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SPPC

BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA

IN THE MATTER of the Application of SIERRA
PACIFIC POWER COMPANY, seeking
approval of the Second Amendment to its 2017-
2036 Integrated Resource Plan.

Docket No. 17-11 ____

VOLUME 1 OF 4

SIERRA PACIFIC POWER COMPANY D/B/A NV ENERGY

APPLICATION, EXHIBITS AND TESTIMONY

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TRANSMITTAL LETTER



November 1, 2017

Trisha Osborne
Assistant Commission Secretary
Public Utilities Commission of Nevada
1150 East William Street
Carson City, Nevada 89701

Re: Docket No. 17-11____, Sierra Pacific Power Company Application seeking approval of the Second Amendment to its 2017-2036 integrated resource plan.

Dear Ms. Osborne:

Please accept this letter and the attached Application and Application Exhibits of Sierra Pacific Power Company d/b/a NV Energy ("Sierra") seeking for approval of its Second Amendment to its 2017-2036 integrated resource plan. The filing includes the following parts:

Volume 1

- Application
- Application Exhibit A: Action Plan Amendment Narrative (Redacted)
- Application Exhibit B: Draft Notice
- Prepared Direct Testimony of Marc D. Reyes
- Prepared Direct Testimony of Terry A. Baxter (Redacted)
- Prepared Direct Testimony of Patrick S. Egan
- Prepared Direct Testimony of Dariusz Rekowski
- Prepared Direct Testimony of Sachin Verma
- Prepared Direct Testimony of John M. Wickersham

Volume 2

- Technical Appendix LF-1 (Redacted)
- Technical Appendix LF-2 to LF-3

Volume 3

- Technical Appendix LF-4 to LF-7
- Technical Appendix ECON-1 to ECON 3
- Technical Appendix REN-1 to REN-2

Volume 4

- Technical Appendix REN-3 to REN-4 (Confidential)
- Technical Appendix REN-5
- Technical Appendix TRAN-1 to TRAN-2 (Redacted)
- Technical Appendix TRAN-3
- Technical Appendix TRAN-4 (Redacted)

Portions of the load forecast section in the Narrative of Exhibit A, Technical Appendix Item LF-1 (Confidential), Mr. Baxter's prepared direct testimony, TRAN-1 and TRAN-2 contains confidential customer-specific information. The confidentiality of the customer-specific information qualifies for confidential treatment under NRS § 703.190. In addition, portions of Narrative discussing the request for proposals of a qualifying facility, REN-3 and REN-4 includes confidential bid information related to an unsuccessful participant's bid information, which qualifies for confidential treatment under NRS § 703.190. This information derives independent economic value from not being generally known and would be harmful for Sierra's future competitive solicitations if the information was disclosed. This information is not known outside the Companies and its distribution is limited within the Companies. Publication of this information would hinder Sierra's ability to achieve the most favorable pricing and terms and conditions from competing suppliers on behalf of its customers. The Company asks that the above information be kept confidential for a period of five (5) years after which it may be destroyed or returned, as is most convenient for the Commission. Finally, portions of Mr. Wickersham's testimony and Technical Appendix TRAN-4 contains a comprehensive analysis of the scenarios, storage plans, transportation plans and restoration methodologies required to recover from a catastrophic event. The information contained is deemed Critical Energy/Electric Infrastructure Information ("CEII") per the FERC Code of Federal Regulations 388.113. The confidentiality of critical infrastructure information qualifies for confidential treatment under NRS § 703.190. Due to the nature of the confidential information (e.g. critical utility infrastructure) the information should be kept confidential indefinitely.

The Companies ask that the Commission maintain the confidentiality of the above-described information pursuant to NRS § 703.190(2) and NAC § 703.527 *et seq.* All confidential information has been printed on pink paper and placed in a sealed envelope appropriately marked, and will be filed separately consistent with NAC § 703.737 *et seq.*

Should you have any questions regarding this filing, please contact me at (775) 834-5692 or mgreene@nvenergy.com.

Respectfully submitted,

/s/Michael Greene
Michael Greene
Senior Attorney

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Sachin Verma

John M. Wickersham

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SIERRA PACIFIC POWER COMPANY D/B/A NV ENERGY

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TRAN-4 Grid Resilience (**REDACTED**)

CERTIFICATE OF SERVICE

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing **SIERRA PACIFIC POWER COMPANY D/B/A NV ENERGY'S APPLICATION** in Docket 17-11___ upon the persons listed below by the electronic service:

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DATED this 1st day of November, 2017.

/s/ Lynn D'Innocenti
Lynn D'Innocenti
Sr. Legal Admin Assistant
Sierra Pacific Power Company
Nevada Power Company

APPLICATION

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BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA

IN THE MATTER of the Application of)
SIERRA PACIFIC POWER COMPANY,)
seeking approval of the Second Amendment to) Docket No. 17-11 ____
its 2017-2036 Integrated Resource Plan.)

**APPLICATION TO APPROVE SIERRA’S SECOND AMENDMENT TO 2017 –
2036 INTEGRATED RESOURCE PLAN**

Sierra Pacific Power Company, d/b/a NV Energy (“Sierra” or “the Company”), makes this Application, pursuant to Nevada Revised Statute (“NRS”) § 704.741 *et seq.*, and Nevada Administrative Code (“NAC”) § 704.9005 *et seq.* This Application seeks approval by the Public Utilities Commission of Nevada (“Commission”) of Sierra’s second amendment to its 2017-2036 integrated resource plan (“IRP”). Pursuant to NRS § 704.751(2),¹ the Commission must issue an order accepting or modifying a IRP amendment within 165 days of filing, or the filing is deemed approved. Thus, the deemed approve date this IRP amendment is April 16, 2018.

Sierra has prepared an update to the load forecast to incorporate the most recent information available. The updated forecast includes refreshed assumptions for large customer loads, population, energy efficiency, and econometric variables. Sierra seeks Commission approval of the updated forecast as setting forth the most accurate information available upon which to base long-term resource planning decisions. Additionally, Sierra seeks to amend its approved IRP to include the acquisition of a new long-term power purchase agreement (“PPA”) with Techren Solar IV, LLC, (“Techren Solar IV”) as part of its qualifying facility (“QF”) request for proposal (“RFP”) in compliance with the Commission’s modified final order in Docket Nos. 16-07001, 16-07007 and 16-08027 issued on February 16, 2017 (“Consolidated Dockets”). The Company also requests Commission approval a new

¹ As modified by SB 146 (2017 Nevada Legislative Session), increasing the time the Commission must issue an order accepting or modifying an IRP amendment from 135 to 165 days.

1 long-term PPA with Turquoise Nevada, LLC that will be used to support Apple, Inc.’s,
2 (“Apple”) commitment to offset its incremental load with renewable energy resources,
3 pursuant to Sierra’s electric rate Tariff Schedule No. NGR – Schedule NV GreenEnergy Rider
4 (“NGR Tariff”). In addition, the Company requests Commission approval to install a second
5 345/120 kV transformer at the East Tracy Substation. Lastly, Sierra is requesting
6 Commission approval of certain projects in its generation capital budget plan for 2018.

7
8 **I.
SUMMARY AND INTRODUCTION**

9 Section 704.9516(1) of the NAC requires that an electric utility seeking to amend its
10 IRP include in the filing a section that identifies the items for which the utility is seeking
11 specific approval. This information is set forth both in summary fashion and in detail in the
12 narrative attached hereto and incorporated herewith. In short, with this amendment the
13 Company seeks Action Plan approval of the following items:

- 14 1. *A Revised Load Forecast.* A finding that the 2017 Second Amendment IRP
15 forecast is suitable for making long-term planning decisions and is based on
16 substantially accurate data.
- 17 2. *Techren Solar IV PPA.* Approval of the long-term PPA between Sierra and
18 Techren Solar IV for all output of the new 25 MW Techren Solar 4 solar
19 generating facility. The Techren Solar IV PPA was the successful bid in the
20 Company’s QF RFP, which was issued in compliance with the Commission’s
21 modified final order in the Consolidated Dockets. The Techren Solar IV PPA
22 is for a 25-year term with a base price of \$34.20 per MWh with no escalation.
23 The Techren 4 solar facility is being developed in Boulder City, Nevada, is
24 expected to be operational in the third quarter of 2020, and has an expected
25 net capacity rating of 25 MW (AC). It is also expected to generate 72,622
26 MWh and provide 72,622 thousand portfolio credits (“kPCs”) in the first year.

1 Sierra's primary business office is located at 6100 Neil Road, Reno Nevada. All
2 correspondence related to this Application, including all discovery requests, should be
3 transmitted to Sierra's counsel and to Sierra's Manager of Regulatory Services, as set forth
4 below:

5
6 Michael Greene
7 Senior Attorney
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**III.
APPLICATION EXHIBITS**

Included with this Application and incorporated herein by reference are the following exhibits:

- **Application Exhibit A**, is the amended Action Plan Narrative as required by NAC §§ 704.9489 and 704.9516.
- **Application Exhibit B**, is a proposed notice of the application as required by NAC § 703.162.

**IV.
SUPPORTING MATERIAL**

Section 704.9321 of the NAC provides that a utility's resource plan must be based on substantially accurate data, adequately demonstrated and defended, and adequately documented and defended. As is set forth below, the reader will find all material required to adequately demonstrate and defend the substantially accurate data supporting the analysis and the requests for affirmative relief set forth herein. A summary of this information, which

1 includes narrative, technical appendices,² and supporting prepared direct testimony,³ is set
2 forth by general topic below.

3 **A. Policy Sponsor and Economic Analysis.**

4 **Mr. Marc Reyes**, Director of Resource Planning and Analysis, provides overall
5 policy support for this second amendment filing, and introduces the witnesses supporting the
6 various components of the Amendment. Additionally, Mr. Reyes sponsors the economic
7 analysis and long-term avoided cost portion of the narrative. Finally, Mr. Reyes explains how
8 the renewable energy transaction between Sierra and Apple advances Nevada’s energy policy,
9 provides mutual benefits to Apple and the Company’s customers, and has the potential to
10 positively impact Nevada’s economy. Mr. Reyes also sponsors Technical Appendix Items
11 ECON-1 through ECON-3.

12 **B. Load Forecast.**

13 **Mr. Terry A. Baxter**, Manager of Load Forecasting, sponsors the Load Forecast
14 portion of the narrative addressing the long-term load forecast used for the Second
15 Amendment to the 2017-2036 IRP. Mr. Baxter also sponsors Technical Appendix Items LF-
16 1 through LF-7.

17 **C. Generation Resources.**

18 **Mr. Dariusz Rekowski**, Generation Executive, supports the request for approval of
19 Sierra’s generation-related projects in the Company’s generation capital budget plan for 2018.

20 **D. Renewable Resources.**

21 **Mr. Pat Egan**, Senior Vice President of Renewable Energy and Smart Infrastructure,
22 sponsors and supports discussions regarding the results of the 2017 PURPA⁴ Qualifying
23

24 ² NAC § 704.922 provides that a utility’s resource plan must include technical appendices that contain
25 sufficient detail to enable a technically proficient reader to understand how the resource plan and its forecasts
26 were prepared and to evaluate the validity of the assumptions and the accuracy of the data used, including,
27 without limitation, a list of the major assumptions used, a description of the forecasting methods employed and
28 a description of the software utilized.

³ NAC § 704.9321(4) provides that all direct testimony offered in support of a utility’s resource plan be
filed with the resource plan.

⁴ Public Utility Regulatory Policy Act of 197

1 Facility (“QF”) Request for Proposals (“2017 QF RFP”), and the power purchase agreement
2 (“Techren PPA”), between the Company and Techren Solar IV LLC entered into as a result
3 of the long term avoided costs (“LTAC”) calculations in compliance with NAC § 704.9496
4 and the Commission’s orders in the Consolidated Dockets. Mr. Egan also supports the power
5 purchase agreement (“PPA”), between Sierra and Turquoise Nevada, LLC, entered into to
6 support a transaction with Apple (the “Turquoise Nevada PPA”) pursuant to Sierra’s Schedule
7 No. NGR (the “NV GreenEnergy Rider” or “NGR”).

8 **E. Transmission Resources.**

9 **Mr. Sachin Verma**, Manager, Network and IRP Transmission Planning, sponsors the
10 portion of the narrative discussing the Sierra Transmission system and associated projects,
11 and the Technical Appendices TRAN 1-3, that support the Company’s request for approval
12 of the installation of a 345/120 kV transformer at East Tracy Substation. Mr. Verma also
13 supports Technical Appendix TRAN-3 which is the Large Generator Interconnection
14 Agreement between the company and Turquoise Solar LLC that describes the interconnection
15 of a 60 MW Photovoltaic generator at the Pah Rah 120 kV bus.

16 **Mr. John Wickersham III**, Director of Transmission Business Planning, Execution
17 and Development, describes the concept of Grid Resiliency and describes the process the
18 Companies undertook to address the increasing risk of catastrophic damage to critical utility
19 infrastructure. Mr. Wickersham supports the Confidential Technical Appendix item TRAN-
20 4.

21 **V.**
22 **CONFIDENTIALITY**

23 Certain information set forth in the narratives and technical appendices is
24 commercially confidential and/or trade secret information subject to protection pursuant to
25 NRS § 703.190. Specifically, the confidential information in this filing, along with the basis
26 for each assertion of confidentiality, is set forth below.

1 **Customer Specific Information.** Portions of the load forecast section in the Narrative
2 of Exhibit A, Mr. Baxter’s prepared direct testimony, Technical Appendix Items LF-1,
3 TRAN-1, and TRAN-2 containing confidential customer-specific information have been
4 redacted. Customer-specific information qualifies for confidential treatment under NRS §
5 703.190.

6 **Renewable Resources.** Portions of Narrative discussing the request for proposals of
7 a qualifying facility, REN-3 and REN-4 includes confidential bid information related to an
8 unsuccessful participant’s bid information qualifies for confidential treatment under NRS §
9 703.190. This information derives independent economic value from not being generally
10 known and would be harmful for Sierra’s future competitive solicitations if the information
11 was disclosed. This information is not known outside the Companies and its distribution is
12 limited within the Companies. Publication of this information would hinder Sierra’s ability
13 to achieve the most favorable pricing and terms and conditions from competing suppliers on
14 behalf of its customers.

15 **Critical Energy/Electric Infrastructure Information.** Portions of Mr.
16 Wickersham’s testimony and Technical Appendix TRAN-4 contains a comprehensive
17 analysis of the scenarios, storage plans, transportation plans and restoration methodologies
18 required to recover from a catastrophic event. The information contained is deemed Critical
19 Energy/Electric Infrastructure Information (“CEII”) per the FERC Code of Federal
20 Regulations 388.113. Due to the nature of the confidential information (e.g. critical utility
21 infrastructure) the information should be kept confidential indefinitely.

22 Pursuant to NAC § 703.5274(1), one unredacted copy of the confidential information
23 will be filed with the Commission’s Secretary in a separate envelope stamped “confidential.”
24 Redacted versions of confidential information will be submitted for processing and posting
25 onto the Commission’s public website.

26 Pursuant to NAC § 703.5274(2), Sierra hereby requests that the above-described
27 information not be disclosed to the public. Sierra requests that this information remain
28

1 confidential for a period of five years, except information related to critical utility
2 infrastructure which should be kept confidential indefinitely.

3 Confidential treatment of the above-described information will not impair the ability
4 of the Regulatory Operations Staff (“Staff”) or the Office of the Attorney General’s Bureau
5 of Consumer Protection (“BCP”) to fully investigate Sierra’s proposals. Pursuant to NAC §
6 703.527 and § 703.5274, Staff and BCP have already have executed a protective agreement
7 for this case and will be immediately provided unredacted copies of the filing.

8 **VI.**
9 **DEVIATION FROM REGULATIONS**

10 NAC § 704.0097 provides that the Commission may allow deviation from any
11 provision of NAC Section 704 if:

- 12 (1) Good cause for the deviation appears;
13 (2) The person requesting the deviation provides a specific reference to each
14 provision of the chapter from which the deviation is requested; and
15 (3) The Commission finds that the deviation is in the public interest and is not
16 contrary to statute.

17 Sierra requests a deviation from the following provisions of NAC § 704.9516
18 (Contents of amendment to action plan) for the reasons set forth below:

19 **IMPUTED DEBT**

20 NAC § 704.9516(g) provides that if an amendment to an IRP seeks approval of a
21 renewable energy contract, it must contain information regarding imputed debt mitigation.
22 The Commission’s statutes do not require a utility to claim or seek authority to mitigate the
23 effects of any imputed debt arising as the result of a purchased power agreement. Moreover,
24 Sierra is not claiming or seeking recovery of imputed debt mitigation related to either of the
25 PPAs that are the subject of this filing. Good cause appearing, Sierra asks the Commission to
26 determine that its request to deviate from the provisions of NAC § 704.9516(g) is in the public
27 interest.

28

1 With respect to the remaining requirements of NAC § 704.9516 the Company has
2 provided all applicable and relevant information by and through this application, the narrative
3 and supported by the information provided in the Technical Appendices and the prepared
4 direct testimony.

5 **VII.**
6 **CONSOLIDATION WITH NEVADA POWER IRP AMENDMENT AND SIERRA NGR FILING**

7 Concurrently with this filing, on November 1, 2017, Nevada Power filed its third
8 amendment to its 2016-2035 IRP, in which it requests Commission approval of: (1) a new
9 long-term PPA, (2) upgrades to an existing substation, (3) its Grid Resilience plan, and (4)
10 certain projects in the Company’s generation capital budget plan for 2018. Sierra’s second
11 amendment to its 2017-2036 IRP seeks approval of a PPA that was selected in the same QF
12 RFP and the same Grid Resilience plan, and it contains the same justification for the
13 generation capital budget plan for 2018. Given the overlap between these two filings, Sierra
14 formally requests that this second amendment to its 2017-2036 IRP be consolidated with
15 Nevada Power’s third amendment to its 2016-2035 IRP, which was filed on November 1,
16 2017.

17 Similarly, this Application is related to Sierra’s Application for approval of a
18 Renewable Energy Agreement with Apple (“REA Application”) concurrently filed by Sierra
19 with the Commission on November 1, 2017. The REA Application requests Commission
20 approval of a new Renewable Energy Agreement that allows Apple to purchase all portfolio
21 energy credits generated by the Turquoise Nevada solar facility. Given the overlapping nature
22 and relationship between these three cases the Company is requesting that the Commission
23 consolidate these three cases. Further, consolidation of these dockets would promote
24 administrative efficiency given that each of the filings brings forth essential elements, which
25 together will allow for the development of incremental renewable resources in the state in
26 order to serve incremental load of a large customers. The filings are inextricably linked by
27 identity in subject matter, methods of analysis and witnesses.
28

**VIII.
PRAYER**

WHEREFORE, Sierra requests that the Commission:

(1) Accept without modification the amended Action Plan as it is set forth in Exhibit A to this Application, which includes the following items:

- a) Approval of the long-term base load forecast presented in the narrative of this filing and a finding it is suitable for making long-term planning decisions through the Action Plan period and is based on substantially accurate data;
- b) Approval of the long-term PPA between Sierra and Techren Solar IV for the 25 MW solar photovoltaic Techren Solar 4 solar facility;
- c) Approval of the long-term PPA between Sierra and Turquoise Nevada for the 50 MW solar photovoltaic Turquoise Nevada solar facility;
- d) Approval to add a new 345/120 kV transformer at the East Tracy Substation;
- e) Approval of 14 separate projects in the Company's generation capital budget plan for 2018.

(2) Make an express finding that Sierra has complied with the Commission's Modified Final Order in, Docket Nos. 16-07001, 16-07007 and 16-08027 related to the issuance of a QF request for proposal in determining the long-term avoided cost.

(3) Grant Sierra's requests to maintain the confidentiality of the information listed, justified and prescribed in Section V. above.

(4) Grant Sierra's request to consolidate this filing with Nevada Power's second amendment to its 2016-2035 IRP and Sierra's request for approval the of Apple Renewable Energy Agreement, which were concurrently filed with the Commission.

(5) Grant such additional other relief as the Commission may deem appropriate and necessary.

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Dated this 1st day of November, 2017.

Respectfully submitted,

SIERRA COMPANY d/b/a NV ENERGY

/s/Michael Greene
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APPLICATION EXHIBIT A

NARRATIVE

**SIERRA PACIFIC POWER COMPANY d/b/a NV
ENERGY SECOND AMENDMENT TO THE 2017-2036
INTEGRATED RESOURCE PLAN**

**SUPPLY SIDE PLAN, TRANSMISSION PLAN, AND
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