to. Slamming is the process of switching your energy service to another provider without your permission[.]"); (5) switch hold rules, or the inability to switch retail providers until a back bill is paid in full; and (6) fluctuating prices.

#### **Implementation**

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- Experience suggests that implementation of a restructured market has not followed a simple, straightforward path (e.g., restructuring the Pennsylvania market was a "16-year process").
- Many states that restructured had to enact multiple pieces of legislation and/or issue regulatory
  orders to address the unanticipated outcomes and unintended consequences of restructuring; in
  2006, Michigan's Public Service Commission, for example, had to issue 40 regulatory orders to
  "further establish and implement the framework" for its energy choice program. Many
  implementation hurdles required an expanded role for the government.
- Question 3: The Energy Choice Initiative seeks to restructure Nevada's electricity market through an amendment to the *Nevada Constitution*. In contrast, all other states, with the exception of one, did so through legislation; New York restructured its electricity market through a regulatory order issued by its Public Service Commission.
- The Nevada Legislature allows investor-owned utilities in Nevada to be monopolies, granting the utility exclusive franchise over a designated service territory. This suggests that, historically, electric utility service has been understood as a policy/regulatory issue, not a constitutional one.
- Using the Nevada Constitution as a regulatory tool forces the Nevada Legislature to proceed with
  restructuring. Even if legislators find that restructuring is infeasible, the constitutional imperative
  takes precedence. Should Nevadans become concerned about the prospects of restructuring, they
  would have to repeal the constitutional amendment with another constitutional amendment.
  This would entail circulation of a new petition to obtain the requisite number of signatures to
  appear on the ballot and then passage in two successive elections.

#### **Conclusion**

- In other states that adopted energy choice and restructured their electricity markets, decisionmakers subsequently had to intervene to stabilize markets and protect consumers, facilitate competition, and establish new or revise existing regulatory frameworks.
- The experiences of other states suggest that restructuring is a complex and prolonged process that will take time, and only after retail electric choice is realized fully would Nevadans be able to determine if restructuring was the "right" path.

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#### About the Kenny C. Guinn Center for Policy Priorities

The Kenny C. Guinn Center for Policy Priorities is a 501(c)(3) nonprofit, bipartisan, independent policy institute focused on providing fact-based, relevant, and well-reasoned analysis of critical policy issues facing Nevada and the Intermountain West. The Guinn Center engages policy-makers, experts, and the public with innovative, data-driven research and analysis to advance policy solutions, inform the public debate, and expand public engagement.

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