#### CONCERNS WITH EXISTING RENEWABLE PORTFOLIO STANDARD

- Nevada's Renewable Portfolio Standard (RPS) requires an electric utility to generate or acquire renewable energy or save electricity in an amount that is not less than a specified percentage of the total amount of electricity sold by the utility to its retail customers during a calendar year.
- The RPS law provides for establishment of a system of portfolio energy credits (PECs) that may be used by the utility to comply with the standard, with the utility generally being entitled to one PEC for each kWh of generated energy by a renewable energy system or saved by an efficiency measure.

## **Current RPS Percentages & Phase-Out of Energy Efficiency Credits**

The RPS stays at 20% until 2019, then increases to 22% from 2020-2024, and then increases to 25% for 2025 and subsequent years. Prior to SB 252 in 2013, a utility could meet up to 25% of its RPS for a compliance year with credits earned from energy efficiency ("EE") measures. As amended by SB 252, the 25% EE carve-out is phased out, dropping to 20% of the RPS through 2019, then 10% of the RPS from 2020-2024, and then eliminated for 2025 and subsequent years.

| <u>Year</u> | RPS Floor | EE Credits | RE Credits Needed |
|-------------|-----------|------------|-------------------|
|             |           |            |                   |
| 2015        | 20%       | 4.0%       | 16.0%             |
| 2016        | 20%       | 4.0%       | 16.0%             |
| 2017        | 20%       | 4.0%       | 16.0%             |
| 2018        | 20%       | 4.0%       | 16.0%             |
| 2019        | 20%       | 4.0%       | 16.0%             |
| 2020        | 22%       | 2.2%       | 19.8%             |
| 2021        | 22%       | 2.2%       | 19.8%             |
| 2022        | 22%       | 2.2%       | 19.8%             |
| 2023        | 22%       | 2.2%       | 19.8%             |
| 2024        | 22%       | 2.2%       | 19.8%             |
| 2025 and    | 25%       | 0.0%       | 25.0%             |
| beyond      |           |            |                   |

### **Disconnect Between PECs and kWh of Renewable Energy**

- The amount of PECs available to a utility for compliance with its RPS in a calendar year has become so disconnected from the amount of kWh of renewable energy actually generated or saved during the year that the RPS is no longer an accurate measurement of progress in transitioning to renewable resources
- After the reforms made by SB 252, there remain three factors driving the discrepancy between credits reported and kWh of renewable energy generated:
  - ➤ The 2.4 multiplier for credits from certain solar PV generation
  - ➤ Granting credits for kWh used for "station use" or "parasitic load"
  - ➤ A utility's ability to use banked or "carry forward" credits
- Use of banked credits for compliance is by far the biggest driver of the discrepancy between available credits for compliance and kWh of renewable energy
- Example of disconnect between kPECs available for RPS compliance and kWh of renewable energy from Nevada Power Company's 2015 IRP filing in Docket No. 15-07004:

|      | (a)        | (b)            | (c)                                   | (d)         | (e)          | (f)              |
|------|------------|----------------|---------------------------------------|-------------|--------------|------------------|
|      | NPC        | NPC            | NPC                                   | NPC         | NPC          | NVE – RE as %    |
|      | <u>RPS</u> | kPECs Required | Banked kPECs                          | Total kPECs | RPS Achieved | of System Energy |
| 2016 | 20%        | 4,209,939      | 737,163                               | 5,609,651   | 26.6%        | 13.5%            |
| 2017 | 20%        | 4,237,548      | 941,869                               | 6,442,561   | 30.4%        | 15.5%            |
|      |            |                | · · · · · · · · · · · · · · · · · · · |             |              |                  |
| 2018 | 20%        | 4,268,250      | 1,746,950                             | 7,598,549   | 35.6%        | 16.1%            |
| 2019 | 20%        | 4,292,347      | 2,872,131                             | 8,893,326   | 41.4%        | 16.3%            |
| 2020 | 22%        | 4,737,101      | 4,142,706                             | 9,829,007   | 45.6%        | 16.5%            |
| 2021 | 22%        | 4,767,001      | 4,750,204                             | 10,423,326  | 48.1%        | 16.3%            |
| 2022 | 22%        | 4,815,023      | 5,697,842                             | 11,398,001  | 52.1%        | 16.1%            |
| 2023 | 22%        | 4,857,461      | 6,624,390                             | 12,323,759  | 55.8%        | 17.8%            |
| 2024 | 22%        | 4,903,020      | 7,507,605                             | 13,218,935  | 59.3%        | 18.0%            |
| 2025 | 25%        | 5,613,031      | 8,357,230                             | 13,560,548  | 60.4%        | 18.8%            |
| 2026 | 25%        | 5,662,484      | 7,988,613                             | 13,186,884  | 58.2%        | 19.0%            |
| 2027 | 25%        | 5,715,833      | 7,565,391                             | 12,747,156  | 55.8%        | 18.8%            |
| 2028 | 25%        | 5,776,348      | 7,072,209                             | 11,953,746  | 51.7%        | 18.3%            |
| 2029 | 25%        | 5,828,518      | 6,218,291                             | 11,063,881  | 47.5%        | 18.0%            |
| 2030 | 25%        | 5,879,552      | 5,276,039                             | 9,332,424   | 39.7%        | 16.2%            |
| 2031 | 25%        | 5,931,842      | 3.493,442                             | 7,545,349   | 31.8%        | 16.1%            |
| 2032 | 25%        | 5,989,426      | 1,653,973                             | 6,010,894   | 25.1%        | 16.9%            |
| 2033 | 25%        | 6,034,975      | 61,939                                | 6,023,939   | 25.0%        | 20.8%            |

• Starting in 2022 and continuing through 2029, Nevada Power Company projects that it will start the compliance year with more banked credits than its total RPS requirement for the year

- RPS is no longer a driver of the transition towards renewable energy resources
  - ➤ The four new utility-scale solar PV projects approved by the PUCN this year (329 MW total) were all driven by SB 123 or large customer choice
  - ➤ Most recent forecast shows Nevada Power Company does not require more renewable energy for RPS compliance until 2032

#### PROPOSED SOLUTIONS

• Consistent with Nevada's role as a leading state in renewable energy development, increase the RPS starting in 2017 to prevent a further accumulation of banked credits and commit Nevada to a steady and sustained transition towards clean energy resources

Comparison of RPS Requirements and Example of RPS Increase Consistent with Nevada's Role as a Leader in Renewable Energy

|      | Nevada - Current | Nevada – Increase | <u>Oregon</u> | <u>California</u> |
|------|------------------|-------------------|---------------|-------------------|
| 2016 | 20%              | 20%               | 15%           | 25%               |
| 2017 | 20%              | 21%               | 15%           | 25%               |
| 2018 | 20%              | 21%               | 15%           | 25%               |
| 2019 | 20%              | 22%               | 15%           | 25%               |
| 2020 | 22%              | 22%               | 20%           | 33%               |
| 2021 | 22%              | 25%               | 20%           | 33%               |
| 2022 | 22%              | 25%               | 20%           | 33%               |
| 2023 | 22%              | 25%               | 20%           | 33%               |
| 2024 | 22%              | 28%               | 20%           | 40%               |
| 2025 | 25%              | 28%               | 27%           | 40%               |
| 2026 | 25%              | 28%               | 27%           | 40%               |
| 2027 | 25%              | 31%               | 27%           | 45%               |
| 2030 | 25%              | 35%               | 35%           | 50%               |
| 2035 | 25%              | 45%               | 45%           |                   |
| 2040 | 25%              | 50%               | 50%           |                   |

#### NEVADA'S CURRENT RENEWABLE PORTFOLIO STANDARD LAW

# 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:
- (1) During calendar years 2013 and 2014, not more than 25 percent of that amount may be based on energy efficiency measures;
- (2) During each calendar year 2015 to 2019, inclusive, not more than 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.
- 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 <u>NRS 704.78213</u>, the provisions of this section do not apply to a provider of new electric resources as defined in <u>NRS 704B.130</u>.
  - 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 <u>2001, 2528</u>; A <u>2003, 1866</u>, <u>1876</u>; <u>2005, 22nd Special Session, 82</u>; <u>2007, 414</u>; 2009, 996, 1399; 2013, 2318)