

Agenda 5-23; Item No. 2C Draft Order for discussion at agenda

**THIS ORDER IS NOT A FINAL ORDER AND MAY BE SUBSTANTIALLY REVISED
PRIOR TO ENTRY OF A FINAL ORDER BY THE PUBLIC UTILITIES COMMISSION
OF NEVADA**

BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA

Joint Application of Nevada Power Company d/b/a)	
NV Energy and Sierra Pacific Power Company d/b/a)	
NV Energy for approval of the fourth amendment to its)	Docket No. 22-11032
2021 Joint Integrated Resource Plan.)	
_____)	

At a general session of the Public Utilities Commission of Nevada, held at its offices on March 14, 2023.

PRESENT: Chair Hayley Williamson
Commissioner C.J. Manthe
Commissioner Tammy Cordova
Assistant Commission Secretary Trisha Osborne

ORDER

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

I. INTRODUCTION

On November 30, 2022, Nevada Power Company d/b/a NV Energy (“NPC”) and Sierra Pacific Power Company d/b/a NV Energy (“SPPC”) (collectively, “NV Energy”) filed with the Commission a joint application (“Joint Application”), designated as Docket No. 22-11032, for approval of the fourth amendment to its 2021 Joint Integrated Resource Plan (“IRP”). NV Energy filed the Joint Application pursuant to the Nevada Revised Statutes (“NRS”) and the Nevada Administrative Code (“NAC”) Chapters 703 and 704, including, but not limited to, NRS 704.741, NAC 704.9005 *et seq.*, and Senate Bill 448 (2021) (“SB 448”). Pursuant to NAC 703.190 and NAC 703.527 *et seq.*, NV Energy requests that certain information contained in its Joint Application receive confidential treatment. This order addresses Phase I of the Joint Application and specifically evaluates NV Energy’s request for approval of the Silverhawk Peaking Plant and associated transmission infrastructure.

II. SUMMARY

The Commission grants Phase I of NV Energy’s Joint Application as delineated in the order below.

III. PROCEDURAL HISTORY

- On November 30, 2022, NV Energy filed the Joint Application.
- The Regulatory Operations Staff of the Commission (“Staff”) participates as a matter of right pursuant to NRS 703.301.
- On December 1, 2022, NV Energy filed a corrected Joint Application.
- On December 12, 2022, the Commission issued a Notice of Joint Application and Notice of Prehearing Conference.
- On December 16, 2022, the Nevada Bureau of Consumer Protection (“BCP”) filed a Notice of Intent to Intervene pursuant to Chapter 228 of the NRS.
- On December 19, 2022, the Presiding Officer issued Procedural Order No. 1 adopting a procedural schedule and discovery processes.
- On December 20, 2022, the Las Vegas Global Economic Alliance filed comments. That same day, Western Resource Advocates (“WRA”) filed a Petition for Leave to Intervene (“PLTI”).
- On December 27, 2022, the Commission issued a Notice of Hearing.
- On January 3, 2023, Google LLC filed a PLTI.
- On January 4, 2023, Boyd Gaming Corporation, Station Casinos LLC, and Venetian Las Vegas Gaming, LLC (“SNGG”); Iron Point Solar, LLC (“Iron Point”) and Hot Pot Solar, LLC (“Hot Pot”); Wynn Las Vegas, LLC (“Wynn”) and Smart Energy Alliance (“SEA”); Nevada Resort Association (“NRA”); Caesars Enterprise Services, LLC (“Caesars”); MGM Resorts International (“MGM”); and Interwest Energy Alliance (“Interwest”) each filed PLTIs.
- On January 5, 2023, the Presiding Officer issued an Order granting the intervention of WRA.
- On January 6, 2023, the Presiding Officer held a prehearing conference.
- On January 9, 2023, the Presiding Officer issued Procedural Order No. 2.
- On January 11, 2023, Iron Point and Hot Pot filed a supplement to their PLTI.
- On January 13, 2023, the Presiding Officer issued Procedural Order No. 3. That same day Nevada Workers for Clean and Affordable Energy filed a PLTI.
- On January 17, 2023, the Presiding Officer held a continued prehearing conference.

- On January 18, 2023, NV Energy filed a Response to PLTI of Iron Point and Hot Pot.
- On January 20, 2023, the Presiding Officer issued an Order granting the PLTIs of Google, SNGG, Wynn and SEA, NRA, Caesars, MGM and Interwest.
- On January 24, 2023, the Presiding Officer held a continued prehearing conference.
- On January 27, 2023, NV Energy filed data requested in Procedural Order No. 2.
- On January 30, 2023, Google, WRA, and Staff filed testimony. That same day NV Energy filed data requested in Procedural Orders No. 2 and 3.
- On January 31, 2023, the Presiding Officer held a continued prehearing conference.
- On February 1, 2023, the Presiding Officer issued an Order granting the PLTIs of Iron Point and Hot Pot and Nevada Workers for Clean and Affordable Energy.
- On February 9, 2023, NV Energy filed data requested in Procedural Order No. 2.
- On February 10, 2023, NV Energy filed rebuttal testimony. That same day, the Presiding Officer issued Procedural Order No. 4.
- On February 13, 2023, Google filed an Exhibit list as requested in Procedural Order No. 4.
- On February 14, 2023, the Presiding Officer held a continued prehearing conference. That same day, WRA and Staff filed an Exhibit list as requested in Procedural Order No. 4.
- On February 15, 2023, Advanced Energy United filed comments.
- On February 16, 2023, the Commission held a hearing. NV Energy, Google, WRA, BCP, and Staff made appearances. During the hearing, Exhibit Nos. 100-104, 105-C, 106-109, 110-C, 111-118, 300, 301-C, 500, and 600 were admitted to the record.

IV. JOINT APPLICATION – PHASE 1

A. Silverhawk Peaking Plant Project

NV Energy's Position

1. NV Energy requests approval of its request to amend its Supply Plan to expend approximately \$333 million to purchase, install, and operate a 400 megawatt (“MW”) peaking turbine project (the “Silverhawk Peaking Plant”) at the Silverhawk Generating Station, with a

summer peak rating of 444 megawatts (“MW”), including wet compression, and an in-service date of July 2024. (Ex. 100 at 13.) NV Energy also requests to amend its Transmission Plan to expend \$20 million to construct transmission infrastructure needed to support the interconnection of the Silverhawk Peaking Plant. (*Id.*, Ex. 107 at 4.) NV Energy requests expedited approval of the Silverhawk Peaking Plant and associated transmission infrastructure by March 10, 2023, to allow the materials to be ordered to meet the July 2024 in-service date. (Ex. 100 at 13.) More specifically, NV Energy states that the need for expedited approval by March 10, 2023, is also based on a required progress payment for the combustion turbine equipment purchase in March 2023 and the additional cost that will be committed between March 2023 and June 2023 when the Commission could approve the project under the normal regulatory schedule. (Ex. 113 at 8.)

2. NV Energy states that, although it requests fossil generation, it is not deviating from its clean energy goals and remains committed to Nevada's sustainability goals. (Ex. 114 at 10.) NV Energy states that its Preferred Plan, which includes the Silverhawk Peaking Plant, achieves and exceeds the RPS in all years and targets Nevada's 2050 clean energy goal. (*Id.*) NV Energy states that firm dispatchable resources such as gas turbines contribute much more significantly to capacity in 2050 than energy production, resulting in a positive impact on resource adequacy with minimal carbon dioxide emissions. (*Id.*) NV Energy states that, to support its commitment to state carbon policies, the combustion turbines in the Silverhawk Peaking Plant would be capable of operating on a 15 percent hydrogen mixture with the original equipment manufacturer planning a path toward allowing these units to operate on 100 percent hydrogen. (*Id.*) NV Energy states that the proportion of annual energy provided by firm dispatchable generation only increases slightly even with the addition of the combustion turbines because those turbines are peaking units serving a capacity need and, therefore, operate rarely.

(*Id.* at 10-11.) NV Energy states that these units are proposed to be limited to 700 annual hours of operation in their air permit application. (*Id.* at 11.)

3. NV Energy states that it is requesting expedited approval of the Silverhawk Peaking Plant because it is critical for NV Energy to reliably serve load. (Ex. 113 at 7.) NV Energy states that resource adequacy risks in Nevada and the Western region have been evolving since the summer of 2020. (Ex. 111 at 3.) NV Energy provides that significant regional heat events have occurred for three consecutive summers and risks for the Western region have continued to change for several reasons including shifts in weather and rapidly changing resource mix. (*Id.*) NV Energy states that weather has grown more extreme across the region, resource variability has increased, and continued drought conditions have led to supply reductions from numerous hydroelectric plants. (*Id.*) Moreover, NV Energy states that wildfire activity in 2021 resulted in the loss of more than 5,500 MW of transmission capacity from the Pacific alternate current and direct current interties. (*Id.*) The California Independent System Operator ("CAISO") rule changes have also added uncertainty to the market and coal supply and demand has become an issue for the region. (*Id.*) All of these factors have led to reduced market liquidity, increased prices, and supply curtailments. (*Id.*) NV Energy states that these issues point to added risk in relying on market purchases to cover NV Energy's open positions. (*Id.*) NV Energy expects concerns regarding climate-related events, such as record temperatures, wildfire, and drought, to continue moving forward as the new normal. (*Id.* 3-4.)

4. NV Energy notes the retirement of 18 gigawatts ("GW") of power from coal and natural gas resources on the Western Interconnection over the past decade, with the planned retirement of an additional 26 GW of mostly coal and natural gas resources by 2032. (*Id.* at 4.) NV Energy states that the California Public Utilities Commission also required procurement of

11,500 MW of specifically non-fossil resources by the end of 2026. (*Id.*) NV Energy states that, not only could these changes dramatically affect the resource mix in the region and the availability of market capacity but, in addition, many recent developments could delay planned new renewable resources in the West and across the United States. (*Id.*) These issues are compounded by rule changes implemented and being discussed by CAISO regarding its day-ahead export priorities and ongoing wheel-through initiative, which NV Energy contends adds significant risk to the market as a whole (*Id.* at 4-5.) NV Energy states that the liquidity in the real-time hourly power market has also been reduced significantly as more entities have joined the energy imbalance market. (*Id.* at 5.)

5. NV Energy states that supply curtailments have increased risk for its companies, both of which have experienced major supply curtailment events leading to emergency conditions. (*Id.*) NV Energy states that one such curtailment led to a Level 3 Energy Emergency Alert (“EEA”) in August of 2020 - the highest level of emergency that means load shed is imminent. (*Id.* at 5-6.) In July of 2021, NV Energy states it experienced significant curtailments again, leading to an EEA Level 3 situation. (*Id.* at 6.) NV Energy states that, while the summer of 2022 featured lower volumes of supply curtailments, there was still more than 300 MW of curtailments during the critical hours in the September heat wave. (*Id.*) NV Energy states that such curtailments of those sizes highlight the risk of relying so heavily on market purchases. (*Id.*)

6. NV Energy states that adding in-system generating resources, specifically resources available after solar resources drop off in the evening hours, will reduce NV Energy's open position and thus its reliance on market capacity purchases, helping to mitigate uncertainty surrounding climate change, wildfires, western resource retirements, and the impact of the CAISO rule changes. (*Id.*) NV Energy states that events in the West have resulted in significant

supply curtailments for its companies and in-system generating resources would not be subject to curtailment and could continue providing energy to Nevada customers even when issues such as regional heat waves and wildfires occur. (*Id.*) NV Energy states it is also taking additional actions to address resource adequacy such as participating in phases of the Western Resource Adequacy Program (“WRAP”). (*Id.*)

7. NV Energy states that the base case in its filing, which includes the Silverhawk Peaking Plant, meets or exceeds the current RPS in every year, meets the 16 percent planning reserve margin (“PRM”) for each utility, targets NV Energy’s proportionate contribution to Nevada’s 2050 clean energy goal, and provides for the timely retirement of the Valmy generating station. (Ex. 112 at 13.)

Google’s Position

8. Google recommends the Commission postpone its decision on whether to approve the Silverhawk Peaking Plant until more robust modelling and analysis is completed in a re-filed IRP amendment. (Ex. 500 at 3.) More specifically, Google recommends that NV Energy be required to perform model simulations that include the effects of joining the WRAP and its statutory requirement to join a regional transmission organization (“RTO”) by 2030 on its needs for energy, capacity, and transmission for all years covered by future IRPs and any current and future amendments to its 2021 IRP. (*Id.*) Google states that, as a component of the refiled amendment, NV Energy should provide detailed information and an associated action plan for the Silverhawk Peaking Plant’s potential use of hydrogen with a minimum of a feasibility study and cost-benefit analysis of the facility’s potential hydrogen use. (*Id.* at 3-4.) Google further recommends that the Commission institute a series of workshops to draft standards and

evaluation criteria for the development of hydrogen for use in the electricity sector, including hydrogen-ready and hydrogen-capable resources, for Commission approval. (*Id.*)

9. Google states that NV Energy could satisfy its short-term needs with carbon-free resources instead of constructing the Silverhawk Peaking Plant. (*Id.* at 8.) Google states that NV Energy's Low Carbon case does not include the Silverhawk Peaking Plant and is based on meeting an 80 percent reduction in carbon dioxide emissions by 2030 instead of the 50 percent reduction by 2030 required by the Renewable Portfolio Standard ("RPS"). (*Id.*) Google further states that NV Energy also provided cases that consisted entirely of carbon-free resources such as the BESS North, BESS South, and Geo case. (*Id.* at 8-9.)

10. Regarding NV Energy's IRP modeling, Google recommends that the utility be required to perform model simulations that include the effects of joining the WRAP and a statutorily required RTO by 2030 on its needs for energy, capacity, and transmission for all years covered by future IRPs and any current and future amendments to its 2021 IRP. (*Id.* at 13.) Google states that the results of these analyses should be incorporated in a refiled IRP amendment for Commission approval. (*Id.* at 13-14.)

11. Google states that NV Energy's IRP modeling did not consider its statutory requirement to join an RTO by 2030 nor did it consider any incremental activities toward joining an RTO by 2030, such as joining the WRAP or a day-ahead market. (*Id.* at 9.) Google states that NV Energy is taking steps to join WRAP before 2030 and notes that NV Energy has stated its expectation to recommend a day-ahead market early in 2025 but that it will probably be after 2025 before it can make its recommendation. (*Id.* at 10.) Google provides that these actions are firmly within the 2021 IRP planning horizon. (*Id.*) Google further provides that incremental RTO activities will have an impact on NV Energy's resource needs. (*Id.*) Google states that, in

the near term, joining WRAP and a day-ahead market will have a material impact on NV Energy's forecasted resource needs and, beyond 2025, long-term resource adequacy, regional transmission planning, and regional transmission control will all materially impact NV Energy's needs. (*Id.*)

12. Google contends that NV Energy's incremental activities should be incorporated into the Fourth Amendment to its 2021 IRP, reflecting NV Energy's decision to join these markets and delineate how the utility has evaluated these impacts in the context of other resource decisions that it has proposed. (*Id.*) Google additionally states that NV Energy should be required to present alternative scenarios reflecting various potential RTO footprints that may be available in 2030. (*Id.*) Google states that, while details of whether and what form an RTO may take by 2030 are uncertain, 2030 is firmly within the IRP planning horizon and such a major potential change should be analyzed by the IRP process. (*Id.* at 10-11.)

13. Google states that RTO-related activities should be reflected in NV Energy's IRP because the incorporation of activities in NV Energy's IRP comports with potential future policy recommendations of the Regional Transmission Coordination ("RTC") Task Force, of which NV Energy is a member. (*Id.* at 11.) Google, citing an RTC Task Force Report, states that the exclusion of RTO activities from resource planning could result in an over-estimation of resources. (*Id.*) Google states that RTOs provide more efficient resource commitment and dispatch, lower peak capacity needs, more efficient intermittent generation management, and lower reserve requirements. (*Id.*) Google further states that prudent resource planning must consider efficiencies and the resources available to the utility through regionally integrated transmission operation and wholesale electricity markets. (*Id.*) Google provides that failure to do so could result in increased costs and a reduction of the benefits of joining an RTO. (*Id.*)

