BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA


Application of Sierra Pacific Power Company d/b/a NV Energy for approval of the second amendment to the Action Plan of the 2011-2030 Integrated Resource Plan as it relates to a new base load forecast, generating plant investments and retirements, and transmission projects. Docket No. 12-08009

At a general session of the Public Utilities Commission of Nevada, held at its offices on December 20, 2012.

PRESENT: Chairman Alaina Burtenshaw
Commissioner Rebecca D. Wagner
Commissioner David Noble
Assistant Commission Secretary Breanne Potter
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ORDER: PHASE II & PHASE III

The Public Utilities Commission of Nevada ("Commission") makes the following findings of fact and conclusions of law:

I.  INTRODUCTION

Sierra Pacific Power Company d/b/a NV Energy ("Sierra") filed its Application, designated as Docket No. 12-06052, with the Commission for approval of its 2012 Annual Demand Side Management ("DSM") Update Report as it relates to the Action Plan period of its
2011-2030 Integrated Resource Plan ("IRP").


Sierra filed an Application, designated as Docket No. 12-08009, with the Commission for approval of the Second Amendment to its 2011-2030 IRP. Within the Application, Sierra requests a Commission determination that it is reasonable to proceed with constructing the One Nevada Transmission Line project ("ON Line") with a revised budget and according to a revised schedule.

II. SUMMARY

The Commission’s Order reflects acceptance and/or approval of some of the DSM program proposed for NV Energy’s portfolio of, many of which are to be funded at the Preferred Plan level. This Order accepts some parts of NV Energy’s Integrated Resource Plan and deems some parts inadequate. This Order also authorizes NV Energy to continue with the construction of the ON Line with strict considerations regarding the allocation of costs associated with the wind-induced vibration issue.

III. PROCEDURAL HISTORY

• On June 29, 2012, Sierra filed with the Commission an Application, designated as Docket No. 12-06052, seeking approval of its 2012 Annual DSM Update Report as it relates to the Action Plan of its 2011-2030 IRP.

• On June 29, 2012, Nevada Power filed an Application, designated as Docket No. 12-06053, seeking approval of its 2013-2032 IRP and 2013-2015 ESP.

• The Application filed by Sierra in Docket No. 12-06052 was filed pursuant to the Nevada Revised Statutes ("NRS") and the Nevada Administrative Code ("NAC"), Chapters 703 and 704, including but not limited to NAC 704.934. Pursuant to NAC 703.527 through 703.5282, Sierra requests that certain material in its Application receive confidential treatment.

• The Application of Nevada Power in Docket No. 12-06053 was filed pursuant to the NRS and NAC Chapters 703 and 704, including but not limited to NRS 704.741 and NAC 704.9005 through 704.9525. Pursuant to NAC 703.527 through 703.5282, Nevada Power requests that certain material in its Application receive confidential treatment.

• On July 5, 2012, the Attorney General’s Bureau of Consumer Protection ("BCP") filed a Notice of Intent to Intervene in Docket No. 12-06053 pursuant to NRS 228.360.

• On July 6, 2012, the BCP filed a Notice of Intent to Intervene in Docket No. 12-06052 pursuant to NRS 228.360.

• On July 10, 2012, the Commission issued a Notice of Application to Approve 2012 Annual
Electric DSM Update Report and Notice of Prehearing Conference in Docket No. 12-06052.


- The Regulatory Operations Staff (“Staff”) of the Commission participates in Docket Nos. 12-06052 and 12-06053 as a matter of right pursuant to NRS 703.301.


- On July 31, 2012, Ormat Nevada, Inc. and ORNI 42 LLC (collectively “Ormat”) filed a PLTI in Docket No. 12-06053. On August 16, 2012, the Presiding Officer issued an Order granting Ormat’s PLTI in Docket No. 12-06053, not including intervention in DSM or load forecast portions of the proceeding.


• On August 2, 2012, the Commission held a prehearing conference in Docket No. 12-06052 at which BCP, NCARE, Sierra and Staff participated. The prehearing conference was continued to August 6, 2012, for the purpose of consolidating Docket No. 12-06052 with Docket No. 12-06053.


• On August 6, 2012, the Commission held a continued prehearing conference in Docket No. 12-06052 and prehearing conference in Docket No. 12-06053. Cargill, Enbridge, EnerNOC, Great Basin, Moapa, Nevada Power, Ormat, Sierra, Sierra Club, SNHG, SNWA, Southwest Generation, and Staff participated in the prehearing conference in Docket No. 12-06053. BCP and NCARE participated in the prehearing conferences for Docket Nos. 12-06052 and 12-06053.

• On August 13, 2012, the Presiding Officer issued Procedural Order No. 1, consolidating Docket Nos. 12-06052 and 2-06053 for hearing purposes and establishing a procedural schedule. The consolidated Dockets were scheduled to be addressed in three distinct phases. Phase I consists of Nevada Power’s ESP in Docket No. 12-06053. Phase III consists of issues related to the ON Line project in Docket No. 12-06053. Phase II consists of the remaining issues in Docket Nos. 12-06053 and all issues in Docket No. 12-06052.

• On August 15, 2012, the Commission issued a Notice of Hearing.

• On August 28, 2012, Sierra Club filed a Motion to Withdraw as Intervener and Participate as Commenter. On September 13, 2012, the Presiding Officer issued an Order granting Sierra Club's Motion.

• On September 6, 2012, Sierra filed Errata # 1 through #4 amending its Application in Docket No. 12-06052.


• On September 13, 2012 Nevada Power filed Errata #2 through #5 amending its Application in Docket No. 12-06053.

• On September 19, 2012, EP Minerals, LLC; Heavenly Valley, Limited Partnership; Wimar Tahoe Corporation; Lake Tahoe Horizon Casino Resort; John Ascuaga’s Nugget; Nevada Cement Company; Premier Chemicals, LLC; The Ridge Tahoe Property Owners Association; and Renown Health, collectively referred to as the Northern Nevada Industrial Electric Users (“NNIEU”) filed a PLTI in Docket No. 12-06053. On October 2, 2012, the Presiding Officer issued an Order granting NNIEU’s PLTI.

• On September 20, 2012, the Presiding Officer held a hearing addressing Phase I of Docket 12-06053, Nevada Power’s ESP portion of its Application. At the conclusion of the hearing, the Presiding Officer granted a motion to accept Exhibits 1 through 23 into the record. The Commission issued an Order regarding Phase I issues in Docket No. 12-06053 on November 5, 2012.

• On September 26, 2012, at a regularly scheduled agenda, the Commission voted to bifurcate the ON Line issues in Sierra’s Application from the remaining issues in Docket No. 12-08009 to be heard with Nevada Power’s ON Line related requests in Docket No. 12-06053.

• On October, 1, 2012, the Commission issued an Order bifurcating the ON Line project issues in Sierra’s Application in Docket No. 12-08009 and consolidated them with Nevada Power’s requests related to the ON Line project in Docket No. 12-06053.

• On October 1, 2012, BCP, Moapa, NCARE, and Staff filed direct testimony in Phase II of Docket No. 12-06052 and 12-06053.

• On October 2, 2012, the Presiding Officer issued Procedural Order No. 2 establishing a procedural schedule for Phase III of consolidated Docket Nos. 12-06053 and 12-08009.


• On October 16, 2012, Cargill filed a Motion to Compel NV Energy to Respond to Data Requests in Docket No. 12-06053. Nevada Power filed its Opposition to the Motion on October 23, 2012. On October 25, 2012, Cargill filed its Reply to Nevada Power Opposition. On November 9, 2012, the Presiding Officer issued an Order denying Cargill’s Motion.


• On October 22, 2012, Staff filed Errata to direct testimony in Docket Nos. 12-06052 and 12-06053.
• On October 22-25, 2012, BCP, Enbridge, EnerNOC, NCARE, NV Energy, Ormat, SNHG, SNWA, and Staff participated in the continued hearing held by the Presiding Officer in Phase II of Docket Nos. 12-06052 and 12-06053. BCP, NV Energy, and Staff (collectively, the “Stipulating Parties”) filed a Partial Party Stipulation Regarding Phase II DSM and Load Forecast issues (“Partial Stipulation”). The Presiding Officer did not accept the Stipulation. At the conclusion of the hearing, the Presiding Officer granted a motion to accept Exhibits 24 through 129 into the record.

• On October 29, 2012, Cargill filed a Motion for Leave to Submit a Pre-Hearing Brief. Nevada Power filed its Opposition to the Motion on November 5, 2012. On November 7, 2012, Cargill filed its Reply to Nevada Power’s Opposition. During the hearing on November 15, 2012, the Presiding Officer denied Cargill’s Motion.

• On October 31, 2012, Staff filed supplemental direct testimony in Phase III of Docket Nos. 12-06052, 12-06053 and 12-08009.


• On November 5, 2012, the Presiding Officer issued Procedural Order No. 3 requesting that Nevada Power file supplemental information. Nevada Power filed the requested information on November 8, 2012.

• On November 9, 2012, NNIEU filed a letter with the Commission withdrawing from the proceeding.

• On November 13-16, 2012, BCP, Cargill, Enbridge, EnerNOC, Great Basin, NCARE, NV Energy, Ormat, SNHG, SNWA, and Staff participated in the continued hearing held by the Presiding Officer in Phase II of Docket Nos. 12-06052 and 12-06053 and Phase III of Docket Nos. 12-06053 and 12-08009. At the conclusion of the hearing, the Presiding Officer granted a motion to accept Exhibits 130 through 167 into the record.

• On November 16, 2012, BCP filed a Motion of the BCP for the Commission to Consider Stipulation in Docket Nos. 12-06052 and 12-06053 (“Motion”). On November 19, 2012, BCP filed an amendment to the Motion to include Attachment 1, which it inadvertently did not attach to the Motion filed on November 16, 2012, and an amended Certificate of Service.

• On November 27, 2012, SNHG and NCARE filed Oppositions to Motion of the BCP for the Commission to Consider Stipulation. Staff filed a Response to Motion to Consider on November 27, 2012.

• On December 4, 2012, BCP filed a Reply to the Responses of Staff, NCARE and SNHG to the BCP’s Motion.

• On December 5, 2012, the Presiding Officer issued Procedural Order No. 4 requesting that BCP file the Partial Stipulation as late-marked Exhibit 168. BCP filed late-filed Exhibit 168 on

IV. MOTION FOR THE COMMISSION TO CONSIDER STIPULATION

Parties’ Positions

BCP

1. BCP requests that the Commission consider the Partial Stipulation in Docket No. 12-06052 and 12-06053 at the agenda meeting at which Docket Nos. 12-06052 and 12-06053 are deliberated. (BCP Motion filed November 16, 2012, at 1, 4.)

NCARE

2. NCARE requests that BCP’s Motion be denied and the Commission disregard the Partial Stipulation in making its decisions in Docket Nos. 12-06052 and 12-06053. NCARE asserts that BCP’s contentions are not supported by the cited regulations or statute, or by the terms of the Partial Stipulation. The Partial Stipulation was never agreed to by all parties to the proceedings, and if the Commission decided to accept the Partial Stipulation, in reaching its decision it would still have to consider any evidence presented by non-stipulating parties on the issues addressed by the Partial Stipulation. Additionally, NCARE asserts that BCP’s Motion is not timely raised. (NCARE Opposition filed November 27, 2012, at 1, 2, 5.)

SNHG

3. SNHG requests the Commission deny BCP’s Motion and asserts that the Partial Stipulation is procedurally defective and was properly rejected by the Presiding Officer. Only BCP, NV Energy and Staff are parties to the Partial Stipulation. Interveners such as SNHG, who have an interest in the subject matter of the Partial Stipulation, were not consulted and did not execute the Partial Stipulation. (SNHG Opposition filed November 27, 2012 at 2, 4.)

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Staff

4. Staff states that BCP’s Motion is moot at this time. Staff sees no indication that the treatment of the Partial Stipulation in this case will differ from that of any other stipulation filed with and considered by the Commission. (Staff Response filed November 27, 2012 at 1-2.)

BCP Reply

5. BCP continues to request that the Commission consider the Partial Stipulation. (BCP Reply filed December 4, 2012, at 1, 4.)

Commission Discussion and Findings

6. The Commission finds that BCP’s Motion is moot. The Partial Stipulation has been received into evidence\(^1\) and will be considered and accorded the appropriate weight by the Commission in making its final decision in this proceeding.

V. STIPULATION

7. BCP, NV Energy, and Staff filed the Partial Stipulation for consideration as a negotiated settlement of all issues raised by in Docket No. 12-06052, and the issues of load forecast and DSM in Phase II of Docket No. 12-06053. The Partial Stipulation states that it is fair, just and reasonable, and that it is in the public interest. The Partial Stipulation states that it is a partial party resolution of the issues and, therefore, NV Energy will be present to defend its direct case as modified by the Partial Stipulation. The Partial Stipulation further provides that Staff and BCP will not present their witnesses on the stipulated issues and waive cross-examination of NV Energy’s witnesses on the stipulated issues.

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\(^1\) Pursuant to NAC 703.725, after the hearing and before the issuance of the final order, the Presiding Officer issued Procedural Order No. 4 requesting that BCP file the Partial Stipulation as late-filed Exhibit 168. The Partial Stipulation was not marked as an Exhibit during the hearing on October 22, 2012, when it was being discussed on the record. (Tr. at 196.) On December 12, 2012, NCARE and NV Energy filed comments on the late-filed exhibit. The Partial Stipulation is received into the record as late-filed Exhibit 168.
Commission Discussion and Findings

8. The Partial Stipulation was filed with the Commission on October 22, 2012, the morning of the continued hearing for Phase II issues in Docket Nos. 12-06052 and 12-06053. The Proof of Service indicates that the Partial Stipulation was served on the parties to the proceeding on October 22, 2012. Enbridge, EnerNOC, Moapa, NCARE, Ormat, SNHG, and SNWA, who had all been granted intervention in the DSM and/or load forecast portions of Docket No. 12-06053\(^2\), and have an interest in the issues addressed by the Partial Stipulation, are not signatories to and may not have been consulted about the Partial Stipulation.\(^3\)

Representatives and witnesses for the non-stipulating parties were present at the hearing on October 22, 2012, prepared to present a case on DSM and load forecast issues and/or cross-examine NV Energy’s, Staff’s and BCP’s witnesses based upon their pre-filed testimony.

9. The Commission finds that it is not in the public interest to approve the Partial Stipulation given the procedural circumstances surrounding the Partial Stipulation. The Commission cannot find that the Partial Stipulation is a consensus settlement of the DSM and load forecast issues pursuant to the interested Parties’ negotiations because of the short period of time between the hearing and the time that the Partial Stipulation was filed with the Commission and served on all the Parties, and the possibility that some Parties, with interests in issues addressed by the Partial Stipulation, were not party to the negotiation of the Partial Stipulation.

VI. DSM APPLICATIONS

A. NV Energy DSM Overview

i. Preferred and Alternative Plans

10. NV Energy presents three alternative plans to Nevada Power’s 2012 IRP and

\(^2\) NCARE was also granted intervention in Docket No. 12-06052.

\(^3\) See SNHG’s Opposition to the Motion of the BCP for the Commission to Consider Stipulation filed with the Commission on November 26, 2012.
Sierra’s Annual DSM Update Report: (1) a Preferred Plan, (2) a Minimum Impact Plan, and (3) a Maximum Net Benefits Plan. The Preferred Plan provides strong energy and peak demand savings by presenting a portfolio of programs that are designed to meet system resource requirements in the 2013 program year. NV Energy contends that the plan is more responsive to the current economic conditions than the Maximum Net Benefits Plan and is more reflective of short-term requirements than the Maximum Net Benefits Alternative Plan or the Minimum Impact Plan discussed below. The Minimum Impact Plan provides the least amount of energy savings and peak demand reductions of the three plans and focuses on minimizing rate impacts. The objective of this plan is a more gradual long-term and sustained reduction in energy consumption and system peak reduction. Lastly, the Maximum Net Benefit Plan seeks to achieve the greatest magnitude of energy savings with an emphasis on peak demand reduction. This plan purports to achieve immediate and sustained energy savings along with system peak reduction. The Maximum Net Benefits Plan includes programs and measures that are not included in the other two plans. (Exhibit 26 at 26, 28-31; Exhibit 35 at 23-29.)

**Commission Discussion and Findings**

11. Based on the Commission’s review of the DSM component of the Nevada Power’s IRP and Sierra’s DSM update, the Commission concludes that an investigatory docket be opened to address the many issues associated with DSM in Nevada. Throughout the pendency of these Dockets and previous DSM-related dockets, the Commission has been alerted to a variety of issues (many discussed herein) that warrant further discussion, evaluation and potential action. The best place to address these issues is within the context of an investigatory docket that is not limited by time and creates a less formal and more inclusive process. The investigatory docket should be general in nature as to avoid the potential to exclude topics that
have not been raised.

B. Sierra DSM Programs

i. Summary of Recommendations

Parties’ Positions

Sierra

12. Sierra recommends that all programs previously approved in Sierra’s 2010 IRP in Docket No. 10-07003, be continued for program year 2013 except for the ENERGY STAR® Manufactured Homes program and Electric Low Income Weatherization program. Sierra recommends that both of these programs be cancelled for the 2013 program year. Sierra further recommends that each of the other programs be accepted as presented in the Preferred Plan. Sierra is requesting a total budget of $7.36 million. The recommended Preferred Plan has a total resource benefits to cost ratio of 1.32 for the Total Resource Cost test (“TRC”) for all programs, with a net benefit to the community of $3,383,626. (Exhibit 26 at 7, 11-14, Table A-1, A-2.)

BCP

13. BCP recommends that the Commission adopt the Minimum Impact Plan budget of $3.83 million for the majority of Sierra’s DSM programs, with one adjustment. BCP recommends the elimination of the Residential Solar Thermal Water Heating program and reallocating $100,000 from that program to the Residential Energy Efficient Lighting program or the Non-Profit Agency Grants program. BCP makes an additional recommendation to have Sierra revise its existing street lighting, parking lot and area lighting tariffs to include Light Emitting Diode (“LED”) exterior lighting technologies. BCP contends that energy and capacity is likely to be available to customers in Nevada in sufficient quantity and at a reasonable cost compared to other options. Nevada is also in a period of economic downturn and hardship. In
an economic situation like Nevada is now experiencing, growth in residential energy use would be expected to slow or be stymied. Demand for new residential housing would likely slow down. If the capacity and energy markets change or are likely to change significantly in the upcoming three to five year period, the Commission and Sierra could make program adjustments accordingly. (Exhibit 108 at 3-6.)

NCARE

14. NCARE recommends that the Commission adopt the Preferred Plan for the Second Refrigerator Collection and Recycling, Market and Technology Trials, and Demand Response programs. NCARE supports the Minimum Impact Plan budget for the Residential Solar Thermal Water Heating program. All other programs should be funded at the Maximum Net Benefits Plan budget for Sierra’s DSM programs with some specific program enhancements. NCARE recommends a total budget of $8.95 million for Sierra’s DSM Programs in program year 2013. NCARE states that its proposed budget is more equitable and will result in nearly 30,000 more program participants. In total, there would be 138,133 program participants with its recommended budget, compared to 108,680 in Sierra’s Preferred Plan. Second, greater energy savings will be achieved with about 55 gigawatt-hours (“GWh”) per year of savings. Third, about $5 million of net economic benefits may be achieved compared to $3.4 million for the Preferred Plan. (Exhibit 81 at 3, 24-25, Attachment MQ-2.)

Staff

15. Staff recommends that the Commission adopt Sierra’s Minimum Impact Alternative Plan, with some deviations. Staff recommends a revised budget of $4.58 million for Sierra’s DSM Programs in program year 2013. This proposed budget is 74 percent of the budget Sierra is requesting for program year 2013. Staff’s recommendations are in the range of updated
estimates and closely reflect Sierra’s actual spending in DSM programs. (Exhibit 84 at 16; Exhibit 88 at 3.)

   ii.  Non-Profit Agency Grants Program

      Parties’ Positions

      Sierra

      16.  Sierra recommends continuing its Non-Profit Agency Grants program in 2013 at the Preferred Plan budget of $110,000 with an annual energy savings of 270 megawatt-hours ("MWh"). Sierra’s Non-Profit Agency Grants program provides grants for general energy efficiency upgrades to commercial spaces leased or owned by non-profit organizations. In determining the recipients for the project grants, the demand and energy savings are projected by the contractor working with the non-profit agencies with input by Sierra. In order for a grant request to be granted, each project request is required to generally support a TRC of 1.0 or greater. The project selection process achieves the cost-effective energy and demand savings within the available program funding. (Exhibit 26 at 11; Exhibit 56 at 9-10.)

      BCP

      17.  BCP recommends continuing the program in 2013 at the Minimum Impact Plan budget of $80,000. (Exhibit 108 at 3, 6, and 11.)

      NCARE

      18.  NCARE recommends continuing the program in 2013 at the Maximum Net Benefits Plan budget of $150,000, which would result in estimated energy savings of 370,000 kilowatt-hours ("kWh") per year. The proposed budget will provide support to 15 non-profit agencies (instead of 11) and produce net economic benefits of $86,052. Even if the Preferred Plan is approved, NCARE recommends that the Commission direct Sierra to increase the funding
cap applied to each project from the 2012 level of $7,500 up to a cap of $20,000. Some non-profit agencies lack the resources to implement cost-effective energy efficiency projects and increasing the cap on utility grants will enable more non-profit agencies to implement such projects. (Exhibit 81 at 15, Attachments MQ-2 and MQ-3.)

**Staff**

19. Staff recommends continuing the program in 2013 at the Minimum Impact Plan budget of $80,000. After reviewing the program details, budgets, PortfolioPro, and the inputs to PortfolioPro, Staff has many unresolved concerns as to how Sierra calculated benefit/cost ratios, including TRC and adjusted TRC ("ATRC"). In light of those concerns, Staff contends that Sierra did not successfully demonstrate that those programs are cost-effective. Although Staff does not have full confidence in the cost/benefit analysis of the programs, Sierra should be still be able to continue an approved program at budgets similar to those used in past years at the Minimum Impact Plan budget. (Exhibit 84 at 15-16; Exhibit 85 at 29; Exhibit 87 at 2, Attachment MDR-2.)

**Sierra’s Rebuttal**

20. Sierra continues to recommend Commission approval of the program in 2013 at a Preferred Plan budget of $110,000. Staff has provided no specific basis for recommending funding at the Minimum Impact Plan level. Staff has put this program in with other DSM programs for which concerns regarding cost-effectiveness were raised. With a TRC of 1.87 for 2013, it is highly unlikely that small changes to the TRC would result in this program not being cost-effective. (Exhibit 109 at 15-16.)

**Commission Discussion and Findings**

21. The Commission accepts Sierra’s proposed budget of $110,000 for the Non-Profit
Agency Grant program contained in the Preferred Plan. The Commission finds that this funding level strikes the appropriate balance between the Maximum Net Benefits Plan as supported by NCARE (that reaches the most non-profit agencies) and the Minimum Impact Plan as supported by BCP (that reflects the current economic conditions in Nevada). The Commission acknowledges Staff’s concerns regarding the calculation of the benefit/cost ratios, but finds compelling Sierra’s testimony that with a TRC of 1.87 for 2013, it is unlikely that small changes to the TRC would result in the program not being cost-effective.

iii. Energy Education and Consultation Program

Parties’ Positions

Sierra

22. Sierra recommends Commission approval of its Energy Education and Consultation program in 2013 at the Preferred Plan budget of $250,000. Sierra states that its Energy Education and Consultation program educates and assists customers regarding the efficient use of electricity. The program has been reworked to move away from the distribution of material at public events. The program focuses on developing K-12 school-based energy efficiency education programs in collaboration with other stakeholders to increase the reach of the new program. The education for new home construction activities will be scaled back, with a new component added to support the home retrofit market. In each area, collaboration with others will be a priority to increase the reach of the limited resources. (Exhibit 26 at 7, 10-11; Exhibit 56 at 12-13.)

BCP

23. BCP recommends continuing the program in 2013 at the Minimum Impact Plan budget of $150,000. (Exhibit 108 at 3,6, and 11.)
NCARE

24. NCARE recommends continuing the program in 2013 at the Maximum Net Benefits Plan budget of $350,000. Sierra does not claim any savings from the program or calculate a benefit-cost ratio. The program would serve 21,850 students under the proposed budget, which is almost 6,000 more than in the Preferred Plan budget, and increase its value to society, and more completely penetrate the next generation of energy consumers. (Exhibit 81 at 22, Attachment MQ-2.)

25. To improve the Energy Education and Consultation program, NCARE further recommends that the Commission direct Sierra to develop and apply a method that can give energy savings credit to education and training program activities for energy and facility managers in the commercial sector. (Exhibit 81 at 22.)

Staff

26. Staff recommends continuing the program in 2013 at the Minimum Impact Plan budget of $150,000. Staff states that there are too many unresolved concerns as to how Sierra calculated benefit/cost ratios, including TRC and ATRC. Accordingly, Staff contends that Sierra did not successfully demonstrate that the program is cost-effective. While it is difficult to have full confidence in the benefit/cost analysis of the program, Sierra should still be able to continue the approved program at a budget similar to that approved in prior years while at the minimum plan budget level. (Exhibit 85 at 29-30; Exhibit 87 at 2, Attachment MDR-2.)

Sierra Rebuttal

27. Sierra continues to recommend Commission approval of its Energy Education and Consultation program in 2013 at the Preferred Plan budget of $250,000. Sierra does not calculate a TRC or ATRC for the education programs since it does not claim energy savings, and
as a consequence, lost revenues. Staff has not provided any supporting evidence to approve the program at the Minimum Impact Plan budget. This program provides customers with the information and knowledge that will enable them to better manage their energy usage and their energy bills. (Exhibit 109 at 8-11.)

Commission Discussion and Findings

28. The Commission accepts Sierra’s proposed budget of $250,000 for the Energy Education and Consultation program contained in the Preferred Plan. The Commission finds that this funding level strikes the appropriate balance between the Maximum Net Benefits Plan supported by NCARE (that reaches the most students resulting in the greatest value to society) and the Minimum Impact Budget as supported by BCP (that reflects the current economic conditions in Nevada).

iv. Electric Low Income Weatherization Program

Parties’ Positions

Sierra

29. Sierra recommends continued suspension of the Low Income Weatherization program for 2013. (Exhibit 26 at 9, 11.)

Staff

30. Staff recommends suspending the program in 2013 because Sierra was unable to create a cost-effective program. (Exhibit 85 at 31; Exhibit 87 at 2, Attachment MDR-2.)

Commission Discussion and Findings

31. The Commission accepts Sierra’s proposal to continue the suspension of the Electric Low Income Weatherization program for 2013. The Commission encourages Sierra to continue to look for solutions to improve the cost-effectiveness of this program in order to create
a more equitable portfolio of DSM programs.

v. Market and Technology Trials Program

Parties’ Positions

Sierra

32. Sierra recommends that the Commission approve its Market and Technology Trials program in 2013 at the Preferred Plan budget of $100,000. Sierra’s Market and Technology Trials program focuses on the assessment and testing of innovative and energy-efficient technologies with applications in the residential, small commercial and industrial markets. This program has supported investigations of a variety of potentially valuable technologies for potential inclusion in its DSM programs. The trials will allow small and moderate scale tests of products that have potential energy and demand savings benefits. Where the benefits are demonstrated to be of sufficient quantity and reliability, the measure will be incorporated in one of Sierra’s energy efficiency or demand response programs. (Exhibit 26 at 9-11; Exhibit 60 at 6-7.)

BCP

33. BCP recommends continuing the program in 2013 at the Minimum Impact Plan budget of $100,000. (Exhibit 108 at 3, 6, 11.)

NCARE

34. NCARE recommends continuing the program in 2013 at the Preferred Plan budget of $100,000. This program is a valuable tool to assess new technologies and market acceptance of newer products on a small scale to determine their potential to deliver cost-effective energy savings and can identify promising new technologies that may become important measures in future programs. (Exhibit 81 at 22-23, Attachment MQ-2.)
Staff

35. Staff recommends continuing the program in 2013 at the Minimum Impact Plan budget of $100,000. After reviewing the program details, budgets, PortfolioPro, and the inputs to PortfolioPro, Staff has many unresolved concerns as to how Sierra calculated benefit/cost ratios, including TRC and ATRC. In light of those concerns, Staff contends that Sierra did not demonstrate that this program is cost-effective. Although Staff does not have full confidence in the cost/benefit analysis of the programs, Sierra should still be able to continue an approved program at a budget similar to those used in past years at the Minimum Impact Plan budget.

(Exhibit 84 at 14-16; Exhibit 87 at 2, Attachment MDR-2.)

Commission Discussion and Findings

36. The Commission accepts Sierra’s proposed budget of $100,000 for the Market and Technology Trials program contained in the Preferred Plan and the Minimum Impact Plan. No party opposed the proposed budget of $100,000.

vi. Residential Energy Efficiency Lighting Program

Parties’ Positions

Sierra

37. Sierra recommends that the Commission approve its Residential Energy Efficiency Lighting program in 2013 at the Preferred Plan budget of $800,000 with an estimated energy savings of 7,125 MWh. Sierra states that its Residential Energy Efficient Lighting program provides direct incentives to encourage consumers to purchase energy-efficient next generation lighting products. Sierra redesigned the program in response to the changes to the lighting standards in Nevada that became effective on January 1, 2012. The program provides incentives for reflector compact fluorescent lights ("CFLs") and specialty CFLs in 2013.
Looking forward to Sierra’s 2013 IRP, a mix of LED lighting measures would be added to the program offerings for 2014. In 2015 and 2016, the program would fully transition to next generation lighting by dropping reflector CFLs and specialty CFLs and continue with incentives provided only for LED measures. The redesign of the program has been informed by the results of the Free-ridership and Spillover Study conducted by Tetra Tech and by the changing lighting marketplace. (Exhibit 26 at 6, 9-11; Exhibit 51 at 23-24.)

**BCP**

38. BCP recommends continuing the program in 2013 at either a modified budget of $100,000 or adopting the Minimum Impact Plan budget, which would provide the program with $0, thus suspending the program. The proposed funding would come from the redeployment of funds from the Residential Solar Thermal Heating program, should the Commission approve its elimination. (Exhibit 108 at 6, 11.)

**NCARE**

39. NCARE recommends continuing the program in 2013 at a proposed Maximum Net Benefits Plan budget of $1.1 million. The proposed budget will provide net economic benefits of $848,674 and serve 60,250 participants as compared to Sierra’s Preferred Plan budget of $800,000, which will provide $642,214 in net economic benefits while serving 47,125 participants. NCARE’s proposed funding would result in an estimated energy savings of 9,500,000 kWh per year. (Exhibit 81 at 13, Attachments MQ-2 and MQ-3.)

40. NCARE also recommends that the Commission direct Sierra to include LED lamps in the residential lighting program starting in 2013, regardless of the approved funding level. In both the Preferred Plan and Maximum Net Benefits Plan, Sierra proposes to start incentives for LED lamps in 2014 rather than 2013. However, a wide availability of LED lamps
already exists in big box retail stores. Other utilities already include incentives for LED lamps in their residential lighting incentive programs and find that doing so is cost-effective based on the long lifetime of LED lamps. However, it appears that Sierra used the same NTG ratio for LED lamps and CFLs in its cost-effectiveness analysis. If Sierra had used a higher net-to-gross (“NTG”) ratio for LED lamps, LED lamps would be more cost-effective than what was estimated. Should the Commission approve adding LED lights to the program in 2013, NCARE further recommends an average rebate of $10 per LED lamp and adding $800,000 to the program budget in 2013 to accommodate LED lamp incentives. (Exhibit 55 at 20-21.)

41. NCARE notes that standard spiral CFLs are left out of Sierra’s program. Based on NV Energy’s Residential Appliance Saturation Survey, the residential lighting market in Nevada is far from being transformed to high energy efficiency. Nevada also adopted light bulb efficiency standards⁴ that are more stringent than federal Energy Independence and Security Act (“EISA”) lamp standards. However, this new law has gone largely unenforced. Meanwhile lamp manufacturers are starting to manufacture and sell improved incandescent lamps that comply with federal but not Nevada’s standards. Given the federal EISA standards, utilities throughout the country are starting to reexamine their residential lighting programs to determine if it makes sense to continue to provide incentives for standard CFL bulbs. Most utilities are coming to the conclusion that providing incentives for standard CFL bulbs remains cost-effective and helpful in producing net energy savings and increasing program participation. As a result, many utilities, including all other major electric utilities in the southwest are continuing to provide such incentives. In light of this situation, NCARE recommends that the Commission direct Sierra to: (1) continue to track CFL and residential lighting market trends during 2013, with a focus on whether federal standards are the de facto lighting efficiency standards in

⁴ Assembly Bill 178 was adopted in 2007.
Nevada and if sales of standard CFLs increase or decline in 2013 relative to sales in 2009-2010 when utility incentives were in place for the entire year; (2) reexamine the cost-effectiveness of resuming in-store incentives for standard CFLs, along with incentives for specialty CFLs and LED lamps, if the federal standards are in reality the de facto lighting efficiency standards in Nevada; and (3) propose restarting incentives for standard CFLs in 2014 if such analysis shows that doing so would be feasible and cost-effective. (Exhibit 55 at 22-24.)

42. NCARE also recommends that the Commission direct Sierra to quantify spillover effect in all future evaluations of the Residential Lighting program, including evaluations of the program implemented in 2013-2015. (Exhibit 55 at 36.)

Staff

43. Staff recommends suspending Sierra’s Residential Energy Efficiency Lighting program for at least one more year. If regulations are adopted to carry out NRS 701.260, which requires general purpose bulbs that are sold in the State of Nevada after January 1, 2012, to meet energy efficiency threshold of 25 lumens per watt, then Sierra should be able to address concerns raised by the Commission Docket Nos. 11-07026 and 11-07027. Staff contends that Sierra’s redesigned program cannot address the changed lighting standards in Nevada because regulations have yet to be adopted. Therefore, the uncertainty that the Commission was concerned with in Docket Nos. 11-07026 and 11-07027 still exists. Furthermore, Staff contends that Sierra has not demonstrated that the new light bulbs have gained market acceptance and have achieved cost comparability. Staff also contends that Sierra fails to discuss LED lights and the acceptance of these types of light bulbs and whether that correlates to amounts sold in homes. (Exhibit 84 at 11-12; Exhibit 87 at Attachment MDR-2.)
Sierra Rebuttal

44. Sierra disagrees with Staff that the Residential Energy Efficiency Lighting program should be suspended. Sierra rejects Staff’s assertion that no mention is made of LED lights and the acceptance of those types of bulbs along with the correlation to amounts sold in homes. Sierra included a small segment of LEDs in the 2011 program. Sierra takes issue with Staff’s claim that insufficient evidence was provided regarding market acceptance and cost comparability of new technologies. Furthermore, Staff makes arguments regarding the regulations to implement NRS 701.260 that are not reflective of the status of those regulations. Sierra states that Staff was correct in observing that no regulations have been adopted to carry out NRS 701.260 and that no enforcement of NRS 701.260 has taken place. Staff bases its argument of uncertainty on the unlikely possibility that Nevada will adopt lighting regulations that will conflict with the lighting definitions in the EISA that exclude reflector bulbs from the definition of general purposes lighting. (Exhibit 113 at 22-24.)

Commission Discussion and Findings

45. The Commission rejects Sierra’s recommendation to continue the Residential Energy Efficiency Lighting program in 2013 at the Preferred Plan budget of $800,000. Sierra should suspend the program in 2013 and reduce the budget to $0. It is appropriate to suspend the program until new lighting technologies become more viable replacements for CFLs. The Commission prefers a program designed around new general lighting bulbs rather than base technology (CFLs) specialty bulbs because the general purpose bulbs will create significantly higher savings due to higher hours of use. The Commission recommends that Sierra continue to redesign this program towards a focus of incorporating more next generation lighting, including LEDs. The revised program should be included in Sierra’s 2013 IRP.
vii. **Second Refrigerator Collection and Recycling Program**

**Parties’ Positions**

**Sierra**

46. Sierra’s Residential Second Refrigerator Collection and Recycling program helps customers reduce energy consumption by removing operating second refrigerators from homes and recycling them. Sierra recommends continuing the program in 2013 at the Preferred Plan budget of $500,000 with estimated annual energy savings of 2,780 MWh. Sierra has redesigned the program to reduce free-ridership by eliminating the retail component from the program. The retail component of the program was a major source of primary refrigerators which were determined to have higher free-ridership. Although there are other companies that provide refrigerator recycling services in northern Nevada, they are not substitutes for Sierra’s program. The convenient free pick-up from the residence and the $50 incentive provides motivation for removing a second refrigerator. (Exhibit 26 at 9-11; Exhibit 60 at 3-5.)

**BCP**

47. BCP recommends that the Commission adopt the Minimum Impact Plan budget of $0 for the program in 2013. (Exhibit 108 at 3, 6, and 11.)

**NCARE**

48. NCARE recommends continuing the program in 2013 at the Preferred Plan budget of $500,000, which will service 3,399 customers. The net economic benefits were higher in the Preferred Plan than in the Maximum Net Benefits Plan, which may be due to a higher free-ridership level. The proposed funding would result in estimated energy savings to be 2,950,000 kWh per year. (Exhibit 81 at 13-14, Attachments MQ-2 and MQ-3.)

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Staff

49. Staff recommends that Sierra continue the program in 2013 at a modified budget of $350,000. Staff states that the program is a good addition in Sierra’s Residential portfolio of DSM programs and should be continued. This program is able to remove non-essential appliances off of the grid. This provides a constant flow of saved energy all day every day for what would be the remainder of the refrigerator’s or freezer’s life. (Exhibit 85 at 24-25; Exhibit 87 at Attachment MDR-2.)

Sierra Rebuttal

50. Sierra continues to recommend Commission approval to continue its Residential Second Refrigerator Collection and Recycling program in 2013 at the Preferred Plan budget level of $500,000. This program is cost-effective and well-received by customers and the community. Staff does not justify approving the program at $350,000 other than Staff recommends approving the program at the 2012 approved budget. It should be noted that Sierra has made structural changes to the program that account for free-ridership and that actual program expenditures in 2011 were $438,487. (Exhibit 111 at 6-7.)

Commission Discussion and Findings

51. The Commission accepts Sierra’s proposed budget of $500,000 for the Second Refrigerator Collection and Recycling program contained in the Preferred Plan. The Commission agrees with Sierra that Staff did not adequately justify approving the program at $350,000. Sierra has addressed Commission concerns by making structural changes to the program to account for free-ridership. Sierra eliminated the retail component of the program, which was a major source of the primary refrigerators that were considered a source of higher free-ridership.
viii. **ENERGY STAR® Manufactured Homes Program**

**Sierra**

52. Sierra recommends the cancellation of the ENERGY STAR® Manufactured Homes Program in 2013. Sierra has determined that the continued slow market for manufactured homes and the lower than anticipated number of homes with electric heating, do not support the continuation of this program. Moreover, the program delivered lower energy savings than anticipated and the avoided capacity costs and energy costs have declined. As a result, the TRC is less than 1.0. (Exhibit 26 at 9; Exhibit 60 at 9-10.)

**Staff**

53. Staff recommends cancelling the program in 2013. The TRC result for 2011 was 0.46, which is significantly below 1.0. Staff continues to support Sierra in its recommendation to discontinue the Program, until and unless Sierra is able to improve the cost-effectiveness and overall benefits of the program. (Exhibit 85 at 31.)

**Commission Discussion and Findings**

54. The Commission accepts Sierra’s proposal to cancel the ENERGY STAR® Manufactured Homes program due to the slow market for manufactured homes and the TRC level of less than 1.0.

ix. **Commercial New Construction Program**

**Parties’ Positions**

**Sierra**

55. Sierra’s Commercial New Construction program facilitates financial incentives and technical assistance to building owners and developers to identify, validate, and implement energy efficiency measures. Sierra recommends continuing the program in 2013 at the Preferred
Plan budget of $600,000 with an estimated energy savings of 3,400 MWh. Due to the limited new construction market projected for the 2013 program year, the budget for this program has been scaled back. The program will focus on education and outreach efforts to prepare and inform the market actors of the program and its benefits. (Exhibit 26 at 9-11; Exhibit 56 at 11-12; Exhibit 57 at 12.)

**BCP**

56. BCP recommends continuing the program in 2013 at the Minimum Impact Plan budget of $400,000. (Exhibit 108 at 3, 6, 11.)

**NCARE**

57. NCARE recommends continuing the program in 2013 at the Maximum Net Benefits Plan budget of $750,000, which would result in an estimated energy savings of 4,320,000 kWh per year. The additional funding will support more participants and higher net economic benefits. This program is important because it produces some of the longest lasting impacts available to DSM programs, and it is a desirable outcome to maximize the program’s influence on the new construction market. (Exhibit 81 at 15-16, Attachments MQ-2 and MQ-3.)

**Staff**

58. Staff recommends continuing the program in 2013 at the Minimum Impact Plan budget of $400,000. Staff contends that there are too many unresolved concerns as to how Sierra calculated benefit/cost ratios, including TRC and ATRC. Accordingly, Staff contends that Sierra did not demonstrate that the program is cost-effective. While it is difficult to have full confidence in the benefit/cost analysis of the program, Sierra should still be able to continue the approved program at a budget similar to that approved in prior years while at the minimum plan budget level. (Exhibit 85 at 29-30; Exhibit 87 at 2, Attachment MDR-2.)
Sierra Rebuttal

59. Sierra continues to recommend Commission approval of the program in 2013 at the Preferred Plan budget of $600,000. Staff has provided no specific basis for recommending the Minimum Impact Plan budget by simply including this program with several other programs for which concerns regarding cost-effectiveness were raised. This program has experienced strong customer demand, repeatedly selling out before the end of the program year. Commercial program measures implemented in 2011 saved 142 GWh in energy. (Exhibit 109 at 16.)

Commission Discussion and Findings

60. The Commission accepts Sierra’s proposed budget of $600,000 for the Commercial New Construction program contained in the Preferred Plan. The Commission finds that this funding level strikes the appropriate balance between the Maximum Net Benefits Plan as supported by NCARE (that reaches the most participants and results in significant energy savings) and the Minimum Impact Plan as supported by BCP (that reflects the current economic conditions in Nevada). The Commission agrees with Sierra that Staff has not provided substantial evidence to support its recommendation of a lower budget other than general concerns about cost-effectiveness. The Commission acknowledges that this program has experienced strong customer demand and produces some of the longest lasting impacts associated with DSM programs.

x. Energy Smart Schools Program

Parties’ Positions

Sierra

61. Sierra states that the objective of its Energy Smart Schools program is to produce energy and cost savings for the school districts, private schools, and higher education facilities.
The program provides training, technical assistance, and incentives to these entities. Sierra recommends continuing the program in 2013 at the Preferred Plan budget of $400,000 with estimated annual energy savings of 1,600 MWh. (Exhibit 26 at 9-11; Exhibit 60 at 8-9; Exhibit 61 at 9.)

**BCP**

62. BCP recommends continuing the program in 2013 at the Minimum Impact Plan budget of $300,000. (Exhibit 108 at 3, 6, 11.)

**NCARE**

63. NCARE recommends continuing the program in 2013 at the Maximum Net Benefits Plan budget of $600,000, which would result in estimated energy savings of 2,700,000 kWh per year. Under the proposed budget, the program can reach 138 schools (instead of 92) and achieve $4,006,232 in net benefits (compared to $3,214,636 in the Preferred Plan) at a higher TRC of 1.38 (compared to 1.19 in the Preferred Plan). (Exhibit 81 at 16-17, Attachment MQ-2.)

**Staff**

64. Staff recommends continuing the program in 2013 at the Minimum Impact Plan budget of $300,000. Staff states that there are too many unresolved concerns as to how Sierra calculated benefit/cost ratios, including TRC and ATRC. Staff contends that Sierra did not successfully demonstrate that the program is cost-effective. While it is difficult to have full confidence in the benefit/cost analysis of the program, Sierra should still be able to continue the approved program at a budget similar to that approved in prior years while at the minimum plan budget level. (Exhibit 85 at 29-30; Exhibit 87 at 2, Attachment MDR-2.)

65. Staff recommends that Sierra move forward with the energy education in school
portion of the program. However, since Sierra also provides natural gas distribution service in certain areas of northern Nevada, Sierra should be directed to incorporate its gas division resources in the program as well, in order to provide a more cost-effective and well rounded program. (Exhibit 85 at 31.)

Sierra Rebuttal

66. Sierra continues to recommend Commission approval of the Energy Smart Schools program in 2013 at the Preferred Plan budget of $400,000. This program is cost-effective and well received by school districts and provides benefits that flow back to customers not only directly by the program, but also by enabling cash-strapped schools to redirect dollars from energy costs to satisfy other needs for the schools. (Exhibit 111 at 8.)

Commission Discussion and Findings

67. Commission accepts Sierra’s proposed budget of $400,000 for the Energy Smart Schools program contained in the Preferred Plan. The Commission finds that this funding level strikes the appropriate balance between the Maximum Net Benefits Plan as supported by NCARE (that reaches the greatest number of schools and results in the greatest energy savings) and the Minimum Impact Plan as supported by BCP (that reflects the current economic conditions in Nevada). The Commission agrees with Sierra that this program provides benefits that flow back to customers not only directly by the program, but also by enabling schools to redirect dollars from energy costs to other needs of the school.

xi. Commercial Retrofit Incentive Program

Parties’ Positions

Sierra

68. Sierra states that its Commercial Retrofit Incentive program facilitates the
implementation of energy efficiency measures in commercial, industrial, and institutional facilities by offering financial incentives and comprehensive technical services. Sierra recommends continuing the program in 2013 at the Preferred Plan budget of $3.15 million, with an estimated annual energy savings of 26,000 MWh. The program offers per unit prescriptive measures for energy efficient lighting, cooling, motors, commercial kitchens, refrigeration, and miscellaneous energy conservation measures. In addition, customer incentives are offered for most measures not covered under the prescriptive component that result in verifiable energy savings. (Exhibit 26 at 9-11; Exhibit 56 at 10-11.)

**BCP**

69. BCP recommends continuing the program in 2013 at the Minimum Impact Plan budget of $2.3 million. (Exhibit 108 at 3, 6, 11.)

**NCARE**

70. NCARE recommends continuing the program in 2013 at the Maximum Net Benefits Plan budget of $4 million, which would result in an estimated energy savings of 32,800,000 kWh per year. In 2011, the program provided $3.6 million in net economic benefits. Based on the 2011 results, it has been a popular program in the business community and is responsible for most of the job creation attributable to NV Energy’s DSM programs. The Maximum Net Benefits Plan will serve more participants and create more net economic benefits, and jobs, with the same or higher TRC value. (Exhibit 81 at 17-19, Attachments MQ-2 and MQ-3.)

71. NCARE recommends that Sierra be given the flexibility to end the “stop-start” cycles of the past and maintain rebates year round. The program has been challenged to maintain market momentum, since annual budgets are set too low to meet market demand,
causing the program to exceed its budget cap and be shut down mid-year in both 2011 and 2012. This “start-stop” cycle harms contractors, utilities and ultimately customers, who pay for DSM programs in their utility bill every month to potentially discover that a rebate is not available when the customer is ready to implement an energy efficiency project. (Exhibit 81 at 17-19.)

72. To improve the incentive structure of the program, NCARE recommends that the Commission direct Sierra to reconsider their rebate levels and possibly raise them either for smaller customers or for all customers in order to attract more participants to the program. NCARE recommends increasing the 20 percent to 30 percent of net present value of the avoided costs of different measures to 30 percent to 40 percent of net present value of the avoided costs of different measures in order to maintain incentives that will move the market while still being highly cost-effective. (Exhibit 81 at 20.)

73. To improve the program communications, NCARE recommends that the Commission direct Sierra to strengthen both the frequency and the methods of its communication with program contractors to reduce uncertainty and create a timely and reliable stream of information, which in turn will better help inform customers, who often learn about utility efficiency programs through contractors. (Exhibit 81 at 20.)

74. To improve how operation and maintenance (“O&M”) activities are treated, NCARE recommends that the Commission direct Sierra to perform measurement and verification (“M&V”) analysis on any significant O&M improvements resulting from programs targeting the commercial and industrial (“C&I”) customers, with credit taken for properly verified savings in Sierra’s Annual DSM reports. (Exhibit 81 at 20-21.)

75. To improve the specific energy efficiency measures offered by the program, NCARE recommends that the Commission issue a directive to Sierra to apply a more directed
effort at marketing cool roof measures. (Exhibit 81 at 21.)

Staff

76. Staff recommends continuing the Commercial Retrofit Incentive program in 2013 at the Minimum Impact Plan budget of $2.3 million. Staff has concerns regarding Sierra’s calculations of the benefit/cost ratios, including the TRC and ATRC. Staff contends that Sierra did not successfully demonstrate that the program is cost-effective. While it is difficult for anyone to have full confidence in the benefit/cost analysis of the program, Staff contends that Sierra should still be able to continue the approved program at a budget similar to those used in prior years at the Minimum Impact Plan budget. (Exhibit 85 at 2, 29-30; Exhibit 87 at Attachment MDR-2.)

Sierra Rebuttal

77. Sierra continues to recommend Commission approval of the Commercial Retrofit Incentives program in 2013 at the Preferred Plan budget of $3.15 million. Staff has provided no specific basis for recommending the Minimum Impact Plan budget by simply including this program with several other programs for which concerns regarding cost-effectiveness were raised. This program has experienced strong customer demand, repeatedly selling out before the end of the program year. Commercial program measures implemented in 2011 saved 142 GWh in energy. (Exhibit 109 at 16.)

78. Sierra disagrees with NCARE’s recommended directive for Sierra to raise incentive levels to 30 percent to 40 percent of net present value of avoided costs for the C&I program. Sierra uses a process to monitor and evaluate market response to incentive levels to ensure the level of market activity is sufficient to meet the program goals and budgets and respond by modifying incentives as needed. Market demand has met or exceeded program
resources for the last several years. (Exhibit 109 at 17.)

79. Sierra disagrees with NCARE’s recommended directive regarding the actions that still need to be taken to strengthen the frequency and methods of communication with program contractors. Sierra made these communication improvements beginning in 2011, immediately after the focus group results were reviewed. These actions included communicating the current status of the program budget through the monthly contractor electronic newsletter and increasing contractor technical assistance. (Exhibit 109 at 17.)

Commission Discussion and Findings

80. The Commission accepts Sierra’s proposed budget of $3,150,000 for the Commercial Retrofit Incentive program contained in the Preferred Plan. The Commission finds that this funding level strikes the appropriate balance between the Maximum Net Benefits Plan as supported by NCARE (that reaches the most participants and results in significant net economic benefit) and the Minimum Impact Plan as supported by BCP (that reflects the current economic conditions in Nevada). The Commission agrees with Sierra that Staff has not provided substantial evidence to support its recommendation of a lower budget other than general concerns about cost-effectiveness. The Commission acknowledges that this program has experienced strong customer demand, provided significant net-economic benefits to the community, and created the most jobs out of Sierra’s DSM programs.

xii. Residential Solar Thermal Water Heating Program

Parties’ Positions

Sierra

81. Sierra recommends Commission approval of its Residential Solar Thermal Water Heating program in 2013 at the Preferred Plan budget of $250,000 with an estimated annual
energy savings of 150 MWh. Sierra states that its Residential Solar Thermal Water Heating program provides education, training, and incentives to support the development of a solar water heating industry in Nevada. The program is included in its DSM Update report in compliance with NRS 704.741(3)(a) and NAC 704.934(4). This program would be delivered to customers as part of the RenewableGenerations incentive programs. Bundling this program with other renewable incentive programs provides cost savings in administration, marketing, and education as materials and support systems can generally be deployed for the benefit of multiple programs. (Exhibit 26 at 11; Exhibit 51 at 25-26.)

BCP

82. BCP recommends eliminating the program because the projected net benefit of a negative $771,000 in the Preferred Plan. That equates to losing approximately $0.70 for every dollar spent on the program, even though the overall plan has greater benefits than costs. In times of limited resources and economic hardships, it is important to closely scrutinize and assess the viability of all proposed measures and technologies. (Exhibit 108 at 3, 7-8, 11.)

NCARE

83. NCARE recommends continuing the program for 2013 at the Minimum Impact Plan budget of $100,000, which would result in an estimated energy savings of 50,000 kWh per year. If it were not for legislation requiring the program to be offered, NCARE would recommend it be migrated from Sierra’s DSM program portfolio to Sierra’s renewable energy portfolio, where it might be a better fit. (Exhibit 81 at 14, Attachments MQ-2 and MQ-3.)

Staff

84. Staff recommends continuing the Residential Solar Thermal Water Heating program for 2013 at the Minimum Impact Plan budget of $100,000. After reviewing the
program details, budgets, PortfolioPro, and the inputs to PortfolioPro, Staff has many unresolved concerns as to how Sierra calculated benefit/cost ratios, including TRC and ATRC. In light of those concerns, Staff contends that Sierra did not successfully demonstrate that those programs are indeed cost-effective. Although Staff does not have full confidence in the cost/benefit analysis of the programs, Sierra should be still be able to continue an approved program at budgets similar to those used in past years at the minimum budget level. (Exhibit 84 at 14-16; and Exhibit 87 at Attachment MDR-2.)

Sierra Rebuttal

85. Sierra continues to recommend Commission approval for the Residential Solar Thermal Water Heating program in 2013 at the Preferred Plan budget of $250,000. The Preferred Plan appropriately addresses the issues of short-term and long-term rate impacts and the growing requirements for additional resources. (Exhibit 113 at 8.)

Commission Discussion and Findings

86. The Commission accepts the proposed budget of $100,000 for the Residential Solar Thermal Water Heating program contained in the Minimum Impact Plan. While nothing in statute requires the Commission to approve such a program, the Commission acknowledges the Legislature’s intent for electric utilities to provide a program to encourage the use of solar hot water heaters.

xiii. Consumer Electronics and Plug Loads Program

Parties’ Positions

Sierra

87. Sierra recommends continuing the Consumer Electronics and Plug Loads program in 2013 at the Preferred Plan budget of $400,000 with an estimated annual energy savings of
1,680 MWh. Sierra’s Consumer Electronics and Plug Loads program addresses the load growth caused by the rapid proliferation of consumer electronics, appliances, and office equipment by providing midstream and upstream incentives for retailers and original equipment manufacturers. A key reason for offering the incentive to retailers and original equipment manufacturers is because they have direct connections to downstream end-use customers. The retailers can send signals upstream to supply chain vendors and manufacturers by purchasing a larger percentage of high efficiency products. The goal is that these signals influence manufacturers to offer more qualified monitors at lower price points, thus spurring market transformation. (Exhibit 26 at 9-11; Exhibit 60 at 7-8.)

**BCP**

88. BCP recommends continuing the program in 2013 at the Minimum Impact Plan budget of $300,000. (Exhibit 108 at 3, 6, 11.)

**NCARE**

89. NCARE recommends continuing the program in 2013 at the Maximum Net Benefits Plan budget of $500,000, which will serve 51,877 customers and produce net benefits of $290,752 with a benefit-cost ratio under the TRC test of 1.58, as compared to the Preferred Plan TRC of 1.44. The proposed budget would result in an estimated energy savings of 2,310,000 kWh per year. (Exhibit 81 at 14, Attachments MQ-2 and MQ-3.)

**Staff**

90. Staff recommends discontinuing the program in 2013. Sierra has partnered with other utilities to promote the marketing and sales of energy efficient electronic measures. This partnership has resulted in energy efficiency measures that now cost the same price as base measures. Staff understands that several retailers no longer provide a base measure and only
provide the supported energy efficiency measure. Staff contends that this program has maximized its benefit to the Nevada electronics market and should be discontinued. The program as proposed only offers rebates for televisions, which are a small portion of the electronics market. Should the program be re-instated in the future, it should offer additional rebated measures and would need to keep ahead of the market as base electronics become more energy efficient. (Exhibit 85 at 18-19; Exhibit 87 at Attachment MDR-2.)

Sierra Rebuttal

91. Sierra continues to request Commission approval of its Consumer Electronics and Plug Loads program in 2013 at the Preferred Plan budget of $400,000. Sierra contends that the program has not maximized its benefit to the Nevada electronic market. At the end of every program year, Sierra assesses the market penetration and increases the baseline for the next program year to stay ahead of market penetration. As energy efficient options become the new base, newer and more energy efficient options are made available for customers to select from when shopping for consumer electronics. The market has not transformed but it is transitioning. Sierra also disagrees with Staff that several retailers no longer provide a base measure and only offer the supported energy efficiency measure. The program is designed at the mid-stream level to persuade retailers to stock their shelves with more efficient units. Eligible units for program participation still represent only a portion of retailer stock. Sierra also disagrees with Staff’s claim that rebates are only offered for televisions, which make up a small part of the electronics market. Sierra states that televisions represent 33 percent of consumer electronics consumption and are the greatest single end-use within consumer electronics. (Exhibit 109 at 5-7.)

Commission Discussion and Findings

92. The Commission rejects Sierra's recommendation to continue the Consumer
Electronics and Plug Loads program for 2013 at the Preferred Plan budget of $400,000. Sierra should discontinue the program in 2013 and reduce the budget to $0. The Commission agrees with Staff’s analysis that this program has maximized its benefit to the Nevada electronics market. The market transformation for energy efficient consumer electronics, appliances, and office equipment has sufficiently evolved and this program should not be continued.

xiv. Demand Response Program

Parties’ Positions

Sierra

93. Sierra recommends Commission approval of its Demand Response program in 2013 at the Preferred Plan budget of $800,000. The goal of Sierra’s Demand Response program is to evaluate the opportunities that may be available to help temper Sierra’s summer and/or winter peaks. Sierra has not previously offered or tested Demand Response measures other than irrigation pump load control. The program will complete a Direct Load Control Trial for residential air conditioning and initiate a C&I Direct Load Control Trial and a Dynamic Pricing Trial with an estimated installed combined demand response reduction capacity of approximately 2 MW in 2013. (Exhibit 26 at 13 at Table A-1; Exhibit 51 at 24-25.)

BCP

94. BCP recommends that the Commission continue the program in 2013 with a Minimum Impact Plan budget of $100,000. (Exhibit 108 at 3, 7-8, 11.)

EnerNOC

95. EnerNOC supports Sierra’s Preferred Plan budget of $800,000. EnerNOC contends that Sierra is pursuing a comprehensive and far-reaching Demand Response program implementation plan that includes evaluating the right mix of options for meeting its Demand
Response reduction goals. This includes prioritizing a balanced mix of Demand Response programs that appropriately targets all customer classes, as well as a forward looking approach to using technology to enable these programs to offer the most meaningful impact for Sierra’s customers. EnerNOC highlights the importance of maintaining a Demand Response portfolio that prioritizes all customer classes, including C&I sectors and the benefits of pursuing a service-based approach for the C&I sectors. (Exhibit 80 at 6, 18.)

**NCARE**

96. NCARE recommends continuing the program in 2013 at the Preferred Plan budget of $800,000. (Exhibit 81 at 3, Attachment MQ-2.)

**Staff**

97. Staff recommends continuing the Demand Response program in 2013 at the Preferred Plan budget of $800,000. Staff agrees that in order to get significant benefits from the Demand Response program in 2013, the program should be run at the Preferred Plan budget level. The Minimum Impact Plan budget only allows keeping the door open to an already small scale Demand Response program and does not allow for any growth. Since the program is still in the “pilot” stage of development, it should be allowed to grow to a level where it can be accurately evaluated to see if it will be successful in northern Nevada. (Exhibit 85 at 25-26; Exhibit 87, Attachment MDR-2.)

**Sierra Rebuttal**

98. Sierra continues to recommend approval to fund the Demand Response program in 2013 at the Preferred Plan budget of $800,000.

**Commission Discussion and Findings**

99. The Commission accepts Sierra’s proposed budget of $800,000 for the Demand
Response Program. The Commission agrees with Sierra that a Demand Response program could provide opportunities to mitigate the effects of Sierra’s summer and winter peaks. The Commission also agrees with Staff that limiting the Demand Response program to the Minimum Impact Plan does not allow for growth of the program, particularly given that the program is still in its early stages of development.

C. Nevada Power’s DSM Programs

i. Summary of Recommendations

Parties’ Positions

Nevada Power

100. Nevada Power requests Commission approval of its Preferred Plan with a total DSM budget of $144 million for the next three years. Nevada Power’s proposed DSM Plan has a total resource benefits to cost ratio of 1.69 for the TRC for all programs, with a net benefit to the community of $127,012,597. This is particularly noteworthy since the portfolio includes one program with a benefit-to-cost-ratio less than one and several programs for which no direct dollar benefits have been quantified. The proposed Preferred DSM plan represents a moderate contraction of program activity relative to the previously approved 2010-2012 DSM Plan. (Exhibit 35 at 8, 10, 12.)

BCP

101. BCP recommends that the Commission approve Nevada Power’s Minimum Impact Plan budget of $93.65 million with two adjustments. First, the Commission should eliminate the Residential Solar Thermal Water Heating program and redeploy $100,000 of Nevada Power’s Minimum Impact Plan to the Low Income Weatherization program. Second, the Commission should further reduce Nevada Power’s Demand Response program by 10
percent to 20 percent from the Minimum Impact Plan. The Commission should direct Nevada Power to revise its existing street lighting, parking lot and area lighting tariffs to include LED exterior lighting technologies. BCP contends that energy and capacity are likely to be available to customers in Nevada in sufficient quantity and at a reasonable cost compared to other options. The Minimum Impact Plan provides a reasonable balance between preserving the long-term benefits of DSM while mitigating short term rate impacts during difficult economic times. Nevada is in a period of economic downturn and hardship. In an economic situation like Nevada is now experiencing, growth in residential energy use would be expected to slow or be stymied. Demand for new residential housing would likely slow down. If the capacity and energy markets change or are likely to change significantly in the upcoming three to five year period, the Commission and Nevada Power could make program adjustments accordingly. (Exhibit 107 at 8; Exhibit 108 at 3-7.)

NCARE

102. NCARE recommends a total budget of $204 million for Nevada Power’s DSM programs in 2013-2015. The proposed budget has substantial advantages compared to Nevada Power’s Preferred Plan. First, it is more equitable in that it will result in more program participants. In total, there would be 975,000 program participants over the three-year period, which accounts for 534,000 more participants under the Preferred Plan. Second, greater energy savings would result than under the Preferred Plan. Based on Nevada Power’s analysis, about 213 GWh per year of savings on average would occur each year during the three year plan period compared with 132.5 GWh per year under the Preferred Plan. Lastly, if NCARE’s recommendations are adopted, $187.3 million in net economic benefits compared to $124.8 million under the Preferred Plan would result. (Exhibit 55 at 34-35.)
103.  NCARE supports the Preferred Plan funding level for the following programs: Market and Technology Trials, Advanced Building Techniques, and Energy Efficient Pools and Spas programs. NCARE supports the Minimum Impact Plan funding level for the Residential Solar Thermal Water Heating program. All other programs should be funded at Maximum Net Benefits Plan funding, which would result in more program participants and would increase the net economic benefits that Nevada Power customers as a whole would realize. NCARE also provides comments on specific program elements, including Home Energy Reports ("HERS"), Demand Response for C&I customers, promotion of LED lamps, treatment of spillover effect for a number of residential programs and funding flexibility in general. (Exhibit 55 at 4.)

Staff

104.  Staff recommends funding Nevada Power’s DSM programs in 2013-2015 at a revised budget of $92.95 million. Staff proposes to use the Nevada Power Minimum Impact Plan budgets for Commercial Incentives, Residential High Efficiency Air Conditioning, Energy Efficient Pools and Spas, Second Refrigerator Collection and Recycling, Energy Smart Schools, Non-Profit Agency Grants, Residential Solar Thermal Water Heating, Market Technology Trials, Energy Education, and Demand Response programs. Staff also proposes to set a budget to zero for the Residential Energy Efficient Lighting, Low Income Weatherization, the Consumer Electronics and Plug Loads, the Energy Plus New Homes, the Energy Efficiency Measures Financing, and the Advanced Building Techniques programs. Given Staff’s difficulties and concerns in the calculated benefit/cost ratios, including the TRC and ATRC, Staff contends that Nevada Power has not demonstrated that spending an average of $48 million per year for the next three years is reasonable or provides sufficient benefits to ratepayers to cover the costs. (Exhibit 84 at 19; Exhibit 86 at 2-4, Attachment CW-2.)
ii. Non-Profit Agency Grants Program

Parties' Positions

Nevada Power

105. Nevada Power recommends Commission approval of its Non-Profit Agency Grants program in 2013-2015 at the Preferred Plan budget of $350,000 with estimated energy savings of 840 MWh. Nevada Power states that its Non-Profit Agency Grants program offers grants for general energy efficiency updates to commercial spaces leased or owned by non-profit organizations. Grants would be awarded based on submitted applications, as well as the potential for energy and demand savings in each grant request. The program will also assist non-profit organizations in completing the grant application. In determining the recipients for the project grants, the demand and energy savings are projected by the contractor working with the non-profit agencies with input by Nevada Power. In order for a grant request to be granted, each project request is required to generally support a TRC of 1.0 or greater. The project selection process achieves the cost-effective energy and demand savings within the available program funding. (Exhibit 35 at 14, 17; Exhibit 58 at 18-20.)

BCP

106. BCP recommends funding the program in 2013-2015 at the Minimum Impact Plan budget of $300,000. (Exhibit 108 at 3, 6, 11.)

NCARE

107. NCARE recommends funding the program in 2013-2015 at the Maximum Net Benefits Plan budget of $600,000, which would result in additional net benefits of $106,533. The program is cost-effective and is valuable for helping social service and other non-profit agencies lower their utility bills, and thus increase the resources they have available for serving clients.
(Exhibit 55 at 10-11.)

**Staff**

108. Staff recommends funding the program in 2013-2015 at the Minimum Impact Plan budget of $300,000. Staff states that there are too many unresolved concerns as to how Nevada Power calculated benefit/cost ratios, including the TRC and ATRC. Accordingly, Staff contends that Nevada Power did not successfully demonstrate that the program is cost-effective. While it is difficult to have full confidence in the benefit/cost analysis of the program, Nevada Power should still be able to continue the approved program at a budget similar to that approved in prior years while at the Minimum Impact Plan budget level. (Exhibit 84 at 18-19; Exhibit 85 at 33; Exhibit 86 at Attachment CW-2.)

**Nevada Power Rebuttal**

109. Nevada Power continues to recommend funding the program in 2013-2015 at the Preferred Plan budget of $350,000. Nevada Power states that Staff has no specific basis for recommending funding at the Minimum Impact Plan level. Staff has lumped this program in with other DSM programs for which concerns regarding cost-effectiveness were raised. With a TRC of 1.85 for 2013-2015, it is highly unlikely that small changes to the TRC would result in this program not being cost-effective. (Exhibit 109 at 15-16.)

**Commission Discussion and Findings**

110. The Commission accepts Nevada Power’s proposed budget of $350,000 for the Non-Profit Agency Grant program contained in the Preferred Plan. The Commission finds that this funding level strikes the appropriate balance between the Maximum Net Benefit Plan as supported by NCARE (that reaches the most non-profit agencies) and the Minimum Impact Plan as supported by BCP (that reflects the current economic conditions in Nevada by utilizing a
minimum budget). The Commission acknowledges Staff’s concerns regarding the calculation of the benefit/cost ratios, but finds compelling Nevada Power’s testimony that with a TRC of 1.85 for 2013-2015, it is unlikely that small changes to the TRC would result in the program not being cost-effective. The Commission agrees with Nevada Power that Staff has not provided substantial evidence to support its recommendation of a lower budget other than general concerns about cost-effectiveness.

iii. **Energy Education and Consultation Program**

**Parties’ Positions**

**Nevada Power**

111. Nevada Power recommends Commission approval of its Energy Education and Consultation program in 2013-2015 at the Preferred Plan budget of $1.2 million. Nevada Power states that its Energy Education and Consultation program educates customers regarding the efficient use of electricity. This program will place less emphasis on events such as home shows and focus more combining with other resources in the community by working with schools to educate children regarding energy efficiency. Specifically, efforts will be made to educate K-12 teachers and students and providing presentations to adults on energy efficiency. The Commercial Education component has been expanded from facility operator training to include webinars and shorter seminars to educate additional commercial customers. The Residential and Commercial Building Industry Support component has shifted resources from a near sole focus on new home construction to a wider focus that incorporates the energy retrofit industry and code compliance training. (Exhibit 35 at 16-17; Exhibit 53 at 27; Exhibit 58 at 22-23.)

**BCP**

112. BCP recommends funding the program in 2013-2015 at the Minimum Impact
Plan budget of $850,000. (Exhibit 108 at 3, 6, 11.)

**NCARE**

113. NCARE recommends funding the 2013-2015 Program in 2013 at an enhanced Maximum Net Benefits Plan budget of $4.3 million. This program is an important component of Nevada Power's DSM portfolio involving public outreach, customer education, student education, and support for trade allies such as builders and contractors. In addition to the activities listed above, Nevada Power has proposed undertaking a HERS pilot program of 25,000 households in the Maximum Net Benefits Plan, but not the Preferred Plan. (Exhibit 55 at 11.)

114. NCARE recommends that the Commission also direct Nevada Power to implement a 50,000 household HERs pilot program in 2013 through 2015 and to rigorously evaluate the cost and benefits of the HERs pilot program in its Annual DSM Update reports. HERs programs are part of DSM program portfolios of dozen utilities around the country and have proven to be a cost-effective programs with real energy savings demonstrated through rigorous evaluation studies. A larger program would provide better statistical validity regarding average energy savings also more insight into which types of customers are most responsive to HERs. A HERs pilot program of 50,000 households should result in energy savings of approximately 15 GWh per year by year three if the results in the Nevada Power service area are similar to those elsewhere. (Exhibit 55 at 11-13.)

115. To improve the Energy Education and Consultation program, NCARE further recommends that the Commission direct Nevada Power to develop and apply a method that can give energy savings credit to education and training program activities for energy and facility managers in the commercial sector. (Exhibit 81 at 22.)
Staff

116. Staff recommends continuing the program in 2013-2015 at the Minimum Impact Plan budget of $850,000. Staff states that there are too many unresolved concerns as to how Nevada Power calculated benefit/cost ratios, including TRC and ATRC. Accordingly, Staff contends that Nevada Power did not successfully demonstrate that the program is cost-effective. While it is difficult to have full confidence in the benefit/cost analysis of the program, Nevada Power should still be able to continue the approved program at a budget similar to that approved in prior years while at the minimum plan budget level. (Exhibit 85 at 23; Exhibit 86 at Attachment CW-2.)

117. To improve the program, Staff recommends that Nevada Power remove any education measures that are associated with going into the schools and educating students. Southwest Gas Company, in Docket No. 12-04027, made a similar request to educate students. Staff asserts that Nevada Power and Southwest can work together to provide a single program that will allow for cost sharing in administration and implementation of the program. (Exhibit 85 at 24.)

Nevada Power Rebuttal

118. Nevada Power continues to recommend Commission approval of its Energy Education and Consultation program in 2013-2015 at the Preferred Plan budget of $1.2 million. Nevada Power does not calculate a TRC or ATRC for the education programs since it does not claim energy savings, and as a consequence, lost revenues. Staff has not provided any supporting evidence to approve the program at the Minimum Impact Plan budget. This program provides customers with the information and knowledge that will enable them to better manage their energy usage and their energy bills. Nevada Power asserts that a program to train teachers
and provide classroom resources would reach a broader student population with the same level of investment by the program. (Exhibit 109 at 8-11.)

119. In response to NCARE’s recommendation that the Commission direct Nevada Power to implement a Pilot Home Energy Reports program for 50,000 households and increase the Energy Education and Consultation program budget to $3.8 million for 2013-2015, Nevada Power contends that the scope and scale of such a budget is justified at this time. Nevada Power testified that a HERs pilot program of 25,000 households would result in an estimated 2.5 percent in energy savings and an estimated TRC of 1.14. Funding for HERs pilot program for 2013-2015 would be at $800,000. Nevada Power testified that it would not expect lost sales compensation related to HERs Nevada Power at this point because the HERs pilot program is within the Energy Education program, which does not claim energy savings. (Exhibit 109 at 17-18; Tr. at 685-691.)

**Commission Discussion and Findings**

120. The Commission accepts Nevada Power’s proposed budget of $1.2 million for the Energy Education and Consultation program contained in the Preferred Plan. The Commission finds that this funding level strikes the appropriate balance between the Maximum Net Benefits Plan as supported by NCARE (that reaches the most participants and provides the greatest value to society) and the Minimum Impact Plan as supported by BCP (that reflects the current economic conditions in Nevada). The program’s new focus of working collaboratively with the community to help educate children regarding energy efficiency as well as educating more commercial customers through webinars and shorter seminars promotes the goals of educating current and future customers about their energy use.

121. The Commission agrees with Nevada Power that Staff has not provided
substantial evidence to support its recommendation of a lower budget other than general concerns about cost-effectiveness.

122. The Commission acknowledges NCARE’s proposal to include the HERs pilot program for 50,000 households and agrees that the HERs pilot program (offered in the Maximum Net Benefits Plan) supports the goals of the Energy Education and Consulting program by providing customers with the information and knowledge that will enable them to better manage their energy use and energy bills. Nevada Power’s analysis indicated that the HERs pilot program would be cost-effective and have estimated energy savings of 2.5 percent. Like all Energy Education and Consultation programs, a HERs pilot program would not result in the collection of lost revenues. However, it is difficult to justify increased budgets beyond the Preferred Plan at this point in time. Nonetheless, the Commission encourages Nevada Power to continue explore the option of a HERs pilot program to include in a future filing.

iv. Electric Low Income Weatherization Program

Parties’ Positions

Nevada Power

123. Nevada Power recommends Commission approval of its Electric Low Income Weatherization program in 2013-2015 at the Preferred Plan budget of $1.5 million for the program with an estimated energy savings target of 500 MWh per year. Nevada Power states that its Electric Low Income Weatherization program facilitates the installation of energy efficiency measures in single and multi-family homes working with the Nevada Housing Division ("NHD"), who would be the program administrator. Nevada Power proposes a restructured, cost-effective program. Program expenditures will cover only the costs of selected energy efficiency measures along with the small overhead costs of the NHD. The measures
funded through the program will enable NHD to serve additional low income households with the substantially reduced funding that is provided from federal programs. The proposed program moves away from gap customers previously served by the program and aligns with the qualifying income levels for federal funding used by NHD. Due to the current level of avoided costs and the need to first address health and safety concerns in Low Income Weatherization programs, it is not possible for Nevada Power to offer a stand-alone cost-effective program that serves a different set of customers. (Exhibit 35 at 14, 17; Exhibit 53 at 28; Exhibit 58 at 12-14.)

BCP

124. BCP recommends that the Commission adopt the Minimum Impact Plan budget of $300,000. (Exhibit 108 at 3, 6, 11.)

NCARE

125. NCARE recommends that the Commission fund the Electric Low Income Weatherization at the Maximum Net Benefits Alternative Plan budget of $2.25 million. The program is an important part of the DSM portfolio as it targets lower income households that face high energy bills relative to their income, and are not served well by other programs. For example, many low income households are renters and do not own the air conditioning system or have pools or spas. NCARE supports the redesigned program, which is funded primarily by the federal Weatherization Assistance Program. This is especially important given the recent funding cuts for the federal program coupled with the end of the boost in funding that occurred through the American Recovery and Reinvestment Act (“ARRA”). The estimated TRC of 1.04 is anticipated in both the Preferred and Maximum Net Benefits Plan. However, the Maximum Benefits Plan will serve 675 more participants and provide additional net economic benefits. If non-energy benefits are quantified, could lead to higher cost-effectiveness than currently
projected. (Exhibit 55 at 14-15.)

Staff

126. Staff recommends suspending the 2013-2015 Electric Low Income Weatherization Program. Staff states that Nevada Power has worked with the NHD to share administrative costs. Nevada Power will only provide cost-effective measures while the NHD will continue to provide less cost-effective and safety measures. Despite the revised program, the estimated TRC and ATRC is 1.04. This program has a long standing trend of low cost-effectiveness and underperformance. In the past, Nevada Power argued that “gap” customers, who were not eligible for the NHD’s program, needed to be served. Since Nevada Power does not have the same income guidelines as the Housing Authority, there are no longer “gap” customers. Staff also cited concerns regarding a first-time refrigerator replacement measure that is being offered with a $500 incentive. Once Staff adjusted the Refrigerator Measure in PortfolioPro, a TRC of 0.96 was obtained. (Exhibit 85 at 19-20; Exhibit 86 at Attachment CW-2.)

127. Staff has additional concerns about the comingling of funds between NHD and Nevada Power. To further compound the financing issues, NHD generally requests landlords of weatherized rental units to pay half the measure cost because such measures improve the property and decrease electric bills for the occupants. Staff agrees that landlords should not free-ride on programs that ultimately benefit them, but it would also be inappropriate for Nevada Power to claim the full savings for a measure that is not fully financed by Nevada Power and will later be recovered as lost revenues. Staff also has issues as to how landlord contributions influence the benefit/cost tests performed in PortfolioPro. (Exhibit 85 at 20-23.)

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Nevada Power Rebuttal

128. Nevada Power continues to recommend Commission approval to fund the Low Income Weatherization program in 2013-2015 at the Preferred Plan budget of $1.5 million. Nevada Power rebuts Staff’s finding that the TRC for the program is 0.96, once refrigerator incentives are excluded. Staff did not reduce the utility administration and contractor costs required to support the removed measure in the model. In the absence of the refrigerator model, the TRC increases. The TRC is 1.19 once the correct assumptions are included. (Exhibit 109 at 12.)

129. Nevada Power confirms that with the program redesign, it would pay the full incentive for energy efficiency measures that the program would be sponsoring. Nevada Power also finds it appropriate for landlords of rental properties to contribute 50 percent to weatherizing their rental units. Nevada Power does not intend to recover the 50 percent of implementation costs from landlords. Currently, the heating, ventilation and air condition (“HVAC”) contractor provides two invoices that split the costs between the NHD and the landlord. NHD would then be reimbursed by Nevada Power. Nevada Power finds it appropriate to claim full savings for a measure that it does not fully finance because the program motivates landlords to perform an early replacement of Air Conditioning and/or Heat Pump units. Nevada Power worked with BCP, Staff and NCARE, NHD, and Southwest Gas to develop a cost-effective design for the program. The program works in conjunction with the NHD to share administrative costs in a structure similar to Southwest Gas. Nevada Power will only pay for measures that are in aggregate cost-effective. With the NHD waitlist for weatherization services at 280 and almost 200,000 homes below 200 percent of the Federal Poverty Level in southern Nevada, the program would provide valuable resources for customers who may not have another opportunity to
participate in Nevada Power’s DSM programs. (Exhibit 109 at 13-14.)

**Commission Discussion and Findings**

130. The Commission accepts Nevada Power’s proposed budget of $1.5 million for the Electric Low Income Weatherization program contained in the Preferred Plan. Nevada Power worked closely with BCP, Staff, NCARE, NHD, and Southwest Gas to develop a cost-effective program redesign. The revised program will allow low income customers to access Nevada Power’s DSM program and increase customer participation. With over 200,000 eligible homes in southern Nevada and 280 households on the waitlist for weatherization services, this program will serve as an invaluable resource in providing cost-effective services to an underserved, yet populous segment of the population. The Commission agrees that landlords should contribute towards weatherizing their own rental units. The program incentives will motivate landlords to perform an early replacement of air conditioning and/or heat pump units.

v. **Market and Technology Trials Program**

**Parties’ Positions**

**Nevada Power**

131. Nevada Power recommends Commission approval of its Market and Technology Trials program in 2013-2015 at the Preferred Plan budget of $1.2 million. Nevada Power states that its Market and Technology Trials program performs an assessment and testing of innovative and energy efficient technologies with applications in the residential, small-commercial, and industrial markets in Nevada. Over the past several years, this program in conjunction with Sierra’s similar program has supported investigation of a variety of potentially valuable technologies for potential inclusion in its DSM programs. (Exhibit 35 at 16-17; Exhibit 62 at 5-6.)
BCP

132. BCP recommends continuing the program in 2013-2015 at the Minimum Impact Plan budget of $300,000. (Exhibit 108 at 3, 6, and 11.)

NCARE

133. NCARE recommends approving the program in 2013-2015 at the Preferred Plan budget of $1.2 million. This program is a valuable tool to assess new technologies and market acceptance of newer products on a small scale to determine their potential to deliver cost-effective energy savings and can identify promising new technologies that may become important measures in future programs. (Exhibit 55 at 15; Exhibit 81 at 22-23.)

Staff

134. Staff recommends approving the program in 2013-2015 at the Minimum Impact Plan budget of $300,000. Staff states that there are too many unresolved concerns as to how Nevada Power calculated benefit/cost ratios, including TRC and ATRC. Staff asserts that Nevada Power did not successfully demonstrate that the program is cost-effective. While it is difficult to have full confidence in the benefit/cost analysis of the program, Nevada Power should still be able to continue the approved program at a budget similar to that approved in prior years while at the Minimum Impact Plan budget level. (Exhibit 84 at 18-19; Exhibit 86 at Attachment CW-2.)

Nevada Power Rebuttal

135. Nevada Power continues to recommend Commission approval of its Market and Technology Trials program in 2013-2015 at the Preferred Plan budget of $1.2 million. Nevada Power states that Staff provides no basis for recommending that this program be funded at the Minimum Impact Plan budget. This program is lumped in with several other programs for which
concerns over cost-effectiveness are raised. This program is of increasing relevant in the next several years as products are proposed that would potentially leverage smart meter technologies are introduced. Nevada Power has demonstrated that it has been judicious in expending funds from this program in past years. (Exhibit 111 at 9-10.)

**Commission Discussion and Findings**

136. The Commission accepts Nevada Power’s proposed budget of $1.2 million for the Market and Technology Trials program contained in the Preferred Plan. The Commission finds that this funding level strikes the appropriate balance between the Maximum Benefits Plan as supported by NCARE and the Minimum Benefits Plan as supported by BCP (that reflects the current economic conditions in Nevada). The Commission agrees with NCARE that this program is instrumental in identifying promising new technologies that may become important measures in future program. Staff has not demonstrated how the information provided by Nevada Power render the program to not be cost-effective.

vi. **Energy Efficiency Measure Financing**

**Parties’ Positions**

**Nevada Power**

137. Nevada Power recommends funding its Energy Efficiency Measures Financing program at the Preferred Plan budget of $1.75 million. The Energy Efficiency Measures Financing program will begin in 2014 with an investigation of direct third-party financing and billing of energy efficiency measures. The investigation may involve a small scale pilot. If the investigation determines that such a program would be cost-effective and practical, the financing option would be offered to customers in the 2015 program year. Lack of funds has been identified as a major barrier for customers to achieve energy efficiency upgrades. By offering
financing in addition or in lieu of rebates, can help expand the pool of participating customers. (Exhibit 35 at 16-17; Exhibit 53 at 32-33.)

**BCP**

138. BCP recommends that the Commission adopt the Minimum Impact Plan budget of $0. (Exhibit 108 at 3, 6, and 11.)

**NCARE**

139. NCARE recommends that the Commission approve a modified version of the proposed budget for this program in the Preferred Plan with $450,000 in funding for planning in 2013, and $1 million in 2014, and $1.5 million in 2015 for implementation. If a cost-effective program is designed in 2013, it would be logical for the program to scale up over time once implementation begins. If Nevada Power is unable to design a cost-effective program in 2013, the funding approved for 2014 and 2015 should not be spent. NCARE also recommends that the Commission direct Nevada Power to evaluate the energy savings and net economic benefits that the program would have, assuming that implementation goes forward, and include these values in annual DSM Update Reports. Such an evaluation is needed to determine whether or not the program is worthwhile and merits continuation after 2015. NCARE notes that many electric utilities are implementing effective energy efficiency financing programs, or including financing components as part of other programs such as residential and commercial retrofit programs. There are a variety of ways for utilities to engage in or support energy efficiency financing. NCARE thus supports Nevada Power’s request to investigate the feasibility of initiating an energy efficiency financing program and then move forward with program implementation if one or more practical and seemingly cost-effective approaches are developed. (Exhibit 55 at 15-17.)

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Staff

140. Staff recommends that the Commission deny Nevada Power’s proposed program budget and direct Nevada Power to re-submit the program for approval if and when data is available to properly evaluate the program. The program is not appropriate for the 2013-2015 DSM program portfolio because no detailed information on the program is provided regarding any benefit/cost tests. Staff has fundamental issue with having Nevada Power involved in financing. If Nevada Power feels strongly about the program, it should use money from the Market and Technology trials budget that is approved annually, but is rarely used by the company. (Exhibit 84 at 13-14; Exhibit 86 at Attachment CW-2.)

Commission Discussion and Findings

141. The Commission accepts Staff’s recommendation to defer approving the Energy Efficiency Measure Financing program until more information is available to properly consider and evaluate the program. The Commission supports the idea of further investigating ways to support more active customer participation in energy efficiency upgrades and growing the energy efficiency market in general. The program as proposed does not provide enough information for the Commission to make a decision on whether to approve the program. The Commission encourages Nevada Power to expand its portfolio of DSM programs. Once the program metrics are more clearly defined, Nevada Power should submit the program for Commission consideration.

vii. Demand Response Program

Parties’ Positions

Nevada Power

142. Nevada Power recommends Commission approval of its Demand Response
program in 2013-2015 at the Preferred Plan budget of $57.9 million. By the end of 2012, NV Energy is targeting 168 MW of cumulative capacity and the Preferred Plan would add an additional 190 MW for a cumulative target of 358 MW of installed capacity by the end of 2015. Nevada Power’s Demand Response program aims to reduce peak demand. The Preferred Plan proposes a controlled level of growth in new Demand Response resources and dedicates resources to continue to manage the existing DR programs. The proposed Demand Response programs take advantage of the data provided by smart meters and the functionality provided by new sophisticated Demand Response infrastructure and enabling technology platforms deployed over the 2010-2012 Action Plan period. The proposed programs provide customers with cost-effective programs as indicated by a Rate Impact Measure test benefit cost ratio of 1.30, and the output of the Rate Impact Model. (Exhibit 35 at 15, 17; Exhibit 53 at 29; Exhibit 63 at 3-4, 7-9.)

143. Nevada Power notes that in both the Preferred Plan and Maximum Net Benefit Plan, Nevada Power will not be able to avoid future supply-side resources and is forecasting significant gaps between peak and load resources. A controlled ramp up of Demand Resources over time will help close that gap by reducing the magnitude of supply-side resources in the future and helping to create a more robust and balanced resource portfolio. A more aggressive Demand Response portfolio and faster ramp of a C&I program could help further close the gap. (Exhibit 63 at 7-8.)

BCP

144. BCP recommends funding the program in 2013-2015 at the Minimum Impact Plan budget of $45.3 million, along with an additional reduction of 10 percent to 20 percent This adjusted budget would reduce the level of effort for enrolling additional residential Demand Response program participants. Nevada Power should be directed to continue the program with
its existing customers, who are already participating in Demand Response activities. It is reasonable to authorize Nevada Power to expand Demand Response services to non-residential customers as requested in order to gain knowledge and operational capability with non-residential customers. BCP’s concern stems namely from higher levels of Demand Response in the short run that would have a higher short term impact on rates. (Exhibit 107 at 6-7; Exhibit 108 at 3, 6-7, and 11-12.)

NCARE

145. NCARE recommends that the Commission approve the Demand Response program at the Maximum Net Benefits Plan budget of $63.03 million in 2013-2015, in order to realize the greater benefits associated with the program and avoid investment in more costly supply side resources. According to Nevada Power’s analysis, the Demand Response program in the Maximum Net Benefits Plan would result in net benefits of $61.35 million under the TRC test compared to net benefits of $51.9 million in the Preferred Plan. The increased funding would also enable Nevada Power to enroll more customers in the program and reduce peak demand by 220 MW incrementally at the end of 2015 rather than by 190 MW incrementally as proposed in the Proposed Plan. (Exhibit 55 at 17-18.)

146. NCARE also recommends that the Commission direct Nevada Power to issue a Request for Proposal ("RFP") for the C&I portion of this program to determine if it is more cost-effective to implement the C&I Demand Response program through a turnkey third party contractor or managed in house. The approach with the lowest cost per unit of peak demand reduction should be pursued. The results of the RFP, along with same information for Nevada Power’s in house program, should be submitted to the Commission to verify that the most cost-effective approach is in fact being pursued. (Exhibit 55 at 18.)
Staff

147. Staff recommends that the program should be funded at the Minimum Impact Level budget of $45.3 million. Staff also supports a C&I Demand Response program. Staff states that there too many issues regarding how Nevada Power calculated benefit/cost ratios, including the TRC and ATRC. Given those serious deficiencies, Staff asserts that Nevada Power did not successfully demonstrate that the program is cost-effective. Although it is difficult for Staff to have full confidence in the benefit/cost analysis of the program, Staff contends that it is reasonable to continue an approved program at a budget that is similar to prior years while at the Minimum Impact Plan budget level. (Exhibit 85 at 27-28; Exhibit 86 at Attachment CW-2.)

148. Staff is concerned that the Demand Response program is not currently growing based on of the 2011 results and Nevada Power’s plans for Program year 2012. The 2011 program evaluation did not include a TRC calculation, even though Nevada Power did call curtailment events for a total kWh savings of 1,302,955 kWh, Legacy Savings of 136 MW, with a total spent of $12,835,158. The Company referred to this year as a “build phase” with only generating savings from the Legacy System. Program year 2012 also seems to focus on the Legacy system. (Exhibit 85 at 27-28.)

Nevada Power Rebuttal

149. Nevada Power continues to recommend approval of its Demand Response program in 2013-2015 at the Preferred Plan budget of $57.9 million. Nevada Power states that BCP’s ultimate recommendation is not consistent with the evidence they present, which demonstrates that lower funding for DR programs is not in the interest of ratepayers. The Preferred Plan budget is the most realistic and achievable plan, and one that benefits ratepayers. The Demand Response program scores above 1.3 on the Ratepayer Impact Measure test, which
shows a general tendency to have a positive impact on rates. Except for their non-sequitur short
term rate impact argument, the BCP has done a very good job presenting evidence in favor of
more DSM not less. (Exhibit 112 at 2-4.)

150. Nevada Power states that Staff argues for the Minimum Budget level for the
Demand Response program on the basis of “critical” errors, incorrect PortfolioPro inputs, and
general doubt based upon lack of information and misinformation. Staff provides evidence that
for the most part they understand the Demand Response program, information and numbers.
Isolated errors should not be characterized as systematic or critical errors. (Exhibit 112 at 2-3, 8-
9.)

151. Nevada Power disagrees with NCARE’s recommendation that issuing an RFP for
a turnkey implementation contractor for the C&I Measures is a way to help determine a cost-
effective implementation strategy. Nevada Power states that NCARE’s approach is not well
defined, not a reliable way of determining the most cost-effective approach to implementation,
implies a singular approach for obtaining C&I Demand Response capacity, and ignores risk
analysis and management. Nevada Power intends to procure services from contractors with the
appropriate experience and special expertise in the commercial and industrial sectors. Nevada
Power does not believe that C&I measures can be fully implemented in-house or that a portfolio
of measures necessarily could or should be fully implemented as a turnkey solution. (Exhibit
112 at 2, 13.)

Commission Discussion and Findings

152. The Commission accepts Nevada Power’s proposed budget of $57.9 million for
the Demand Response program. The Commission agrees with Nevada Power that a Demand
Response program under the Preferred Plan provides a controlled level of growth in new
Demand Response resources and continues to manage existing Demand Response programs. No plan proposed by Nevada Power will have the ability to completely avoid future supply-side resources. Nonetheless, the Commission agrees with Nevada Power that the Preferred Plan offers the more realistic and achievable plan that will benefit ratepayers.

153. The Commission also supports the establishment of a C&I Demand Response program. To ensure a successful implementation of a C&I Demand Response program, the Commission encourages Nevada Power to solicit input from potential C&I customer, including, but not limited to hotels.

viii. Residential Energy Efficient Lighting Program

Parties’ Positions

Nevada Power

154. Nevada Power recommends Commission approval of the Residential Energy Efficient Lighting Program in 2013-2015 at Preferred Plan budget of $5.3 million with estimated energy savings of 29,100 MWh. Nevada Power’s Residential Energy Efficiency Lighting program provides direct incentives to encourage consumers to purchase energy efficient next generation lighting products. Nevada Power redesigned the program in response to the changes to the lighting standards in Nevada that become effective on January 1, 2012. The program provides incentives for reflector CFLs and specialty CFLs in 2013. A mix of LED lighting measures is added to the program offerings for 2014. In 2015, the program fully transitions to next generation lighting by dropping CFLs and specialty CFLs and continues with incentives provided only for LED lighting measures. The program has also been informed by the results of the Free-ridership and Spillover Study conducted by Tetra Tech. (Exhibit 35 at 10,15,17; Exhibit 53 at 31-32.)
BCP

155. BCP recommends continuing the program in 2013-2015 at the Minimum Impact Plan budget, of $2.5 million or a modified budget that would include an additional $100,000. The additional funding would come from the redeployment of funds from the Residential Energy Efficiency Thermal Heating program, should the Commission approve its elimination. (Exhibit 108 at 6 and 11.)

NCARE

156. NCARE recommends that the Commission approve the program in 2013-2015 at the Maximum Net Benefits Plan budget of $7.8 million with certain caveats. The Maximum Net Benefits Plan indicates that it would facilitate the adoption of 2,180,000 energy-efficient lighting measures over the three year period. The plan estimates that 257,000 would participate in the program, compared to 165,000 participants under the Preferred Plan. The Maximum Net Benefits Plan would result in net benefits of approximately $5.37 million with a TRC of 1.59. (Exhibit 55 at 18-19.)

157. NCARE also recommends that the Commission direct Nevada Power to include LED lamps in the residential Lighting program starting in 2013, regardless of the approved funding level. In both the Preferred Plan and Maximum Net Benefits Plan, Nevada Power proposes to start incentives for LED lamps in 2014 rather than 2013. However, a wide availability of LED lamps already exists in big box retail stores. Other utilities already include incentives for LED lamps in their residential lighting incentive programs and find that doing so is cost-effective based on the very long lifetime of LED lamps. However, it appears that Nevada Power used the same NTG ratio for LED lamps and CFLs in its cost-effectiveness analysis. If Nevada Power had used a higher NTG ratio for LED lamps, LED lamps would be more cost-
effective than what was estimated. Should the Commission approve adding LED lights to the program in 2013, NCARE further recommends an average rebate of $10 per LED lamp and adding $800,000 to the program budget in 2013 to accommodate LED lamp incentives. (Exhibit 55 at 20-21.)

158. NCARE notes that standard spiral CFLs are left out of Nevada Power’s program. Based on NV Energy’s Residential Appliance Saturation Survey, the residential lighting marking in Nevada is very far from being transformed to high energy efficiency. Nevada also adopted light bulb efficiency standards (AB 178) that are more stringent than federal EISA lamp standards. However, this new law has gone largely unenforced. Meanwhile lamp manufacturers are starting to manufacture and sell improved incandescent lamps that comply with federal but not Nevada’s standards. Given the federal EISA standards, utilities throughout the country are starting to reexamine their residential lighting programs to determine if it makes sense to continue to provide incentives for standard CFL bulbs. Most utilities are coming to the conclusion that providing incentives for standard CFL bulbs remains cost-effective and helpful in producing net energy savings and increasing program participation. As a result, many utilities, including all other major electric utilities in the southwest are continuing to provide such incentives. In light of this situation, NCARE recommends that the Commission direct Nevada Power to: (1) continue to track CFL and residential lighting market trends during 2013, with a focus on whether federal standards are the de facto lighting efficiency standards in Nevada and if sales of standard CFLs increase or decline in 2013 relative to sales in 2009-2010 when utility incentives were in place for the entire year; (2) reexamine the cost-effectiveness of resuming in-store incentives for standard CFLs, along with incentives for specialty CFLs and LED lamps, if the federal standards are in reality the de facto lighting efficiency standards in Nevada; and (3)
propose restarting incentives for standard CFLs in 2014 if such analysis shows that doing so
would be feasible and cost-effective. (Exhibit 55 at 22-24.)

159. NCARE also recommends that the Commission direct Sierra to quantify spillover
effect in all future evaluations of the Residential Lighting program, including evaluations of the
program implemented in 2013-2015. (Exhibit 55 at 36.)

Staff

160. Staff recommends that the Commission deny Nevada Power’s request to fund the
Residential Energy Efficiency Lighting program at the Preferred Plan budget of $5.3 million.
Instead, Staff recommends that the program be suspended for at least one more year. If
regulations are adopted to carry out NRS 701.260, which requires general purpose bulbs that are
sold in the State of Nevada after January 1, 2012, to meet energy efficiency threshold of 25
lumens per watt, then Nevada Power should be able to address concerns raised by the
Commission in Docket Nos. 11-07026 and 11-07027. Staff contends that Nevada Power’s
redesigned program cannot address the changed lighting standards in Nevada because
regulations have yet to be adopted. Therefore, the uncertainty that the Commission was
concerned with in Docket Nos. 11-07026 and 11-07027 still exist. Furthermore, Staff asserts
that Nevada Power has not demonstrated that the new lighting bulbs have gained market
acceptance and have achieved cost comparability. Staff also asserts that Nevada Power fails to
discuss LED light and the acceptance of these types of light bulbs and whether that correlates to
amounts sold in homes. (Exhibit 84 at 11-12; Exhibit 86 at Attachment CW-2.)

Nevada Power Rebuttal

161. Nevada Power disagrees with Staff that the Residential Energy Efficiency
Lighting program should be suspended. Nevada Power rejects Staff’s assertion that no mention
is made of LED lights and the acceptance of those types of bulbs along with the correlation to amounts sold in homes. Nevada Power has included a small segment of LEDs in the 2011 program. Nevada Power also takes issue with Staff’s claim that insufficient evidence was provided regarding market acceptance and cost comparability of new technologies. Furthermore, Staff makes arguments regarding the regulations to implement NRS 701.260 that are not reflective of the status of those regulations. Nevada Power states that Staff was correct in observing that no regulations have been adopted to carry out NRS 701.260 and that no enforcement of NRS 701.260 has taken place. Staff bases its arguments of uncertainty on the unlikely possibility that Nevada would adopt lighting regulations that would conflict with the lighting definitions in the Energy Independence and Security Act that exclude reflector bulbs from the definition of general purposes lighting. (Exhibit 113 at 22-24.)

**Commission Discussion and Findings**

162. The Commission rejects Nevada Power’s recommendation to continue the Residential Energy Efficiency Lighting program at the Preferred Plan budget of $5.3 million. Nevada Power should suspend the program in 2013. It is appropriate to suspend the program until new lighting technologies become more viable replacements for CFLs. The Commission prefers a program designed around new general lighting bulbs rather than base technology (CFLs) specialty bulbs because the general purpose bulbs will create significantly higher savings due to higher hours of use. The Commission encourages Nevada Power to continue to revise the program towards a focus on next generation light bulbs, including LEDs. The revised program should be included in Nevada Power’s 2014 and 2015 Annual DSM Update Reports.

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ix. **Second Refrigerator Collection and Recycling Program**

**Parties’ Positions**

**Nevada Power**

163. Nevada Power recommends continuing its Residential Second Refrigerator Collection and Recycling program in 2013-2015 at a Preferred Plan budget of $3.6 million with estimated energy savings of 17,670 MWh and demand savings of 2.593 MW. Nevada Power’s Residential Second Refrigerator Collection and Recycling program helps customers reduce energy consumption by removing operating second refrigerators from homes and recycling them. The design and delivery of this program has been modified to reduce the freeridership rate. The retailer component of the program has been eliminated to minimize the number of primary units collected. This change will remove participation from customers who are purchasing new appliances while will reduce the number of primary refrigerators recycled by the program. Although there are other companies that provide refrigerator recycling services in southern Nevada, they are not substitutes for Nevada Power’s program. The convenient free pick-up from the residence and $50 provide a motivation to remove a second refrigerator from a residence. (Exhibit 35 at 15, 17; Exhibit 53 at 27; Exhibit 62 at 11-14.)

**BCP**

164. BCP recommends funding the program in 2013-2015 with the Minimum Impact Plan budget of $2.7 million. (Exhibit 108 at 3, 6, 11.)

**NCARE**

165. NCARE recommends funding the program in 2013-2015 with the Maximum Net Benefit Budget plan of $4.8 million. The Maximum Net Benefits Plan estimates net economic benefits increase to $1.66 million and increases the number of participants to 10,000 per year.
compared to the Preferred Plan of $1.4 million net economic benefits and 7,750 participants per year. Furthermore, the 2011 Residential Appliance Saturation Study shows that there are still a large number of second refrigerators in the housing stock. Approximately 25 percent if Nevada Power customers have more than one refrigerator in use. (Exhibit 55 at 25.)

Staff

166. Staff recommends that the Commission deny Nevada Power’s request to fund the Second Refrigerator and Recycling program at the Preferred Plan budget of $3.6 million for the Program. Instead, Staff recommends that the program should be funded at the Minimum Impact Level budget of $2.7 million. Staff states that there are too many issues regarding how Nevada Power calculated benefit/cost ratios, including TRC and ATRC. Given those deficiencies, Staff asserts that Nevada Power did not successfully demonstrate that the program is cost-effective. Although it is difficult for Staff to have full confidence in the benefit/cost analysis of the program, Staff asserts that it is reasonable to continue an approved program at a budget that is similar to prior years while at the Minimum Impact Plan budget level. (Exhibit 85 at 27-28; Exhibit 86 at Attachment CW-2.)

Nevada Power Rebuttal

167. Nevada Power continues to recommend that the Commission approve the Second Refrigerator and Recycling program in 2013-2015 at the Preferred Plan budget of $3.6 million. This program is cost-effective and well received by customers and the community. The Commission cited a high free-ridership in Docket Nos. 11-07026 and 11-07027 as the primary reason for reducing the budget to $1 million for 2012. Nevada Power has improved the free-ridership rate with structural changes to the program by eliminating the collection of primary refrigerators. (Exhibit 111 at 7-8.)
Commission Discussion and Findings

168. The Commission accepts Nevada Power’s proposed budget of $3.6 million for the Second Refrigerator Collection and Recycling program contained in the Preferred Plan. The Commission agrees with Nevada Power that Staff did not justify approving the program at $2.7 million. Nevada Power has addressed Commission concerns by making structural changes to the program to account for free-ridership. Nevada Power eliminated the retail component of the program, which was a major source of the primary refrigerators that were considered a source of higher free-ridership.

x. Energy Smart Schools Program

Parties’ Positions

Nevada Power

169. Nevada Power recommends approval of the Energy Smart Schools program for 2013-2015 at the Preferred Plan budget of $4.7 million with estimated energy savings of 21,700 MWh. Nevada Power’s Energy Smart Schools program aims to produce energy and cost savings for the Clark County School District, private schools, and higher education facilities. The program provides training, technical assistance, and incentives to these entities. The primary objective of the program is to achieve cost-effective energy savings that ultimately result in energy and cost savings for schools within Nevada Power’s service territory. (Exhibit 35 at 15, 17; Exhibit 58 at 17-18; Exhibit 59 at 18.)

BCP

170. BCP recommends that the Commission approve the program in 2013-2015 at the Minimum Impact Plan budget of $3 million. (Exhibit 108 at 3, 6, 11.)

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NCARE

171. NCARE recommends that the Commission approve the program in 2013-2015 at the Maximum Net Benefits Plan budget of $9 million. Not only do the net economic benefits more than double in moving from the Preferred Plan to the Maximum Net Benefits Plan, but the benefit-cost ratio increases as well. (Exhibit 55 at 25-26; Exhibit 81 at 16-17.)

Staff

172. Staff recommends that the program should be funded at the Minimum Impact Level budget of $3 million. Staff states that there too many issues regarding how Nevada Power calculated benefit/cost ratios, including TRC and ATRC. Given those deficiencies, Staff asserts that Nevada Power did not successfully demonstrate that the program is cost-effective. Although it is difficult for Staff to have full confidence in the benefit/cost analysis of the program, Staff asserts that it is reasonable to continue an approved program at a budget that is similar to prior years while at the Minimum Impact Plan budget level. (Exhibit 85 at 27-28; Exhibit 86 at Attachment CW-2.)

Nevada Power Rebuttal

173. Nevada Power continues to recommend Commission approval of the 2013-2015 Preferred Plan budget of $4.7 million. Nevada Power states that Staff provides no specific basis for the reduced funding. Instead, the program was lumped with other DSM programs for which concerns about cost-effectiveness were raised. This program is cost-effective and well received by the school districts. It provides benefits that flow back to customers not only directly by the program but also by enabling cash strapped schools to redirect dollars from energy costs to satisfy other needs for the schools. (Exhibit 109 at 15.)

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Commission Discussion and Findings

174. The Commission accepts Nevada Power’s proposed budget of $4.7 million for the Energy Smart Schools program contained in the Preferred Plan. The Commission finds that this funding level strikes the appropriate balance between the Maximum Net Benefits Plan as supported by NCARE (that reaches achieves significant net economic benefits) and the Minimum Impact Plan as supported by BCP (that reflects the current economic conditions in Nevada). The Commission agrees with Nevada Power that this program provides benefits that flow back to customers not only directly by the program, but also by enabling schools to redirect dollars from energy costs to other needs of the school. The Commission agrees with Nevada Power that Staff has not provided substantial evidence to support its recommendation of a lower budget other than general concerns about cost-effectiveness.

xi. Commercial Incentives Program

Nevada Power

175. The Commercial Incentives program facilitates the implementation of energy efficient measures in commercial, industrial, and institutional facilities for both retrofits and new construction through offering incentives and comprehensive technical services. This new program is a combination of the previously offered Commercial Retrofit Incentives Program and the Commercial Construction Program. The consolidation of the two programs into this new program is part of Nevada Power’s effort to reduce fixed costs and optimize resources. Nevada Power recommends approval of the program in 2013-2015 at the Preferred Plan budget of $32.15 million with estimated energy savings of 213,000 MWh. (Exhibit 35 at 15, 17; Exhibit 53 at 26-27; Exhibit 58 at 20-21.)

BCP
176. BCP recommends that the Commission the program in 2013-2015 at the Minimum Impact Plan budget of $18.9 million. (Exhibit 108 at 3, 6, 11.)

NCARE

177. NCARE recommends that the Commission approve the program in 2013-2015 at the Maximum Benefits Plan budget of $54 million. Not only do the net economic benefits increase by 70 percent in moving from the Preferred Plan to the Maximum Net Benefits Plan, but the benefit-cost ratio under the TRC test increases as well. Based on the 2011 results, it has been a popular program in the business community and is responsible for most of the job creations in NV Energy’s DSM programs. The Maximum Net Benefits Plan will serve more participants and create more net economic benefits, and jobs, with the same or higher TRC value. (Exhibit 55 at 26.)

178. NCARE recommends that Nevada Power be given the flexibility to end the “stop-start” cycles of the past and maintain rebates year round. The program has been challenged to maintain market momentum, since annual budgets are set too low to meet market demand, causing the program to exceed its budget cap and be shut down mid-year in both 2011 and 2012. This “start-stop” cycle harms contractors, utilities and ultimately customers, who pay for DSM programs in their utility bill every month to potentially discover that a rebate is not available when the customer is ready to implement an energy efficiency project. (Exhibit 81 at 17-19.)

179. To improve the program communications, NCARE recommends that the Commission direct Nevada Power to strengthen both the frequency and the methods of its communication with program contractors to reduce uncertainty and create a timely and reliable stream of information, which in turn will better help inform customers, who often learn about utility efficiency programs through contractors. (Exhibit 81 at 20.)
180. To improve the incentive structure of the program, NCARE recommends that the Commission direct Nevada Power to reconsider their rebate levels and possible raise them either for smaller customers or for all customers in order to attract more participants to the program. NCARE recommends increasing the 20 percent to 30 percent of net present value of the avoided costs of different measures to 30 percent to 40 percent of net present value of the avoided costs of different measures in order to maintain incentives that will move the market while still being highly cost-effective. (Exhibit 81 at 20.)

181. To improve how O&M activities are treated, NCARE recommends that the Commission direct Nevada Power to perform M&V analysis on any significant O&M improvements resulting from programs targeting the C&I customers, with credit taken for properly verified savings in Sierra’s Annual DSM reports. (Exhibit 81 at 20-21.)

182. To improve the specific energy efficiency measures offered by the program, NCARE recommends that the Commission issue a directive to Nevada Power to apply a more directed effort at marketing cool roof measures and to understanding its cost-effectiveness across climate zones and its most promising applications in the market places. Cool roofs offer substantial energy savings potential especially in southern Nevada’s hot climate. (Exhibit 81 at 21.)

Staff

183. Staff recommends that the program should be funded at the Minimum Impact Level budget of $18.9 million. Staff states that there too many issues regarding how Nevada Power calculated benefit/cost ratios, including TRC and ATRC. Given those deficiencies, Staff asserts that Nevada Power did not successfully demonstrate that the program is cost-effective. Although it is difficult for Staff to have full confidence in the benefit/cost analysis of the
program, Staff contends that it is reasonable to continue an approved program at a budget that is similar to prior years while at the Minimum Impact Plan budget level. (Exhibit 85 at 27-28; Exhibit 86 at Attachment CW-2.)

**Nevada Power Rebuttal**

184. Nevada continues to recommend continuing the program in 2013-2015 at the Preferred Plan budget of $32.15 million. Staff has provided no specific basis for recommending the Minimum Impact Plan budget by simply including this program with several other programs for which concerns regarding cost-effectiveness were raised. This program has experienced strong customer demand, repeatedly selling out before the end of the program year. Commercial program measures implemented in 2011 saved a combined 142 GWh in energy and nearly 20 MW in demand annually. (Exhibit 109 at 16.)

185. Nevada Power disagrees with NCARE’s recommended directive for Nevada Power to raise incentive levels to 30 percent to 40 percent of net present value of avoided costs for the Commercial Incentive program. Nevada Power uses a process to monitor and evaluate market response to incentive levels to ensure the level of market activity is sufficient to meet the program goals and budgets and respond by modifying incentives as needed. Market demand has met or exceeded program resources for the last several years. (Exhibit 109 at 17.)

186. Nevada Power disagrees with NCARE’s recommended directive regarding the actions that still need to be taken to strengthen the frequency and methods of their communications with program contractors. Nevada Power made these communication improvements beginning in 2011, immediately after the focus group results were reviewed. These actions included communicating the current states of the program budget through the monthly contractor electronic newsletter and increasing contractor technical assistance. (Exhibit
Commission Discussion and Findings

187. The Commission accepts Nevada Power’s proposed budget of $32.15 million for the Commercial Incentives program contained in the Preferred Plan. The Commission finds that this funding level strikes the appropriate balance between the Maximum Net Benefits Plan as supported by NCARE (that has significant net economic benefits) and the Minimum Impact Plan as supported by BCP (that reflects current economic conditions in Nevada). The program combines the Commercial Retrofit Incentives program and Commercial Construction program in order to better leverage resources while reducing fixed costs. The Commission agrees with Nevada Power that Staff has not provided substantial evidence to support its recommendation of a lower budget other than general concerns about cost-effectiveness. The Commission acknowledges that this program has experienced strong customer demand, repeatedly selling out before the end of the program year and produces some of the longest lasting impacts available to DSM programs.

188. The Commission agrees with NCARE’s concerns regarding the “start-stop” cycle of this program. By accepting the budget contained in the Preferred Plan rather than the Minimum Impact Plan, the Commission addresses this issue.

xii. Residential High Efficiency Air Conditioning

Parties’ Positions

Nevada Power

189. Nevada Power recommends funding the Residential High Efficiency Air Conditioning program in 2013-2015 at the Preferred Plan budget of $26.5 million, with estimated energy savings of 58,500 MWh. Nevada Power’s Residential High Efficiency Air
Conditioning program provides incentives to homeowners, residential homebuilders, and HVAC contractors to properly maintain high efficiency air conditioning equipment and to optimize the operation of less efficient AC equipment. The program has been refocused around the duct sealing component of the program. The result is an increase in the effectiveness of the program in terms of anticipated energy savings per dollar invested. The other measures have been retained such that this program provides choices for customers to improve the efficiency of their air conditioning units. The proposed budget increases each year to accommodate the program's growing demand. (Exhibit 35 at 15, 17; Exhibit 53 at 29; Exhibit 62 at 6-8.)

**BCP**

190. BCP recommends that the Commission approve the program in 2013-2015 at the Minimum Impact Plan budget of $15 million. (Exhibit 108 at 3, 6, 11.)

**NCARE**

191. NCARE recommends that the Commission approve the program in 2013-2015 at the Maximum Net Benefits Plan of $36 million. Not only do the net economic benefits increase by over $20 million in moving from the Preferred Plan to the Maximum Net Benefits Plan, and the number of program participants increases from 73,443 in the Preferred Plan to 127,764 in the Maximum Net Benefits Plan. Increased funding will also reduce the likelihood that some of the elements of the program are cut back early due to high customer demand.

**Staff**

192. Staff recommends that the program should be funded at the Minimum Impact Level budget of $15 million. Staff states that there are too many unresolved concerns as to how Nevada Power calculated benefit/cost ratios, including TRC and ATRC. Staff asserts that Nevada Power did not successfully demonstrate that the program is cost-effective. While it is
difficult to have full confidence in the benefit/cost analysis of the program, Nevada Power should still be able to continue the approved program at a budget similar to that approved in prior years while at the Minimum Impact Plan budget level. (Exhibit 84 at 18-19; Exhibit 86 at Attachment CW-2.)

**Nevada Power Rebuttal**

193. Nevada Power continues to request approval for funding at the Preferred Plan budget of $26.5 million. The Preferred Plan proposed by Nevada Power provides cost-effective portfolio of programs to meet the strategic objectives of the Preferred Plan. The program is cost-effective with a TRC of 2.16. The savings to be achieved by this program are important because residential air conditioning is a major contributor to system peak loads. (Exhibit 111 at 10-12; Exhibit 113 at 7.)

**Commission Discussion and Findings**

194. The Commission accepts the proposed budget of $36 million for the Residential High Efficiency Air Conditioning program contained in the Maximum Net Benefits Plan. The Commission finds that the net economic benefits increase by over $20 million in moving from the Preferred Plan to the Maximum Net Benefits Plan, and the number of program participants increases from 73,443 in the Preferred Plan to 127,764 in the Maximum Net Benefits Plan. Increased funding will also reduce the likelihood that some of the elements of the program are cut back early due to high customer demand. The Commission acknowledges the strong demand for the program and the importance of continuing this program to reduce system peak loads.

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Energy Efficient Pools and Spas Program

Parties' Positions

Nevada Power

195. Nevada Power recommends approval of its Energy Efficient Pools and Spas program in 2013-2015 at the Preferred Plan budget of $4.6 million with estimated energy savings of 25,500 MWh. Nevada Power states that its Energy Efficient Pools and Spas program will provide incentives for program participants who substantially reduce the energy required for swimming pool and spa filtration by offering several measures. Since the actual TRC for the 2011 program year was only 1.02, the program has been redesigned for the Action Plan period to be implemented more cost-effectively by adjusting how rebates are paid and how the program will be marketed and by renegotiating the fixed and variable costs of delivering the program. The revised program has an estimated TRC of 1.29. (Exhibit 35 at 15, 17; Exhibit 62 at 9-10.)

BCP

196. BCP recommends that the Commission approve the program at the Minimum Impact Plan budget of $3.6 million. (Exhibit 108 at 3, 6, and 11.)

NCARE

197. NCARE recommends that the Commission approve the program in 2013-2015 at the Preferred Plan of $4.6 million. This program has evolved over time and has gained considerable traction in the marketplace, as demonstrated by the program significantly surpassing its targeted budget and energy savings goal in 2011. Given that Nevada Power proposes to increase the budget from $1 million in 2012 to $1.5 million in 2013, the Preferred Plan serves a relatively narrow market (10 percent of residential customers have swimming pools). (Exhibit 55 at 28.)
Staff

198. Staff recommends that the program be funded at the Minimum Impact Level budget of $3.6 million. Staff states that there are too many unresolved concerns as to how Nevada Power calculated benefit/cost ratios, including TRC and ATRC. Staff contends that Nevada Power did not successfully demonstrate that the program is cost-effective. While it is difficult to have full confidence in the benefit/cost analysis of the program, Nevada Power should still be able to continue the approved program at a budget similar to that approved in prior years while at the Minimum Impact Plan budget level. (Exhibit 84 at 18-19; Exhibit 86 at Attachment CW-2.)

Nevada Power Rebuttal

199. Nevada Power continues to recommend approval of its Energy Efficient Pools and Spas program in 2013-2015 at the Preferred Plan budget of $4.6 million. This program has experienced high demand and is popular with customers, as shown by the fact that it has sold out before the end of summer two program years in a row. Nevada Power redesigned the incentive structure of the program for 2013-2015 to make it more cost-effective. (Exhibit 111 at 10.)

Commission Discussion and Findings

200. The Commission accepts Nevada Power’s proposed budget of $4.6 million for the Energy Efficient Pools and Spas program contained in the Preferred Plan. The Commission agrees with Nevada Power and NCARE that the Preferred Plan is appropriate given the modifications made to the program and its past success. However, the Commission is concerned that it serves only a small portion of the population and only benefits those with pools and/or spas. The Commission agrees with Nevada Power that Staff has not provided substantial evidence to support its recommendation of a lower budget other than general concerns about
xiv. Advanced Building Techniques Program

Parties' Positions

Nevada Power

201. Nevada Power recommends funding its Advanced Building Techniques program in 2013-2015 at the Preferred Plan budget of $1.5 million with estimated energy savings of 1,200 MWh. Nevada Power's Advanced Building Techniques program is designed to investigate and demonstrate the viability of advanced building techniques and materials that will increase the energy efficiency of new homes in the production home market. The goal of this program is to develop and drive proven practices, new innovative technologies and emerging energy efficient materials into the new home construction market. (Exhibit 35 at 16; Exhibit 62 at 4-5.)

BCP

202. BCP recommends that the program is funded in accordance to the Minimum Impact Plan budget of $0. (Exhibit 108 at 3, 6, 11.)

NCARE

203. NCARE recommends funding this program in 2013-2015 at the Preferred Plan of $1.5 million. (Exhibit 55 at 28.)

Staff

204. Staff recommends that the program should be funded at the Minimum Impact Level budget of $0. This program does not have a calculated TRC and is seen by Nevada Power as more of an education and trial Program. Thus, Staff contends that this is more of a bonus program above the Energy Education and Market Trials Program. Staff asserts that the type of benefits from this program can be adequately represented in other Nevada Power programs.
(Exhibit 85 at 28-29; Exhibit 86 at Attachment CW-2.)

**Nevada Power Rebuttal**

205. Nevada Power continues to recommend approval of the program in 2013-2015 at the Preferred Plan budget of $1.5 million. Staff opines that this program is a bonus program and that it can be adequately represented by other programs, but provides no basis or explanation for its conclusion. With the demise of the Energy Plus New Homes program, this program will be the only program in the portfolio that focuses on the important new home construction market, where actions taken will have energy efficiency implications for decades to come. (Exhibit 111 at 8-9.)

**Commission Discussion and Findings**

206. The Commission rejects Nevada Power’s recommendation to continue the Advanced Building Techniques program at the Preferred Plan budget of $1.5 million. Instead, the Commission adopts the Minimum Impact Plan budget of $0 for 2013-2015. The Commission agrees with Staff that this program is a bonus program above the Energy Education and Consultation and Market and Technologies Trials programs. The benefits offered from this program can be adequately represented in those DSM programs.

* xv. **Consumer Electronics and Plug Loads Program**

**Parties’ Positions**

**Nevada Power**

207. Nevada Power recommends that the Commission approve its Consumer Electronics and Plug Loads program in 2013 at the Preferred Plan budget of $1 million with estimated energy savings of 4,500 MWh. Nevada Power states that its program addresses the load growth caused by the rapid proliferation of consumer electronics, appliances and office
equipment by providing midstream and upstream incentives for retailers and original equipment manufacturers to increase the stocking, promotion, and sales of the highest efficiency products on the market. A key reason for offering the incentive to retailers and original equipment manufacturers is because they have direct connections to downstream end-use customers. The retailers can send signals upstream to supply chain vendors and manufacturers by purchasing a larger percentage of high efficiency products. The goal is that these signals influence manufacturers to offer more qualified monitors at lower price points, thus spurring market transformation. (Exhibit 35 at 14, 17; Exhibit 58 at 14-15.)

BCP

208. BCP recommends that Commission adopt the Minimum Impact Plan budget of $0. (Exhibit 108 at 3, 6, 11.)

NCARE

209. NCARE recommends Commission approve the program at the Maximum Net Benefit Plan budget of $3.9 million. The Maximum Net Benefits Plan would projects 247,500 participants in 2013-2015 compared to 63,500 in the Preferred Plan. The Maximum Net Benefits Plan contemplates more opportunities for additional products or measures that could be added to the Consumer Electronics program. (Exhibit 55 at 28-29.)

210. NCARE recommends that the Commission direct Nevada Power to quantify spillover effect in all future evaluations of the Consumer Electronics and Plug Loads program, including evaluations of the program implemented in 2012 as well as 2013-2015. NCARE notes that although the NTG study accounted for Free-ridership, it did not account for spillover effects in its program assumptions for 2013-2015. The program is expected to have some level of non-zero spillover effect, meaning net savings will be greater and the benefit-cost ratio will be higher
than projected by Nevada Power. (Exhibit 55 at 30.)

**Staff**

211. Staff recommends that the Commission discontinue Nevada Power's 2013-2015 Customer Electronics and Plug Loads program. Staff notes that not even Nevada Power recommends that this program continue in the 2014 and 2015 Preferred Plan budget. Nevada Power has partnered with other utilities to promote the marketing and sales of energy efficient electronic measures. This partnership has resulted in energy efficient measures that now cost the same price as base measures. Staff understands that several retailers no longer provide a base measure and only provide the supported energy efficiency measure. Staff contends that this program has maximized its benefit to the Nevada electronics market and should be discontinued. The program as proposed only offers rebates for televisions, which are a small target in the electronics market. Should the program be reinstated in the future, it should offer additional rebated measures and would need to keep ahead of the market as base electronics become more energy efficient. (Exhibit 85 at 18-19; Exhibit 86 at Attachment CW-2)

**Nevada Power Rebuttal**

212. Nevada Power continues to request Commission approval of its Consumer Electronics and Plug Loads program in 2013-2015 at the Preferred Plan budget of $1 million. Nevada Power does not believe that the program has maximized its benefit to the Nevada electronic market. Every year, Nevada Power assesses the market penetration at the end of the program year and increases the baseline for the next program year to stay ahead of market penetration. As energy efficient options become the new base, newer and more energy efficient options are made available for customer to select from when shopping for consumer electronics. The market has not transformed but it transitioning. Nevada Power also disagrees with Staff that
several retailers no longer provide a base measure and only offer the supported energy efficiency measure. The program is designed at the mid-stream level to persuade retailers to stock their shelves with more efficient units. Eligible units for program participation still represent only a portion of retailer stock. Nevada Power also disagrees with Staff’s claim that rebates are offered to televisions, which make up a small target in the electronics market. Nevada Power states that televisions represent 33 percent of consumer electronics consumption and are the greatest single end-use within consumer electronics. (Exhibit 109 at 5-7.)

Commission Discussion and Findings

213. The Commission rejects Nevada Power’s recommendation to continue the Consumer Electronics and Plug Loads program for 2013 at the Preferred Plan budget of $1 million. Nevada Power should discontinue the program in 2013 and reduce the budget to $0. The Commission agrees with Staff’s analysis that this program has maximized its benefit to the Nevada electronics market. The market transformation for energy efficient consumer electronics, appliances, and office equipment has sufficiently evolved and this program should not be continued.

xvi. Residential Solar Thermal Water Heating Program

Parties’ Positions

Nevada Power

214. Nevada Power recommends that the Commission approve its Residential Solar Thermal Water Heating program in 2013-2015 at the Preferred Plan budget of $750,000 with estimated energy savings of 540 MWh. Nevada Power states that its Electric Solar Thermal Water Heating program provides facilitates the installation of energy efficiency measures in single and multi-family homes working with the NDH. The program is included in the DSM
Plan in compliance with NRS 704.741(3)(a) and NAC 704.934(4). This program would be delivered to customers as part of the RenewableGenerations incentive programs. Bundling this program with other renewable incentive programs provides cost savings in administration, marketing, and education as materials and support systems can generally be deployed for the benefit of multiple programs. (Exhibit 35 at 14, 17; Exhibit 53 at 34-35.)

**BCP**

215. BCP recommends that the Commission discontinue the program. In times of limited resources and economic hardships, it is important to closely scrutinize and assess the viability of all proposed measures and technologies. (Exhibit 108 at 3, 7-8, and 11.)

**NCARE**

216. NCARE recommends that the Commission approve the program at the Minimum Impact Plan budget of $300,000. This program is legislatively mandated even though it is not close to being cost-effective under the TRC test. (Exhibit 55 at 33.)

**Staff**

217. Staff recommends that the program should be funded at the Minimum Impact Plan budget of $300,000. Staff states that there are too many unresolved concerns as to how Nevada Power calculated benefit/cost ratios, including TRC and ATRC. Staff contends that Nevada Power did not successfully demonstrate that the program is cost-effective. While it is difficult to have full confidence in the benefit/cost analysis of the program, Nevada Power should still be able to continue the approved program at a budget similar to that approved in prior years while at the Minimum Impact Plan budget level. (Exhibit 84 at 18-19; Exhibit 86 at Attachment CW-2.)
Nevada Power Rebuttal

218. Nevada Power continues to recommend Commission approval for the Residential Solar Thermal Water Heating program in 2013 at the Preferred Plan budget of $750,000. The Preferred Plan appropriately addresses the issues of short-term and long-term rate impacts and the growing requirements for additional resources. (Exhibit 113 at 8.)

Commission Discussion and Findings

219. The Commission accepts the proposed budget of $300,000 for the Residential Solar Thermal Water Heating program contained in the Minimum Impact Plan. While nothing in statute requires the Commission to approve such a program, the Commission acknowledges the Legislature’s intent for electric utilities to provide a program to encourage the use of solar hot water heaters.

xvii. Energy Plus New Homes Program

Parties’ Positions

Nevada Power

220. Nevada Power states that its Energy Plus New Homes Program is designed to increase energy efficiency in new home construction. This program has enjoyed phenomenal success in recent years in terms of increasing the energy efficiency of new homes in southern Nevada. This program is not in the Preferred Plan because almost half of the net benefits under the TRC were due to a reduction in natural gas usage. This split of net benefits is less advantageous for non participants. (Exhibit 35 at 15, 17; Exhibit 53 at 28; Exhibit 62 at 15.)

Staff

221. Staff recommends a $0 budget for this program in 2013-2015. (Exhibit 86 at 3.)

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NCARE

222. NCARE recommends that the Commission direct Nevada Power to quantify spillover effect in all future evaluations of the Energy Plus New Homes program, including evaluations of the program implemented in 2012 as well as 2013-2015 should the Commission approve the program in this docket. NCARE notes that although NV Energy’s contractor in the NTG study accounted for freeridership, it did not try to quantify spillover effect for the program even though Nevada Power acknowledged in its filing that the program has significant spillover benefits. (Exhibit 55 at 32-33.)

Commission Discussion and Findings

223. The Commission does not accept Nevada Power’s proposal to include the Energy Plus New Homes Program. Nevada Power did not adequately justify including this program other than suggest that it was successful in recent years.

D. Free-Ridership and Spillover Effects Study: Net to Gross Ratios

Parties’ Positions

NV Energy

224. NV Energy requests approval of the NTG ratios analyzed and determined by TetraTech in its “Free-Ridership and Spillover Effects” study. NV Energy commissioned the study to determine program level NTG values to be filed as part of Sierra’s 2012 DSM Update report and future IRP proceedings as well as Nevada Power’s 2012 IRP and future filings. NTG ratios estimate overall energy savings that can be attributed to program interventions. NV Energy applies the NTG ratio to verified gross savings to calculate the kWh and kilowatt (“kW”) savings caused or created by its DSM programs. Because free-ridership and spillover rates change over time, NV Energy determined that it was appropriate to conduct an NTG study for
Nevada Power’s 2012 IRP filing and Sierra’s 2012 DSM Annual Update. (Exhibit 56 at 2-3; Exhibit 58 at 4-5.)

225. The objectives of the study were to determine free-ridership rates both pure and partial by program and determine spillover rates both participant and non-participant by program and/or energy efficient measure. The NTG study results for Sierra and Nevada Power are provided in each company’s filing (see Exhibit 39 for Nevada Power and Exhibit 29 for Sierra). As a result of the study, program designs were adjusted to eliminate or minimize measures that were burdened with higher free-ridership rates. (Exhibit 56 at 4-6; Exhibit 58 at 5, 8.)

Staff

226. Staff recommends that the Commission deny NV Energy’s request to approve the NTG ratios prepared by Tetra Tech in its NTG study. Instead, NV Energy should be ordered to use the same NTG ratios approved by the Commission in Docket Nos. 10-10024 and 10-10025. Staff states that NV Energy did not perform a cost-benefit study prior to deciding to conduct a new NTG study, which costs $362,520. If the study were to be repeated again by Tetra Tech in the 2013-2015 program cycle, the cost would be 15 percent less if the programs are reasonably close to those studied in 2012. The cost of the NTG study was incurred in 2012 and would therefore be subject to review at the time NV Energy seeks recovery of the 2012 DSM costs. (Exhibit 82 at 2-4.)

227. Staff is unable to verify that the NTG ratios estimated by Tetra Tech more accurately measure the effects of free-ridership on lost revenue. Staff explains that for all DSM programs, except for Sierra’s Commercial Retrofit, Nevada Power’s Second Refrigerator Collection and Recycling and Mobile and Manufactured Home Retrofit programs, the proposed and approved NTG ratios differ by less than 10 points. Tetra Tech uses survey data from a
random sample to estimate mean free-ridership and spillover rates for the population of
participants. (Exhibit 82 at 4.)

228. Staff contends that the free-ridership rates should not be adjusted based on past
participation in NV Energy’s DSM programs. Tetra Tech adjusted free-ridership rates
downward for downstream programs, where participants reported that their past participation in
NV Energy’s programs was highly influential in their decision to implement the sampled project.
Furthermore, because the NTG ratios include spillover effects, more subjectivity is added to the
NTG ratios. Thus, NTG ratios should not be adjusted by estimated spillover effects. (Exhibit 82
at 2, 7-8.)

NCARE

229. NCARE recommends that the Commission direct Nevada Power and Sierra to
evaluate and quantify the spillover effects in all future evaluations of the Consumer Electronics
and Plug Loads program, the Residential Lighting program, and the Energy Plus New Homes
program. (Exhibit 55 at 32.)

NV Energy Rebuttal

230. NV Energy states that Staff’s proposal supports the use of data that is over four-
years old, gathered from markets outside Nevada, and does not have a level of measure of
confidence. The recent NTG study is based on Nevada markets with a focus on NV Energy
DSM measures and was conducted by a well respected firm. It is industry standard to update the
NTG periodically as the market changes. (Exhibit 109 at 4; Exhibit 116 at 3.)

231. NV Energy disagrees with Staff’s conclusion that it was not prudent to undertake
the NTG study without first conducting a cost-benefit study. NV Energy found no reasonable
basis in professional literature or industry practice indicating that a cost-benefit study should be
performed prior to conducting an NTG study. Current free-ridership and spillover data is
important in the delivery of the programs as it enables changes to be made to the manner in
which programs are being delivered to mitigate and reduce free-ridership. (Exhibit 109 at 2-3.)

232. NV Energy maintains that its NTG values provide more accurate estimates of
NTG ratios and the best information available to inform NV Energy’s filings. The fact the NTG
rates are close to the Commission-approved rates further supports the results of the study. The
recent NTG study values follow industry best practice to base evaluation results on primary data
collection specific to the geography and market of interest. In response to Staff’s assertion that
free-ridership rates should not be adjusted based on past participation, NV Energy states that not
including the impacts of past program participation would produce results that would understate
the savings attributable to the programs delivered. (Exhibit 116 at 2, 3, 8.)

233. NV Energy states that NCARE incorrectly states that spillover was omitted. The
final estimates presented in the reports are not just free-ridership, but an overall NTG value for
the programs. The NTG estimates represent total program attribution inclusive of free-ridership
and spillover inside of NV Energy’s service territories. (Exhibit 116 at 13.)

**Commission Discussion and Findings**

234. The Commission approves the NTG ratios analyzed and determined by TetraTech
in its study of Free-ridership and Spillover Effects. The Commission finds that the evaluation of
Nevada-specific market along with NV Energy’s DSM measures provides the more accurate
estimation of NTG values and updates the previously approved free-ridership numbers approved
in Docket Nos. 10-10024 and 10-10025.

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E. M&V

Parties’ Positions

NV Energy

235. NV Energy requests a finding that the M&V reports for program year 2011 provided in Technical Appendix items DSM-7 through DSM-19 for Sierra and Appendix items DSM-9 through DSM-26 for Nevada Power (see Exhibits 29-31 for Sierra and Exhibits 40-43 for Nevada Power) are adequate for the calculation of the NRS 704.785 revenue requirement caused by the programs delivered in the 2011 program year. NV Energy specifically notes that approval of the gross kWh and demand kW savings set forth in the M&V reports can be used to calculate the energy efficiency implementation rate (“EEIR”) revenue requirement. (Exhibit 26 at 9; Exhibit 35 at 29.)

236. NV Energy states that it is administratively efficient to approve the kWh and kW savings at the same time as when the reports are being used for prospective planning purposes. Using the deferred energy proceedings to resolve M&V issues for the purpose of calculating the EEIR would be less efficient. (Exhibit 26 at 4, Exhibit 35 at 13.)

Staff

237. Staff recommends that the Commission deny NV Energy’s request for approval of the gross energy and demand savings contained in NV Energy’s 2011 M&V reports to calculate the lost revenue. Instead, NV Energy should seek approval of the 2011 M&V reports in Nevada Power’s and Sierra’s next deferred energy filings scheduled for March 2013. Staff cites to lighting factors and energy savings profiles provided in NV Energy’s PortfolioPro models discussed in more detail below. Staff also has concerns with cost effectiveness calculations provided by the company, which include the lighting factors, energy savings profiles, as well as
other PortfolioPro inputs and challenges. (Exhibit 88 at 1-3.)

238. Staff recommends that the Commission reject NV Energy's factors for CFL-replacing-CFL rates, CFL light bulbs hours of use ("HOU") rates, and heating-cooling interaction factor ("HCIF") in estimating energy savings and calculating cost-effectiveness of NV Energy's proposed DSM programs. NV Energy incorporated new CFL-replacing-CFL rates, HOU rates, and HCIF factors in estimating energy savings and calculating cost-effectiveness of their proposed DSM programs without requesting Commission approval. NV Energy did not provide any new materials or justification, beyond what they provided in Docket Nos. 11-07026 and 11-07027, in which the Commission rejected NV Energy's proposed CFL-replacing-CFL rates, HOU rates, and HCIF factors. It also appears that some of these new figures were used in calculating benefit/cost ratios in NV Energy's PortfolioPro model. The Commission should direct NV Energy to follow the newly established process to change M&V standards in the Commission's Order in Docket No. 12-03030 (issued August 10, 2012). (Exhibit 88 at 2, 17, 23-24.)

239. Staff also states that it has encountered numerous difficulties with NV Energy's filings with respect to: 1) load shapes; 2) energy savings profiles; 3) timeliness and quality of NV Energy's responses to Staff's data requests; 4) critical errors in the Applications; and 5) other PortfolioPro input factors such as incremental costs, measure life, annual savings per unit, rebate per unit, and number of units. These factors affect savings calculations and cost effectiveness calculations and must be revisited. (Exhibit 83 at 2; Exhibit 85 at 5; and Exhibit 88 at 1-3.)

240. Staff does not have a high level of confidence in the load shapes used as PortfolioPro inputs to distribute the energy savings of each DSM measure over the 8760 hours
per year that the savings occurred. Staff is concerned about the following quarterly program graphs: Commercial Lighting; Commercial Cooling; Residential Lighting; School Lighting; and School Cooling. (Exhibit 88 at 25-26; Exhibit 83 at 2, 10-11.)

241. Staff has unresolved questions concerning the development and accuracy of NV Energy’s energy savings profiles, which are used to estimate program participants’ energy and demand savings and benefit/cost ratios, including TRC. Staff recommends that in future filings NV Energy be required to explain in detail the development of and demonstrate the reasonableness of the energy savings profiles representing each customer class’s energy savings as a result of a DSM program. (Exhibit 88 at 11-12; Exhibit 84 at 10.)

242. Staff states that NV Energy failed to timely respond to Staff’s data requests regarding data and material used to support NV Energy’s position. NV Energy often requested five day extensions to respond and some responses still came in late. There was also concern about the quality of their responses. (Exhibit 88 at 10, 13-14, 16.)

243. Staff states that the Applications contained errors in some critical portions, which stalled the review process. For example, it was difficult to figure out the contribution of DSM programs in reducing Nevada Power’s system peak load in Nevada Power’s IRP filing because of conflicting numbers presented in the Application. (Exhibit 88 at 10, 14-16.)

244. Staff requests that the Commission issue the following directives to NV Energy for future DSM filings: (1) provide documentation for all incremental cost calculations; (2) use the M&V verified measure life as the measure life input for PortfolioPro for the same year and provide information when changing measure life for measures from past verified years; (3) define a unit as an installed measure unit; (4) provide more information on the rebates offered in DSM Programs; (5) provide information on changing deemed savings for measures from past
verified years; and (6) the Demand Response program data sheets should contain a Residential section, a Commercial section, and combined total program section. (Exhibit 85 at 16, 32-33.)

245. As a result of Staff’s concerns mentioned above, calculations for kWh and kW savings for the DSM programs and lost revenues related to Nevada Power’s or Sierra’s 2011 M&V report were not performed. (Exhibit 86 at 1, 6; Exhibit 87 at 1, 6.)

**NV Energy Rebuttal**

246. NV Energy disagrees with Staff’s recommendation that the Commission should deny NV Energy’s request for approval of the gross energy and demand savings contained in the 2011 M&V reports for use in calculating the EEIR. M&V reports should be reviewed in advance in the appropriate planning dockets. Without an approved report, NV Energy is forced to base EEIR filings on data that has not yet been reviewed. Delaying M&V reports impacts the final true-up of revenue previously recorded. When an annual report is deemed final, a final true-up of that year’s activities is undertaken. Moving forward with unapproved M&V reports, opens new periods without being able to close previous periods. (Exhibit 119 at 2-4.)

247. The situation is already occurring with the 2010 M&V reports. NV Energy was unable to include the final true-up from 2010 with the March 2012 EEIR filing. Assuming the M&V reports approval occurs during that proceeding, the true-up of those lost revenues can occur in the March 2013 filing with rates going into effect October 1, 2013, almost three years later than incurred. The process cannot work efficiently unless the M&V reports are reviewed and approved in the IRP and annual DSM update dockets. (Exhibit 119 at 5.)

248. NV Energy clarifies that the load shapes that Nevada Power and Sierra are using in PortfolioPro are based on 2010 program year and do not include HCIF. NV Energy states that Staff only opposes changes to the lighting factors because they are different than the previously
used factors, even though these lighting assumptions calculate more accurate savings for the residential lighting. (Exhibit 113 at 12; Exhibit 114 at 13.)

249. To address Staff’s concerns regarding load shapes, NV Energy addresses the data sources that inform the 13 load shapes used as inputs to Nevada Power’s and Sierra’s PortfolioPro models and a technical review of the load shapes used in Nevada Power’s and Sierra’s PortfolioPro models. (Exhibit 114 at 2.)

250. NV Energy states that even though Nevada Power’s residential lighting load shape is inconsistent with Staff’s expectation, the load shape is still appropriate for use in TRC calculations. (Exhibit 114 at 9-11.)

251. NV Energy agrees that the residential total curve does not represent a total of what is portrayed in the lighting and cooling curves. However, this is not problematic as the residential total curve is a savings curve, not a usage curve. (Exhibit 114 at 14.)

252. NV Energy concludes that Staff’s use of a sample of school bills is not necessarily representative of the Energy Smart School program because the program will be targeting a broader population, including secondary education institutions, which include year round instructional and administration buildings. (Exhibit 114 at 16.)

253. NV Energy acknowledges that ADM Associates (“ADM”), the M&V contractor sent the wrong Commercial Lighting load shape. However, the overall impact is expected to be relatively small because neither the correct lighting curve nor the incorrectly provided lighting curve exhibit any marked seasonality. The use of a correct commercial lighting load curve would reduce the TRC benefits by approximately 3 percent. (Exhibit 114 at 17.)

254. NV Energy acknowledges that ADM sent a flawed residential cooling load shape. The incorrect load shape underestimates the TRC benefits because the usage during
summer on-peak hours would be underestimated. Had the correct residential load shape been applied, the TRC benefits would have increased by approximately 11 percent. (Exhibit 114 at 18-19.)

255. Regarding the 2011 and 2012 Commercial Cooling load shape, NV Energy states that the ADM-supplied load shape will result in lower avoided costs since it concentrates less of the impact in the summer and summer on-peak period. In sum, ADM’s load shapes have resulted in a more conservative and potentially more accurate estimation of the program’s cost effectiveness. (Exhibit 114 at 19-20.)

256. NV Energy disagrees with Staff that the errors in the Applications are critical errors. Isolated errors should not be characterized as systematic or critical errors. Staff and NV Energy are capable of spotting isolated errors, especially when the rest of the information provided is correct. (Exhibit 112 at 8-9.)

257. NV Energy shares Staff’s concerns regarding the timeliness of NV Energy’s responses to data requests. NV Energy responded to over 350 data requests, 100 of which were provided in one day alone. It was not physically possible to prepare thoughtful and thorough answers to this volume of discovery requests in a lesser period of time. NV Energy will endeavor to improve its future performance. (Exhibit 113 at 16.)

258. NV Energy agrees that additional information could be provided to improve the M&V review process. NV Energy recommends that a master data request be developed. NV Energy also recommends additional M&V education, including a workshop to reverse engineer an M&V report. NV Energy agrees with Staff that better explanations can be provided for incremental costs and additional information on the sources of the load shapes. A better understanding of PortfolioPro may help clarify how incremental costs are developed and applied.
NV Energy is also amenable to providing information on measure life and explanations to Demand Response programs information. (Exhibit 113 at 17-18; Tr. at 774-778.)

**Commission Discussion and Findings**

259. In accordance with NAC 704.9524(4)(a)-(b)\(^5\) and NAC 704.9522\(^6\), the Commission approves the 2011 M&V reports submitted in Sierra’s 2012 DSM Annual Update filing in Docket No. 12-06052 and Nevada Power’s 2012 IRP filing in Docket No. 12-06053, subject to the modifications discussed below.

260. The Commission reaffirms its findings in Docket Nos. 11-07026 and 11-07027 regarding CFL-replacing-CFLs, HOU, and HCIF. NV Energy failed to provide additional support as to why the Commission should accept its proposed CFL-replacing-CFLs, HOU, and HCIF in the 2011 M&V reports. NV Energy shall revise its energy savings in calculations in both the 2011 M&V reports and the calculations provided in this filing to use the Commission’s previously approved factors for CFL-replacing-CFLs (8.3 percent for Nevada Power, 6.5 percent for Sierra); HOU rates (to 1.9 hours), and the removal of any HCIF factors from residential program calculations for inclusion in each company’s deferred energy filings to be filed in March 2013. The modified spreadsheets and supporting calculations with the energy savings (kWh) adjustments are to be filed as a compliance item in this docket.

261. The Commission approves NV Energy’s proposed cost calculations in Nevada Power’s and Sierra’s DSM programs, subject to certain modifications discussed below. The

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\(^5\) NAC 704.9524(4)(a) provides that “[a]n electric utility shall perform by program by month by class the monitoring and verification of actual kilowatt hour and demand savings required by NAC 704.9522.” NAC 704.9524(4)(b) requires that a demand side plan submitted by a utility pursuant to NAC 704.934 have the information described in NAC 704.9524(4)(a) for review and approval by the Commission.

\(^6\) NAC 704.9522(1)-(2) states that “[a] utility provider shall propose a measurement and verification protocol for all energy efficiency and conservation measures submitted pursuant to NAC 704.9005 to 704.9525, inclusive. The utility provider shall comply with, and shall ensure that all energy efficiency and conservation contracts entered into by the utility provider comply with, the most recent measurement and verification protocol approved by the Commission.”
Commission finds that Nevada Power’s DSM Plan meets the standards of NAC 704.9321(1).\textsuperscript{7} NV Energy has provided a comprehensive DSM Plan and DSM Update in Docket Nos. 12-06052 and 12-06053 that adhered to multiple compliance items requesting more detailed information. NV Energy secured reputable third-party contractors to perform M&V calculations and an NTG study to improve the accuracy of energy and demand savings. Given the breadth and depth of information now being provided in DSM filings, and the short period of time in which to review the information, confusion, some errors, and ultimately mistrust about the voluminous amount of information has resulted.

262. Despite the challenges presented, no party to this proceeding has requested that the Commission reject NV Energy’s filings as inadequate. Rather, parties have proposed minimum plan budgets as a default solution. The Commission finds such an approach to be short-sighted, distracting from the overall purpose of DSM programs, and does not address the need to resolve the M&V issues raised in the filings.

263. Commission shares Staff’s concerns surrounding M&V issues including the accessibility and reliability of data, the reasonableness of load shapes and energy savings profiles, the inputs used in PortfolioPro including incremental costs, measure life, rebate per unit, number of units and deemed savings, and the presentation of Demand Response program data. The Commission finds it appropriate to address these issues raised by Staff. NV Energy, in future IRP DSM Plans and Annual DSM Update Reports, shall: 1) serve upon Staff and the BCP at the same time it files its initial application, all information and all supporting data in executable format upon which it relies to develop benefit/cost calculations related to DSM

\textsuperscript{7} NAC 704.9321(1) states that “[t]o the extent consistent with cost-effective procedures generally accepted by the industry, all assumptions, forecasts, conclusions and information used by a utility in its resource plan must be: (a) Based on substantially accurate data; (b) Adequately demonstrated and defended; and (c) Adequately documented and justified.”
program and lost revenue calculations for DSM programs; 2) include a discussion of, and support for, the development of load shapes (energy savings profiles); 3) include documentation for incremental cost calculations; 4) utilize the measure life as presented in the latest M&V reports unless documentation is provided to support a changed measure life; 5) provide a discussion of, and support for, rebates and incentives offered for each appropriate program; 6) include, for those programs that do not have an installed unit such as a refrigerator or pool pump but instead utilize an aggregate measure, a detailed discussion explaining and supporting the development of the aggregate measure; 7) provide deemed savings on a per unit measure basis and present changes in M&V verified deemed savings including the reasons behind the changes to future savings; and, 8) present in its Demand Response data sheets, a residential section, a commercial section and a combined program section.

F. Past Compliances and Directives for Nevada Power and Sierra

Parties’ Positions

NV Energy

264. NV Energy requests Commission findings that Nevada Power and Sierra have: a) satisfied the directives contained in ordering paragraphs 11 and 12 of the Commission’s May 23, 2011, Order in Docket Nos. 10-10024 and 10-10025; and b) satisfied the directives contained in ordering paragraphs 6, 7, 8, 9, 10, 13, and 14 of the Commission’s March 23, 2012, Order in Docket Nos. 11-07026 and 11-07027. (Exhibit 26 at 13-16; Exhibit 35 at 14-17; Exhibit 51 at 2-3, 37-44; and Exhibit 53 at 50-59.)

Staff

265. Staff recommends that the Commission find that Sierra and Nevada Power have satisfied the directives contained in ordering paragraphs 11 and 12 of the Commission's May 23,
2011, Order in Docket Nos. 10-10024 and 10-10025. The Commission’s directive required NV Energy to consider the long-term and cumulative effect of lost revenue recovery in the cost calculus in the next IRP/Annual DSM update filing. NV Energy retained Cadmus Group, the developer of PortfolioPro, the model used to determine if DSM programs are cost-effective. After a meeting with NV Energy and Cadmus Group to discuss the Rate Impact Model, which was developed to determine rate impacts on residential as well as commercial and industrial customers, Staff had concerns with the model’s assumptions and calculations. Staff was not able to perform a thorough investigation and intends to address the Rate Impact Model in Sierra’s 2013 IRP filing. Staff recommends that the Commission direct NV Energy to ensure that a M&V evaluator shall not have any other financial tie to NV Energy’s business operations. Staff states that NV Energy’s M&V evaluator, ADM, has also worked as a subcontractor for Tetra Tech in completing the NTG study for NV Energy. Staff is concerned about the increasing financial ties and dependency of NV Energy on ADM. (Exhibit 84 at 25-28; Exhibit 88 at 26-27.)

266. Staff recommends that the Commission find that Nevada Power and Sierra are in compliance with the directives contained in ordering paragraphs 6, 7a, 7b, 8, 9, 10, 13, and 14 of the Commission’s March 23, 2012, Order in Docket Nos. 11-07026 and 11-07027. (Exhibit 84 at 2, 21-28.)

267. Staff recommends ordering paragraphs 6 and 7a, NV Energy met with Staff, BCP, and NCARE to discuss the Electric Low Income Weatherization Program on March 28, 2012 and April 26, 2012. The parties then met with the Nevada Division of Housing to discuss a draft plan. (Exhibit 84 at 22-23.)

268. Staff recommends directives in ordering paragraphs 7b and 8, NV Energy
restructured the Low Income Weatherization programs by changing the delivery of the program from one that focused on an implementation contractor to a program design with program delivery to the Nevada Housing Division. (Exhibit 84 at 24.)

269. Staff recommends the directives in ordering paragraphs 9 and 10, Staff confirms that NV Energy included Adjusted Total Resource Cost ("ATRC") in accordance with the 2007 California Public Utilities Commission Clarification memorandum as part of the Annual DSM Update for Sierra and IRP filing for Nevada Power. (Exhibit 84 at 24-25.)

270. Staff recommends the directives in ordering paragraphs 13 and 14, Nevada Power and Sierra each filed a preferred DSM plan and two alternative plans. (Exhibit 84 at 21-22.)

**NV Energy Rebuttal**

271. In response to Staff's recommendation that "the Commission should direct the Companies to ensure that an M&V evaluator shall not have any other financial tie to the Companies' business operations," NV Energy asserts that Staff has based its assumption on an incorrect understanding that it is unusual or inappropriate to have the M&V contractor participate or be totally responsible for the preparation of a net to gross study. NV Energy contends that there is no factual basis for Staff's assertion that ADM's work on the NTG study "undermines the public confidence and perception on the independency and transparency of a M&V process." (Exhibit 113 at 21; Exhibit 118 at 2.)

272. NV Energy contends that ADM performs M&V work for jurisdictions throughout the country and is aware of the requirements and procedures that other commissions have put in place to ensure independence and transparency for the M&V process. ADM's role in the NTG study was primarily to facilitate the collection of data. NV Energy further notes that in many jurisdictions it is the M&V contractor that performs that the NTG work. (Exhibit 118 at 3.)
Commission Discussion and Findings

273. The Commission finds that Nevada Power and Sierra have satisfied the directive contained in ordering paragraph 11 of the Commission's May 23, 2011, Order in Docket Nos. 10-10024 and 10-10025, directing Nevada Power and Sierra to "provide analyses considering the long-term and cumulative effect of lost revenue recovery in the cost calculus in their next respective Integrated Resource Plan and Annual Demand Side Management Update." Nevada Power and Sierra provided analyses considering the long-term and cumulative effect of lost revenue recovery in the cost calculus in their respective filings.

274. The Commission finds that Nevada Power and Sierra have complied with the directive contained in ordering paragraph 12 of the Commission's Order, issued May 23, 2011, in Docket Nos. 10-10024 and 10-10025, directing Nevada Power and Sierra to "provide an assessment of current measurement and verification process and recommend changes if necessary in their next Annual Demand Side Update regarding the need for an independent measurement and verification process." The Commission therefore finds that Sierra and Nevada Power have satisfied this directive. The Commission acknowledges Staff's concerns with respect to the independence and transparency of the M&V process. However, the Commission is satisfied with NV Energy's explanation regarding the M&V evaluator and the preparation of the NTG Study.

275. The Commission finds that Sierra and Nevada Power have complied with the directives contained in ordering paragraphs 6 and 7a of the of the Commission's March 23, 2012, Order in Docket Nos. 11-07026 and 11-07027 directing NV Energy to meet with Staff, BCP, and NCARE within 30 days of the issuance of the Order to discuss options for restructuring the Electric Low Income Weatherization Program.
276. The Commission finds that Sierra and Nevada Power have complied with the directives contained in ordering paragraphs 7b and 8 of the of the Commission’s March 23, 2012, Order in Docket Nos. 11-07026 and 11-07027 directing NV Energy to propose a restructured, cost-effective Low Income Weatherization Program in Sierra’s 2012 Demand Side Management Update Report and Nevada Power’s 2012 IRP filing.

277. The Commission finds that Sierra and Nevada Power have complied with the directives contained in ordering paragraphs 9 and 10 of the of the Commission’s March 23, 2012, Order in Docket Nos. 11-07026 and 11-07027 directing NV Energy to, “in addition to its standard cost-effectiveness calculations, include as part of its next Annual Demand Side Management Update Report [Integrated Resource Plan] adjusted Total Resource Cost calculations, in accordance with the 2007 California Public Utilities Commission clarification Memo, for all proposed energy efficiency and conservation programs.”

278. The Commission finds that Sierra and Nevada Power have complied with the directives contained in ordering paragraphs 13 and 14 of the of the Commission’s March 23, 2012, Order in Docket Nos. 11-07026 and 11-07027 directing NV Energy to “include at least three energy efficiency and conservation portfolios, one preferred and two alternatives, to address identified strategic load objectives” in its next Integrated Resource Plan filings.

VII. NEVADA POWER’S LOAD & FUEL AND PURCHASED POWER FORECASTS

Parties’ Positions

Nevada Power

279. Nevada Power requests approval of the long-term load forecast as being the most accurate information upon which to base long-term planning decisions through the Action Plan period. (Exhibit 2 at 27, 42; Exhibit 3 at 35.) Additionally, Nevada Power requests approval of
the long-term fuel and purchased power forecast as being the most accurate information upon which to base long-term planning decisions through the Action Plan period. (Exhibit 2 at 42; Exhibit 3 at 35).

280. Nevada Power contends that the 2012 IRP forecast captures the effects of the most up-to-date economic outlooks and the best estimates of DSM and DR reductions and energy efficiency reductions available at the time it was prepared. Accordingly, it is a reasonable basis upon which to make planning decisions for the period 2013 through 2042. (Exhibit 44 at 17.)

281. Nevada Power states that the methodology used to prepare forecasts for power and natural gas prices relies upon observable market quotes in the near-term, which are gradually blended into long-term price forecasts that Nevada Power obtained from an external professional forecasting service. (Exhibit 34 at 86; Exhibit 46 at 3-4.) The price forecast for coal delivered to Nevada Power's power plants is prepared by an external consulting firm with expertise in coal markets. (Exhibit 34 at 86; Exhibit 47 at 2.)

**BCP**

282. BCP does not oppose the long-term base load forecast for purposes of long-term planning. However, BCP recommends that the Commission should not formally approve the extreme temperature peak forecast or a specific planning reserve margin for transmission planning. BCP suggests that the Commission should limit its determination to whether or not the Application is sufficient with respect to the development and documentation of the criteria used to determine a flat 4 percent reserve margin based on the extreme temperature peak forecast methodology. The BCP does not oppose a determination by the Commission that a flat 4 percent planning reserve margin is reasonable for the purposes of planning transmission
facilities. (Exhibit 48 at 2, 6.)

283. BCP states that the IRP regulations do not require approval of a methodology for load forecasting or a planning reserve margin for transmission planning. (Exhibit 48 at 6.)

Staff

284. Staff recommends that the Commission accept Nevada Power’s long-term gross system peak load forecast as it is based on the most recent and substantially accurate data to be used for long-term planning decisions through the Action Plan period, including net metering from solar photovoltaics and projects associated with the Solar Energy Systems Incentive Program and Wind Energy Systems Demonstration Program. However, Staff’s recommendation specifically excludes plug in electric vehicle (“PEV”) sales and system peak load reductions due to DSM and DR programs. (Exhibit 49 at 1, 2, 12.)

285. Staff states that Nevada Power complied with the regulations governing load forecasts including NAC 704.9225, 704.922 through 704.9321 and NAC 704.925. (Exhibit 49 at 2.)

286. Staff states that pursuant to NAC 704.925(11), Nevada Power developed a new extreme temperature peak forecast for use in transmission planning in its forecast methodology in the IRP. Staff contends that this new forecast methodology for transmission planning is reasonable as it captures the unusually hot temperatures that occasionally occur. (Exhibit 49 at 5, 7.)

287. Staff notes that in Docket No. 10-02009, Nevada Power used the high load forecast for transmission planning purposes which greatly discounted the effects of DSM. Staff’s concern was that by using the high load forecast, Nevada Power showed a need to construct transmission projects far earlier than under the base case load forecast. Further, Staff
and Nevada Power have met several times since the conclusion of Docket No. 10-02009 and have come to a consensus on the new transmission peak forecast planning that is reflected in the new methodology. (Exhibit 49 at 5; Exhibit 126 at 13-14.)

288. Staff recommends that the Commission order Nevada Power to use a constant annual sales share of 1 percent of PEVs for all new cars in Nevada in 2015 and beyond for forecasting purposes. Staff contends that it is difficult to measure and forecast the effects of PEVs especially for the long-run because there are no long-term historical data to that effect. Without the benefit of historical data, Staff supports Nevada Power's 2013-2015 ESP base forecast assumption that approximately 1 percent of new cars on the roads in Nevada by 2015 are PEVs. Staff suggests that this assumption be used until there are historical data on the effect of PEVs in Nevada Power's service territory. (Exhibit 49 at 9, 10, 12.)

289. Based on a review of Nevada Power's fuel and purchased power price forecast, Staff contends that the natural gas, purchased power, and coal price forecasts are reasonable. (Exhibit 49 at 8-9.)

Nevada Power Rebuttal

290. Nevada Power reasserts its position that the methodology used to develop the extreme temperature peak forecast for transmission planning is reasonable and that the methodology, not just the results, should be approved by the Commission. (Exhibit 50 at 6.)

291. Nevada Power does not object to Staff's recommendation to use a constant annual sales share of 1 percent of PEVs for all new cars in Nevada in 2015 and beyond for forecasting purposes. Nevada Power reasserts its position that the base case PEV vehicle penetration numbers in the Application are reasonable. However, Nevada Power acknowledges that there is little historical experience with the adoption rates of PEVs in Nevada. (Exhibit 50 at 4.)
Commission Discussion and Findings

292. The Commission finds that the long-term load forecast, as presented in Volume 6: IRP Load Forecast and Market Fundamentals (Exhibit 34), provides the most accurate information upon which to base long-term planning decisions through the Action Plan period.

293. The Commission finds that Nevada Power’s new extreme temperature forecast for transmission planning and the underlying methodology are acceptable. The Commission finds compelling Staff’s explanation about how the new methodology better captures the effects of DSM on transmission planning, and that the methodology is reasonable.

294. The Commission declines to accept BCP’s recommendation regarding the extreme temperature forecast and underlying methodology. NRS 704.746(4)(a) requires that the Commission determine whether “[t]he forecast requirements of the utility are based on substantially accurate data and an adequate method of forecasting.” Further, NRS 704.746(4)(b) requires that the Commission determine that “[t]he 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. NAC 704.925(11) requires that “any change in the methodology of forecasting used by the utility from that used in the utility’s previous resource plan must be identified in the current resource plan of the utility.” Nevada Power has complied with this regulation by providing information to facilitate the Commission’s review of this new methodology in accordance with its statutory mandate.

295. Nevada Power shall use a constant annual sales share of 1 percent of PEVs for all new cars in Nevada in 2015 and beyond for forecasting purposes until such time as there is adequate data to warrant a different percentage. The Commission agrees with Staff’s assertion
that it is difficult to measure and forecast the effects of PEVs especially for the long-run because there are no long-term historical data to that effect. Nevada Power did not dispute that there is little historical experience with the adoption rates of PEVs in Nevada.

296. The Commission finds that the long-term fuel and purchased power forecast, as presented in Volume 6: IRP Load Forecast and Market Fundamentals (Exhibit 34), provides the most accurate information upon which to base long-term planning decisions through the Action Plan period.

VIII. NEVADA POWER’S SUPPLY SIDE ISSUES

A. Brownfield Comprehensive Study and Conceptual Design

Parties’ Positions

Nevada Power

297. Nevada Power requests approval to expend $3.5 million over the Action Plan period to perform a comprehensive study and conceptual design for a Nevada Power-owned brownfield\(^8\) generation facility suitable for commercial operation as early as 2018. (Exhibit 2 at 16-17, 27, 43; Exhibit 3 at 35; Exhibit 91 at 25-27.)

298. Nevada Power states that its preferred supply plan ("Preferred Plan") indicates that additional capacity is needed in the 2018 and 2021 timeframes. Nevada Power argues that to meet the projected need of an additional 500 MW by 2018 the Commission should authorize the completion of the recommended brownfield comprehensive study and conceptual design. (Exhibit 3 at 20-22; Exhibit 91 at 25.)

299. Nevada Power states that this study and conceptual design is the next step for the

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\(^8\) A brownfield site is a site in and around existing Nevada Power generation facilities. (Exhibit 91 at 22.)
work authorized by the Commission in Nevada Power’s last IRP filing, Docket No. 10-020099. The proposed study will include (1) a site screening level analysis of a brownfield site, (2) the performance of a conceptual plant design, (3) the development of a project schedule and cost estimate, and (4) the development of a technical procurement specification for a steam turbine generator and issuance of a RFP to obtain definitive pricing for a steam turbine generator.

(Exhibit 91 at 25-27; Exhibit 100 at 2-3.)

300. Nevada Power indicates that 2018 expansion resources are identified as peaking units, however, the proposed study will also assess combined cycle options in order to preserve maximum flexibility at this stage in the planning. The lead time on steam turbines is 30 to 48 months, gas turbines is about half that time. (Exhibit 91 at 25; Tr. at 1498.)

BCP

301. BCP recommends that the Commission deny $1.2 million of the $3.5 million requested by Nevada Power for the costs associated with the development of technical procurement specification for a steam turbine generator and issuance of a RFP. BCP does not oppose an expenditure of the $2.3 million associated with the performance of a conceptual plant design and development of a project schedule and cost estimate. BCP further recommends that the Commission order, as compliance items, Nevada Power to file with the Commission the report of the completed site screening analysis expected by the end of 2012, a report of the conceptual plant design when available, and a report of the project schedule and cost estimates when available. (Exhibit 48 at 2, 33; Tr. at 872.)

302. BCP asserts that Nevada Power will have made the brownfield site selection by the end of 2012 and will have sufficient time for development of a brownfield site for the 2018

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9 In Docket No. 10-02009 the Commission accepted Nevada Power’s request to perform a preliminary assessment of opportunities for expansion in brownfield sites which are sites in and around existing Nevada Power generating facilities.
303. BCP states that the development of a technical procurement specification for a steam turbine generator and issuance of a RFP to obtain definitive pricing for a steam turbine generator are activities that are needed for the permitting process. BCP states the permitting activities should not be approved until Nevada Power is seeking Commission approval of the permitting process. BCP asserts that Commission approval of permitting and project approval could be issued separately and in sequential order (permitting before project approval). (Exhibit 48 at 29-32; Tr. at 941-42.)

304. BCP states that Nevada Power’s Preferred Plan need for 500 MW of peaking units in 2018 could be filled in a number of ways, such as Purchase Power Agreements (“PPAs”), DSM, or owner-built generation units. (Exhibit 48 at 26; Tr. at 938-939.)

Staff

305. Staff recommends that the Commission accept Nevada Power’s request to spend $3.5 million over the Action Plan period to perform a comprehensive study and conceptual design for a brownfield facility suitable for commercial operation beginning 2018, contingent on the Reid Gardner site being one of the sites studied. (Exhibit 124 at 1, 3, 6.)

306. Staff notes that Nevada Power is not requesting authority to proceed with the acquisition or construction of the identified generation it needs and cautions Nevada Power not to begin any construction activities, procure any generation asset, or expend more than $3.5 million until it receives such approval from the Commission. Staff states that if Nevada Power makes a decision to retire some or all of the coal-fired units in light of the Best Available Retrofit Technology (“BART”) environmental investments that would be required under the U.S. Environmental Protection Agency’s (“EPA”) recent decision regarding Regional Haze for Reid
Gardner units 1, 2, and 3 ("RG123"), it contends it is important for Nevada Power to examine whether or not there would be significant opposition to Nevada Power constructing cleaner burning natural gas generating units at the Reid Gardner site and the results of this examination should be incorporated into Nevada Power's decision making regarding a company-owned brownfield facility. (Exhibit 124 at 3-6.)

307. Staff supports Nevada Power's idea of doing preliminary engineering work for a combined cycle plant for the brownfield site even though the preferred plan indicates a need for a peaking unit in order to maintain flexibility. Staff states that there are pending issues that could sway whether a combined cycle unit is urgently needed. (Tr. at 972-973.)

**Nevada Power Rebuttal**

308. Nevada Power continues to request approval to expend $3.5 million over the Action Plan period to perform a comprehensive study and conceptual design for a Nevada Power-owned brownfield facility. Nevada Power agrees with Staff and intends to look at all of its generation sites to determine preferred and alternate sites, including Reid Gardner. (Exhibit 156 at 2-4.)

309. Nevada Power testified that a brownfield site will not be identified by the end of 2012 as asserted by BCP. The brownfield study proposed in this Docket is intended to focus on reviewing the development of the two or three preferred sites that will be identified by the end of 2012 pursuant to the brownfield study approved in Docket No. 10-02009. The study approved in 10-02009 originally included the evaluation of brownfield sites at Harry Allen, Reid Gardner and Sunrise facilities and was subsequently expanded to study opportunities at Higgins, Silverhawk and Mohave plant sites. (Exhibit 91 at 17-18; Exhibit 157; Tr. at 1479-1487.)

310. Nevada Power disagrees with BCP that it should wait until a later IRP filing to
request approval to expend money for the costs associated with the development of a technical procurement specification for a steam turbine generator and issuance of a RFP. Nevada Power states completing the technical specifications and RFP before the later IRP filing is necessary to meet the 2018 on-line dates for the new generation units. Nevada Power states that the later IRP filing should be based on finalized permitting and adequate cost discovery for important generator components, like the steam turbine generator, and the RFP needs to be completed in order to have a good quality estimate. Further, Nevada Power argues that finalizing the air permit and preparing the RFP in series as proposed by BCP instead of in parallel will increase the schedule by six to eight months and jeopardize the cost estimate used to prepare the resource plan filing. (Exhibit 156 at 4-5; Tr. 1490-1491.)

Commission Discussion and Findings

311. The Commission accepts Nevada Power's request to spend $3.5 million over the Action Plan period to perform a comprehensive study and conceptual design for a brownfield facility suitable for commercial operation in 2018. Nevada Power shall include Reid Gardner as one of the study sites. The Commission agrees with Nevada Power and Staff that a comprehensive study of this nature is appropriate at this time. However, the Commission's acceptance of this request does not constitute approval of any construction activities, procurement of any generation assets, or expenditures beyond the $3.5 million.

312. The Commission finds compelling Nevada Power's testimony that it is appropriate to include costs associated with the development of a technical procurement specification for a steam turbine generator and the issuance of a RFP in order to meet potential 2018 targets for new generation and to have a quality estimate for the steam turbine generator. As such, the Commission does not accept BCP's proposal to limit the expenditures to $2.3
million. However, the Commission does agree with BCP that the need for generation in 2018 could be met with other options including PPAs and DSM programs.

B. Greenfield Site Screening Level Study

Parties' Positions

Nevada Power

313. Nevada Power requests approval to expend $5 million over the Action Plan period to perform a site screening level study for a new greenfield\textsuperscript{10} site outside of the non-attainment area of Clark County, Nevada suitable for commercial operation beginning in 2020. (Exhibit 2 at 27, 43; Exhibit 3 at 35; Exhibit 91 at 27-28; Exhibit 100 at 2-3.)

314. Nevada Power argues that the recommended site screening level study is necessary to meet the projected capacity need indicated by Nevada Power's Preferred Plan of an additional 2000 MW by 2020. Nevada Power's existing generation fleet is located entirely within non-attainment areas of Clark County. Banked and or purchased Emission Reduction Credits ("ERCs") would likely be required for a brownfield site or greenfield site located within Clark County. Building on a brownfield site is dependent on whether emissions associated with the new generation units can fit within the banked ERCs and/or ERCs that could be obtained from retiring units. A greenfield site may not require emission offsets or ERCs. (Exhibit 3 at 20-22; Exhibit 91 at 21, 28.)

315. Nevada Power explains that proposed assessment of greenfield sites will occur in two phases consisting of a prequalification phase and a site procurement and permitting phase. Nevada Power states that based on the results of the site screening study, two to three geographical locations will be selected for further study each at an estimated cost of $250,000.

Next, assuming a suitable site candidate is identified as a result of the prequalification

\textsuperscript{10} A greenfield site is a new generation site. (Exhibit 91 at 23.)
assessment, Nevada Power will proceed with securing a site through an option agreement, commence land use applications (such as an Environmental Assessment or Environmental Impact Statement in the event the site is on federal lands), establish a meteorological monitoring station and submit an air permit application. The cost to complete this activity is approximately $4.25 million per site. (Exhibit 91 at 27.)

**BCP**

316. BCP recommends that the Commission deny Nevada Power’s request to expend $4.25 million for site procurement and permitting, but does not oppose Nevada Power spending up to $750,000 to prequalify sites. BCP further recommends that the Commission order Nevada Power to file a report including the findings and conclusions of the prequalifying phase studies as a compliance item. (Exhibit 48 at 36-37.)

317. BCP argues that funding for site procurement and permitting should not be granted prior to Nevada Power identifying a site and developing a project scope and cost estimates for the specific site. (Exhibit 48 at 34, 36)

318. BCP states that Nevada Power’s Supply Side Plan indicates that the estimated cost for site procurement and permitting is $4.25 million per site. If Nevada Power chooses to permit all three sites evaluated in the prequalification phase, the cost would increase to $12.75 million. (Exhibit 48 at 36.)

319. BCP argues that the preference for evaluating siting potential for future generation facilities should be directed towards brownfield sites which should be more defined by the end of 2012. Until the generation potential for brownfield sites is fully evaluated and vetted, greenfield sites should not be a priority. The need for and timing of future generation on greenfield sites is very speculative and uncertain at this time and are more applicable to the
period after 2021. (Exhibit 48 at 35.)

Staff

320. Staff recommends the Commission deny Nevada Power’s request to expend $5 million over the Action Plan period to perform a site screening study for a new greenfield site suitable for commercial operation beginning in 2020. Nevada Power’s Preferred Plan in this IRP assumes that Nevada Power will construct approximately 375 MW of new generation in 2018 and additional capacity in 2021. Staff does not agree with Nevada Power that the additional capacity in 2021 should be at a greenfield site. (Exhibit 124 at 2, 7.)

321. Staff states that it is most reasonable for Nevada Power to explore and permit brownfield sites before it permits greenfield sites. Additionally, Staff argues that there are options available to Nevada Power other than constructing new generation units to meet the projected capacity needs in 2021. Nevada Power is currently under contract to receive approximately 1,356 MW of capacity; however, other than the Second Amended Exchange with SNWA, Nevada Power’s Preferred Plan does not include extending its current PPA’s. Nevada Power should develop a portfolio to include long-term PPAs, which may provide the least cost for ratepayers. Additionally, depending on to what extent Phase 2 of the ON Line project proceeds, Nevada Power may want to investigate developing generation sites in northern Nevada. It is too early to commit an additional $5 million of ratepayer funds for a capacity need almost 10 years in the future. (Exhibit 124 at 7-8.)

Nevada Power Rebuttal

322. Nevada Power continues to request approval to expend $5 million over the Action Plan Period to perform a site screening level study for a new greenfield site outside of the non-attainment area of Clark County, Nevada suitable for commercial operation beginning in 2020.
Nevada Power states that it intends to only pursue permitting on one of the sites evaluated in the prequalification phase, not all three as suggested by BCP. (Exhibit 156 at 6, 8.)

323. Nevada Power agrees that it should first look to brownfield sites for the next new generating unit; however, Nevada Power disagrees with Staff that it should pursue new generation only on brownfield sites during this Action Plan period. Nevada Power states that it is proposing to prequalify greenfield sites coincident with brownfield sites just in case it comes up that Nevada Power cannot economically develop one of the brownfield sites to meet 2018 capacity needs. This would force Nevada Power to come back to the Commission for approval to pursue greenfield opportunities and delay construction so that Nevada Power would be forced to go to the market to meet customer electricity needs. (Exhibit 156 at 6-7.)

324. Additionally, Nevada Power states that it has a limited number of emission credits, including those from the shutdown of Mohave, Clark and Sunrise units and the emission reductions at Reid Gardner, and only expects to be able to build on one brownfield site. Therefore, Nevada Power asserts that the forecasted need of 2000 MW by 2020 would most likely have to be on a greenfield site outside of the non-attainment area. Nevada Power further asserts that it takes approximately six and one half years to develop on a greenfield site. Starting the greenfield site study now puts Nevada Power close to the 2020 deadline. However, Nevada Power testified that theoretically it could accelerate some of the activities necessary to commission a greenfield unit by the 2020 deadline. (Exhibit 156 at 6-7; Tr. at 1494, 1501, 1515.)

325. Nevada Power agrees with staff that it currently has 1356 MW under conventional PPAs; however, if Nevada Power does not have a self-build option available it would be subject to whatever third parties want to charge them for power. (Tr. at 1496.)
**Commission Discussion and Findings**

326. The Commission deems inadequate Nevada Power’s request to spend $5 million over the Action Plan period to perform a site screening study for a new greenfield site suitable for commercial operation in 2020. The Commission finds compelling Staff’s testimony that it is most reasonable for Nevada Power to explore and permit brownfield sites before it permits greenfield sites. The Commission also agrees with Staff’s suggestions regarding the development of a portfolio of long-term PPAs as well as considering sites in northern Nevada assuming that ON Line is completed. Finally, the Commission agrees with Staff that it is too early to commit $5 million for a potential capacity need 10 years in the future.

327. The Commission acknowledges Nevada Power’s concern about its limited number of emission credits. However, until the future of Reid Gardner is determined, it would be premature to approve expenditures of $5 million based on the assumption that there may not be enough emission credits to develop a project in Clark County.

**C. Renewable Additions at Existing Generating Facilities**

**Parties’ Positions**

**Nevada Power**

328. Nevada Power requests approval to expend $1.45 million over the Action Plan period to pursue permitting activities to facilitate the addition of renewable technologies, primarily solar, at or near existing company-owned generating sites. (Exhibit 2 at 27, 43; Exhibit 3 at 35; Exhibit 91 at 28-29; Exhibit 100 at 2-3.)

329. Nevada Power states that the requested permitting work is necessary to meet energy needs identified in this IRP for 2018 and beyond if the company is to pursue renewable options as part of its generation portfolio. Nevada Power testified that a failure to pursue some
level of permitting at this juncture would absolutely eliminate the possibility of Nevada Power
taking advantage of the federal Investment Tax Credit ("ITC") by 2016, which would result in a
loss of value of the project that Nevada Power may eventually bring before the Commission.
(Exhibit 91 at 29; Tr. at 527)

**BCP**

330. BCP recommends the Commission deny Nevada Power's request because Nevada
Power's application is deficient as to this request. There is no pre-filed direct testimony that
supports the request and the application itself does not contain the data regarding the what, when
and where for the intended future resources as required by NAC 704.9005 through 704.9525.
For example, BCP states that there is no data presented with respect to a specific proposed site,
commercial date of operation, type of facility, or stated capacity as required by NAC 704.9385.
(Exhibit 48 at 3, 37.)

**Staff**

331. Staff recommends that the Commission deny Nevada Power's request. Staff
states that Nevada Power's request is associated with the Case 4 expansion plan, which is not
Nevada Power's Preferred Plan or its Alternative Plan. Nevada Power's request to spend over $1
million pursuing a component of a plan that Nevada Power is not recommending be approved, is
wholly unsupported. (Exhibit 128 at 3, 8.)

332. Additionally, Staff has many concerns regarding Nevada Power developing a
company-owned renewable resources facility. Staff states that Nevada Power does not believe
that it should be held to any specific performance standards on its company owned photovoltaics
("PV") projects. This is contradictory to the high standards that Nevada Power mandates in its
PV contracts with third parties. (Exhibit 128 at 3-5.)
333. Staff further asserts that Nevada Power does not have any experience constructing and operating large utility-scale PV systems and Nevada Power's track record for development of company-owned renewable projects is poor. Nevada Power has investigated 18 projects, but to date has been successful in bringing only one project on-line. Staff further asserts that Nevada Power has not provided justification for why ratepayers should continue to fund investment in company-built renewable projects. (Exhibit 128 at 3-7.)

334. Staff states that Nevada Power has not identified a need for any of the renewable energy to meet the RPS. Staff asserts that, based upon its review of additions and subtractions in forecasted renewable generation projects that have occurred since Nevada Power’s Application was prepared and filed, it appears that Nevada Power will still be Renewable Portfolio Standard (“RPS”) compliant out until 2020. (Exhibit 128 at 6, 8.)

**Nevada Power Rebuttal**

335. Nevada Power continues to request approval to expend $1.45 million over the Action Plan period to pursue permitting activities to facilitate the addition of renewable technologies, primarily solar, at or near existing company-owned generating sites. Nevada Power states that the purpose of the approval is to preserve the benefit of these sites for future renewable, primarily solar, development and to maintain flexibility to meet future needs, whether such needs are RPS, load or legislation driven. (Exhibit 137 at 11, 22.)

336. Nevada Power disagrees with BCP that the lack of data presented with respect to a specific proposed site and capacity makes the filing incomplete as to this request. Nevada Power is seeking to pursue permitting not seeking project approval or construction approval. Further, while the sites were not named, Staff and BCP are fully aware of the generation facilities owned by Nevada Power. (Exhibit 137 at 21-22.)
337. Nevada Power agrees with Staff that utility-sponsored projects are subject to different cost recovery mechanisms than PPAs, but does not agree that a utility-developer is insulated from development risk by rate regulation. (Exhibit 137 at 11-20.)

338. Nevada Power disagrees with Staff’s assertion that utility-owned projects are inferior to third-party projects because of the lack of performance standards that are in the PPAs. (Exhibit 137 at 14-15.)

Commission Discussion and Findings

339. The Commission deems inadequate Nevada Power’s request to spend $1.45 million over the Action Plan period to pursue permitting activities to facilitate the addition of renewable technologies at or near existing company-owned generating sites. As presented, it appears that Nevada Power contemplates developing the project on its own. If this is the case, the Commission shares the same concerns as Staff regarding Nevada Power’s lack of experience in developing renewable energy projects. The Commission acknowledges that Nevada Power’s proposal may have merit, but it appears that the concept has not been fully developed. (Tr. at 1277-1280.) The Commission encourages Nevada Power, if it finds that it is warranted, to more fully develop this concept and return to the Commission with a clear, concise plan in a future filing.

D. Renewable Energy Plan

i. One or Two Renewable Energy RFPs for No More than 250 MW

Parties’ Positions

Nevada Power

340. Nevada Power requests approval to issue one or more RFPs in 2014 and/or 2015 for no more than 250 MW of renewable resources located in close proximity to Nevada Power’s
load centers. (Exhibit 2 at 28, 43; Exhibit 3 at 36; Exhibit 102 at 2-3.)

341. Nevada Power expects that it would present no more that 250 MW of new nameplate capacity for approval by the Commission during the Action Plan period. The RFPs would be for new renewable resources located close in proximity to Nevada Power’s service territory and load centers. Nevada Power states that it would not present projects that are priced below the most recent lowest-priced renewable PPA approved by the Commission. If no proposal meets the pricing threshold, then no new PPA would be presented. (Exhibit 91 at 57-58; Exhibit 102 at 11.)

342. Nevada Power states that based on current load projections and current law, including the legislatively set increases in the RPS, Nevada Power’s renewable portfolio is expected to enable it to comply with the RPS through at least 2020. (Exhibit 91 at 40.)

343. Nevada Power states that solar pricing continues to fall and Nevada Power sits on one of the best solar resources in the United States. The low pricing for solar has enabled Nevada Power to focus on the benefits of its supply profile, which normally coincides with Nevada Power’s highest load demand in the summer. Additionally, the current deadline for new solar projects to take advantage of the ITC is 2016. Therefore this may be the most opportune time for Nevada Power to enter into these types of agreements. (Exhibit 91 at 57-58; Exhibit 102 at 11.)

344. Nevada Power states that while it does not require supply-side resources until 2018, and does not require energy from renewable resources to meet RPS prior to 2020, it contends the policy objectives of the RPS warrant consideration of renewable energy projects after meeting the RPS especially where pricing is favorable and federal tax incentives remain available. (Exhibit 91 at 58; Exhibit 102 at 11.)
345. Nevada Power asserts that issuance of the RFP will enable it to continue to develop a vital sector of the local economy and diversify fuel sources to contemplate any potential change in the current planning assumptions, such as a change in law affecting coal or natural gas. Additionally, the additional renewable facility could meet any unexpected change in load and could be used toward future compliance years, as Portfolio Credits ("PCs") do not expire in Nevada. (Exhibit 91 at 58-59; Exhibit 102 at 11-12.)

BCP

346. BCP recommends that the Commission deny Nevada Power's request for approval to issue one or more renewable RFP in 2014 and/or 2015 for 250 MW of renewable resources located in close proximity to Nevada Power's load centers. BCP asserts that Nevada Power could reevaluate the need of additional PCs in 2013 with a higher degree of certainty due to new data, including 2013 legislation on RPS requirements and/or changes to DSM implications and the status of current renewable projects under development. An IRP amendment filing in 2013 with a similar request would afford a schedule for issuing a RFP by 2014 and or 2015 as requested. (Exhibit 48 at 3, 13, 25.)

347. BCP states that Nevada Power's strategy relative to timing the renewable PPAs so that it may take advantage of the ITC expiring in 2016 and the falling solar pricing is speculative. BCP further states that it is concerned with this strategy because it is not based on a timetable which coincides with the need for PCs. (Exhibit 48 at 9-10.)

348. BCP testified that it does not support the issuance of any renewable RFP at this time; including the 50 MW RFP that Staff recommends the Commission order in this proceeding. (Tr. 889-90.)
NCARE

349. NCARE recommends that the Commission approve Nevada Power’s request to issue RFPs in 2014 and/or 2015 for new renewable resources not to exceed 250 MW in total during the Action Plan period. NCARE further recommends that Nevada Power consider modifying the Portfolio Credit Exchange Agreement ("PC Exchange Agreement") with Sierra to allow Nevada Power to repay Sierra for borrowed non-solar PCs with surplus solar PCs. (Exhibit 106 at 4.)

350. Overall, NCARE states that it is encouraged by the stated objectives of Nevada Power for its renewable energy plan. NCARE supports a more robust DSM plan and a shift away from meeting future electricity requirements primarily with fossil-fuel generation toward cleaner solutions. NCARE asserts that legislative policy objectives support Nevada Power’s request to issue RFPs. Specifically, the addition of new renewable energy provides environmental and health benefits resulting from reduced impact on air and water quality and reduces carbon dioxide emissions. Continued development of renewable energy also diversifies fuel supply and provides a hedge against future fossil fuel price volatility. Economic benefits associated with renewable energy projects include jobs within the renewable industry and, indirectly, jobs in other sectors. (Exhibit 106 at 5-6.)

351. NCARE states that Nevada Power is projected to have a surplus of zero non-solar kPCs and surplus of 1,438,101 solar kPCs by 2015. Therefore, NCARE recommends that Nevada Power consider modifying the PC Exchange Agreement with Sierra to allow Nevada Power to repay Sierra for borrowed non-solar PCs with surplus solar PCs. (Exhibit 106 at 4, 6, 7.)

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Staff

352. Staff recommends that the Commission reject Nevada Power's request to issue one or more renewable RFP's for resources located in close proximity to its load centers. Instead, Staff recommends that the Commission approve Nevada Power issuing a single RFP in late 2013 or early 2014 for 50 MW, with the intent of actually executing prudent solar PV contracts totaling 50 MW. If the Commission approves Nevada Power's request to issue one or more RFPs for no more than 250 MW, then the Commission should, as part of its approval, rescind the "Critical Facility" designation it gave the ON Line project as well as rescind all rate making incentives that were approved for the ON Line Project in Docket No. 10-02009. (Exhibit 128 at 17.)

353. Staff states that one of its major concerns with the proposed issuance of RFPs is that none of the energy capacity associated with these potential new resources is included in either the Loads & Resources ("L&R") tables or the production cost simulations performed for the Preferred or Alternative Plans. The proposed RFPs are not being issued to comply with the RPS, but instead are being issued to provide capacity and energy resources to serve load. Therefore, Staff asserts that executed contracts out of the proposed RFPs could have an impact on Nevada Power's Preferred and Alternative expansion plans. (Exhibit 128 at 10.)

354. Staff states that the "up to" 250 MW parameter of the RFPs is going to get lost and/or not be fully understood by those interested entities responding to and or monitoring the renewable RFPs. Staff asserts that developers devote significant time and money to prepare proposals that meet the requirements of the RFP and, if Nevada Power does not execute a contract from the proposed RFPs, developers may think twice before submitting future proposals based on Nevada Power's history of not actually executing contracts from issued RFPs. Staff
testified that a statement of the amount that will be issued adds more clarity.  (Exhibit 128 at 11-12; Tr. 987.)

355. Staff further states that the aggressive price target of at or below $92 per MWh proposed by Nevada Power, such that Nevada Power states that it is unlikely any contracts are actually going to be executed, is problematic. (Exhibit 128 at 10, 12.) Staff testified that the price cap based on a previous contract is arbitrary and does not support the ceiling for the RFPs. Staff further testified that any price above zero for a contract that the ratepayers do not need is not a beneficial price or price competitive. Additionally, Staff testified that when Nevada Power issues a RFP that it should intend to actually execute contracts for that amount. Staff asserts this would ensure getting quality bids from quality entities. (Tr. 984-988.)

356. Staff asserts that Nevada Power’s concern that the price of solar PV contracts could go up if the 2016 ITC is not extended has merit and warrants Nevada Power issuing a smaller renewable RFP as a hedge against the possible sunset of the ITC. Staff proposes that Nevada Power issue a RFP totaling 50 MW of solar PV resources close to the Las Vegas load pocket in late 2013 or early 2014. Staff states that Nevada Powers proposal to issue the RFPs in 2014 and 2015 essentially moves up the energy amounts associated with all renewable resources forecasted to be added in 2020, 2024, and 2025. This speculation could have an impact on customer rates, could cause integration subsidy issues and could be detrimental to ratepayers if the ITC is extended. Staff states that its proposal to move a reasonably small amount of future renewable resources need up by four years to provide a hedge in case the ITC is not extended is a balanced approach. (Exhibit 128 at 14.)

357. Staff testified that it limited its recommendation to solar PV because it understood Nevada Power’s request to be limited to solar PV in Las Vegas. Staff testified that it is not
opposed to a different resource and would be willing to change its recommendation to not make the 50 MW RFP to solar PV with the caveat that the bidder be able to actually deliver to Nevada Power service territory. (Tr. 990-95, 1031.)

358. Staff asserts that because Nevada Power has requested that the Commission reaffirm moving forward with ON Line project, the Commission has the authority to reexamine if the ON Line still qualifies as a critical facility given the new facts and circumstances. Staff states that the Commission approved Nevada Power’s preferred plan to construct the ON Line project, including its designation as a critical facility in Docket No. 10-02009, in part because the ON Line project was forecasted to be the least cost alternative for Nevada Power to comply with the RPS as opposed to Nevada Power incurring the higher cost by executing contracts with solar PV resources located in its service territory as proposed in its alternate plan in Docket No. 10-02009. If Nevada Power ratepayers are going to be asked to pay for the cost of constructing both the ON Line and pay for the cost of the alternate plan in Docket No. 10-02009 there is no longer a basis or justification for classifying the ON Line as a critical facility. (Exhibit 128 at 16-17.)

Nevada Power Rebuttal

359. Nevada Power continues to request approval to issue one or more RFPs in 2014 and/or 2015 for no more than 250 MW of renewable resources located in close proximity to Nevada Power’s load centers, but states that it is amenable to seeking bids for a lower amount. Nevada Power asserts that the 50 MW cap proposed by Staff is too low. (Exhibit 137 at 8.)

360. Nevada Power clarifies that, while not described in the initial request, it expects the RFPs to consider proposals from all renewable technologies. Nevada Power agrees that solar is the most likely participating technology, based on the tax credits and price decreases, but there may be other technologies that can compete in spite of the solar ITC. However, limiting the RFP
to 50 MW would effectively preclude utility scale wind from participating. If the Commission favors a smaller RFP, a single 100 MW RFP would allow all technologies to participate in late 2013 or early 2014. (Exhibit 137 at 8-9.)

361. Nevada Power continues to assert that the pricing limitation that new PPAs be required to beat the last least-cost PPA should be part of any RFP. Nevada Power states that it would categorically state in the RFP the specifications for the proposal. (Exhibit 137 at 7-9.)

362. Nevada Power states that it did not incorporate new renewable projects from an RFP into its planning portfolios because there is no assurance that any bidders would meet the project viability requirements or pricing threshold. The projects would be fully incorporated into the planning process once a contract is awarded from the proposed RFP. Additionally, the RFPs are not driven by load or RPS need, so, the RFPs have virtually no impact on the economic analysis described in the Application. (Exhibit 137 at 7-8.)

363. Nevada Power states that the primary goal of the proposed RFPs is to take advantage of the pricing advantages that are currently available in the Federal tax code for solar energy that expire December 31, 2016. The certainty around this incentive provides value in undertaking some limited RFP opportunities in the course of the Action Plan period. Nevada Power further states if it were to wait until an IRP amendment, filed in late 2013, to request approval to issue the RFP’s, as recommended by BCP, that it would not have sufficient time to receive the necessary regulatory approvals to meet the December 31, 2016 deadline\(^{11}\) of the ITC. (Exhibit 137 at 4-5.)

364. A RFP requires extensive planning an analysis. Assuming an IRP amendment was filed at the end of 2013 as suggested by BCP and approved in April 2014, and RFP issued in

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\(^{11}\) Nevada Power states that a project must be “in service” by the December 31, 2016 expiration date to qualify for the solar ITC. (Tr. at 1243.)
early 2014, with reviews and negotiations completed in mid-2015, and an IRP amendment submitted to the Commission in the fall of 2015, approval of the project would not occur until early 2016. (Exhibit 137 at 4-6.)

365. Nevada Power states that BCP’s suggestion to not repay any further PCs to Sierra because there is no contractual requirement to do so by a specific date runs contrary to the spirit and intent of the PC Exchange Agreement, which was established to bridge Nevada Power over a short-term deficit period, not to indefinitely transfer PCs that were loaned to Nevada Power. Additionally, barring repayment runs counter to general principles of equity since Nevada Power would be retaining surplus PCs not expected to be required for near-term RPS compliance while subject to an outstanding obligation to Sierra. (Exhibit 137 at 24-25.)

366. Nevada Power continues to assert that it is requesting approval of further RFPs to enable continued support of this sector of the Nevada economy and to take advantage of potential pricing benefits, but is not expecting to need the PCs from such projects in the near future to meet RPS. Nevada Power states that a Commission determination that when a utility is RPS compliant the utility should not let an RFP is bad for business for the PPA development community. At least with an RFP being let, there is hope and argument for Commission approval of a project. (Exhibit 137 at 4; Tr. at 1273.)

367. Nevada Power states that the proceedings in Docket No. 11-03014 and Docket No. 12-04016 clearly indicated that there is an interest at the BCP and Staff for Commission review of renewable RFPs before they are issued; however, there is no explicit regulatory requirement or statutory requirement that new RFPs be authorized in an IRP. Previously, the only opportunity for the Commission, BCP and Staff to respond to an RFP was at the very end of the process after the contracts were executed and brought forth for approval. (Exhibit 137 at 4)
Tr. at 1235.)

368. Nevada Power disagrees with Staff’s recommendation that the Commission rescind the “critical facility” designation it gave the ON Line project as well as rescind all rate making incentives that were approved for the ON Line Project in Docket No. 10-02009. Nevada Power states that a request to issue an RFP which explicitly provides no assurance of resulting contracts should in no way affect the previously approved treatment of the costs of constructing ON Line. The ON Line has been justified based on an economic analysis of the ON Line’s beneficial impacts to Nevada Power’s existing renewable portfolio and the cost of this portfolio. The wealth of renewable resources in northern Nevada cannot be replicated cost-effectively in southern Nevada, and will provide the bulk of Nevada Power’s RPS requirement for the foreseeable future. (Exhibit 137 at 9-10.)

Commission Discussion and Findings

369. The Commission accepts Nevada Power’s proposal to issue an RFP for additional renewable energy contracts for no more than 100 MW, subject to a decision of the Commission in Docket No. 12-04016. The RFP shall be open to all types of renewable resources and the RFP shall not be limited to projects located in southern Nevada. Nevada Power shall not let the RFP until the Commission has further opportunity to address the issues under consideration in Docket No. 12-04016. The RFP will be subject to any additional conditions as deemed necessary and appropriate as determined in Docket No. 12-04016. The Commission finds this approach appropriate for addressing the concerns raised by Nevada Power, Staff and BCP.

370. The Commission acknowledges Nevada Power’s concern with the potential

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12 Docket No. 12-04016 is a rulemaking to adopt, amend, or repeal regulations associated with the portfolio standard and resource planning process. This docket was opened as a result of Docket No. 11-09018, an investigation regarding the need to amend or repeal the regulations associated with the portfolio standard and integrated resource planning.
expiration of the ITC for solar projects in 2016. However, BCP raises a compelling point regarding the uncertainty created by potential state legislation in 2013 that could affect the RPS. To address these concerns, the Commission finds that a measured approach of taking more time than what is allowed in an IRP proceeding is necessary to balance the potential expiration of the ITC for solar in 2016 and potential changes in legislation in 2013. Further, by allowing all renewable resources in the RFP and by eliminating the limitation to southern Nevada, a negative outcome for the extension of the ITC for solar contracts is mitigated.

371. The Commission agrees with Staff’s concerns regarding developer interest in a RFP that may not lead to an executed contract. Staff correctly states that developers devote significant time and money to prepare proposals to meet the requirements of a RFP. The Commission is concerned that there is limited participation by renewable energy developers in this Docket and the Commission may not be getting the full spectrum of concerns. Accordingly, further evaluation of a RFP in the context of Docket No. 12-04016 where renewable energy developers have a less costly and less formal mechanism to participate is appropriate.

372. Staff’s recommendation that the Commission rescind the “Critical Facility” designation it gave the ON Line project as well as rescind all rate making incentives that were approved for the ON Line Project in Docket No. 10-02009 is moot because the Commission is not approving Nevada Power’s request to issue one or two RFPs for no more than 250 MW.

ii. Program for Marketing Surplus PCs

Parties’ Positions

Nevada Power

373. Nevada Power states that the variable nature of RPS inherently means that there will be times PCs exceed the RPS requirement and requests that the Commission approve a
program allowing Nevada Power to market surplus PCs. (Exhibit 91 at 42-44.)

374. Nevada Power states that the renewable energy forecasts indicate that Nevada Power may have a surplus of Portfolio Credits (PCs”) in the Action Plan period. These surplus renewable energy and/or PCs can either be retained for future RPS compliance or sold to third-parties. Nevada Power states that it will evaluate potential opportunities to sell surplus renewable energy and/or PCs to determine whether doing so creates a better value for customers than retaining the PCs for future compliance. Nevada Power states that revenue from any such sales will be credited to customers through the deferred energy accounting adjustment ("DEAA") process. If the company determined that customers would be advantaged through a sales agreement with a term of three years or longer, Nevada Power will file such proposed transaction agreement with the Commission for approval in an IRP or IRP amendment. Nevada Power states that it will only consider selling amounts of renewable energy and/or PCs that are forecasted to exceed 10 percent of the forecasted RPS requirements in any calendar year. (Exhibit 91 at 55-56; Exhibit 102 at 3.)

**BCP**

375. BCP recommends that Nevada Power not undertake a strategy of selling surplus PCs during the Action Plan period given uncertainties related to several renewable projects currently under development. Nevada Power should retain surplus PCs for future RPS compliance years. (Exhibit 48 at 19-22, 25; Confidential Exhibit C8 at 19-22.)

**NCARE**

376. NCARE recommends the Commission approve Nevada Power’s proposal to sell surplus PCs where the sale creates a better value for customers than retaining the PCs for future compliance years. (Exhibit 106 at 4, 6, 7.)
Staff

377. Staff testified that it does not take issue with Nevada Power’s proposal to market surplus PCs. However, Staff states that it would be problematic if Nevada Power sold PCs just to make a need for more. PCs have real value to meet future RPS requirements and could get more expensive if the Federal tax credits are not renewed. (Tr. at 1026-1027.)

Nevada Power Rebuttal

378. Nevada Power continues to request approval of a program allowing Nevada Power to market surplus PCs. Nevada Power states that to the extent that surplus PCs materialize and market opportunities are available to sell those PCs, it would mitigate the cost impact of renewable energy purchases for ratepayers. BCP’s suggested blanket prohibition on sales of PCs provides absolutely no flexibility for market conditions. Additionally, Nevada Power asserts that BCP’s suggested “hoarding” of PCs would have the effect of deferring future development of new renewable projects for a significant period of time. The primary goal of RPS is environmental benefits and a de facto prohibition on sales of PCs would temporarily detach the environmental benefits of renewable energy from the renewable energy generation delivered. (Exhibit 137 at 23-24.)

Commission Discussion and findings

379. The Commission accepts Nevada Power’s proposal to create a program to market surplus PCs. The Commission finds that the sale of surplus PCs would mitigate the cost impact of renewable energy purchases for ratepayers. However, the Commission cautions Nevada Power that the intent of marketing surplus PCs is to benefit ratepayers and not to create a need for more PCs.

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iii. Amendments to the ORNI 42, LLC PPA

Parties' Positions

Nevada Power

380. Nevada Power request approval of two amendments to the previously approved long-term PPA between Nevada Power and ORNI 42, LLC ("ORNI"), dated February 2, 2010. Nevada Power additionally requests a determination that the amendments are prudent and the terms are just and reasonable pursuant to NRS 704.7821. (Exhibit 2 at 28, 43; Exhibit 3 at 36; Exhibit 91 at 59-61.)

381. Nevada Power states that in March of 2010 Nevada Power and ORNI entered into a PPA for a 25 MW nameplate facility, with an option for potential expansion of a second 25 MW generator. In late 2011 Nevada Power indicates that it learned that ORNI installed two 16 MW nameplate units. These additions led to discussions between the parties, which resulted in the third amendment to the PPA ("Third Amendment"). Nevada Power states that the Third Amendment establishes an hourly energy cap of 19.4 MWh on the installed 32 MW geothermal facility. ORNI has seven and one half years from the date of commercial operation to remove the cap; however, if it elects to remove the cap it forfeits the option to add a final generation unit. Additionally, the Third Amendment formally recognizes a name change from Hot Sulphur Springs II to Tuscarora. (Exhibit 91 at 59-60; Exhibit 96 at 184-192; Exhibit 102 at 3-4, 13-14.)

382. The fourth amendment to the PPA ("Fourth Amendment") addresses ORNI's requirements in connection with financing backed with a guaranty by the U.S. Department of Energy ("DOE"). DOE perceives an unacceptable exposure for "change in law" risk in the current PPA which must be resolved before committing to the financing. This amendment only applies to the final unit expansion option and would be void if ORNI elects to remove the cap
established in the Third Amendment without additional expansion. In exchange for the Fourth Amendment, ORNI provided additional protection for Nevada Power in the event of default by increasing their operating security from $20 per MWh to $30 per MWh. (Exhibit 91 at 59-60; Exhibit 96 at 193- 204; Exhibit 102 at 3-4, 14.)

BCP

383. BCP does not oppose Nevada Power’s request for approval of the two amendments to the previously approved long-term PPA between Nevada Power and ORNI. (Exhibit 48 at 3.)

Staff’s Position

384. Staff recommends the Commission accept the Third and Fourth Amendments to the previously approved ORNI 42 PPA. Staff states that the amended hourly cap provides a benefit to ratepayers by providing that energy generated in excess of the cap will be delivered for free for any given hour including any renewable portfolio credits produced during this time, as opposed to there being a $45 per MWh excess energy rate. (Exhibit 126 at 3-4.)

Commission Discussion and Findings

385. The Commission accepts Nevada Power’s request to approve the Third and Fourth Amendments to the previously approved long-term PPA between Nevada Power and ORNI 42 and finds that the amendments are prudent and the terms are just and reasonable pursuant to NRS 704.7821. The amended hourly cap provides a benefit to ratepayers by providing that energy generated in excess of the cap will be delivered for free for any given hour.

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iv. Integration of Intermittent Resources and Intermittency Impacts and Ancillary Service Costs Studies

Parties' Position

Nevada Power

386. Nevada Power requests approval of a methodology that utilizes the results of studies presented to the Commission in prior dockets, as well as upcoming near-term operating experience, to the greatest extent possible as its strategy for meeting its obligations related to ancillary services for variable generation projects should one be proposed within the Action Plan period. Additionally, Nevada Power is requesting approval for funding, not to exceed $800,000, to undertake studies of intermittency impacts and ancillary service costs if additional information is necessary during the Action Plan period, and if prior studies are not able to provide a reasonable proxy for such information. (Exhibit 2 at 15, 26; Exhibit 91 at 61, 63-64; Exhibit 103 at 2-4.)

387. NAC 704.8885(2)(h) requires the Commission to consider the requirements for ancillary services to integrate a long-term portfolio energy credits contract, long-term renewable energy contract or energy efficiency contract for a term of more than three years. (Exhibit 91 at 63.)

388. Specifically, Nevada Power states that its strategy for quantifying ancillary services for the Action Plan period is to use the Large Scale PV Integration Study completed in July 2011 to determine the costs and the regulation reserve requirements that will be necessary to integrate a proposed solar PV project in southern Nevada. Nevada Power also states that it

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13 NRS 704B.020 defines “Ancillary Services” as those generation services that 1) Are necessary to support the transmission of energy and capacity from resources to loads while maintaining reliable operation of the transmission system of the electric utility; and (2) are defined and established in applicable transmission tariffs on file with FERC.
14 This study is also submitted to the Commission pursuant to a compliance item in Docket No. 10-02009 directing Nevada Power to update its integration analysis for intermittent resources to more directly address the effects of Nevada Power’s gas-fired generation fleet.
plans to use the analysis conducted in support of the Integration of Renewable Resources in Northern Nevada report, submitted to the Commission in Docket No. 10-02009, to determine both the ability to accommodate a proposed wind project in northern Nevada and the amount of incremental regulating capacity necessary to reliably balance the resource. Should a wind-powered project be proposed in southern Nevada, Nevada Power states that it would attempt to use the near-term experience from Spring Valley Wind project to determine a regulation reserve requirement and associated costs. (Exhibit 91 at 63-65.)

389. Nevada Power states that in some instances, additional factors, such as a significant change in load or the merger of Nevada Power’s and Sierra’s Balancing Areas (“BAs”), additional ancillary cost analysis will be required. Nevada Power asserts that only if prior studies and/or experience do not provide a reasonable proxy for a specific proposed project, Nevada Power would undertake a new intermittency impacts and ancillary service cost study. Nevada Power states that this study, or studies, would seek to model the combined BA operation and could include a variety of sensitivities of both PV and wind in both the north and south. (Exhibit 91 at 64-65.)

BCP

390. BCP does not oppose Nevada Power’s request for funding, not to exceed $800,000, to undertake additional studies of intermittent resources and ancillary service costs if prior work and operating experience are not sufficient. BCP states that its position is predicated on Nevada Power’s obligation to prove that the undertaking of an additional study was necessary and prudent in a future rate case. (Exhibit 48 at 3-4.)

Staff

391. Staff recommends that the Commission reject Nevada Power’s request for
approval of funding for additional studies of intermittency impacts and ancillary service costs. Staff is not saying that Nevada Power should not conduct additional studies if it becomes necessary; but rather that the best option if new contracts are selected in the Action Plan period and previous studies are not sufficient, is to have Nevada Power proceed with the new study and simply seek recovery in its next general rate case. (Exhibit 126 at 5, 7-8; Exhibit 127 at 5, 7-8.)

392. Staff states the if the Commission were to approve Staff’s recommended 50 MW renewable RFP instead of the 250 MW, there is even less of a chance of a change from what the 2011 PV Study analyzed. Staff further states that Nevada Power’s concern that the additional study would be necessary is unreasonable given the large capacity amounts previously analyzed by the 2011 PV Study. (Exhibit 126 at 5-7; Exhibit 127 at 5-7.)

393. Staff agrees with Nevada Power’s assertion that it could not bring this request to the Commission in an IRP amendment once a renewable RFP was issued, contract executed and particular projects were known because of the time and expense involved with preparing for and executing an intermittency study. (Exhibit 126 at 5; Exhibit 127 at 5.)

**Nevada Power Rebuttal**

394. Nevada Power continues to request approval of intermittency study funding. Nevada Power states that the aggregate magnitude of nameplate values of PV resources is not the sole determining factor for whether a new intermittency study would be necessary. Additional factors such as the geographic location and technology of a project may also influence the applicability of the 2011 PV Study. Additionally, it is possible that an entirely different resource type such as wind, could be proposed, which would render the 2011 PV Study entirely inapplicable. The 2011 PV Study did not assess the consolidating of the balancing areas of Nevada Power and Sierra. (Exhibit 129 at 3-4.)
395. Nevada Power further states that if a study does become necessary and funding is not approved in this proceeding, the expense of the study would be treated as an operating expense in the next general rate case. Given that the study is either a very infrequent, or perhaps a one-time expenditure, such treatment would represent an anomaly. The more appropriate treatment is to record the cost in an asset account and request recovery with reasonable amortization time in a subsequent general rate case. (Exhibit 129 at 4-5.)

Commission Discussion and Findings

396. The Commission deems inadequate Nevada Power’s request for funding not to exceed $800,000 to undertake studies of intermittency impacts and ancillary service costs if additional information is necessary in the Action Plan period. The Commission accepts Nevada Power’s methodology that utilizes the results of previous studies presented to the Commission to estimate the costs and the regulation requirements related to ancillary services. The Commission finds compelling Staff’s testimony that if Nevada Power determines that it is necessary to gather additional information, Nevada Power can proceed with a new study and request to recover the prudently incurred costs in its next general rate case.

E. SNWA Second Power Exchange Agreement ("PEA")

Parties’ Position

Nevada Power

397. Nevada Power requests approval of a Second PEA with SNWA. Additionally, Nevada Power requests a determination that the terms and conditions of the Second PEA are just and reasonable, the costs associated with the Second PEA are prudently incurred, that Nevada Power may recover all just and reasonable costs associated with the Second PEA, and that the Second PEA qualifies as a retail power exchange under Nevada Power’s rate schedule Retail
Power Exchange ("RPE"). (Exhibit 6 at 1; Exhibit 91 at 33; Exhibit 101 at 3-4.)

398. Nevada Power states that the existing PEA with SNWA will expire May 31, 2013. Nevada Power states that it entered into a new PEA with SNWA that will begin June 1, 2013 and proceed through December 31, 2018. The Second PEA with SNWA, like the existing PEA, provides Nevada Power with the right to dispatch SNWA’s 25 percent share of the Silverhawk plant. Nevada Power will again be responsible for providing the natural gas necessary and will pay the variable O&M rate associated with the Silverhawk plant. In exchange for these rights, Nevada Power will deliver to SNWA, at the Mead 230 kW substation, 125 MW of firm energy during on-peak hours and 25 MW of firm energy during off-peak hours. (Exhibit 91 at 33; Exhibit 95 at 5-56; 101 at 3-4.)

399. Also consistent with the existing PEA, SNWA will provide Nevada Power with the exclusive right to utilize SNWA’s 125 MW point-to-point transmission contract from Harry Allen switchyard to the Mead 230 kilovolt ("kV") substation. However in the Second PEA, SNWA will pay all costs of the transmission contract. (Exhibit 91 at 33; Exhibit 95 at 5-56.)

400. Coincident with this IRP filing, Nevada Power is filing a modification to Rate Schedule Retail Power Exchange to reduce the required term of a retail power exchange permitted under that schedule from seven years to five years. (Exhibit 91 at 33.)

**BCP**

401. BCP does not oppose Nevada Power’s requests sought regarding the Second PEA with SNWA. (Exhibit 48 at 4.)

**Staff**

402. Staff recommends that the Commission find that the terms and conditions of the

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15 On July 19, 2012, Nevada Power filed Advice Letter 419 to revise Tariff No. 1-B-PUCN Sheet No. 36T, Schedule RPE.
Second PEA are just and reasonable, the costs associated with the Second PEA are prudently incurred and the Nevada Power may recover all just and reasonable costs associated with the Second PEA, and that the determination of whether the Second PEA qualifies as a retail power exchange under Nevada Power Rate Schedule Retail Power Exchange depends on the outcome of the currently pending Docket No. 12-07005. (Exhibit 124 at 13.)

403. Staff notes its concern with forced outage hours at Silverhawk as the plant ages and the potential cost impact to Nevada Power as a result of those outages. Staff states that the Silverhawk has averaged approximately 129 hours of forced outage during each summer from 2004 to 2012. If during a forced outage Nevada Power must purchase power on the market to supply SNWA with 125 MW, using the average number of 129 hours of forced outage during summer season, the cost to Nevada Power could total $225,750 per year or $1.1 million over the term of the Second PEA. (Exhibit 124 at 11.)

**Nevada Power Rebuttal**

404. Nevada Power continues to request approval of the Second PEA with SNWA. Nevada Power states that Staff misinterpreted outage data related to the Silverhawk facility. First, Nevada Power states that in calculating the average total of forced outage during each summer from 2004 to 2012 Staff used a number of hours that includes both full and partial outages. Nevada Power states that the average full outage hours for the summer seasons from 2004 to 2012 is 44 hours not 129 hours as stated by Staff. Second, Nevada Power states the Staff assumed that Nevada Power had to provide the full 125 MW to SNWA every outage hour. However, the Second PEA requires deliveries to SNWA of 125 MW during peak-hours and 25 MW during off-peak hours. Nevada Power asserts that if Staff made the two described adjustments, the average risk is reduced under Staff’s methodology to $58,137 per year, a lot less
than asserted by Staff. The full outage hours for 2004 to 2012 reflects about a 1 percent forced outage rate for Silverhawk, which Nevada Power states was utilized in its PROMOD analysis. Therefore the risk that Staff has attempted to quantify has been captured in the PROMOD.

(Exhibit 136 at 2-4.)

Commission Discussion and Findings

405. The Commission approves Nevada Power's Second PEA with SNWA and finds that the terms and conditions are just and reasonable, the costs are prudently incurred and that Nevada Power may recover all just and reasonable costs. No party contested these components of Nevada Power's request. The Commission finds that Nevada Power adequately addressed Staff's concerns regarding outages by clarifying the outage data related to the Silverhawk facility.

F. WestConnect Membership

Parties' Position

Nevada Power

406. Nevada Power requests approval to continue its involvement and membership in WestConnect during the Action Plan period. The total estimated budget for the Action Plan Period is $450,000, excluding AFUDC. Nevada Power states that the Action Plan budget for WestConnect has increased due to the increased participation obligation required to comply with Federal Energy Regulatory Commission ("FERC") Order No. 1000. Nevada Power's cost is estimated to be $146,000 in 2013, $150,000 in 2014, and $154,000 in 2015. Nevada Power states that it seeks authorization to fund continued participation in WestConnect during the Action Plan period assuming that the issues related to FERC Order No. 1000 are resolved in a manner that is in the best interest of NV Energy's customers so that NV Energy remains part of
WestConnect. Nevada Power is currently a member of WestConnect Steering Committee and WestConnect Transmission Planning Committee. (Exhibit 2 at 18, 28, 43; Exhibit 3 at 7, 36; Exhibit 91 at 85-87; Exhibit 104 at 8-10.)

**BCP**

407. BCP does not oppose Nevada Power’s request for continued involvement and membership in WestConnect. (Exhibit 48 at 4.)

**Staff**

408. Staff recommends that the Commission accept Nevada Power’s request to continue its involvement and membership in WestConnect. Staff states that it supports Nevada Power’s continued membership in WestConnect to comply with FERC Order Nos. 890 and 1000 mandates and requirements. (Exhibit 124 at 8-9.)

**Commission Discussion and Findings**

409. The Commission approves Nevada Power’s request to expend $450,000 over the Action Plan period to continue its membership and involvement in WestConnect. The Commission agrees with Nevada Power and Staff that there is value in participating in WestConnect particularly in light of FERC Order No. 1000 compliance requirements.

**G. Economic Plan**

**Parties’ Position**

**Nevada Power**

410. Nevada Power states that utilizing the results of the long-term load forecast, the Preferred DSM Plan and the Renewable Energy Plan, it identified its resource requirements over a full 30-year planning period. Nevada Power states that this analysis indicated that it does not need to add incremental supply side resources until 2018. Nevada Power further states that, in accordance with NAC 704.937 and 704.948, it developed and compared four alternative
expansion plans for meeting the projected needs for incremental capacity and energy. In selecting the Preferred Plan and Alternative Plan, Nevada Power stated that it evaluated various factors including the present worth of revenue requirement ("PWRR") for each alternative plan; the present worth of societal cost ("PWSC") for each plan; whether the plan mitigated risk; whether the plan provided adequate reliability; regulatory and financial constraints; whether the plan meets the RPS; and whether the plan meets the requirements of environmental protection. (Exhibit 91 at 116-118; Exhibit 97 at 13-14.)

411. The first expansion plan ("Case 1") relies exclusively on market purchases to meet the first new incremental capacity and energy requirement in 2018. The second expansion plan ("Case 2" or the "Preferred Plan") centers on conventional gas-fired technologies including, a block of five simple-cycle combustion turbines (375 MW) in 2018 and an additional nine units in 2021. The third expansion plan ("Case 3" or the "Alternative Plan") backfills open capacity with a 275 MW Tolling agreement in 2018 through 2027; five combustion turbines in 2021; and four combustion turbines in 2028. The fourth expansion plan ("Case 4") is based on company-built renewable energy resources in 2018 and satisfies the requirement that one expansion plan be of low carbon intensity. All expansion plans assume completion of the ON Line by December 31, 2013 and in-service in January 2014. (Exhibit 91 at 116, 124-128; Exhibit 97 at 14-16.)

412. NAC 704.9357 requires Nevada Power to assess the "net economic benefit" of the alternative plans, also referred to as "economic impacts." The net economic benefits include both positive impacts of greater expenditure in Nevada and the negative impacts of higher electricity rates for consumers and businesses. The PWSC of competing resources must be adjusted by the Commission to take into consideration either all, or only a portion, of the
calculated economic benefits. (Exhibit 91 at 153-54; Exhibit 134 at 33-36.)

413. Nevada Power states that it retained the services of NERA Economic Consulting to provide analysis of the environmental costs and economic benefits of potential expansion plans. Nevada Power states that NERA identified alternative methods and model for assessing the net economic impacts of resource alternatives. The two major alternatives are the Regional Economic Models, Inc. ("REMI") and the IMPLAN economic multipliers model ("IMPLAN"). Nevada Power indicates that the REMI is the appropriate approach to calculate both positive expenditures effects and negative electricity rate impacts. Nevada Power asserts that developing the additional data and incurring the additional cost associated with the REMI model to incorporate the negative impacts of a resource is appropriate when the alternative cases in this IRP differ significantly in their potential electricity price effects and when the Commission is faced with an immediate decision on major capital commitments. These two conditions do not hold true for this IRP because the alternative cases differ only slightly and the Commission is not being asked to make a capital decision. Therefore, Nevada Power continued to use the relatively cost-effective IMPLAN model and estimates only the positive economic impacts of the cases in this docket. (Exhibit 91 at 153-155; Exhibit 94 at 62-63; Exhibit 134 at 33-36.)

414. Nevada Power states that based in large part of its PWRR and PWSC ranking, it selected Case 2 as the Preferred Plan. Nevada Power states that the analysis shows that Case 2 is the lowest cost alternative over the greatest range of potential scenarios. It also provides operating flexibility, maintains system reliability and allows Nevada power to economically meet its compliance with RPS. Nevada Power designated Case 3 as it the Alternative Plan. (Exhibit 91 at 139-142; Exhibit 97 at 15-17.)

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BCP

415. BCP recommends that the Commission not make a finding with respect to Nevada Power’s Preferred Plan. The description of the Alternate Plan and supporting narrative of the Supply Side plan are misleading. BCP states that there is a 224 MW tolling agreement of 2014 to 2018 included in the economic analysis of the Alternative Plan. This resource is included in the L&R tables for the Alternative Plan. The tolling agreement increases the long position in 2014 relative to the Preferred Plan from 42 MW to 266 MW. The Alternate Plan would be less expensive by approximately $50 million on a PWRR basis. The four expansion plans would be of equal cost on a five-year PWRR basis if all four included the same resources prior to 2018. For the 10-year PWRR the Alternate Plan would be the least costly by approximately $62 million. For a 20-year PWRR the Alternate Plan and Preferred Plan are both approximately equal to least cost. BCP states that the Commission should address Nevada Power’s requests for relief in light of this hidden input in Case 3. (Exhibit 48 at 25-28.)

NCARE

416. NCARE recommends the Nevada Power change the way it models the future value of water so that it steadily increases, as would be expected as water demand grows and/or supplies decline because of drought or climate change. NCARE suggests using a range of several different real, inflation adjusted, rates of increase such as five percent per year, 10 percent per year, and 15 percent per year. In addition, NCARE recommends that the Commission acknowledge that water-efficient sources of energy, including many forms of renewable energy, energy efficiency, and dry-cooled thermoelectric facilities, can act as a hedge against the risk of short or long-term drought. NCARE also recommends that Nevada Power

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16 NCARE recommended that Nevada Power update the values used by NERA report in its analysis of the opportunity cost of water in her pre-filed direct testimony. (Exhibit 121 at 3) However, NCARE testified that it
include more comprehensive water use data in their resource plan. Specifically, NCARE recommends that the company include annual water use data in gallons or acre-feet per year for each year of the resource plan period and each scenario. (Exhibit 121 at 3-4, 13-14.)

Staff

417. Staff recommends that the Commission find that the four expansion plans that Nevada Power has developed and considered meet the regulatory requirements. Staff states that Nevada Power provided a detailed listing of all generation additions for each expansion plan for the base, high and low load forecast scenarios as required by NAC 704.937(1). Staff states that Case 4 qualifies as the low carbon intensity plan required to be included by NRS 704.741, NAC 704.9355(1)(e) and NAC 704.937(1). Case 1, 2, and 3 meet RPS requirements and Case 4 exceeds RPS. (Exhibit 82 at 2, 18-20.)

418. Staff further recommends that no expansion plan be adopted as the Preferred Plan because of issues regarding how Nevada Power’s presented, skewed and selected the Preferred Plan. Staff recommends that the Commission clarify in its Order that although it is accepting certain Action Plan items to the Preferred Plan, it is not accepting the Preferred Plan as filed nor is it giving any presumptive credence to the generation additions included in the Preferred Plan and specify the inadequacies of the Preferred Plan. (Exhibit 128 at 23-24.)

419. Staff agrees with Nevada Power, that its use of the IMPLAN model, which estimates only the positive economic impacts under NAC 704.9357, in the current IRP is acceptable because Nevada Power is not asking for approval of any new major capital investments and the Preferred and Alternative Plans differ only slightly in environmental cost and expenditure estimates. (Exhibit 82 at 10-11.)

agrees with the values NERA used to model the opportunity cost of using water for power generation. (Tr. 842-843.)
420. Staff further states that the Commission should not adjust the PWSC of the expansion plans pursuant to NAC 704.9357(4) by taking into consideration the net economic benefits to the State. Staff asserts that the positive economic impacts are highly correlated with the PWRR. Since the use of the more complex costly model to estimate the negative economic impacts is not warranted in the current IRP, Staff states there is no constructive information brought by the economic benefit estimates. (Exhibit 82 at 11.)

421. Staff recommends that the following estimates are acceptable for the purposes of evaluating Nevada Power’s expansion plans pursuant to: (a) carbon dioxide costs, (b) sulfur dioxide costs, (c) the environmental costs of other air emissions (not covered by cap-and-trade program), and (d) the costs of additional water resources. (Exhibit 82 at 2, 12, 20.)

422. Staff states that NERA’s estimation methodologies for air emissions are the same as previous proceedings. Staff states that it reviewed the methodologies used for estimating both air emissions and additional water consumption and found them to be sound. Staff further states that the dollar value for both air emissions and additional cost of water are very small relative to the PWRR and to carbon costs. (Exhibit 82 at 16-17.)

423. Staff states that Nevada Power included a “stealth” 224 MW tolling agreement starting in 2014 as part of Case 3, which is four years earlier than needed. Staff states that Nevada Power has not provided an explanation in this filing as to why the tolling agreement starts in 2014, as all of the text in the filing references 2018. Staff further states that the starting of the tolling agreement in 2014 is the sole reason why Case 3 has a $50 million higher five-year PWRR and causes Case 3 to only have a $7 million lower 10-year PWRR than the Preferred Plan. (Exhibit 82 at 19-20; Exhibit 128 at 18-19.)

424. Furthermore, in the later years of the planning horizon, Case 3 is configured such
that it is running a considerably larger open capacity position than is Case 2. Staff states that 2020 to 2021 is the time period when the 2011 Western Electric Coordinating Council ("WECC") Power Supply Assessment drops below 15 percent reserve margin, thereby resulting is assumed increases in purchased power capacity costs. Staff states that it could be the combination of the larger open position at the time when capacity prices are being totally phased into the pricing forecast that is skewing the longer term 20-year PWRR and PWSC in favor of Case 2. However, Staff states that without re-optimizing Case 3 such that it has a comparable open position to that of Case 2, any comparison of the 20-and 30-year PWRR is not appropriate and is somewhat meaningless. Staff states the Nevada Power does not typically have these large spreads in open/long positions from the preferred and alternate plans. (Exhibit 82 at 19-20; Exhibit 128 at 20-22.)

Nevada Power Rebuttal

425. Nevada Power continues to recommends that the Commission accept Nevada Power's Preferred Plan. Nevada Power states that the Preferred and Alternative Plans are comparable with respect to their main issues. Nevada Power states that NAC 704.937(6)(a) requires each alternate plan to have adequate, not equivalent, reliability. Additionally, Nevada Power asserts that NAC 704.948(1) specifically contemplates that each alternate plan have different reliability and that the utility take into account the different attributes of each alternative plan when evaluating the plans. (Exhibit 138 at 3-4.)

426. Nevada Power contends that it could have described Case 3 in greater detail, but did not hide the 224 MW tolling agreement. Nevada Power states that it used the 224 MW tolling agreement in L & R table for Case 3 to reduce its 2014 open position. (Exhibit 138 at 4-5.)
427. Nevada Power states that it does not agree with Staff that the open positions of alternative cases should be equivalent in order for the Commission to accept a resource plan as adequate. Nevada Power asserts that it is virtually impossible to develop alternative plans with equivalent open positions. Nevada Power states that it did not model the tolling agreement as coming on in 2018 because it did not have detailed information regarding the availability and cost of such a resource. Nevada Power states that it based the 224 MW of tolls for 2014 on reliable cost information derived from bona fide responses to a recent RFP. (Exhibit 138 at 5-6.)

428. Nevada Power states that reconstructing Case 3 as suggested by Staff, and moving the 224 MW toll from the 2014 to 2018, would not impact Nevada Power’s selection of the Preferred Plan. Nevada Power states the result would be the same; it would not alter its approach to any new supply-side resources or expenditures during the Action Plan period. Nevada Power states that the addition of expansion plans in the context of this IRP is neither instructive nor necessary. (Exhibit 138 at 5-6.)

429. Nevada Power states that a detailed evaluation of the expected future cost of water in Nevada could lead to more precise estimates of Nevada Power’s future water costs, although the resulting forecast could still be highly uncertain. The time and effort required to conduct such analysis would be paid for by Nevada Power ratepayers and water accounts for an extremely small percentage of the total costs calculated in the IRP. Nevada Power states that it will continue to re-evaluate the methods and data used to estimate water prices and values in IRP filings. (Exhibit 138 at 15-17.)

430. Nevada Power states the NCARE did not explain the mechanism by which water-saving investment can act as a hedge against the risk of short and long-term droughts.
Additionally, because of the extremely small cost of water in the context of the PWSC, it is highly unlikely that the inclusion of the additional data suggested by NCARE would affect the relative ordering of alternative expansion plans. (Exhibit 138 at 17-19.)

**Commission Discussion and Finding**

431. The Commission accepts Nevada Power’s economic plan as filed. The Commission finds that the four expansion plans developed and considered by Nevada Power meet regulatory requirements. No party contested Nevada Power’s compliance with regulatory requirements.

432. The Commission finds that the IMPAN model sufficiently quantifies the net economic benefits to the State of the alternative expansion plans in this IRP filing. The Commission agrees with Staff and Nevada Power that use of the IMPLAN model in this IRP, which estimates only the positive economic impacts under NAC 704.9357, is acceptable because Nevada Power is not asking for approval of any new major capital investments and the preferred and alternative plans differ only slightly in environmental cost and expenditure estimates.

433. The Commission agrees with Staff that no adjustment to the PWSC of the expansion plans is necessary pursuant to NAC 704.9357(4) based on the net economic analysis performed in this proceeding.

434. The Commission deems Nevada Power’s designation of Case 2 as the Preferred Plan inadequate. The Commission is compelled by Staff’s testimony that Nevada Power did not adequately justify the basis for adopting Case 2 as its Preferred Plan. The Commission agrees with Staff that the analysis is flawed due to the concerns regarding the 224 MW tolling agreement, the variations in the open position and the inability to evaluate the Preferred and Alternative Plans on a comparable basis. The Commission’s approval of certain Action Plan
items does not translate to acceptance of the Preferred Plan including the generation additions included therein.

435. The Commission finds that Nevada Power's Application adequately demonstrates the economic, environmental and other benefits to this State as required by NRS 704.746 (4)(c).

436. The Commission encourages Nevada Power to continue to evaluate the methods and data used to estimate water prices and values in IRP applications.

H. Financial Plan

Parties’ Position

Nevada Power

437. Nevada Power states that it utilized the capital expense recovery ("CER") model to prepare the capital expenditures and cash flow analysis for its Preferred Plan and Alternative Plan. Nevada Power states that cash generated from internal operations is insufficient to cover the capital expenditures required by the Preferred and Alternative Plans. In order to meet funding requirements, maintain coverage ratios, target capital structure and preserve investment grade credit metrics, external financing is required. Nevada Power states that it will be able to access capital markets in order to finance the plans. The external financing requirement under the Preferred Plan totals $3.7 billion. Nevada Power states that this amount includes expenditures related to ongoing operations and previously approved capital projects. Nevada Power is not seeking authority to proceed with the construction of the 2018 and 2021 peaking units identified in the Preferred Plan at this time, even though their costs are reflected in the CER model. Nevada Power will return to the Commission requesting authority to proceed with the peaking units as uncertainty is resolved and the circumstances warrant. (Exhibit 91 at 167-169; Exhibit 105 at 2-5.)
Staff

438. Staff recommends that the Commission find that Nevada Power can finance its Preferred and Alternative Plans to the extent identified within this docket. Staff states that unlike previous IRP filings, Nevada Power does not request resource plan approval for a major new project. Nevada Power indicates that over the next several years it intends to reduce debt, consider new investment opportunities, and increase its dividend payment to shareholders. Staff further states that it is not recommending that the Commission find that the future costs related to the identified projects are reasonable. The actual project expenditures are reviewed for reasonableness and propriety at the time Nevada Power seeks to recover the costs. (Exhibit 123 at 2-4, Attachment KEL-2.)

Commission Discussion and Findings

439. The Commission accepts Nevada Power’s Financial Plan to the extent identified in this docket.

I. Long Term Avoided Cost (“LTAC”)

Parties’ Position

Nevada Power

440. Nevada Power states that it calculated the LTAC based on the hourly marginal costs from a PROMOD simulation for the Preferred Plan, assuming the open position is filled with market purchases. During the July-September period the capacity charge included in the market price forecast was added to the on peak hourly marginal energy cost. Nevada Power proposes that the availability of long-term avoided cost rates be limited to a maximum of 25 MW of Qualifying Facilities (“QF”) contracts and should act as a cap on the actual payments under a long-term QF contract. (Exhibit 91 at 165-66.)
BCP

441. BCP recommends that the Commission direct Nevada Power to conduct workshops or otherwise meet with parties to address and resolve issues related to the calculation of the avoided cost. BCP state that the first issue with the methodology is that avoided costs are typically based on a supply-side only plan, which typically results in a slightly higher marginal cost. BCP states that having DSM already embedded in the marginal cost calculation understates the avoided cost and undervalues the DSM being evaluated using the screening models. BCP asserts that the second issue is that the avoided costs are allegedly based on the marginal costs for the Preferred Plan; the Preferred Plan includes the Preferred DSM plan, which is allegedly determined by evaluating DSM resources using the avoided costs. BCP states that Nevada Power could not have developed the preferred DSM plan by evaluating DSM resource options using avoided costs that were based on a system plan which already included the preferred DSM plan. (Exhibit 107 at 24-25.)

Staff

442. Staff recommends that the Commission approve Nevada Power’s proposed methodology for its LTAC and its proposed 25 MW block off size for QFs. Staff states that Nevada Power did not comply with NAC 704.9492(3) by not breaking out its proposed LTAC into a capacity and energy component as specified by NAC 704.9492(1). Staff states that although there are different methods a utility may use to compute LTAC, using the hourly marginal energy costs from the PROMOD simulations for the Preferred Plan is an acceptable methodology. Additionally, the development and use of a utility’s LTAC has become a somewhat antiquated and outdated tool. It is no longer relevant when determining what price to pay for renewable energy resources. Staff reviewed the bid summaries from Nevada Power’s
last QF RFP and none of the bids conformed with the RFP issued. (Exhibit 128 at 24-26.)

**Nevada Power Rebuttal**

443. Nevada Power states that the calculation of avoided cost is consistent with the methodology that Nevada Power and Sierra have used in previous resource plan filings. The methodology was last reviewed in Docket No. 10-02009. Nevada Power states it is open to considering alternative and/or improvements to the methodology. However Nevada Power stated that it already conducts workshops and no additional direction is needed. (Exhibit 138 at 10-11.)

**Commission Discussion and Findings**

444. The Commission accepts Nevada Power’s proposed methodology for calculating LTAC and the use of 25 MW blocks for QFs. However, the Commission finds compelling BCP’s concerns regarding how DSM is accounted for in calculating the LTAC. BCP’s concerns would be appropriately addressed in the investigatory docket proposed earlier in this Order.

**J. Reid Gardner**

**Parties’ Position**

**Moapa**

445. Moapa states that the pollutants from the Reid Gardner facility located just a mile from Tribal Council offices is affecting the Moapa Band of Paiutes who live in the community center of the Reservation. Moapa states that the Tribe is impacted by the coal ash dust; dust and liquids from the wastewater ponds; dust from coal piles; sulfur dioxide, NOX, particulate matter, mercury and other emission from the smokestacks; and ND smoke from unintended fires at the facility. Moapa states that many of the members of the tribe experience respiratory problems, headaches, dizziness, high blood pressure, heart problems, strokes, and/or cancer. Moapa
requests that the Commission act to protect the members of the tribe from further pollution from the facility. (Exhibit 155 at 1-3.)

**Nevada Power Rebuttal**

446. Nevada Power states that the EPA is required under the Clean Air Act (42 U.S.C. section 7401 et seq.) to set National Air Quality Standards ("NAAQS") for pollutants considered harmful to public health and environment. NAAQS govern operation of Reid Gardner and set ambient air quality levels that should not be exceeded. Therefore, Nevada Power states that the NAAQS serve as the basis for emission standards in new rules and emission limits in air permits. In compliance with its permits, the Reid Gardner station is required to maintain several ambient air quality monitoring sites in the vicinity of the facility, including one monitor on the Reservation. Nevada Power states that a review of the most recent five years of data from the Reservation monitor indicates that there have been no occasions on which the ambient air quality standards have been exceeded at the location on the reservation. (Exhibit 158 at 2-4.)

**Commission Discussion and Findings**

447. The Commission acknowledges the environmental and health concerns raised by Moapa. However, Nevada Power is not requesting any approvals in this Docket with respect to Reid Gardner. The Commission will address issues associated with Reid Gardner in a subsequent Nevada Power IRP Amendment application that is expected to be filed in 2013.

**K. Past Compliances and Directives**

i. **Items from Docket No. 10-02009**

**Parties’ Position**

**Nevada Power**

448. Nevada Power requests that the Commission find that it has satisfied Compliance
Item 6 from the Order in Docket No. 10-02009 (ordering Paragraph 10 in the Order issued July 30, 2010, in Docket No. 10-02009) requiring Nevada Power to update its integration analysis for intermittent resources to more directly address the effects of Nevada Power's gas-fired generation fleet and Compliance Item 21 from the Order in Docket No. 10-02009 (paragraph 370 of the Order issued on July 30, 2010, in Docket No. 10-02009) related to permitting activities for a Integrated Solar Combined Cycle ("ISCC") plant. (Exhibit 2 at 35.)

449. Nevada Power states that it completed the 2011 PV Study pursuant to a compliance item in Docket No. 10-02009. Nevada Power further states that the 2011 PV Study provided a comprehensive analysis of the regulations for a wide variety of PV penetration scenarios, with sensitivities for a reasonable spectrum of distributed PV generation. Nevada Power further states that the modeled projects in the 2011 PV Study sufficiently cover the geographic area of southern Nevada service territory. (Exhibit 91 at 63-66; Exhibit 103 at 2.)

Staff

450. Staff recommends that the Commission find that Nevada Power has satisfied Ordering Paragraph 10 of the Order issued on July 30, 2010 in Docket No. 10-02009. Staff asserts that the 2011 PV Study satisfies Ordering Paragraph 10 as it investigates topics such as regulation of load following reserve requirements, solar impacts on regulation and load following requirements, balancing area reserve requirements, identifying challenging operating hours, and ramping deficiencies. (Exhibit 126 at 9-10; Exhibit 127 at 9-10)

451. Staff further recommends that the Commission find that Nevada Power has satisfied paragraph 370 the Commission's Order issued July 30, 2010, in Docket No. 10-02009 as it relates to permitting activities for an ISCC plant. Staff states that Nevada Power filed an Initial Application for a Permit to Construct the proposed ISCC facilities on February 16, 2010,
designated Docket No. 10-02016. However, Nevada Power has suspended its permitting efforts until it deems that an ISCC plant would be cost-effective. (Exhibit 124 at 13-14.)

**Commission Discussion and Findings**

452. The Commission finds that Nevada Power has satisfied Ordering Paragraph 10 of the Order issued on July 30, 2010 in Docket No. 10-02009. The Commission also finds that Nevada Power has satisfied paragraph 370 the Commission’s Order issued July 30, 2010, in Docket No. 10-02009. No party contested the fact the Nevada Power satisfied these compliances.

**ii. Directive Item 6 from Docket No. 11-03014**

**Parties’ Positions**

**Nevada Power**

453. Nevada Power requests that the Commission find that it has satisfied Compliance Item 8 from the Order in Docket No. 11-03014 (directive Item 6 in the Order issued on February 2, 2012, in Docket No. 11-03014), requiring Nevada Power to improve the accuracy of its estimating process for transmission interconnection costs and to inform the Commission of its progress on this item in its 2012 IRP. (Exhibit 2 at 37.)

454. Nevada Power states that the process for determining interconnection cost estimates associated with interconnection requests is specified by the FERC-approved Open Access Transmission Tariff (“OATT”). The procedure included three study phases for interconnection request: (1) a Feasibility Study; (2) a System Impact Study; and (3) a Facilities Study. Nevada Power further states that the cost estimates for the Feasibility and System Impact Study phases are non-binding. Only the cost estimate associated with the Facility Study is construction quality and binding. The cost estimate for PPAs that are submitted for approval in
an IRP are derived from the most recent completed interconnection study for the project and the quality of the estimate is dictated by the phase of study the project is in. In order to provide a construction quality estimate prior to approval of PPAs, it would be necessary to have the Facilities Study complete before submitting the PPA for Commission approval. (Exhibit 91 at 113-114; Exhibit 104 at 10.)

455. Nevada Power asserts that if it were to require the submittal of a binding cost estimate like those generated in the Facilities Study it is possible that all of the bidders into the RFP could require Nevada Power to provide Facilities Studies, taxing already limited resources with projects that may not have a realistic chance for success. Additionally, Nevada Power states that because it must analyze projects sequentially pursuant to the OATT and cannot prioritize projects by likelihood of viability, weaker projects could clog the queue. Nevada Power also asserts that the additional interconnection costs incurred in order to prepare binding cost estimates before submitting a response to a RFP and before IRP approval may drive developers away from pursuing projects in Nevada. Therefore, Nevada Power asserts that the current structure whereby preliminary cost information from the Feasibility Study is provided at the time of a RFP, strikes a reasonable balance between the desire for a precise estimate and the practical realities of the renewable development process. (Exhibit 91 at 113-114; Exhibit 104 at 10.)

Staff

456. Staff recommends that the Commission find that Nevada Power has satisfied Directive Item 6 from the Order issued February 2, 2012, in Docket No. 11-03014. Staff states that it agrees with Nevada Power on the possible consequences that could arise from performing the Facilities Study before seeking IRP approval. Additionally, Staff states that Nevada Power is
currently proposing changes in its OATT to FERC, which includes a pre-application process that would enable field visits in order for Nevada Power to determine feasibility of interconnection requests. (Exhibit 127 at 10-12; Tr. at 979.)

**Nevada Power's Rebuttal Position**

457. Nevada Power asserts that the interconnection cost estimates provided in the Feasibility and System Impact Studies are fairly close to the estimate provided once the Facilities Study is completed. Nevada Power further states that the proposed changes to the OATT and generator interconnection process will improve the quality of Feasibility and System Impact Study cost estimates. (Exhibit 135 at 4-8.)

**Commission Discussion and Findings**

458. The Commission finds that Nevada Power has satisfied Directive Item 6 from the Order issued February 2, 2012, in Docket No. 11-03014. No party contested the fact that Nevada Power satisfied the directive.

iii. **Directive Item 7 from Docket No. 11-03014**

459. Nevada Power requests that the Commission find that it has satisfied Compliance Item 9 in the Order in Docket No. 11-03014 (directive Item 7 in the Order issued on February 2, 2012, in Docket No. 11-03014), requiring Nevada Power to evaluate its current methods and identify alternative methods for assessing the economic benefits to the State for resources alternatives that will more accurately quantify the range of economic costs and benefits in a cost-effective and practical manner in its 2012 IRP filing. Nevada Power states that NAC 704.9357 requires it to estimate the net economic benefits to the State in selecting a resource option but does not include specific language on how to assess the negative economic impacts of higher

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17 Staff’s direct testimony filed on October 1, 2012, recommended that the Commission find that Nevada Power had not satisfied Directive Item 6 of the Order in Docket No. 11-03014. However, Staff changed its recommendation in errata to testimony filed on October 22, 2012.
electricity rates. Directive 7 directed Nevada Power, on a going forward basis, to identify an alternative method that more accurately quantifies the economic benefits of resource to the State. (Exhibit 2 at 37; Exhibit 91 at 154; Exhibit 134 at 33-35.)

460. Nevada Power states that it retained the services of NERA Economic Consulting to provide analysis of the environmental costs and economic benefits of potential expansion plans. Nevada Power states that NERA has identified alternative methods and models for assessing the economic impacts of resource alternative. The two major alternatives are the REMI and the IMPLAN. Nevada Power indicates that the REMI is the appropriate approach to calculate both positive expenditure effects and negative electricity rate impacts. However, Nevada Power also states that the REMI is a more costly model and requires Nevada Power to develop additional information. Nevada Power continued to use the relatively cost-effective IMPLAN model and estimates only the positive economic impacts of the cases in this Docket. (Exhibit 91 at 153-54; Exhibit 94 at 62-63; Exhibit 134 at 33-36.)

Staff's Position

461. Staff recommends that the Commission find that Nevada Power has satisfied Directive Item 7 from the Order issued February 2, 2012, in Docket No. 11-03014. Staff agrees that the NERA June 2012 Economic Consulting Report, Environmental and Economic Impacts of the 2012 Integrated Resource Plan for Nevada Power evaluates the current method and identifies the alternative REMI and IMPLAN methodologies. Staff further agrees with Nevada Power, that its use of the IMPLAN model, which estimates only the positive economic impacts under NAC 704.9357, in the current IRP is acceptable because Nevada Power is not asking for approval of any new major capital investments and the preferred and alternative plans differ only slightly in environmental cost and expenditure estimates. Therefore, Staff states that the more
complex and costly REMI model is not warranted in this case. (Exhibit 82 at 8-12.)

**Commission Discussion and Finding**

462. The Commission finds that Nevada Power has satisfied Directive Item 7 from the Order issued February 2, 2012, in Docket No. 11-03014. As discussed above, the Commission agrees with Staff and Nevada Power that use of the IMPLAN model in this IRP is acceptable.

**IX. INTEGRATED ANALYSIS OF SUPPLY SIDE AND DEMAND SIDE RESOURCES**

**Parties' Position**

**BCP's Position**

463. BCP states that the Commission should direct NV Energy to make improvements to its integrated resource planning process and filings for future IRP, ESP and Annual DSM Applications. The first category of improvements contain specific improvements to NV Energy's broad planning procedures and the second category of improvements recommends that the Commission direct NV Energy to conduct workshops and otherwise meet with parties to address and resolve issues. (Exhibit 107 at 2, 16.)

464. BCP recommends that the Commission order NV Energy to perform and provide an analysis that compares the annual revenue requirements and the annual average rates for each alternative plan consisting of alternative DSM portfolios and corresponding supply resources. BCP states that NV Energy already filed this information for its Preferred Plan pursuant to NAC 704.0401(1). BCP further states that NAC 704.937(3) already requires the utility to calculate the PWRR for each alternative plan. The calculating of the PWRR requires first calculating the annual revenue requirement on a system. So, BCP asserts the information needed is already prepared by NV Energy. Such comparison will allow the Commission and parties to do a direct side-by-side comparison of the effects of alternative plans on system costs and system average
rated on a year-by-year basis. Additionally, the comparative system level analysis is based on
dynamic models that dispatch the utility generating plants based on the loads after DSM, so the
impact of changing DSM levels can be determined. (Exhibit 107 at 17-19.)

465.  BCP recommends that the Commission order NV Energy to analyze a no new
DSM case among the alternative system plans. NV Energy analyzed the preferred, low and high
DSM cases, and considered, but did not analyze a case which suspends DSM through the Action
Plan period. BCP states that the Commission, in reviewing DSM could assess the benefits of
various levels of new DSM against a benchmark of supply side only resources. The analysis
would clearly lay out the relative revenue requirements and rate impacts of viable alternative
system resource plans and quantify how much value DSM adds to the resource mix. Evaluating
the supply side only plan for new resources is appropriate for establishing priorities among
options for demand and supply resources pursuant NAC 704.9465(2) as the primary function of
integrated analysis. (Exhibit 107 at 19-20.)

466.  BCP recommends that the Commission order NV Energy to perform an integrated
analysis to determine the appropriate mix of supply side and demand side resources. Currently,
Nevada Power develops a Preferred DSM Plan which it uses to modify load forecast. The
resulting load forecast is then used to develop the alternative supply plans. All of NV Energy’s
alternative supply plans are based on the Preferred DSM Plan. Thus there is no way to determine
whether a different DSM portfolio would be beneficial in addition to the supply plan to meet
various contingencies. NV Energy’s current method does not allow DSM to be part of the
solution to unexpected conditions such as higher or lower load growth, more or less greenhouse
gas regulation, higher or lower fuel costs or purchase power costs. BCP states that this problem
could be easily resolved by considering several DSM portfolios, each with corresponding load
forecasts and supply side resource plans to meet those forecasts. BCP asserts that it would not be necessary to run all permutations of the resource plans with all of the DSM portfolios if some indicative ones were selected that would test the relative benefits of changing DSM resources. (Exhibit 107 at 20-21.)

467. BCP recommends that the Commission order NV Energy to include and report all costs in the comparative system level analyses. For the purposes of comparative analyses, the total revenue requirement should be presented for each alternative plan. NV Energy's current economic analysis for various alternative plans includes PROMOD and CER analyses to develop annual revenue requirements for the alternative plans. The revenue requirements do not include recovery of capital costs associated with the existing system or the costs of the DSM program. Currently, NV Energy's financial analysis included revenue requirement for recovery of capital costs for existing system as well and DSM program, but only for the preferred plan and one supply side alternative plan. The production cost, capital cost and DSM program costs would vary with alternative plans, but the capital cost of the existing system would be the same across all plans. (Exhibit 107 at 21-22.)

468. BCP recommends that the Commission direct NV Energy to conduct workshops or otherwise meet with the parties to address and resolve issues related to the limitation of the DSM screening tools. BCP states that the screening tools that are used to assess DSM measures and programs are based on avoided costs and rates that are static. The value of all DSM measures and programs is determined by multiplying the savings by the avoided costs. BCP states that the problem is that the avoided cost changes as the resources are added. The limitations mean that the models cannot be expected to produce reliable system level results and should not be relied upon for that purpose. (Exhibit 107 at 23-24.)
469. BCP recommends that the Commission direct NV Energy to conduct workshops or otherwise meet with parties to address and resolve issues related to the calculation of the avoided cost. BCP states that the first issue with the methodology is that avoided costs are typically based on a supply-side only plan, which typically results in a slightly higher marginal cost. BCP states that having DSM already embedded in the marginal cost calculation understates the avoided cost and undervalues the DSM being evaluated using the screening models. BCP asserts that the second issue is that the avoided costs are allegedly based on the marginal costs for the Preferred Plan; the Preferred Plan includes the Preferred DSM Plan, which is allegedly determined by evaluating DSM resources using the avoided costs. BCP states that NV Energy could not have developed the preferred DSM plan by evaluating DSM resource options using avoided costs that were based on a system plan which already included the Preferred DSM Plan. (Exhibit 107 at 24-25.)

470. BCP recommends that the Commission direct NV Energy to conduct workshops or otherwise meet with parties to address and resolve issues related to the quantification of the DSM contribution in forecasting and resource planning. NV Energy begins with DSM program design that identifies the MWs and MWhs saved. NV Energy then creates an adjusted energy intensity parameter that reflects the program savings and incorporates this energy intensity into its statistically adjusted end-use ("SAE") load forecasting model. NV Energy then asserts that half of the energy savings is already in the SAE forecast. BCP states that NV Energy’s assertion that 50 percent of the DSM savings is already in the SAE is arbitrary. BCP states that the NV Energy needs to do a better job of identifying DSM savings and their filing should include a tabulation of the impacts of DSM on energy and peak demand that is NV Energy’s proposal. (Exhibit 107 at 25-27.)
471. BCP recommends that the Commission direct NV Energy to conduct workshops or otherwise meet with parties to address and resolve issues related to the direct modeling of demand response in PROMOD. NV Energy models Demand Response as a fixed adjustment to the load curve at specific times. PROMOD is then used to model the supply resources needed to serve the new post Demand Response load shapes. BCP states that PROMOD apparently has the capability of modeling the Demand Response directly and Demand Response would in effect be modeled like a plant and dispatched when needed. NV Energy does not use this feature. (Exhibit 107 at 27-28.)

472. BCP recommends that the Commission direct NV Energy to conduct workshops or otherwise meet with parties to address and resolve issues related to the optimization of resource plans. BCP states that NV Energy models its DSM plans without optimizing the balance of system supply plans. Thus when comparing low DSM, to the high DSM case the planned generation capacity is unchanged in size or timing. The additional capacity required to serve the low DSM case compared to the high case is simply purchasing more energy and capacity at market prices. It is probable that the cost of the supply portion of the system plan could be reduced by adjusting the generating capacity in response to different DSM portfolios. (Exhibit 107 at 28-29.)

**NV Energy’s Rebuttal Position**

473. NV Energy agrees with BCP’s recommendation that the Commission Order NV Energy to perform a comparative system analysis of alternative plan with alternative DSM portfolios to the extent that high and low DSM cases are evaluated as sensitivities against the Preferred Plan. NV Energy states that this would add two case runs to the Preferred Plan analysis. NV Energy opposes BCP’s proposal to perform production cost analysis of large
numbers of DSM portfolio alternatives. Such a requirement would be very costly in terms of internal labor and computing time and would provide little discernable difference between system level alternatives. (Exhibit 138 at 7-8.)

474. NV Energy states that analysis of a no new DSM case similar to the high and a low case evaluated as sensitivities against the Preferred Plan is manageable if the Commission contends that such a case would be useful in its deliberations. (Exhibit 138 at 8.)

475. NV Energy disagrees with BCP’s recommendation that the Commission order the NV Energy to perform an integrated analysis to determine the appropriate mix of supply side and demand side management. NV Energy states that BCP does not grasp the magnitude of the efforts that would be required to perform the level of analysis discussed. For this filing NV Energy states that it ran over 98 PROMOD runs. BCP suggests that NV Energy add at least two additional DSM portfolios and analyze them for all expansion plans for a total of 384 cases. To develop and compare additional expansion plans, including alternative renewable expansion plans, would explode the number of PROMOD cases even further and evaluate the time required to perform the suggested analyses rises to unmanageable levels. The current sensitivities performed on the high and low DSM cases provide the level of information necessary for the Commission to evaluate the appropriate level of demand side resources. (Exhibit 138 at 8-9.)

476. NV Energy agrees with BCP’s recommendation that the Commission order it to include and report all costs in the comparative system level analysis provided that the comparative system level costs are limited to the PROMOD/CER analysis of the Preferred Plan with high, low, and no DSM sensitivities. (Exhibit 138 at 10.)

477. As to BCP’s recommendation that the Commission direct NV Energy to have workshops to resolve issues, NV Energy states that it is willing to consider inputs from other
parties. However, NV Energy states that it is concerned about the notion that workshops will resolve issues related to overly broad resource planning issues. NV Energy already conducts workshop and when doing so provides an opportunity for collaborative solutions. No additional direction is needed. (Exhibit 138 at 10-11.)

478. DSM screening tools have been discussed in workshops and NV Energy states that it routinely evaluates the performance of its screening tools and alternative tools as they become available. NV Energy states that it continues to evaluate ideas for improving modeling. PROMOD has the capability to directly model Demand Response as a supply option, but the model does not reasonably represent the Demand Response programs offered by NV Energy. To directly model Demand Response in PROMOD, simplifying assumptions must be made, and NV Energy does not believe the simplified assumptions that would be needed are superior to the assumption made for its model that adjusts load. NV Energy testified that there may be enhancements that can be made to PROMOD software what would allow it to model DR as a supply-side resource but is not aware of any PROMOD vendor working on it at this time. (Exhibit 138 at 11-12; Tr. 1301-1302.)

479. NV Energy states that the calculation of avoided cost is consistent with the methodology that Nevada Power and Sierra have used in previous resource plan filings. The methodology was last reviewed in Docket No. 10-02009. Nevada Power states it is open to considering alternative and/or improvements to the methodology. (Exhibit 138 at 10-11.)

480. NV Energy states the modeling and analysis of resource options and resource planning requires balance. The level of investment in terms of both time and financial resource must be weighed against the relative value of any actionable or informative result. Spending hundreds of hours modeling alternative scenarios with minor long-term impacts that do not result
in changes to proposed actions during the action plan period is inefficient and unnecessary. NV Energy testified that over 250 cases would be very cumbersome and difficult for everyone, including the Commission, and the details of the differences between cases would start to be lost. However, with enough time and resources NV Energy could run more cases. (Exhibit 138 at 12; Tr. 1298, 1305.)

**Commission Discussion and Findings**

481. The Commission finds compelling BCPs concerns regarding how DSM is integrated and evaluated in the IRP process. In many instances, NV Energy agrees with BCP. The Commission recognizes that DSM is often the least cost planning option and as a result should be modeled appropriately to ensure that future expansion plans more accurately reflect the value of DSM.

482. The Commission finds that Nevada Power’s IRP identifies and takes into account any present and projected reductions in the demand for energy that may result from measures to improve energy efficiency as required by NRS 704.746(4)(b). The Commission agrees with Nevada Power that modeling and analysis of resource options and resource planning requires balance and that the level of investment in terms of time and financial resources should be weighed against the value of any actionable or informative result. Due to the limited time in which the Commission must review, adjudicate and render a decision in an IRP, the Commission finds that it is appropriate to address the issues raised by BCP in the separate investigatory docket proposed earlier in this Order so that it is not confined by time limitations and/or lack of meaningful participation by parties with limited financial resources.

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X. PHASE III- ON LINE

A. Revised ON Line Budget and Schedule

Parties’ Position

NV Energy

483. NV Energy requests a determination that it is reasonable to proceed with constructing ON Line with the revised budget and according to the revised schedule, assuming satisfactory resolution of the wind-induced vibration issues. The total new estimated cost to construct ON Line, excluding Accumulated Funds Used During Construction (“AFUDC”), is $552.1 million and the new completion date is December 31, 2013. The project schedule has been delayed and pushed construction dollars into the Action Plan period. (Exhibit 2 at 28; Exhibit 3 at 36; Exhibit 91 at 91, 95; Exhibit 140 at 10, 13-14; Exhibit 141 at 178, 182-183; Exhibit 142 at 5-7; Exhibit 143 at 5-7.)

484. NV Energy states that in Docket No. 10-02009, when the Commission approved its request to proceed with construction of the 235-mile-long 500 kV ON Line project through a joint venture agreement with Great Basin, the approved budget was $509.6 million, excluding AFUDC, and had a proposed in-service date of December 31, 2012. After receiving approval, NV Energy and Great Basin (“Owners”) entered into a Transmission Use and Capacity Exchange Agreement (“TUA”) and completed the financial transaction whereby Great Basin sold and NV Energy purchased undivided ownership interests in the ON Line. Nevada Power purchased 23.75 percent and Sierra purchased a 1.25 percent interest. (Exhibit 91 at 92; Exhibit 141 at 178-179.)

485. Construction of ON Line started in April of 2011, but due to issues with the cultural inventory and implementation of the Construction, Operation, and Maintenance
("COM") Plan, early construction progressed much slower than originally anticipated. Installation of overhead wires started on October 17, 2011, but was halted in January of 2012 due to wind induced vibration issues experience in December of 2011. While technical solutions were being identified and tested to address the wind induced vibration issues, the Owners decided to proceed to construct some elements of the project and defer some elements of the project, depending on physical requirement and contractual commitments. (Exhibit 91 at 92-94; Exhibit 141 at 179-181; Exhibit 142 at 5-6; Exhibit 143 at 5-6; Exhibit 144 at 3.)

486. Around December of 2011, NV Energy states that the crews working on the ON Line observed damage to several of the tubular steel guyed-V towers, which has since been determined to have been caused by wind-induced vibration experiences when the towers are exposed to sustained winds from various directions. To prevent further damage to the towers, the Owners took down most installed towers and installed temporary mitigation measures for the towers already supporting conductors and focused on identifying solutions to ensure the long-term sustainability of the structures. (Exhibit 91 at 94; Exhibit 141 at 181; Exhibit 148 at 3; Exhibit 149 at 3.)

487. Two unrelated independent teams of experts have been working on a technical solution, one assembled by Thomas & Betts, the tower supplier, and the other by the Owners. Both sets of experts have prepared reports ("TGV Reports") through which they agree that retrofitting the tubular guyed-V structures with helical strakes and configuring them with span and secondary guy wires will significantly reduce wind-induced vibration and therefore effectively mitigate the potential impacts of the vibration on the structures. Both studies continue to be scrutinized by the Owners, experts commissioned by the DOE, and experts engaged by Thomas & Betts. However, Nevada Power asserts that the ongoing work does not
call into question the viability of the helical strakes as the cost-effective solution to the wind-induced vibration issue. NV Energy states that it intends on implementing a long-term monitoring program for the project to ensure that the tubular guyed-V structures fulfill their intended purpose. The monitoring program involves the purchase and installation of equipment to monitor the towers and wind measuring equipment to measure wind speed that will transmit the information to a home computer. The capital costs of the monitoring program are included in the revised budget. There are also ongoing annual costs associated with monitoring the program. (Exhibit 144 at 3-6; Exhibit 148 at 4-6; Exhibit 149 at 3-5; Tr. at 1361-1362.)

488. NV Energy states that the retrofit of the tubular guyed-V towers can be completed in time to meet a new completion date of December 31, 2013, and within a revised budget of $552.1 million, an increase of $42.5 million or 8.34 percent over the original approved budget. The delay in constructing the ON Line has pushed construction dollars in to 2013 and NV Energy asserts that the material developments in schedule and budget require Commission review and action. (Exhibit 91 at 95; Exhibit 144 at 2, 5; Exhibit 146 at 5-6; Exhibit 147 at 3.)

489. NV Energy states that it prepared a sunk cost analysis, including actual committed construction costs plus the cost of dismantling the project, that demonstrates that a decision to terminate the ON Line project on September 1, 2012, would require an expenditure of $471.5 million, which is approximately 85.4 percent of the revised cost to construct, and a decision to terminate ON Line as of December 31, 2012, would require the expenditure of $487 million or approximately 88.2 percent of the revised cost to construct. (Exhibit 91 at 96-97; Exhibit 141 at 183-184; Exhibit 142 at 8; Exhibit 143 at 8; Exhibit 146 at 7-8, Attachment Direct -3; Exhibit 147 at 5, Attachment Direct-3)

490. NV Energy states that it also prepared a traditional resource planning analysis to
determine the PWRR benefit of proceeding with the ON Line given the revised schedule and
budget using the most current resource planning input plan used to prepare the Preferred and
Alternative cases in these dockets. The result indicates that proceeding with ON Line is
projected to provide a 30-year net positive PWRR benefits in the range of at least $50 to $90
million. NV Energy states that while the economic benefits of the ON Line project have
changed since the Commission’s order in Docket No. 10-02009, the project is still cost justified.
Therefore, NV Energy asserts that, assuming the satisfactory resolution of the wind-induced
vibration issue, it is reasonable to proceed with constructing the ON Line with the revised budget
and according to the revised schedule. (Exhibit 91 at 97-98; Exhibit 94 at 355-359; Exhibit 141
at 184-185; Exhibit 142 at 8-9; Exhibit 143 at 8-9.)

491. NV Energy further states that the benefits of directly interconnecting the Nevada
Power and Sierra systems are at least as important now as they were when the project was
originally proposed. NV Energy asserts that interconnecting the systems will facilitate further
development of the full menu of renewable energy resources located in Nevada, allow Nevada
Power and Sierra to utilize the most economical mix of resources, create joint dispatch
opportunities, provide direct operational saving through load diversity, improve the reliability of
both systems, and provide an invaluable hedge against climate change. NV Energy also asserts
that there are additional benefits that will be realized when the North and South BAs are
combined that are not reflected in the PWRR analysis. (Exhibit 91 at 98-103. Exhibit 141 at
185-190.)

BCP

492. BCP recommends that the Commission not grant NV Energy’s request for a
determination that it is reasonable to proceed with constructing ON Line with a revised budget
and according to the revised schedule assuming satisfactory resolution of the wind-induced vibration issues. BCP states that the ON Line information provided in this case should be considered as an updated status of the project. (Exhibit 154 at 2, 18.)

493. BCP states that the Commission has already granted NV Energy authority to proceed with the ON Line project. BCP asserts that the Commission’s previous approval of the project did not include approval of a specific ON Line budget. Pursuant to NAC 704.9494, the Commission’s approval of an Action Plan constitutes a finding that the projects in the Action Plan are prudent. Costs associated with a project in an approved Action Plan may be recovered in the appropriate rate case proceeding if they are prudently and reasonably incurred. IRP proceedings are not rate proceedings so the prudence review of costs should not be conducted in an IRP proceeding. The IRP regulations do not require a previously approved project be reapproved with a revised budget while it is under construction. Therefore, BCP states that the updated cost estimates for ON Line are not required to be approved by the Commission. Instead BCP asserts that the ON Line information provided in this case should be considered as an updated status of the project. (Exhibit 154 at 2-5.)

494. BCP states that given the limited amount of time, the amount of data, and the technical nature of the structural inadequacy of the existing towers, a party to this case could not reasonably review and analyze the data and provide a recommendation to the Commission regarding whether it is reasonable to proceed with the construction of ON Line with the revised budget. (Exhibit 154 at 6-9.)

Cargill

495. Cargill recommends that the Commission approve the continuation of the On Line project pursuant to the revised budget and schedule. Additionally, Cargill recommends that
the Commission find that if NV Energy does not have exclusive use of its allocation of the ON Line capacity as a result of an OATT violation, the purpose and benefits of the ON Line to Nevada ratepayers will not be thwarted or significantly impaired. (Exhibit 150 at 5, 34.)

496. Cargill asserts that NV Energy has not fulfilled its commitment to offer the transmission capacity of the ON Line Project pursuant to the terms of its OATT. Cargill further states that NV Energy’s failure to adhere to its OATT when offering transmission service to third-party customers on ON Line could result in NV Energy not having exclusive use of the ON Line capacity as assumed when the Commission first reviewed and approved the ON Line in Docket Nos. 10-02009. However, Cargill states that the ON Line project will still provide many of the promised benefits to Nevada ratepayers if it does not have exclusive use of ON Line capacity. (Exhibit 150 at 5-6, 30-31.)

Great Basin

497. Great Basin recommends that the Commission find that it is reasonable for the NV Energy to proceed with constructing the ON Line with the revised budget and according to the revised schedule. Great Basin states that it has worked with NV Energy to identify, test and confirm a technical solution to mitigate the impact of wind-induced vibration on the ON Line’s tubular guyed-V structures. Great Basin states that the identified solution involves retrofitting all tubular guyed-V structures with helical strakes that alter the flow of wind around the tower structural members. Great Basin agrees with NV Energy that the retrofits can be completed within the revised budget and schedule. Great Basin intends to move forward and complete construction in accordance with the TUA based on the revised budget and schedule. (Exhibit 153 at 2-3.)

498. Great Basin testified that to the extent that litigation related to the wind-induced
vibration issues results in a financial settlement, any money awarded to the Owners would be split 75 percent to Great Basin and 25 percent to NV Energy. Any amount that goes to Great Basin would be used to recalculate the monthly lease payment from NV Energy to Great Basin. (Tr. at 1418-1419.)

Staff

499. Staff recommends that the Commission find that it is reasonable for NV Energy to proceed with constructing the ON Line project given the new facts and circumstances. However, Staff also recommends that the Commission state in its order that by finding it is reasonable to proceed with the ON Line project it is not granting pre-approval for Nevada Power or Sierra to pass the increased cost due to the wind induced vibration issue on to ratepayers via either rate base additions or higher lease payments to Great Basin. (Exhibit 160 at 2, 17.)

500. Staff further recommends that if the Commission finds that it is reasonable to proceed with ON Line, the Commission order NV Energy to exclude any and all incremental costs arising from changes and delays to the project due to the wind-induced vibration issues in calculating the amount of monthly payments NV Energy is allowed to pass though the deferred energy process; and order NV Energy to defer the difference between the actual monthly payment amount and the monthly payment excluding all costs arising from the wind-induced vibration issue in a deferred regulatory asset account for later investigation and disposition. These accounting protections are needed to shield ratepayers from the cost increases until various issues, including but not limited to causation, liability and/or prudence, have been resolved. Staff testified that if the incremental costs arising from the wind-induced vibration issue are later deemed prudent, ratepayers will have the increased cost of the carrying charge on the asset account to pay. (Exhibit 159 at 1-2; Tr. 1529-32.) Staff also testified it does not have a
problem with the new accounting treatment proposed by NV Energy in rebuttal. (Tr. at 1538.)

501. Staff is recommending that the Commission find it is reasonable for NV Energy to proceed with the construction of ON Line because the Sierra system cannot continue to absorb the energy and capacity associated with Nevada Power executing renewable contracts in northern Nevada. Staff stated that Nevada Power has executed contracts with approximately 620 MW of nameplate capacity of renewable resources located in Sierra’s service territory. Given that the Sierra off-peak loads can be as low as 720 MW, staff has serious concerns about Sierra’s ability to efficiently and reliably absorb this energy and struggle with the variability over the long-term. If ON Line is not built Staff states that it expects Sierra to incur significant additional capital costs and operational costs from having to manage the output from the Nevada Power renewable contracts. (Exhibit 160 at 9-10.)

502. Additionally, Staff states that it is recommending that it is reasonable to proceed with the construction of ON Line because Nevada Power gaining access to renewable resources from outside its service territory is the most viable and cost-effective way for Nevada Power to comply with the growing RPS standards. (Exhibit 160 at 8-9.)

503. Staff states that pursuant to the TUA between Great Basin and NV Energy, NV Energy is to make monthly payments to Great Basin over the 41 year agreement period to compensate Great Basin for NV Energy’s use of its 75 percent ownership interest of the ON Line. The payments begin the month following the month that ON Line becomes operational. As approved by the Commission in Docket No. 10-02009 the monthly payment to Great Basin will be charged to the FERC Account No. 565, transmission of electricity by others, and will therefore flow through the deferred energy process. Staff states that the amount of the monthly payment is composed of multiple components, one being dependent on the amount that Great
Basin actually invests in Phase I of ON Line.

504. Due to the wind-induced vibration problem, Staff states that the total construction cost for ON Line is expected to increase to $620.2 million including AFUDC. However, the actual cost increase due to the wind induced vibration is unknown at this point. NV Energy states that the cost to finish construction of the On Line project has increased by $64.2 million, $42.5 million in hard costs and $27.1 million in AFUDC, from the original estimated cost of $556 million outlined in Docket No. 10-02009, but Staff asserts that that figure is not necessarily the cost increase due to the wind induced vibration issue. Staff states that based on the December 2011 On Line monthly status report provided by NV Energy, the forecasted cost associated with the wind induced vibration issue is likely significantly higher than the $64.2 million increase because the project was significantly under budget at the time the vibration issue was initially observed. (Exhibit 159 at 4; Exhibit 160 at 7-8; Exhibit 161 at 7-8)

505. Staff states that it is concerned NV Energy might misconstrue a Commission finding that it is reasonable to proceed with the ON Line Project as a finding that it is appropriate for NV Energy to charge Nevada ratepayers for the entire cost increase attributable to the wind induced vibrations problems including Great Basin’s 75 percent portion of the costs. Staff states that NV Energy seems to assert that approval to continue with the project in this proceeding is also approval for NV Energy to pass Great Basin’s increased capital costs through to ratepayers via higher lease payments pursuant to the TUA. One of the reasons Staff recommended approval of the joint development of ON Line with Great Basin is because it would limit some degree of risk exposure to ratepayers should the line experience construction problems or encounter operational issues. Ratepayers should not shield or insure a non-regulated entity’s financial endeavors. (Exhibit 159 at 4-5; Exhibit 160 at 3-4.)
506. Staff is further concerned that if NV Energy contends it can pass the entire cost increase on to ratepayers, it will have a diminished incentive to pursue all potential legal/contractual recourse against potentially liable entities. Staff states that to the extent that the construction problems and delays are determined to be the result of equipment and/or design failures, NV Energy should seek redress from other parties before recovering the costs from ratepayers. (Exhibit 159 at 4-5; Exhibit 160 at 50.)

507. Staff asserts that the Commission should limit the level of lease payments that NV Energy immediately passes through to ratepayers by excluding the incremental increase in costs due to the wind induced vibration issues, including AFUDC. Staff further recommends that the Commission order NV Energy to defer the difference between the monthly payments NV Energy actually pays to Great Basin and the monthly payment excluding all costs arising from the wind-induced vibration issue in a deferred regulatory asset account for later investigation and disposition, presumably in a general rate case. Otherwise, Staff states that the higher lease payments will pass through to ratepayers via the deferred energy accounting process before Staff has an opportunity to fully examine the costs, based on the Commission decision in Docket No. 10-02009. The monthly payments to Great Basin, unlike NV Energy’s 25 percent ownership interest, will not be fully vetted in a general rate case prior to being recovered in rates. Staff recommends that NV Energy be authorized to accrue carrying charges on the portion of the deferred balance that is ultimately found to have been prudently incurred. (Exhibit 159 at 4-6; Exhibit 160 at 17, 3-6.)

508. Staff states that it reviewed both NV Energy’s sunk cost analysis and more traditional PWRR analysis of the benefit of proceeding with the ON Line given the revised schedule and budget. Staff states that the sunk cost analysis has merit and reveals that the
majority of the costs associated with ON Line have been spent or incurred. With an incremental increase of $64.2 million to complete the project, Staff states that it does not make sense to stop the project and strand all the renewable energy projects Nevada Power has contracted with in northern Nevada. (Exhibit 160 at 10-11.)

509. Staff states that NV Energy’s PWRR analysis is really meaningless and should not be given any weight in making a determination as to whether construction of the ON Line should continue. Staff states that if it were to rely strictly upon the PWRR analysis, the figures support stopping the ON Line project. Staff states the PWRR analysis ignores the almost $500 million that has been incurred on the project to date. Even if Great Basin would be solely responsible for its 75 percent, NV Energy still has $125 million in sunk costs. Some portion of the costs spent to-date would make their way into rates, thereby eroding the PWRR savings associated with stopping the project. The PWRR analysis does not factor in the reliability problems and the additional costs Sierra would experience as a result of having to absorb the output from the renewable projects Nevada Power has contracted with in the north. Finally, Staff states that the without the ON Line project Nevada Power faces greater risk of not being able to comply with the RPS in both the near and long-term. Sierra would likely have to curtail the output from some of the renewable resources which would reduce the amount of PC’s Nevada Power would accrue. (Exhibit 160 at 11-12.)

510. Staff states that it has reviewed the two TGV Reports filed by Nevada Power, but is not making a representation that the proposed changes will fix the wind-induced vibration issue. Staff states that it would be inappropriate for it to make a representation because Staff does not have a licensed structural engineer in house that could make a formal representation. Additionally, Staff states that it should not weigh in on the proposed changes for the following
reasons: (1) Staff never reviewed the original tower design or the numerous attempted design fixes; (2) it took the Owners and Thomas & Betts over 18 months to research the problem and develop the proposed fix so it is not reasonable for Staff to comment on the merits based on 45 days of review of documents; (3) Staff comments could affect future litigation; and (4) the final design fix is not yet complete. (Exhibit 160 at 12-14.)

511. Staff states that it questions whether it is appropriate or possible for Nevada Power to designate Sierra’s generation resources and Nevada Power’s designated network resources ("DNRs") and potentially use that designation to claim that there is no available transmission capacity available on the ON Line. In Docket No. 10-02009, Staff states it expressed concern as to whether Nevada Power could hold transmission rights based on an assumption that, at some point in the future, Nevada Power and Sierra plan to make a merger filing with the Commission and to potentially jointly dispatch the two systems. Staff states that the issue of DNRs is a FERC matter, but whether Sierra and Nevada Power will be allowed to merge into one company and to what extent joint dispatch will be utilized is a decision that will be made by this Commission. Staff recommends that NV Energy examine the possibility of selling transmission capacity on the ON Line project should the analysis show that all the transmission capacity is not needed to deliver output from renewable resources Nevada Power and Sierra have under contract. Staff states that the long-term sale of transmission capacity would derive long-term revenue that could directly offset rates for Nevada customers and offset any increased costs associated with the wind-induced vibration issue that gets passed along to Nevada ratepayers. (Exhibit 160 at 14-17.)

**NV Energy Rebuttal**

512. NV Energy states that a solution to the wind induced-vibration issue has been
identified. The Owners have continued to confirm the conclusions presented in the TGV Reports that the proposed retrofitting of the towers will mitigate the wind-induced vibration issues. Specifically, NV Energy states that they brought in an additional third-party wind engineering expert that completed an independent analysis of the retrofitted design on October 19, 2012, that confirms the structural adequacy of the modified tower design. Additionally, NV Energy states that they have also completed a few remaining open design fabrications issues and obtained BLM approval of the modified structure configuration. (Exhibit 163 at 6-8; 164 at 12.)

513. With respect to Staff’s concern that NV Energy might misconstrue a Commission finding that it is reasonable to proceed with the ON Line Project as a finding that it is appropriate for NV Energy to charge Nevada ratepayers for the entire cost increase attributable to the wind induced vibrations problems including Great Basin’s 75 percent portion of the costs, NV Energy states that it is requesting an affirmation from the Commission that it is reasonable to proceed with constructing On Line with the revised budget and according to the revised schedule, which includes not only NV Energy’s portion of the increase costs, but also the payments to be made to Great Basin under the TUA. However, NV Energy states that the Commission authorization to proceed does not relieve its obligation to act prudently to manage the project cost. It merely assures NV Energy that it will be able to recover the costs prudently incurred in completing the project. (Exhibit 164 at 3-4.).

514. NV Energy states that its plans to combine Nevada Power’s and Sierra’s BAAs at the time of the merger of the Companies and concurrent with the in-service date for ON Line. The generating resources of both Nevada Power and Sierra will be DNRs for the combined system. NV Energy states that Staff’s concerns that Nevada Power may not be able to designate Sierra’s generation resources and Nevada Power’s DNRs and potentially use that designation to
claim that there is no available transmission does not reflect how NV Energy’s plans to operate ON Line once it is complete. Additionally, NV Energy states that once FERC approves the merger of Sierra and Nevada Power and a single system tariff, potential transmission customers like Cargill will not be eligible for service over the ON Line because it would be an embedded system resource. NV Energy further states that because the issues with transmission can only be addressed by FERC, NV Energy has filed a Petition for Declaratory Order which describes and addresses the interim process that Sierra and Nevada Power established to deal with transmission service requests until such time as NV Energy can effectuate the merger, consolidate the BAAs and have a single system tariff on file with FERC to offer transmission service over the consolidated system. (Exhibit 164 at 6-11.)

515. NV Energy agrees with Staff that the costs attributable to the wind induced vibration issues cannot be identified by simply subtracting the prior estimate of $556 million from the current estimate of $620.2 million. Isolation of the wind induced vibration costs requires detailed identification and tracking of engineering services, material procurement and construction services. NV Energy states that the cost to mitigate the wind-induced vibration will be separately tracked and compiled. NV Energy states that it will pursue available legal/contractual remedies on behalf of customers. However, at this time NV Energy is concentrating on actions needed to restart the project and complete construction at the lowest possible project cost so that the project benefits may be achieved. Monetary recoveries associated with any legal actions or pursued remedies will be credited to or serve to reduce project costs and accrue to the benefit of ratepayers. (Exhibit 163 at 4-5; Exhibit 164 at 3-4, 13.)

516. NV Energy does not object to Staff’s recommendation to place the portion of the TUA payment related to wind-induced vibration in a regulatory asset with carrying charges to
the extent that the Commission wishes to further investigate those costs. NV Energy testified
that the only difference in this scenario, compared to the full lease payment being flowed through
the DEAA would be the carrying charge that accrues on the asset account (Tr. at 1576.)

517. NV Energy states that FERC has determined that, based on the final version of
the TUA, the payments from NV Energy to Great Basin under the TUA cannot be treated as
“transmission by others” and cannot be recorded in FERC Account No. 565, as previously
approved by the Commission in Docket No. 10-02009. NV Energy states that according to
FERC, Great Basin does relinquish operating control of its transmission line under the TUA.
Therefore, FERC will consider the capacity payment to Great Basin to be a cost of transmission
service, not power supply, and expects NV Energy to record such costs accordingly. NV Energy
states that pursuant to the Uniform System of Accounts, the appropriate accounting treatment for
payments to Great Basin is to record the transaction in FERC Account No. 101.1, Property
Under Capital Lease, and the depreciation/amortization in FERC Account Nos. 403 or 404. This
change in accounting will have the effect of allocating payments under the TUA to all customers
(retail and wholesale), thereby ensuring that retail customers are not allocated costs in excess of
their contribution to transmission load. NV Energy proposes that the jurisdictional costs under
the TUA be flowed through the deferred energy process the same as previously approved by the
Commission. (Exhibit 162 at 3-6; Tr. at 1580-1584.)

**Commission Discussion and Findings**

518. The Commission approves NV Energy’s request and finds that it is reasonable for
NV Energy to proceed with the construction of the ON Line project with the revised budget and
according to the revised schedule, assuming a satisfactory resolution of the wind-induced
vibration issues. The Commission agrees with Staff that it is reasonable to continue for the
following reasons: 1) Sierra’s system cannot continue to absorb the energy and capacity
associated with the Nevada Power renewable energy contracts in northern Nevada, 2) ON Line
provides Nevada Power with the opportunity to access cost-effective renewable energy outside
of its service territory; and, 3) the sunk cost analysis reveals that the majority of the costs
associated with ON Line have been spent or incurred so that stopping the project now makes
little sense.

519. The Commission’s finding that it is reasonable for NV Energy to proceed with the
construction of the ON Line project does not constitute approval for NV Energy to pass the
increased cost due to the wind-induced vibration issue on to ratepayers through rate base
additions or higher lease payments to Great Basin. The Commission, in a future rate proceeding,
will determine the prudence of those costs.

520. The Commission finds that it is appropriate for NV Energy to defer the difference
between the actual monthly payment amount to Great Basin and the monthly payment amount
excluding all costs arising from the wind-induced vibration issue in a deferred regulatory asset
account for later investigation and disposition. NV Energy shall be authorized to accrue carrying
charges on the portion of the deferred balance that is ultimately found by the Commission to be
prudently incurred. Accordingly, NV Energy shall track and compile all costs associated with
the mitigation of the wind-induced vibration issue. The Commission shares Staff’s concern for
protecting ratepayers from the cost increases until the various issues have been resolved.

521. Based on the record, the Commission is unable to reasonably conclude the proper
accounting treatment for the costs associated with ON Line. In rebuttal, NV Energy disclosed
that FERC has determined that, based on the final version of the TUA, the payments from NV
Energy to Great Basin pursuant to the TUA cannot be treated as “transmission by others” and
cannot be recorded in FERC Account No. 565 as previously approved by the Commission in Docket No. 10-02009. While NV Energy proposes that the jurisdictional costs under the TUA be recorded in FERC Account No. 101.1, Property Under Capital Lease, and the depreciation/amortization in FERC Account Nos. 403 or 404 and be flowed through the deferred energy process as previously approved by the Commission, the Commission is concerned that these costs may not be appropriately included in the deferred energy process. The Commission shall address the aforementioned accounting issues in a new investigatory docket where the interested parties can have a better opportunity to examine the proposed accounting treatment or offer other solutions.

522. The Commission acknowledges the concerns of Cargill and Staff regarding NV Energy’s allocation of transmission rights on the ON Line. However, this issue is outside of the jurisdiction of this Commission and is properly addressed at FERC. The Commission notes that NV Energy has filed a Petition for Declaratory Order with FERC. Therefore, the Commission declines to address concerns related to NV Energy’s allocation of transmission rights on the ON Line.

523. As provided in this Order, the Commission finds that (1) Nevada Power’s forecasted requirements are based on substantially accurate data and an adequate method of forecasting; (2) Nevada Power’s resource plan identifies and takes into account present and projected reductions in demand for energy that may result from measures to improve energy efficiency; and (3) Nevada Power’s resource plan adequately demonstrates the economic, environmental and other benefits to the State of Nevada and its customers associated with improvements in energy efficiency, pooling of power, purchase of power from neighboring states, renewable energy generation, co-generation, hydro-generation, and other generation.
524. All arguments of the Parties raised in this proceeding not expressly discussed herein have been considered and either rejected or found to be non-essential for further support of this Order.

THEREFORE, it is hereby ORDERED that:

1. The Partial Party, Partial Issue Stipulation regarding Phase II Demand Side Management and Load Forecast issues entered into by the Attorney General’s Bureau of Consumer Protection, Sierra Pacific Power Company d/b/a NV Energy, Nevada Power Company d/b/a NV Energy and the Regulatory Operations Staff, is REJECTED.

2. The Application of Sierra Pacific Power Company d/b/a NV Energy’s for approval of its 2012 Annual Demand Side Management Update Report as it relates to the Action Plan Of its 2011-2030 Integrated Resource Plan, designated as Docket No. 12-06052, is ACCEPTED as modified by this Order.


following issues:

a. The request of Nevada Power Company d/b/a NV Energy for approval to expend $5 million over the Action Plan period to perform a site screening level study for a new Greenfield site;
b. The request of Nevada Power Company d/b/a NV Energy for approval to expend $1.45 million over the Action Plan period to pursue permitting activities to facilitate the addition of renewable technologies at or near existing generation facilities;
c. The request of Nevada Power Company d/b/a NV Energy for approval for funding not to exceed $800,000 to undertake studies of intermittency impacts and ancillary service costs;

6. The One Nevada Transmission Line project portion of Sierra Pacific Power Company d/b/a NV Energy’s Application for approval of the second amendment to the Action Plan of the 2011-2030 Integrated Resource Plan as it relates to a new base load forecast, generating plant investments and retirements, and transmission projects, designated as Docket No. 12-08009, is ACCEPTED.

Investigatory Dockets:

7. The Commission shall open an investigatory docket regarding demand side management in Nevada.

8. The Commission shall open a investigatory docket regarding accounting treatment of costs associated with One Nevada Transmission Line.

Compliances:

9. Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy shall file with the Commission in Docket No. 12-06052 and Docket No. 12-06053, within 30 days of the effective date of this Order, modified spreadsheets, including all supporting calculations, to reflect an adjustment to the 2011 kilowatt-hour energy savings calculations that use the factors approved in Docket Nos. 11-06026 and 11-06027 for compact
fluorescent light bulb-replacing-compact fluorescent light bulb, compact fluorescent light bulb hours of use, and remove any heating-cooling interaction factors from residential program calculations.

**Directives:**

10. Nevada Power Company d/b/a NV Energy shall use a constant annual sales share of 1 percent for plug-in electric vehicles for all new cars in Nevada in 2015 and beyond for load forecasting purposes.

11. Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy, for all future Integrated Resource Plan Demand Side Management Plans and Annual Demand Side Management Update Reports, shall serve upon Staff and the BCP at the same time it files its initial application, all information and all supporting data in executable format upon which it relies to develop benefit/cost calculations related to Demand Side Management programs and lost revenue calculations for Demand Side Management programs. This information and supporting data includes, but is not limited to, all spreadsheets and calculations prepared by any out-side Measurement and Verification contractors and consultants in executable and manipulative format.

12. Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy, for all future Integrated Resource Plan Demand Side Management Plans and Annual Demand Side Management Update Reports, shall include a discussion of, and support for, the development of load shapes (energy savings profiles).

13. Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy, for all future Integrated Resource Plan Demand Side Management Plans and
Annual Demand Side Management Update Reports, shall include documentation for all incremental cost calculations.

14. Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy, for all future Integrated Resource Plan Demand-Side Management Plans and Annual Demand-Side Management Update Reports, shall utilize the measure life as presented in the latest Measurement and Verification reports unless documentation is provided to support a changed measure life.

15. Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy, for all future Integrated Resource Plan Demand Side Management Plans and Annual Demand Side Management Update Reports, shall provide a discussion of, and support for, rebates and incentives offered for each appropriate program.

16. Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy, for all future Integrated Resource Plan Demand Side Management Plans and Annual Demand Side Management Update Reports, shall include, for those programs that do not have an installed unit such as a refrigerator or pool pump but instead utilize an aggregate measure, a detailed discussion explaining and supporting the development of the aggregate measure.

17. Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy, for all future Integrated Resource Plan Demand Side Management Plans and Annual Demand Side Management Update Reports, shall provide deemed savings on a per unit measure basis and present changes in Measurement and Verification verified deemed savings including the reasons behind the changes to future savings.
18. Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy, for all future Integrated Resource Plan Demand Side Management Plans and Annual Demand Side Management Update Reports, shall present in its Demand Response data sheets, a residential section, a commercial section and a combined program section.

19. Failure to comply with the compliances and directives in his Order may subject Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy to administrative fines pursuant to NRS 703.380 and/or revocation of the underlying relief granted as appropriate.

20. The Commission may correct any errors that may have occurred in the drafting or issuance of this Order without further proceedings.

By the Commission,

ALAINA BURTENSHAW, Chairman

REBECCA D. WAGNER, Commissioner and Presiding Officer (Concurring in part and dissenting to paragraphs 45, 92, 162, 206, and 213.)

DAVID NOBLE, Commissioner

Attest:
BREANNE POTTER,
Assistant Commission Secretary

Dated: Carson City, Nevada
12-24-12
(SEAL)