Energy+Environmental Economics
101 Montgomery Street | Suite 1600 | San Francisco, CA 94104 | 415.391.5100 |

Stephanie Mullen
Executive Director
Public Utilities Commission of Nevada
1150 E. William St
Carson City, Nevada 89701

Dear Ms. Mullen,

Please find attached an updated study, *Nevada Net Energy Metering Impacts Evaluation 2016 Update,* which was requested by the Nevada Legislative Committee on Energy.

As you know, E3 conducted a study in 2014 to quantify the cost impacts of Net Energy Metering in Nevada using the best data available at the time. The 2014 study was conducted through the Public Utilities Commission of Nevada (PUCN) and a stakeholder process that included participation from the Nevada utilities, the solar industry, ratepayer advocates, and the PUCN staff.

Using the same methodological framework, E3 has updated the 2014 study with the latest costs and data as described within the revised study. In order to update many of the study inputs we requested updated datasets from NV Energy from their Integrated Resource Planning processes through PUCN. The analysis behind this study was performed independently by E3 staff without any involvement of PUCN staff or any other outside groups.

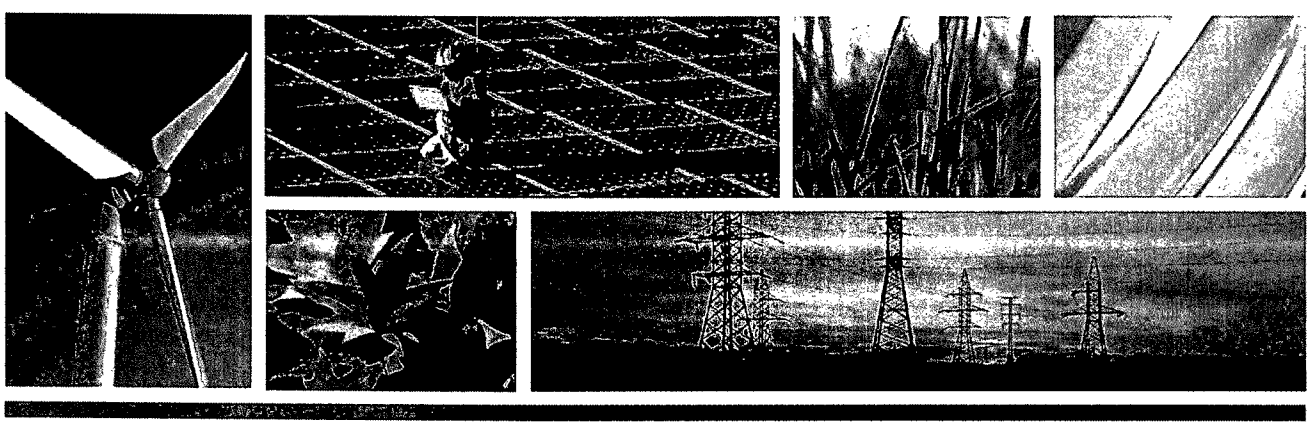
Thank you for the opportunity conduct this update. We look forward to working with the Nevada Legislative Committee, the PUCN, and other stakeholders to describe the study, results, and to provide any additional support that might be helpful.

Sincerely,

Snuller Price, Senior Partner

Nevada Net Energy Metering Impacts Evaluation 2016 Update

August 2016



Energy+Environmental Economics

Nevada Net Energy Metering Impacts Evaluation 2016 Update

August 2016

Energy and Environmental Economics, Inc.
101 Montgomery Street, Suite 1600
San Francisco, CA 94104
415.391.5100
www.ethree.com

This report is prepared by:

Snuller Price

Zachary Ming

Alison Ong

Sheridan Grant

Table of Contents

1 Executive Summary

1.1 Study Overview

This study provides an update to the 2014 report "Nevada Net Energy Metering Impacts Evaluation," which calculated the costs and benefits of renewable generation systems under the state's net energy metering (NEM) program. Energy + Environmental Economics (E3), hereafter referred to as "we", completed the 2014 study with input from the Public Utilities Commission of Nevada (PUCN) and a stakeholder advisory group composed of experts from the solar industry, ratepayer advocates, and electric utility representatives.

This 2016 update follows the same methodological framework while incorporating the most up-to-date utility data. At the end of 2015, the Nevada PUC adopted reforms to the NEM tariff that included an increase in fixed charges, a decrease in the variable energy rate, and a separate, lower compensation rate for energy exported back to the grid. All costs and benefits in this updated study are calculated under the NEM structure as it existed prior to the reforms instituted at the end of 2015. This perspective allows the study to address the question "what *would* the cost impacts of NEM have been if *no* reforms had been enacted." This perspective also allows the study to estimate the impacts of "grandfathering" systems installed prior to the reforms.

NEM is an electricity tariff designed to encourage installation of customer-sited renewable generation. Under the NEM tariff, a customer can self-generate electricity, reducing purchases from the utility, and sell excess electricity back to the utility at retail rates. Customers with solar photovoltaic (PV), solar thermal electric, wind, biomass, geothermal electric, or hydroelectric distributed generation (DG) installations are eligible for Nevada's NEM tariff, although the vast majority of installations are solar PV. For this reason, this study focuses solely on solar PV.

A number of complimentary programs in Nevada also serve to encourage DG installations in the state. Some DG systems receive financial incentives through NV Energy's RenewableGenerations program. Generation from these incentivized systems can be counted towards Nevada's renewable portfolio standard (RPS), which requires NV Energy (Nevada's two electric utilities, Nevada Power Company and Sierra Pacific Power Company, jointly) to produce 25% of its generation from eligible renewable resources by 2025. Lastly, the Federal Investment Tax Credit (ITC) works to incentivize DG installations by offsetting 30% of eligible installed system capital costs.

As of June 2016, over 30,000 individual solar PV systems were installed or in the pipeline of NV Energy's NEM program, totaling over 265 Megawatts (MW), approximately 3% of NV Energy peak demand. These systems produce about 472 Gigawatt-hours (GWh) of energy annually, approximately 1.5% of NV Energy electricity generation.

1.2 Updates to 2014 Study

This update generally follows the same framework and methodology as the 2014 study while incorporating the most up-to-date data from NV Energy. Much of the data used in this study is *substantially* different than what was used in the 2014 study. Unsurprisingly, many of the results and final conclusions are different as well. The following list provides a brief overview of the key data inputs that drive changes in the results between the 2014 and 2016 studies.

- Natural gas price declines
    - Lower natural gas prices decrease in the avoided cost of energy by approximately 50%, making self-generated electricity relatively less economic
- Utility-Scale RPS cost declines
    - Lower costs of utility-scale renewable resources, from $100/MWh in 2014 to $36/MWh in 2016, decreases the 'RPS Value' benefit by nearly 95% and make self-generated electricity relatively less economic

Additionally, this 2016 study incorporates a few methodological changes, none of which have a substantial impact on the results.

- Solar generation data is now provided by NV Energy instead of simulated by E3
- Demand charge savings are now included in the base case bill savings since customer load data is now available from NV Energy
- Distribution avoided costs are now included in the base case while the exclusion of these costs is presented as a sensitivity

+ Simplify the three vintages in the 2014 study to two vintages by combining pre-2014 and 2014/2015 into an "existing" vintage category since both categories have now been installed.

Finally, the scope of this study is slightly narrower than the 2014 study. In this iteration, we do not analyze wind NEM systems, do not conduct a demographic analysis of NEM customers, nor conduct a review of the macroeconomic impacts of NEM in Nevada.

1.3 Scope of Analysis and Results

In this study, we investigate the impact of existing NEM PV systems as well as the projected impact of future NEM PV systems. Both vintages of installations are analyzed under the rate structure of the old NEM tariff before the reform at the end of 2015. For consistency with the previous report, results are presented in 2014 dollars. This allows results to be compared side-by-side.

1.3.1 COSTS AND BENEFITS OF NEM

We evaluate the cost-effectiveness of NEM generation from five different perspectives to provide a comprehensive assessment of the costs and benefits of the NEM program. These tests are typically applied when assessing the cost-effectiveness of distributed resources and reflect the industry standard used in all 50 states.[1] The core questions the cost-effectiveness tests answer are the following:

[1] The 'cost tests' are defined in the California Standard Practice Manual used nationwide which is available for download at: http://www.cpuc.ca.gov/NR/rdonlyres/004ABF9D-027C-4BE1-9AE1-

1) Is renewable self-generation cost-effective for the customers who install systems? (Participant Cost Test or "PCT")
2) What is the cost impact on non-participating utility customers? (Ratepayer Impact Measure or "RIM")
3) Recognizing that some utility bills may go down and others may go up, does the NEM program reduce utility bills overall? (Program Administrator Cost Test or "PACT")
4) Does NEM generation reduce the overall cost of energy for Nevada? (Total Resource Cost Test or "TRC")
5) Does NEM generation provide net societal benefits considering the cost and externalities such as the health impacts from NEM? (Societal Cost Test or "SCT")

The cost-effectiveness analysis of existing systems (June 2016 and earlier) incorporates all of the changes that have occurred in the past that affect NEM-eligible systems. Several of the most notable changes include:

+ A significant reduction in RenewableGenerations incentives in 2014
+ The elimination of payment for the public purpose charge portion of the rate for energy that is exported back to the grid beginning in 2014
+ The elimination in 2016 of both a 2.4x RPS multiplier for utility-scale solar generation toward RPS compliance as well as a 2.45x RPS multiplier for distributed solar generation

CE56ADF8DADC/0/CPUC_STANDARD_PRACTICE_MANUAL.pdf. The cost tests described in the manual are used throughout the United States.

Systems installed in July 2016 and beyond are assumed to *not* receive a RenewableGenerations utility incentive.

For future systems, there was no forecast of installations as would have been expected under old NEM rate structure. Therefore, for comparability to existing systems, an equivalent assumed installed capacity used for future systems as for current existing systems.

- Existing systems (through June 2016): 265 MW
- Assumed future systems (beyond 2016): 265 MW

Results for both existing and future installations are presented on a levelized basis ($/kWh), a net present value dollar basis ($ NPV), and an annualized basis ($/yr).

1.3.2 BASE CASE RESULTS

In the Base Case we find the following results for each of the five perspectives of cost-effectiveness.

1. **Is renewable self-generation cost-effective for the customers who install systems? (Participant Cost Test or "PCT")**

Based on the installation cost data collected through the RenewableGenerations program, Solar PV is not cost effective from the participant perspective for existing systems or for future systems. However, the net cost to participating customers is relatively small at $0.02/kWh for existing systems and $0.04/kWh for future systems. Although the installation cost of solar has dropped precipitously in recent

years which increases the cost effectiveness for future systems, these systems are not assumed to collect a RenewableGenerations utility incentive.

Table 1: Base Case Results of NEM Generator Participant Cost-Effectiveness; Participant Cost Test (PCT)

Benefit (cost) to customers who participate in NEM	Existing Installations	Future Installations
Lifecycle NPV ($MM 2014)	($118)	($201)
Annual ($MM 2014)	($10)	($17)
Levelized ($/kWh 2014)	($0.02)	($0.04)

2. Does renewable self-generation impact the other NV Energy ratepayers? (Ratepayer Impact Measure or "RIM")

There is a cost-shift from NEM customers to non-participating customers for both existing installations and future installations. In total, existing installations shift approximately $36 million per year while an equivalent amount of hypothetical future installations would shift an additional $15 million per year. For existing systems, $20 million of the $36 million per year is a "sunk cost" that has already been spent in the form of incentive payments. Therefore, we estimate the cost of grandfathering existing systems to the old NEM rate structure to be approximately $15 million per year[2]. This amounts to a levelized cost shift of $0.08/kWh for existing installations and $0.04/kWh for future installations. The cost-shift is larger

[2] Numbers do not add up due to rounding

for existing installations almost entirely because of the utility funded RenewableGenerations incentive which is assumed to expire and not be available to future installations.

Table 2: Base Case Results of NEM Generator Non-Participating Ratepayer Cost-Effectiveness; Ratepayer Impact Measure (RIM)

Benefit (cost) to non-participating ratepayers	Existing Installations	Future Installations
Lifecycle NPV ($MM 2014)	($423)	($179)
Annual ($MM 2014)	($36)	($15)
Levelized ($/kWh 2014)	($0.08)	($0.04)

3. **Overall, do the bills NV Energy collects from all customers (both participants and non-participants) increase or decrease due to NEM systems? (Program Administrator Cost Test or "PACT")**

Existing and future NEM systems both cause total bills collected by NV Energy to decrease. Because future systems do not receive a RenewableGenerations incentive, these systems cause total bills to decrease more than for existing systems. Of course, all of the bill savings accrue to those who install self-generation. Nonetheless, bill savings to participants are larger than bill increases to non-participants.

Table 3: Base Case Results of NEM Generator Program Administrator (Utility) Cost-Effectiveness; Program Administrator Cost Test (PACT)

Reduction (increase) in aggregate customer bills	Existing Installations	Future Installations
Lifecycle NPV ($MM 2014)	$151	$379
Annual ($MM 2014)	$13	$32
Levelized ($/kWh 2014)	$0.03	$0.08

4. **Is self-generation a cost-effective resource for Nevada? (Total Resource Cost Test or "TRC")**

Overall, NEM generation of both existing and future systems increases total energy costs for Nevada. We estimate a net cost to the state of Nevada of $0.13/kWh for existing systems and $0.08/kWh for future installations. Future installations have a smaller net cost largely due to the recent decline in distributed solar installation costs.

Table 4: Base Case Results of NEM Generator Total Resource (State) Cost-Effectiveness; Total Resource Cost (TRC) Test

Benefit (cost) to the state of Nevada	Existing Installations	Future Installations
Lifecycle NPV ($MM 2014)	($660)	($380)
Annual ($MM 2014)	($56)	($32)
Levelized ($/kWh 2014)	($0.13)	($0.08)

5. How does this conclusion change if we consider non-monetized benefits of renewables? (Societal Cost Test or "SCT")

The societal perspective, which includes externalities and non-monetized health benefits of reduced air emissions from self-generation, does not significantly change the results of our findings for the costs and benefits of NEM for Nevada overall. The primary reason is that since distributed solar counts toward the state RPS requirement, if more NEM systems are installed then less utility-scale renewable generation will be installed to meet the standard. Therefore, there is no substantial net emissions reduction or additional health benefits attributable to NEM systems.

We estimate a net cost to the state of Nevada of $0.13/kWh for existing systems and $0.08/kWh for future installations.

The driver behind the difference in Lifecycle NPV between the Total Resource Cost Test and the Societal Cost Test is the difference in discount rates. As is standard utility practice, we use a lower societal discount rate (3% real) for the societal perspective than for the utility (4.7% real) which is used in the TRC. It is conventional for societal cost-effectiveness analyses to put more emphasis on future time periods and future generations.

Table 5: Base Case Results of NEM Societal (State) Cost-Effectiveness; Societal Cost Test (SCT)

Benefit (cost) to the state of Nevada, including externalities	Existing Installations	Future Installations
Lifecycle NPV ($MM 2014)	($764)	($446)
Annual ($MM 2014)	($55)	($32)
Levelized ($/kWh 2014)	($0.13)	($0.08)

1.3.3 SENSITIVITY RESULTS: NO DISTRIBUTION AVOIDED COSTS

In addition to the base case, we evaluate NEM cost-effectiveness under an assumption that does not assume the utility will defer or avoid investment in distribution system infrastructure due to the installation of solar. We calculate this sensitivity because NV Energy distribution engineers think the intermittent output of NEM systems may not be reliable enough to avoid the need for distribution system upgrades. Therefore, removing the distribution component of avoided costs provides a conservative estimate of net metered systems' benefits to the grid. Table 6 shows the results of each affected cost test with the inclusion of distribution benefits. Removing distribution benefits decreases net benefits under each of the cost tests as there are fewer benefits to non-participants if the utility cannot capture distribution benefits.

Table 6: Results without Distribution Avoided Costs – Existing Systems Only

Cost Test	Primary Question What is the....	Base Case ($MM/yr)	No Distribution Avoided Costs ($MM/yr)
RIM	Benefit (cost) to non-participating ratepayers	($36)	($43)
PACT	Reduction (increase) in aggregate customer bills	$13	$5
TRC	Benefit (cost) to the state of Nevada	($56)	($63)
SCT	Benefit (cost) to the state of Nevada, including externalities	($55)	($62)

1.3.4 SUMMARY OF KEY FINDINGS

The following points summarize the key findings of this analysis:

- Solar NEM causes a cost-shift of approximately $36 million per year for the 265 MW of existing NEM installations, and an additional 265 MW of hypothetical future installations would increase this cost-shift by $15 million per year.
- We estimate the cost of grandfathering existing NEM systems to the old rate structure is approximately $15 million per year. This is because of the $36 million per year cost-shift that is attributable to existing systems,

$20 million[3] has already been spent through incentive payments and is a sunk cost.

+ We estimate the total cost-shift of existing NEM systems will cause an increase in rates of 1.2%[4]. Given that much of these costs have already been spent through incentive payments, we estimate that the incremental cost of grandfathering existing systems to the old NEM rate will cause an increase in rates of 0.5%[5].

+ Overall, for the state of Nevada, NEM generation is a costlier approach for encouraging renewable generation than utility-scale renewables. This is mainly due to utility-scale solar PPA prices having dropped precipitously in recent years, greatly lessening the costs avoided by NEM generation, while distributed solar costs have not dropped commensurately.

[3] Numbers do not add up due to rounding
[4] $36 million cost-shift divided by the 2014 NV Energy revenue requirement of $3.05 billion (source: EIA Form 861)
[5] $15 million cost-shift divided by the 2014 NV Energy revenue requirement of $3.05 billion (source: EIA FORM 861)

2 Introduction

2.1 Analysis Overview

This study is an update to the 2014 "Nevada Net Energy Metering Impacts Evaluation," which calculated the costs and benefits of renewable generation systems that qualify for the state's NEM program. The 2014 study was completed with input from a stakeholder advisory group composed of experts from the PUCN, the solar industry, ratepayer advocates, and electric utility representatives. This 2016 update follows the same methodological framework while incorporating the most up-to-date utility data.

NEM is an electricity tariff designed to encourage installation of customer-sited renewable generation. Under the NEM tariff, a customer can self-generate electricity, reducing purchases from the utility, and sell excess electricity back to the utility at retail rates.

At the end of 2015, the Nevada PUC adopted reforms to the NEM tariff that included an increase in fixed charges, a decrease in the variable energy rate, and a separate, lower compensation rate for energy exported back to the grid. All costs and benefits in this updated study are calculated under the NEM structure as it existed *prior* to the reforms instituted at the end of 2015. This perspective allows the study to address the question "what *would* the cost impacts of NEM have been if *no* reforms had been enacted."

This study evaluates the comprehensive costs and benefits of generation systems eligible for NEM in Nevada including the impact to:

- customer-generators who participate in NEM
- utility customers who do not participate in NEM
- all utility customers overall
- the State of Nevada
- the State of Nevada including non-monetized health benefit.

This analysis considers existing net metering systems installed through June 2016 which totals over 265 MW. This is approximately equal to 1.5% of all NV Energy generation and 3% of peak demand. This analysis also considers the cost impacts of potential future net metering systems. For ease of comparison between the total cost impacts of existing systems with these hypothetical future systems, we assumed the installed capacity of future systems was also 265 MW.

2.2 NEM Program

2.2.1 NEM RATE STRUCTURE FOR CUSTOMER-GENERATORS

In Nevada, customers with qualifying distributed renewable energy systems can participate in the NEM program. Under NEM tariffs, customer-generators are billed based on their monthly net electricity consumption. For each month in which a NEM customer's usage exceeds the customer's generation, the kWh generation credits are applied directly against the customer's usage to reduce the month's electricity bill. Any excess kWh credits remaining in a billing month are carried forward, and they may be used only to offset future electricity charges.

Under this system, only the variable cost portion of the bill ($/kWh usage) and demand charge portion ($/Kilowatt (kW) of peak demand during the billing period) can be avoided. Any portion of the bill based on fixed charges ($/month) cannot be avoided by NEM. In addition, NEM customers cannot avoid public purpose charges for NEM generation in excess of usage. Public purpose charges are additional $/kWh charges applied to customers' bills. Funds collected through these charges are used to facilitate alternative and renewable energy projects, incentivize higher energy efficiency, and provide energy assistance to those in need.[6] These charges generally account for less than 5% of a customer's total bill.

At the end of 2015, the Nevada PUC adopted reforms to the NEM tariff that included an increase in fixed charges, a decrease in the variable energy rate, and a separate, lower compensation rate for energy exported back to the grid. All costs and benefits in this updated study are calculated under the NEM structure as it existed *prior* to the reforms instituted at the end of 2015. This perspective allows the study to address the question "what *would* the cost impacts of NEM have been if *no* reforms had been enacted."

2.2.2 RENEWABLEGENERATIONS PROGRAM

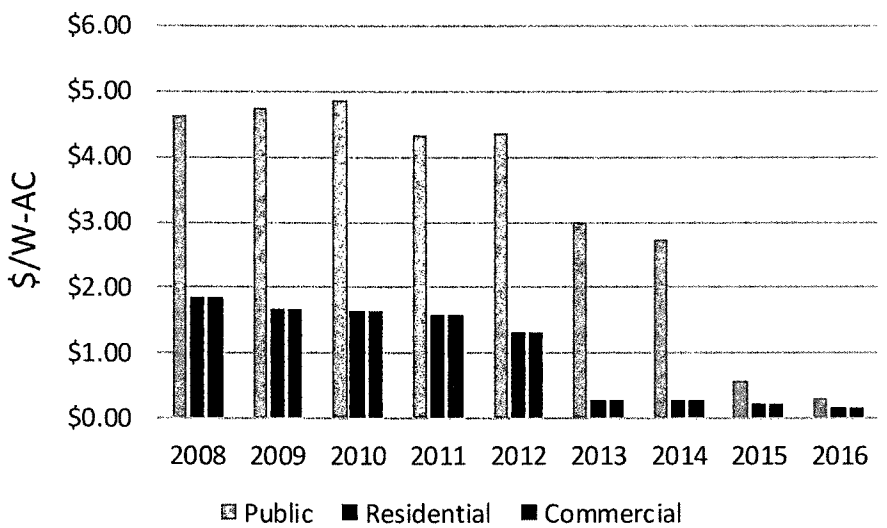
In adherence with AB 431,[7] NV Energy began offering rebates to customers installing NEM-eligible solar PV generators in 2004. The RenewableGenerations program was later expanded to include wind and small hydroelectric systems.

[6] NV Energy's public purpose charges are comprised of the following bill components: Temporary Green Power Financing (TRED), Renewable Energy Program (REPR), Energy Efficiency Charge (EE), and Universal Energy Charge (UEC).

[7] AB 431 information: http://www.leg.state.nv.us/Session/72nd2003/Bills/AB/AB431_EN.html

Incentive amounts vary by customer sector and are required by law to decline along with installed costs. Incentive levels began at $5 per Watt-Alternating Current and have declined as the installed cost of solar PV has declined. Incentive levels are now below $0.50/W-AC for all customer sectors.

Table 7: Historical RenewableGenerations Incentive Levels



As the RenewableGenerations incentive program is nearing the end of it $255 million spending limit[8], future vintage NEM systems are not assumed to be eligible for this incentive.

[8] NV Energy Annual Renewable Plan Vol. 1 (2016).

2.3 Analysis Framework

2.3.1 COST TEST OVERVIEW

This analysis evaluates the costs and benefits of the NEM generators from five perspectives established in the Standard Practice Manual (SPM). Each perspective is defined by a "cost test" and collectively they define a broad assessment of the cost-effectiveness. There is not a single correct cost test to use in general, each SPM cost test aims to answer a different question as follows:

- The *Participant Cost Test (PCT)* analyzes the financial proposition of purchasing and installing a NEM system from a NEM participant's perspective. If a customer's bill savings are greater than the customer's post-incentive capital costs paid, then the customer experiences a monetary gain from installing a NEM system.
- The *Ratepayer Impact Measure* (RIM) measures the impact of NEM on non-participating utility customers. The RIM test compares the utility avoided costs from not having to provide the energy generated by the NEM system (reduction in revenue requirement) to the incremental utility system costs such as incentives and program administration and the lost utility revenue due to reductions in NEM customer bills. If there is a net shortfall, over time in the next rate setting proceeding the utility would be allowed to increase customer rates to make up for the shortfall, which results in a cost-shift form participants to non-participants.
- The *Program Administrator Cost Test (PACT)* calculates the cost-effectiveness of NEM from the perspective of all customers of the program administrator, the NV Energy utilities. Note that this cost test is also commonly known as the *Utility Cost Test (UCT)*. This test addresses the

question, "Will customer bills need to increase because of NEM?" If NEM reduces the utility revenue requirement, or total cost of providing service, then the average customer bill including both participants and non-participants will decrease.

- The *Total Resource Cost Test (TRC)* captures the total direct monetary impact of NEM on the state of Nevada. The test includes the net impacts of participants, non-participants, and utility administrators. Cost shifts between parties within Nevada and benefits that cannot be directly monetized through existing channels are excluded from this analysis. Note that this test does include the net costs of emissions to the extent that emissions costs are embedded in energy prices and utility costs.
- The *Societal Cost Test (SCT)* aims to quantify the total impact of NEM on the state of Nevada when externalities are included. In this analysis, the SCT differs from the TRC only in its inclusion of the societal net health benefits due to a change in emission levels.

Table 8 describes the cost and benefit components of each of the cost tests. Each component is described in detail in Section 3. Note that some cost test components, such as customer bill reductions, are transfers from participants to non-participants. This occurs because lower bills for participants reduce the revenue the utility collects, and to the extent these bill reductions are greater than any cost-savings, the next utility rate case would increase rates to make up the shortfall, increasing bills of non-participants. Transfers may be treated as a cost in some tests and a benefit in others due to differences in the cost test perspectives.

Table 8: Benefit and Cost Components of Cost Tests

	Benefits	Costs
Participant Cost Test (PCT)	Customer Bill Reductions + Utility Incentives + Federal Tax Credits	NEM Generation System Costs
Ratepayer Impact Measure (RIM)	Utility Avoided Costs +RPS Value	Customer Bill Reductions + Utility Incentives + Utility Integration Costs + Utility Administration Costs
Program Administrator Cost Test (PACT)	Utility Avoided Costs + RPS Value	Utility Incentives + Utility Integration Costs + Utility Administration Costs
Total Resource Cost (TRC)	Utility Avoided Costs + Federal Tax Credits + RPS Value	NEM Generation System Costs + Utility Integration Costs + Utility Administration Costs
Societal Cost Test (SCT)	Utility Avoided Costs + Federal Tax Credits + RPS Value + Health Benefits	NEM Generation System Costs + Utility Integration Costs + Utility Administration Costs

Future costs and benefits are discounted back to 2014 dollars. The PCT, RIM, PACT, and TRC all use the average utility after-tax weighted average cost of capital (WACC) for NVE North and NVE South of 4.7% real (6.8% nominal) as the discount rate for this net present value (NPV) calculation. We use a lower societal discount rate of 3% real (5.1% nominal) to account for the societal cost test that includes externalities. Using a lower discount rate is standard practice in the SPM and reflects a longer-term emphasis on costs and benefits from a societal perspective and a lower cost of borrowing of the state than the utility. This notion of using a

lower social discount rate relative to a private discount rate is well established in the literature.[9]

We say that a program "passes" each of these five tests if the present value of the relevant benefits is greater than the present value of the relevant costs. Table 9 summarizes the interpretation of each set of cost test results.

Table 9: Cost Test Result Interpretations

	Benefits GREATER than Costs	Benefits LESS than Costs
Participant Cost Test (PCT)	NEM customers spend less on utility bills than had they not installed NEM	NEM customers spend more on utility bills than had they not installed NEM
Ratepayer Impact Measure (RIM)	Average utility rates decrease, decreasing bills of non-participants	Average utility rates increase, increasing bills of non-participants
Program Administrator Cost Test (PACT)	Total bills (revenue requirement) collected by the utility decrease	Total bills (revenue requirement) collected by the utility increase
Total Resource Cost (TRC)	There is a positive economic benefit to the state of Nevada	There is an economic cost to the state of Nevada
Societal Cost Test (SCT)	There is a positive economic benefit to the state of Nevada INCLUDING benefits of criteria pollutant reductions	There is an economic cost to the state of Nevada INCLUDING benefits of criteria pollutant reductions

[9] See generally, http://yosemite.epa.gov/ee/epa/eerm.nsf/vwAN/EE-0568-06.pdf/$file/EE-0568-06.pdf

2.3.2 RESULTS FRAMEWORK

In this analysis, we consider both existing NEM installations (installed through June 2016), as well as hypothetical future NEM installations. For existing systems, all policy changes that occurred over the historical timeframe are captured through the analysis. Several of the most notable policy changes of this time period include:

- A significant reduction in RenewableGenerations incentives in 2014
- The elimination of payment for the public purpose charge portion of the rate for energy that is exported back to the grid beginning in 2014
- The elimination in 2016 of both a 2.4x RPS multiplier for utility-scale solar generation toward RPS compliance as well as a 2.45x RPS multiplier for distributed solar generation

Systems installed in 2017 and beyond are assumed to *not* receive a RenewableGenerations utility incentive.

For future systems, there was no forecast of expected installations as would have been expected old NEM rate structure. Therefore, for comparability to existing systems, an equivalent assumed installed capacity used for future systems as for current existing systems.

- Existing systems (through June 2016): 265 MW
- Assumed future systems (beyond 2016): 265 MW