Agenda 22-23; Item No. 2B 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

Application of Nevada Power Company d/b/a NV Energy for authority to adjust its annual revenue requirement for general rates charged to all classes of electric customers and for relief properly related thereto.	)	Docket No. 23-06007
Application of Nevada Power Company d/b/a NV Energy for approval of new and revised depreciation and amortization rates for its electric and common accounts.	)	Docket No. 23-06008

At a general session of the Public Utilities Commission of Nevada, held at its offices on December 18, 2023.

PRESENT: Chair Hayley Williamson
Commissioner Tammy Cordova
Commissioner Randy Brown
Assistant Commission Secretary Trisha Osborne

CHAIR WILLIAMSON'S PROPOSED MODIFICATIONS TO [PROPOSED] ORDER

(***Additions*** are in bold italics, ~~deletions~~ are in strikethrough)

E. Time-Of-Use ("TOU") Periods

NPC's Position

65. Regarding NPC's proposed TOU periods, NPC is proposing an on-peak period that will start at 3:01 p.m. and end at 9:00 p.m., every day of the week during the summer months of June through September. (Ex. 227 at 45.) NPC provides that the current TOU period is from 1:01 p.m. to 7:00 p.m. (*Id.*) NPC also proposes to eliminate the Summer Mid-Peak period for large commercial customers. (Ex. 216 at 4.) NPC proposes to add weekend days to the Summer On-Peak period for residential and small commercial customers. (*Id.*) NPC is also proposing that non-holiday weekend days be added to the Critical Peak Pricing ("CPP") event days for residential customers. (*Id.*) NPC states that these proposals are a notable update to existing peak period definition. (Ex. 227 at 45.) NPC states that currently the peak period only exists on weekdays for residential optional TOU classes, while weekends are entirely off-peak. (*Id.*) In addition, NPC states that the existing peak period begins at 1 p.m. and ends at 7 p.m. (*Id.*) NPC states that it is not proposing modify the winter TOU period definition, which considers all hours as off-peak, May through October. (*Id.*)

66. In Docket No. 17-07026, NPC states that the Option A and Option B residential TOU were closed to new customers. (Ex. 223 at 4.) NPC provides that, for the optional residential and the optional general service rate classes a Summer-On-Peak period was implemented from 1:01 p.m. to 7:00 p.m. Monday-Friday and Summer Off-Peak period was implemented from 7:01 p.m. to 1:00 p.m. for all days. (*Id.*) The Winter Off-Peak period is October through May for all hours. (*Id.*)

NPC explains that, during the TOU period review performed for this GRC, NPC compared historical marginal cost data to NPC's test period data, and to NPC's forecasted data. (*Id.*) As a

result of this process, NPC states that it determined that it was appropriate to revise NPC's TOU period definitions given the ongoing shift in the daily timing of functionalized costs which provide the basis for TOU period rate design. (*Id.*) NPC explains that, as the marginal cost of providing electricity shifts to later in the day due to NPC's heavy reliance on solar generation to meet state statutory guidelines, NPC believes that modifying the TOU periods sends the appropriate price signal to customers. (*Id.* at 2.)

Walmart's Position

67. Walmart states that it does not oppose NPC's proposed TOU periods or the elimination of the summer mid-peak period. (Ex. 1001 at 2.)

Conservation Advocates' Position

68. Conservation Advocates recommend that the Commission should adopt it's proposal to create a unique Summer TOU window of 6 – 9 p.m. for residential customers, which it believes better reflects the highest cost hours and would likely be more attractive to customers. (Ex. 801 at 22.) Conservation Advocates state that its proposal aligns with the three highest cost hours, even if one accepts NPC's flawed marginal cost of service study assumptions. (*Id.*) Conservation Advocates provide that correcting those assumptions simply makes the cost reflectiveness of a shorter Summer peak more pronounced. (*Id.*) Conservation Advocates states that NPC should recalculate its rates under Conservation Advocates' updated TOU definition. (*Id.*) Conservation Advocates states that the shorter peak period will likely increase the peak to off-peak ratio, which NPC has acknowledged should be higher, in order to be cost reflective. (*Id.* at 23.) However, Conservation Advocates provide that to shield customers from abrupt rate spikes, Conservation Advocates recommend that the on to off peak price ratio increase to no more than 4:1, inclusive of riders. (*Id.*)

69. Conservation Advocates states that the Commission should also plan to iterate on TOU rate design in the future, as the grid continues to evolve. (*Id.*) In particular, Conservation Advocates states that it will likely be necessary to implement time-differentiated non-summer rates as electrification increases over the coming years. (*Id.*)

70. Conservation Advocates also recommends that the Commission order NPC to reduce the length of the proposed on-peak window to a period of three hours, down from the current proposed window length of six hours. (Ex. 800 at 5.) Conservation Advocates provides that price signals will not produce the desired results and core objectives of TOU rates if customers are unable to respond to them. (*Id.*) Conservation Advocates explains that most customers cannot shift daily behavior out of the proposed 6-hour window, as it is too long. (*Id.*)

71. Conservation Advocates states that its recommendation amounts to a simple and basic TOU rate structure that is easily understandable by customers, but also alludes to the objectives of TOU rates in general. (*Id.* at 6.) Conservation Advocates states that this basic rate structure will act as an introductory rate for Nevadans to become familiarized with TOUs and the benefits they offer. (*Id.*) Conservation Advocates states that in the years to come, this basic rate structure can be added onto, changed, and overall made more complex as customers become more sophisticated users of TOU rates. (*Id.*)

Staff's Position

72. Staff recommends that the Commission approve NPC's proposed modifications to the current TOU period definitions. (Ex. 326 at 2.)

73. Staff also recommends that the Commission approve NPC's proposal to eliminate the optional TOU Option A and Option B residential rate classes and move these customers to the proposed optional schedule. (*Id.*)

74. Staff provides that NPC's TOU review clearly shows that marginal generation and energy costs peak later in the day and the proposal has a higher R^2 value than the current TOU periods. (*Id.* at 6-7.) Additionally, Staff notes that the proposed TOU definition aligns NPC's TOU periods with Sierra's revised TOU periods approved by the Commission in Docket No. 22-06014. (*Id.* at 7.)

NPC's Rebuttal

75. NPC disagrees with Conservation Advocates' three-hour SON period. (Ex. 231 at 4.) NPC points out that Conservation Advocates do not provide a direct comparison of its proposal to NPC's proposal. (*Id.*) NPC states that Conservation Advocates recognize that NPC utilizes an Analysis of Variance ("ANOVA") model as one of its tools to compare various TOU definitions to provide the Commission with a comparison of similar TOU periods. (*Id.*) NPC explains that the ANOVA model provides the percentage of variation in costs captured by the TOU periods. (*Id.*) NPC states that it is important to remember that if the sole focus is on selecting the set TOU periods with the highest coefficient of determination ("r^2") it may result in choosing a set of TOU definitions that fails to include hours that should be included for theoretical or operational reasons, for example, peak system demand hours that might not be peak marginal cost hours. (*Id.*)

76. NPC provides that when it compares the coefficient of determination values for NPC's TOU proposal with Conservation Advocates' proposal, the results demonstrate that the coefficient of determination for NPC's proposed TOU periods (r^2=0.468) is greater than the coefficient of determination for Conservation Advocates' proposal (r^2=0.405). (*Id.* at 5.) Thus, NPC states that its proposed TOU periods better capture the variation in marginal costs in the SON period than Conservation Advocates' proposed 3-hour SON captures the three highest

marginal cost hours and fails to include hours that belong in the SON period, which is why the coefficient of determination for NPC's proposed SON is greater than the coefficient of determination for Conservation Advocates' proposed SON period. (*Id.*)

Commission Discussion and Findings

~~77. The Commission acknowledges there is a benefit in offering TOU rates to customers, despite the low adoption rate of such schedules in the state of Nevada. The Commission therefore approves NPC's proposed modifications to the current TOU period definitions, which Staff agrees are appropriate. The Commission approves NPC's proposal to eliminate the optional TOU Option A and Option B residential rate classes and approves the ability to move those customers to the proposed optional schedule, consistent with Docket No. 17-07026. The Commission finds that the proposed TOU definition aligns NPC's TOU periods with Sierra's revised TOU periods approved by the Commission in Docket No. 22-06014.~~

~~78. Considering the low adoption rates, the Commission encourages NPC to discuss further modifications to the TOU rates for future cases with the Conservation Advocates and other interested persons. Increasing customer acceptance of TOU rates has the potential to decrease demand at the system peak.~~

77. The Commission acknowledges there is a benefit in offering TOU rates to customers, despite the low adoption rate of such schedules in the state of Nevada. The Commission acknowledges that changes in peak hours and pricing of rates during such hours is a growing concern for the general body of ratepayers in Nevada. The purpose of TOU rates in the state is to encourage more customers to take service under TOU schedules, and to structure peak and off-peak periods to send appropriate price signals to customers. The Commission knows that structuring rates in rate design aspects of a general rate case is not

black and white and is a balancing act for all customers. The Commission finds that there may be a slight benefit in offering shorter TOU rate structures than what is proposed by NPC in this case.

78. The Commission finds that the arguments and recommendations presented in this case by Conservation Advocates are compelling. Therefore, the Commission adopts Conservation Advocates' recommended three-hour TOU rate. The Commission finds that an on-peak three-hour period ending at 9 P.M. is the appropriate price signal to send to customers at this time. The Commission finds that a TOU period from 6 P.M. to 9.P.M. is appropriate and shall be incorporated into NV Energy's TOU rate schedules. The Commission believes this type of rate structure sends the appropriate price signals to TOU customers during peak hours and therefore will encourage more residential customers in the state to take service under TOU rate schedules. Furthermore, as stated by the Conservation Advocates, this type of TOU rate structure is simple and easily understandable by customers.