

Decision No. R20-0642

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 19AL-0687E

IN THE MATTER OF ADVICE LETTER NO. 1814 FILED BY PUBLIC SERVICE COMPANY OF COLORADO TO IMPLEMENT THE MODIFIED RESIDENTIAL ENERGY TIME-OF-USE SCHEDULE TO BECOME EFFECTIVE JANUARY 2, 2020.

**RECOMMENDED DECISION OF
ADMINISTRATIVE LAW JUDGE
CONOR F. FARLEY
GRANTING JOINT MOTION TO APPROVE
UNANIMOUS AND COMPREHENSIVE SETTLEMENT
AGREEMENT, PERMANENTLY SUSPENDING TARIFF
SHEETS, AND REQUIRING CERTAIN FILINGS**

Mailed Date: September 11, 2020

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I. STATEMENT

A. Introduction and Summary

1. This Recommended Decision addresses a settlement agreement reached by the parties to this proceeding concerning Advice Letter No. 1814 (Advice Letter). In that Advice Letter and the Tariff Sheets filed therewith, Public Service Company of Colorado (PSCo) proposes to replace the current “inverted block rates” that are in place from June 1 through September 30 of each year, with time-of-use (TOU) rates. The current inverted block rates (IBRs) charge one rate for the first 500 kWhs consumed by each ratepayer, and a higher rate for all kWhs consumed over 500. In contrast, TOU rates charge different rates during different periods of the day based on the costs of generation and the corresponding emissions of carbon dioxide (CO₂). As the generation costs and their corresponding CO₂ emissions increase, so do the rates charged to ratepayers. PSCo argues that, unlike the current IBR rates, TOU rates send effective price signals to ratepayers that incentivize them to shift some of their electricity usage to the periods of the day when generation costs and CO₂ emissions are relatively low. PSCo contends that the change to TOU rates will result in lower costs and CO₂ emissions that will redound to the benefit of everybody.

2. PSCo and the ten Intervenors in this proceeding, who represent all residential ratepayers and various interests relevant to residential electric rates, engaged in extensive discovery and filed voluminous direct, answer, cross-answer, and rebuttal testimony that analyzed several different TOU rate designs over several months. A little over a week before the hearing was scheduled to commence, the parties reached a unanimous settlement in principle on June 8, 2020 that made substantial changes to PSCo's original TOU proposal based on the input provided by Intervenors. The parties filed an Unopposed Joint Motion to Approve Unanimous and Comprehensive Settlement Agreement and Modify Procedural Schedule and Request for Waiver of Response Time (Joint Motion) and a 24-page Unanimous and Comprehensive Stipulation and Settlement Agreement (Settlement Agreement) on June 11 and 12, 2020, respectively, followed by testimony in support of the Settlement Agreement from PSCo and six of the Intervenors on June 18, 2020. The Administrative Law Judge (ALJ) then held a full-day hearing on June 26, 2020 at which the ALJ asked questions of the witnesses who filed testimony in support of the Settlement Agreement.

3. Based on the voluminous record in this proceeding, and as explained in more detail below, the ALJ grants the Joint Motion and approves the Settlement Agreement without modification.

B. Procedural History

4. On December 2, 2019, PSCo filed the Advice Letter and Tariff Sheets and the Direct Testimony of witnesses Brook Trammell, Steven Wishart, Stacey Simms, and Jennifer Wozniak in support thereof, and a Motion for Commission Approval of an Alternative Form of Notice (Motion for Alternative Form of Notice). The effective date of the tariff sheets was January 2, 2020.

5. By Decision No. C19-0988 issued on December 11, 2019, the Commission granted the Motion for Alternative Form of Notice.

6. By Decision No. C19-1015 issued on December 18, 2019, the Commission set the tariff pages for hearing, which suspended the effective date for 120 days from the proposed effective date (January 2, 2020) through May 2, 2020. The Commission also referred this proceeding to an ALJ for disposition. The proceeding was subsequently assigned to the undersigned ALJ. Finally, Decision No. C19-1015 also established a deadline for interested parties or individuals to intervene in the proceeding.

7. The following entities filed Notices of Interventions as of Right before the deadline established in Decision No. C19-1015: Trial Staff of the Commission (Staff) and the Office of Consumer Counsel (OCC) on December 18, 2019; and the Colorado Energy Office (CEO) on January 16, 2020.

8. In addition, the following entities filed Motions or Petitions to Intervene in this proceeding before the deadline: Energy Outreach Colorado (EOC) on January 15, 2020; the City of Boulder (Boulder), Southwest Energy Efficiency Project (SWEEP), and Vote Solar on January 16, 2020; and Colorado Solar and Storage Association (COSSA), the Solar Energy Industries Association (SEIA), and Western Resource Advocates (WRA) on January 17, 2020 (all entities that filed Notices of Intervention as of Right or Motions or Petitions to Intervene are referred to collectively as Intervenors).¹

¹ Staff, OCC, CEO, EOC, Boulder, SWEEP, Vote Solar, COSSA, SEIA, and WRA are referred to as Intervenors in this Decision.

9. On December 27, 2019, PSCo filed a Motion for Extraordinary Protection seeking highly confidential protection for “proprietary system hourly marginal costs information.”² PSCo seeks to limit disclosure of this information to Staff, the OCC, the Commission (Commissioners, Advisors, and the ALJ), and a “reasonable number” of attorneys and subject-matter experts.³ The Motion for Extraordinary Protection is unopposed.

10. On January 28, 2020, the ALJ issued Decision No. R20-0062-I that scheduled a prehearing conference in this proceeding for February 11, 2020 and on February 21, 2020 the ALJ granted PSCo’s Motion for Extraordinary Protection in Decision No. R20-0121-I.

11. On February 11, 2020, the prehearing conference took place. PSCo and the entities that filed Motions or Petitions to Intervene appeared at the prehearing conference. Among the topics discussed at the prehearing conference were the Motions and Petitions to Intervene, the Motion for Extraordinary Protection, suspension of the effective date of the Advice Letter and Tariff Sheets, a procedural schedule, the scheduling of the hearing in this proceeding, and the scheduling of public comment hearings. Ultimately, the parties agreed to a prehearing schedule and the hearing dates.

12. On February 21, 2020, the ALJ issued Decision No. R20-0121-I that, among other things, granted the Motions and Petitions to Intervene, adopted the prehearing schedule and dates for the hearing (June 16 through 19, 2020) agreed to by the parties, and extended the deadline pursuant to § 40-6-111(1), C.R.S., for an additional 130 days, or through September 8, 2020. The prehearing schedule adopted in Decision No. R20-0121-I included public comment hearings set for April 8, 2020 in Grand Junction and April 16, 2020 in Denver, Colorado.

² Motion for Extraordinary Protection at 1.

³ *Id.* at 5.

13. Due to the State of Emergency declared by Governor Polis on March 10, 2020 over the novel coronavirus pandemic, the closure of public access to the building containing the Commission's offices, and the public directives regarding social distancing, the ALJ issued Decision No. R20-0202-I on March 27, 2020 that consolidated the April 8, 2020 public comment hearing into the April 16, 2020 public comment hearing and converting the April 16, 2020 in-person public comment hearing into a remote public comment hearing.

14. The ALJ issued Decision No. R20-0243-I on April 10, 2020 that revised the instructions for participating in the remote public comment hearing on April 16, 2020.

15. On April 16, 2020, the remote public comment hearing took place. Nine members of the public provided oral comments to the Commission.

16. The parties filed extensive answer, cross-answer, and rebuttal testimony on April 24, 2020 and May 21, 2020, which were the deadlines established in Decision No. R20-0121-I. Specifically, the following witnesses filed answer testimony: Matthew Lehrman (Boulder); Keith Hay (CEO); Kevin Lucas (COSSA and SEIA); Andrew Bennett and Tim Woolf (EOC); Joseph Pereira and Cory Skluzak (OCC); Eric Haglund and Fiona Sigalla (Staff); Justin Brant and Rick Gilliam (SWEEP and Vote Solar); and Gwendolyn Farnsworth and Douglas Howe (WRA). The following witnesses filed cross-answer testimony: Mr. Hay (CEO); Messrs. Bennett and Woolf (EOC); Messrs. Brant and Gilliam (SWEEP and Vote Solar); and Ms. Farnsworth and Mr. Howe (WRA). Finally, the following witnesses filed rebuttal testimony: Ms. Trammell, Mr. Wishart, and Mr. Wozniak.

17. On May 21, 2020, EOC filed a Motion to Strike certain portions of the answer testimony of Staff.

18. On June 3, 2020, Staff filed a Response to EOC's Motion to Strike.

19. On June 8, 2020, counsel for PSCo sent an email to the ALJ stating that the parties had reached a settlement. Counsel for the rest of the parties were copied on the email. Counsel for PSCo stated in the email that a notice of settlement in principle would be filed in the proceeding on June 9, 2020. In subsequent email exchanges between the ALJ and the parties, the ALJ stated that the prehearing conference set for June 12, 2020 would go forward as planned and counsel for PSCo stated that the parties were working to file the settlement agreement and a motion to approve the settlement agreement before the prehearing conference.

20. On June 9, 2020, PSCo filed a Notice of Unanimous Settlement in Principle.

21. On June 11, 2020, PSCo filed the Joint Motion referenced above. While the Joint Motion referenced the Settlement Agreement as Attachment 1, the Settlement Agreement was not filed until June 12, 2020. Nevertheless, counsel for PSCo provided a copy of the Settlement Agreement by email to the ALJ in the evening of June 11, 2020. Counsel for the other parties were copied on the email. In the Joint Motion, the parties requested that the procedural schedule be modified to establish a deadline of June 16, 2020 for testimony in support of the Settlement Agreement and June 19, 2020 for the hearing addressing the Joint Motion.

22. On June 12, 2020, the prehearing conference took place as scheduled at 10:30 a.m. All of the parties appeared and participated. At the outset of the prehearing conference, PSCo reiterated the request for this procedural schedule concerning the Settlement Agreement. The Settlement Agreement is 24 pages long and purports to settle every issue in this complicated proceeding. At the prehearing conference, the ALJ asked several preliminary questions seeking clarification of a few provisions in the Settlement Agreement. Based on that colloquy, the parties requested more time than initially requested in the Joint Motion to develop and file more comprehensive testimony in support of the Settlement Agreement. Based on the

foregoing, and the resulting schedule proposed by the parties, the ALJ established June 18, 2020 as the deadline for testimony supporting the Settlement Agreement and June 26, 2020 as the date for the hearing on the Settlement Agreement.

23. On June 15, 2020, the ALJ issued Decision No. R20-0441-I that vacated and rescheduled the hearing to June 26, 2020 and formally set June 18, 2020 as the deadline for filing testimony in support of the Settlement Agreement.

24. On June 18, 2020, the following witnesses filed testimony in support of the Settlement Agreement: Ms. Trammell and Mr. Wishart (PSCo); Mr. Haglund (Staff); Mr. Pereira (OCC); Mr. Hay (CEO); Mr. Bennett (EOC); Mr. Brant (SWEEP and Vote Solar); and Ms. Farnsworth (WRA).

25. On June 26, 2020, the hearing on the Settlement Agreement took place. All of the witnesses who submitted written testimony in support of the Settlement Agreement answered questions posed by the ALJ. At the conclusion of the hearing on the Settlement Agreement, the ALJ kept the evidentiary record open in light of the limited time the ALJ had to consider the Settlement Agreement and testimony in support thereof in advance of the hearing. The ALJ informed the parties that a further hearing day would be scheduled if necessary.

C. Background

1. Existing Schedule R Rates

26. The underlying design of Schedule R rates was established in 2010 pursuant to Decision No. C10-0286 that issued in Proceeding No. 09AL-299E on March 29, 2010.⁴ Proceeding No. 09AL-299E was a combined Phase I/Phase II proceeding. The Commission

⁴ The rates on the Schedule R tariff sheets were later updated to collect a higher revenue requirement consistent with this same rate design in Proceeding No. 16AL-0048E.

bifurcated the Phase I and Phase II issues and held separate hearings and issued separate decisions on the Phase I and Phase II issues. Decision No. C10-0286 addressed the Phase II issues in the proceeding.

27. In Decision No. C10-0286, the Commission decided to institute IBRs during the “Summer Season” of June 1 through September 30. IBRs separate ratepayers’ usage into blocks of kWhs and charge progressively higher rates for each block. The IBR structure used for the Schedule R rates during the Summer Season is as follows:

<u>Block (kWh)</u>	<u>Rate</u>
0-500	\$0.05461
501+	\$0.09902

Decision No. C10-0286 established a flat winter rate of \$0.05461 and a medical exemption rate during the Summer Season of \$0.06237.

28. PSCo advocated for the IBRs adopted in Proceeding No. 09AL-299E as a transition to TOU rates. TOU rates could not be adopted at that time because the advanced meters and their associated infrastructure (AMI) necessary to implement TOU rates were years away from being installed.⁵ AMI measures and records electricity consumption by time of day. PSCo viewed IBRs as a first step in both signaling to ratepayers the increasing long-run marginal cost of electricity and reducing “energy sales [] and/or peak load reductions.”⁶

29. In adopting the IBRs, the Commission stated:

Customer education and awareness will be key in the success of an IBR structure. We want customers to understand the design and purpose of the IBR structure we are approving. It is critical for Public Service to develop an advertising and

⁵ See Decision No. C10-0286 at 31 (¶ 89).

⁶ *Id.* at 26 (¶ 71).

education campaign that reaches out to the residential class and educates them about the IBR structure sufficiently in advance of its implementation.

We direct Public Service to convene a Committee on Education and Customer Bill Information as soon as possible after the effective date of this Order. Membership on the Committee will be open to any party to this case. The purpose of the Committee is to provide feedback to the Company on customer education and bill re-design, with a goal of completing these tasks before implementation of the new rates on June 1, 2010.

Because of the novelty of IBRs in Colorado, the optional time-of-use rates, and the greater seasonality spread in rates, the Commission will seek to examine the consequences of this rate structure in Public Service's next Phase II rate case.⁷

2. RE-TOU Trial

30. PSCo filed its next Phase II proceeding on January 25, 2016 (Proceeding No. 16AL-0048E) in which PSCo proposed, among other things, “to revise existing rate schedules consistent with its intention of developing a common rate design platform that includes time-of-use rates and a demand charge for the majority of its customers.”⁸ The Three Case Settlement settled that Phase II proceeding and two others: Proceeding Nos. 16A-0055E (PSCo's Application for Approval of its Solar*Connect Program) and 16A-0139E (PSCo's 2017 through 2019 Proposed Compliance Plan with the Renewable Energy Standard).⁹ All of the parties to this proceeding were also parties to the Phase II proceeding that was encompassed in the Three Case Settlement. With the exception of SWEEP, all of the parties to this proceeding were parties to (and thus supported) the Three Case Settlement.

31. The parties to the Three Case Settlement agreed for PSCo to implement a voluntary, opt-in trial for Residential Energy Time-of-Use (RE-TOU) rates starting on January 1,

⁷ *Id.* at 33 (¶¶ 95-97) (citation omitted).

⁸ Decision No. C16-1075 issued in Proceeding Nos. 16AL-0048E, 16A-0055E, and 16A-0139E on November 23, 2016 at 4 (¶ 8).

⁹ *See generally id.*

2017. The trial was designed to include up to 10,000 customers in 2017, 20,000 in 2018, and 30,000 participants in 2019, including up to 500 low-income customers.

32. The RE-TOU trial has different rate structures for weekdays except holidays and weekends and holidays. The weekday except holiday rate structure has three time-periods with different rates: On-Peak (2:00 p.m. to 6:00 p.m.), Off-Peak (9:00 p.m. to 9:00 a.m.), and Shoulder (all other hours (9:00 a.m. to 2:00 p.m. and 6:00 p.m. to 9:00 p.m.)). The trial also has different rates for summer and winter. The rate structure for weekdays except holidays is as follows:

Weekday Except Holiday Trial Schedule RE-TOU Rates

	<u>Peak</u> (2:00 p.m. to 6:00 p.m.)	<u>Shoulder</u> (9:00 a.m. to 2:00 p.m., 6:00 p.m. to 9:00 p.m.)	<u>Off-Peak</u> (9:00 p.m. to 9:00 a.m.)
<u>Summer Rates</u> <u>(\$/kWh)</u>	\$0.13814	\$0.08420	\$0.04440
<u>Winter Rates</u> <u>(\$/kWh)</u>	\$0.08880	\$0.05413	\$0.04440 ¹⁰

¹⁰ *Id.*, Attach. A at 27.

33. The weekend and holiday schedule eliminates the On-Peak period and modifies the time-periods and rates for the remaining Shoulder and Off-Peak periods, as follows:

Weekend and Holiday Trial Schedule RE-TOU Rates

	<u>Shoulder</u> (9:00 a.m. to 9:00 p.m.)	<u>Off-Peak</u> (9:00 p.m. to 9:00 a.m.)
<u>Summer Rates</u> <u>(\$/kWh)</u>	\$0.08420	\$0.04440
<u>Winter Rates</u> <u>(\$/kWh)</u>	\$0.05413	\$0.04440 ¹¹

For both rate structures, the summer period is from June 1 through September 30 and the winter period is from October 1 through May 31.¹² To protect low-income participants in the trial, a hold harmless provision is included that allows the low-income trial participants to pay the lower of their monthly bills determined under Schedule R and Trial Schedule RE-TOU.¹³

34. The Three Case Settlement required Public Service to file an advice letter no later than December 2, 2019:

- (1) to provide the Commission, Public Service, and stakeholders a decision point as to whether Schedule RE-TOU should become the rate for all residential customers based on the efficacy of the initial design of Schedule RE-TOU rate structure on different residential customer demographics, specifically including low-income customers;
- (2) to provide an opportunity to revise Schedule RE-TOU;
- or (3) to discontinue Schedule RE-TOU.¹⁴

¹¹ *Id.*

¹² *Id.*

¹³ *Id.*, Attach. A at 31-32.

¹⁴ *Id.*, Attach. A at 30.

35. On October 9, 2019, PSCo filed a Motion for a Variance to Extend Filing Date of its RE-TOU Advice Letter Until on or Before August 1, 2020 (Motion for Variance) in Proceeding No. 16AL-0048E. Specifically, PSCo stated that AMI meters “are needed for [PSCo’s] residential customers to maximize the opportunities and potential benefits of utilizing an RE-TOU rate design.”¹⁵ PSCo then stated that it had only recently executed a final contract for the deployment of AMI meters “starting in the third quarter of 2021.”¹⁶ For this reason, and because PSCo’s “RE-TOU research consultant, Navigant, will provide the final results of [PSCo’s] Trial Schedule RE-TOU in February 2020, with a final report available for filing approximately in June 2020,” PSCo requested that the deadline to file the RE-TOU Advice Letter required by the Three Case Settlement be extended to August 1, 2020 “in order to better coincide with the updated AMI deployment schedule, as well as the timing of the final Navigant report.”¹⁷

36. Based on the opposition by Staff, the CEO, Vote Solar, and WRA, the Commission denied the Motion for Variance on November 12.

D. Advice Letter No. 1814

37. Based on the foregoing, PSCo filed the Advice Letter that initiated this proceeding on December 2, 2019. The Advice Letter includes a new Modified Schedule RE-TOU that alters the structure and rates of Schedule RE-TOU used in the trial. The Advice Letter proposes to make the new Modified Schedule RE-TOU the default schedule for all residential ratepayers.

¹⁵ Motion for Variance at 4.

¹⁶ *Id.*

¹⁷ *Id.* at 4-5.

38. PSCo proposed an effective date of January 2, 2020 for the changes described in the Advice Letter and Tariff Sheets, as required by the Three Case Settlement. PSCo further requested that the Commission suspend the tariffs, and set the tariffs for hearing, with an effective date of January 1, 2021. At that time, the only ratepayers that would transition to Modified Schedule RE-TOU are the existing ratepayers participating in the trial who, as a result, are currently on RE-TOU. The remainder of the ratepayers would be transitioned to Modified Schedule RE-TOU as PSCo installs advanced meters on each ratepayer's residence and the associated infrastructure for the AMIs is installed in the ratepayer's area. PSCo will begin deploying AMI in the second quarter of 2021 and anticipates that ratepayers will be transitioned to Modified Schedule RE-TOU from the second quarter of 2021 to 2024, when PSCo believes the deployment of AMI will be completed.

39. The following summarizes the changes proposed by PSCo in the Advice Letter and the reasons therefor.

1. Default Rate

40. PSCo proposes to make TOU rates the default rates for all residential ratepayers for three primary reasons. First, TOU rates "are designed to encourage residential customers to shift their summer energy usage away from periods when electricity demand is greatest, which is also when system costs as well as fossil generation and associated [CO₂] emissions are at their highest."¹⁸ TOU rates do this by sending price signals to ratepayers that are consistent with the costs of, and CO₂ emissions resulting from, generating electricity. In other words, when the costs of, and CO₂ emissions resulting from, generating electricity are at their highest, the rates

¹⁸ Hearing Exhibit 101 at 14:9-12 (Direct Testimony of Ms. Trammell).

paid by ratepayers are likewise at their highest and vice versa. Such a rate structure incentivizes ratepayers to shift their electric consumption from the highest cost periods to lower cost ones.¹⁹ In so doing, it “create[s] the opportunity for customers to reduce their bills by moving their energy usage to off-peak periods” and the resulting “reductions in load . . . can help reduce carbon emissions on Public Service’s system.”²⁰

41. Second, TOU rates also incentivize the “electrification of transportation and electric vehicle (“EV”) adoption” because while purchasers of EV’s would thereby increase their electric consumption, they would be able to charge their EV’s during the lowest cost non-peak hours. As stated by PSCo:

Currently, under tiered rates, customers may pay as much as 13.5 cents per kWh to charge their vehicles in the summer as higher overall usage translates to higher overall costs in the tiered structure. With tiered rates, customers are not incentivized to charge their EVs during off-peak periods (i.e., at night), a behavior that would be beneficial because it shifts load away from the Company’s system peak. The Modified Schedule RE-TOU encourages this type of behavior through different on-peak versus off-peak pricing. The Modified Schedule RE-TOU encourages this type of behavior through different on-peak versus off-peak pricing. As proposed, the off-peak rate of the Modified Schedule RE-TOU would charge EV customers only 8.9 cents, a 40 percent reduction in the cost to charge EVs at home and equivalent to \$0.66 per gallon of gasoline.²¹

42. Finally, by reducing load during system peak demand, TOU rates may help to avoid or reduce the need for investments in peaking plants or energy storage facilities in the future.²² Both may need to be constructed in the future “to meet system peak demands and bridge between periods of abundant renewable energy generation.”²³ By lowering peak demand, TOU rates could avoid the need to make these investments. Given that the cost of a conventional

¹⁹ *Id.* at 16:2-6.

²⁰ *Id.* at 14:13-18.

²¹ *Id.* at 18:10-19.

²² Hearing Exhibit 102 at 16:17-21 (Direct Testimony of Mr. Wishart).

²³ *Id.*

natural gas combustion turbine is \$1,072 per kW and the cost of battery storage as \$1,857 per kW, TOU rates could lead to significant future cost savings.²⁴

43. The current summer two-tiered rates do not lower generation costs and CO₂ emissions to the same degree because they focus “pricing on the amount of energy customers use, regardless of what time of the day that energy is used.”²⁵ Specifically, as described above, under the current IBR system ratepayers pay a lower rate (\$0.05461/kWh) for the first 500 kWh consumed, and then a higher rate (\$0.09902/kWh) for every kWh consumed over 500 kWh.²⁶ The tiered rate system does not send accurate price signals about when the marginal energy cost and carbon emissions are at their highest. For this reason, ratepayers are not incentivized to move their consumption to times when marginal energy costs and carbon emissions are lower. Similarly, because marginal energy costs and carbon emissions are at their highest during peak demand, the current summer tiered rates are less likely than TOU rates to avoid the costs associated with building new natural gas peaking plants and energy storage facilities to meet the peak demand.²⁷ For these reasons, PSCo proposed to make the Modified Schedule RE-TOU rates the default rates for all residential ratepayers.

2. Modifications to Schedule RE-TOU

44. Modified Schedule RE-TOU proposes to change the time-periods in Schedule RE-TOU as follows: (a) the On-Peak period would start and end one hour later (3:00 p.m. to 7:00 p.m.); (b) the Off-Peak period would start one hour later and end two hours later (10:00 p.m. to 11:00 a.m.); (c) the morning Shoulder period starts two hours later and ends

²⁴ *Id.* at 16:23-17:3.

²⁵ Hearing Exhibit 101 at 16:17-19.

²⁶ Hearing Exhibit 102, Attach. SWW-3 at 1.

²⁷ *See* Hearing Exhibit 102 at 16:17-17:3.

one hour later (11:00 a.m. to 3:00 p.m.); and (d) the night Shoulder period starts and ends one hour later (7:00 p.m. to 10:00 p.m.). The Modified Schedule RE-TOU also proposes to eliminate the two different rate structures for summer and winter and the different rate structures and time periods for weekdays except holidays and weekends and holidays. The resulting proposed rate structure is as follows:

	<u>On-Peak</u>	<u>Shoulder</u>	<u>Off-Peak</u>
	Summer Weekdays – 3:00 p.m. to 7:00 p.m. Summer Weekends & Holidays – N/A Winter – N/A	Summer Weekdays – 11:00 a.m. to 3:00 p.m., 7:00 p.m. to 10:00 p.m. Summer Weekends & Holidays – N/A Winter – N/A	Summer – 10:00 p.m. to 11:00 a.m. Summer Weekends & Holidays – All Hours Winter – All Hours
<u>Rate</u> <u>(\$/kWh)</u>	\$0.11078	\$0.08309	\$0.05539 ²⁸

3. Hold Harmless Provision

45. In the Advice Letter, PSCo proposed to eliminate the hold harmless provision for low-income ratepayers included in the RE-TOU Trial. As justification, PSCo stated that “[t]he reality of this hold harmless provision . . . is that the Trial Schedule RE-TOU did not incentivize participating low-income customers to modify their on-peak consumption.”²⁹ Because “[i]t is important for low income customers to have the tools to take charge of their bills,”³⁰ PSCo proposed to eliminate the hold-harmless provision and use “targeted outreach and education” to allow low-income ratepayers to “take that step.”³¹

²⁸ Hearing Exhibit 102, Attach. SWW-1 at 1.

²⁹ Hearing Exhibit 101 at 53:11-13 (Direct Testimony of Ms. Trammell).

³⁰ *Id.* at 54:7-8.

³¹ *Id.* at 54:9.

46. PSCo emphasized that existing energy assistance programs – the federal Low-Income Energy Assistance Program (LEAP), PSCo’s Electric Affordability Program (EAP), and an assistance program run by EOC – would continue to be offered to assist low-income ratepayers with their bills.

47. According to PSCo,

LEAP is a federally funded program that helps eligible Colorado families, seniors, and individuals pay a portion of their winter home heating costs. Customers whose income is within 60 percent of the State median income and have a home heating bill, may qualify for LEAP benefits and the funds are typically paid directly to the energy provider. During the 2018/2019 heating season, 39,000 Public Service customers received LEAP benefits totaling over \$16 million.³²

48. EAP is a PSCo-administered program that provides “bill payment assistance to low income LEAP-qualified households based on an affordable percentage of their income towards the cost of consumption on their electric and gas bills.”³³ One aspect of the EAP is designed to limit a low-income household’s expenditure on electricity to 3 percent of its annual household income, as determined “by the Colorado Department of Human Services, Division of Low Income Energy Assistance.”³⁴ From November 1, 2018 to October 31, 2019, EAP assisted 22,846 low-income electric customers with \$5.3 million in bill assistance.³⁵ PSCo “recently updated [its] EAP funding by \$2.1 million of its 2018-2019 program year funding levels.”³⁶

49. EOC’s low-income program is administered through “a network of agencies within Colorado communities that [EOC] fund[s] to help customers with their home energy

³² *Id.* at 54:16-22.

³³ *Id.* at 55:12-14.

³⁴ *Id.* at 56:1-2.

³⁵ *Id.* at 56:4-6.

³⁶ Hearing Exhibit 106 at 39:18-19 (Rebuttal Testimony of Ms. Trammell).

needs, including electricity, throughout the year.”³⁷ EOC’s aid is available to PSCo’s customers whose income is within 80 percent of the State median income. According to PSCo, EOC provided approximately \$4.89 million in energy assistance to 9,233 PSCo customers from October 2018 through September 2019.³⁸ According to PSCo, these three assistance programs would continue to be available to low-income ratepayers after the transition to Modified Schedule RE-TOU. Regardless, PSCo also asserted that it does not believe low-income customers will experience a significant bill increase resulting from the switch to Modified Schedule RE-TOU.³⁹ This conclusion was based on data from the trial, which showed that low-income participants experienced an average bill increase of \$1.50/month.⁴⁰

4. Medical Exemption Program

50. The Advice Letter also includes revisions to the Schedule Medical Exemption Program (MEP). Specifically, the MEP would be extended to apply to Modified Schedule RE-TOU ratepayers who: (a) have a household income of less than or equal to 250 percent of the federal poverty guidelines; and (b) submit by May 1st of each year, a written certification from a currently licensed physician in good standing in the State of Colorado of a heat sensitive, qualifying medical condition and/or use of essential life support equipment. Households that qualify would pay \$0.06237/kWh from June 1 to September 30.

5. Other Provisions

51. The Advice Letter also requested: (a) to convert all rate riders for residential customers from cents per kWh to a percentage of base energy charges, which is the overall

³⁷ *Id.* at 55:3-5.

³⁸ *Id.* at 55:5-8.

³⁹ Hearing Exhibit 102 at 26:6-27:4, 46:1-50:20 (Direct Testimony of Mr. Wishart).

⁴⁰ *Id.* at 46:1-9.

average rate per kWh paid by ratepayers; (b) customer education and outreach related to the implementation of the proposed Modified Schedule RE-TOU; and (c) deferred accounting for incremental costs for billing and programming changes and customer education. As to the first, PSCo states that this change will allow the charges of the rate riders to exhibit the same hourly price variations as the base rate charges.⁴¹ The table below shows the change proposed by PSCo:⁴²

Rider	Current Rider Rate	Rider as a % of Base Energy Charge
Electric Commodity Adjustment (ECA)	\$0.02674	43.66%
Demand-Side Management Cost Adjustment (DSMCA)	\$0.00162	2.65%
Purchased Capacity Cost Adjustment (PCCA)	\$0.00401	6.55%
Transmission Cost Adjustment (TCA)	\$0.00203	3.31%
Clean Air Clean Jobs Adjustment (CACJ)	\$0.00301	4.92%

52. As to the deferred accounting for customer education expenses, PSCo estimated that those expenses would be \$825,000 to \$4.78 million.⁴³ PSCo promised to update its customer education plan and estimated incremental expenses later in the proceeding, after it received a report from Navigant Consulting, Inc. “with more specifics on customer preferences.”⁴⁴

53. Finally, PSCo asserted that the Modified Schedule RE-TOU is designed to be revenue neutral, which means that PSCo will not gain or lose revenue as a result of implementing Modified Schedule RE-TOU.

⁴¹ *Id.* at 31:19-32:7.

⁴² *Id.* at 33 (Table SWW-D-4).

⁴³ Hearing Exhibit 103 at 23:15-16 (Direct Testimony of Ms. Wozniak).

⁴⁴ *Id.* at 24:3-5.

6. Summary of Changes Proposed to Schedule RE-TOU

54. The following table highlights the differences between the Schedule RE-TOU used in the Trial and the Modified Schedule RE-TOU proposed in the Advice Letter:

	<u>Trial Schedule RE-TOU</u>	<u>Modified Schedule RE-TOU</u>
<u>Applicability</u>	Optional	Default Rate for All Residential Ratepayers
<u>Weekday TOU Rate Differentiation</u>	Year-Round	Summer Only (June through September)
<u>Peak Period (Weekday Excluding Holidays)</u>	Year-Round – 2:00 p.m. to 6:00 p.m., excluding weekends and holidays	Summer Only – 3:00 p.m. to 7:00 p.m., excluding holidays
<u>Shoulder Period (Weekday Excluding Holidays)</u>	Year-Round – 9:00 a.m. to 2:00 p.m. and 6:00 p.m. to 9:00 p.m.	Summer Only – 11 a.m. to 3:00 p.m. and 7 p.m. to 10 p.m.
<u>Shoulder Period (Weekends & Holidays)</u>	Year-Round – 9:00 a.m. to 9:00 p.m.	N/A
<u>Off-Peak Period</u>	Year-Round – 9 p.m. to 9 a.m., including Holidays	Summer Weekdays – 10 p.m. to 11 a.m. Summer Weekends & Holidays – All Hours Winter Hours & Holidays – All Hours
<u>Peak/Off-Peak Rate Ratio</u>	2.4:1	2.1:1
<u>Provision for Low-Income Ratepayers</u>	Yes (Hold Harmless Provision)	No
<u>Rate Riders</u>	Per kWh charges	Percent of base energy rate charges

E. Intervenors’ Positions in Answer Testimony

55. In their answer testimony, the Intervenors agreed with PSCo that the Commission should adopt a TOU rate structure as the default rate structure for the Residential class.

However, they disagreed with PSCo concerning the particulars of PSCo's Modified Schedule RE-TOU proposal. The following summarizes those disagreements.

1. Peak, Shoulder, and Off-Peak Time Periods

a. Staff

56. Staff accepted the peak and off-peak periods proposed by PSCo, but argued in favor of shortening the shoulder periods to 12:00 to 3:00 and 7:00 to 9:00. Staff stated that such a change will make it easier for ratepayers to shift consumption from shoulder to off-peak periods. Specifically, Staff asserted that “[i]t is considerably easier for ratepayers trying to delay the use of appliances in the evening to take advantage of the off-peak rate if they only have to wait until 9:00 P.M. instead of 10:00 P.M.”⁴⁵ Staff also argued that the system load data also supports this change because none of the top 100 highest load hours occurred from 11:00 a.m. to noon, and only three of those hours occurred from 9:00 p.m. to 10:00 p.m. Staff concluded that “dropping the 9:00 P.M. hour for the sake of ratepayer convenience is a worthwhile tradeoff.”⁴⁶

b. OCC

57. OCC proposed to alter the peak period from 3:00 to 7:00 p.m. to 2:00 to 6:00 p.m., which required a shift in the shoulder periods by one hour to 10:00 a.m. to 2:00 p.m. and 6:00 p.m. to 9:00 p.m. OCC proposes these changes for two reasons. First, because carbon dioxide (CO₂) emissions are higher from 2:00 to 3:00 p.m. than from 6:00 to 7:00 p.m., shifting the peak period back by one hour will have a greater impact in decreasing CO₂ emissions.⁴⁷ Second, the shift in the shoulder periods will yield TOU rates that are more acceptable to

⁴⁵ Hearing Exhibit 400 at 52:11-14 (Answer Testimony of Mr. Haglund).

⁴⁶ *Id.* at 53:3-4.

⁴⁷ Hearing Exhibit 301 at 16:1-12.

ratepayers, as 6:00 to 7:00 p.m. “is the time period the majority of daytime workers are returning from work, preparing the evening meal and utilizing electric appliances.”⁴⁸ OCC indicated that it is open to shifting the peak period to 3:00 to 7:00 p.m. in the future, but “the concept of gradualism is the grounding rationale for [OCC’s] proposal.”⁴⁹ According to OCC, gradualism “simply means that rates should not be raised too abruptly in the art of rate design” that “could result in rate shock and foment much backlash and resentment from the ratepayers that the OCC represents.”⁵⁰ In the context of the peak period, OCC appears to be arguing that including the 6:00 p.m. hour (from 6:00 to 7:00 p.m.) in the peak period could cause such a backlash because of the impact on the majority of daytime workers.

c. SWEEP/Vote Solar

58. SWEEP/Vote Solar proposed a significantly different rate period structure: a peak period from 3:00 p.m. to 6:00 p.m., two shoulder periods from 8:00 a.m. to 3:00 p.m. and 6:00 p.m. to 9:00 p.m., and an off-peak period from 9:00 p.m. to 8:00 a.m.⁵¹ SWEEP/Vote Solar used unadjusted actual 2018 residential load data to design its time periods. In contrast, PSCo adjusted the 2018 load data to normalize it based on weather and the anticipated elasticity effects of implementing PSCo’s proposed TOU pricing differentials.⁵² Based on the unadjusted 2018 data, SWEEP/Vote Solar concluded that “the 3 p.m. to 6 p.m. period best reflected the highest summer emission hours.”⁵³ As to the shoulder periods, SWEEP/Vote Solar concluded based on its analysis of the data “that 8 a.m. was a natural weekday morning threshold especially

⁴⁸ *Id.* at 16:18-20.

⁴⁹ *Id.* at 18:14-15.

⁵⁰ *Id.* at 21:5-10.

⁵¹ Hearing Exhibit 801, Rev. 1 at 43:17-44:4 (Answer Testimony of Mr. Gilliam).

⁵² *Id.* at 42:3-46:7.

⁵³ *Id.* at 46:12-13.

in the eight winter months and that 9 p.m. was similar on the evening end” because “[b]y 9 p.m., emissions levels are on a fairly steep downward trajectory, and CO₂ intensity is close to its low point for both summer and winter weekdays.”⁵⁴

d. COSSA/SEIA

59. Like SWEEP/Vote Solar, COSSA/SEIA proposed a significantly different rate period structure: a “super off-peak” period from 12:00 a.m. to 5:00 a.m., off-peak periods from 5:00 a.m. to 11:00 a.m. and 7:00 p.m. to 12:00 a.m., a shoulder period from 11:00 a.m. to 2:00 p.m., and a peak period from 2:00 p.m. to 7:00 p.m.⁵⁵ As justification, COSSA/SEIA stated that its proposal is:

more strongly supported than the Company’s proposal and align customer incentives with multiple factors beyond reducing the top 100 CO₂ hours. These rates target CO₂ reductions; are mindful of system load and loss of load risks; reflect future marginal costs, loads, and net loads; and have more potential to reduce peak demand than the Company’s proposal. Setting the TOU hours and rates as I recommend will enable the Company to use the power of price signals to help align customer consumption with current and future system benefits. In the long run, this will be critical to obtaining the state’s carbon reduction goals while controlling future energy and capacity costs.⁵⁶

COSSA/SEIA also stated that its proposal “provide[s] opportunity for savings for more customers than the Company’s proposed Modified RE-TOU rate while better protecting subclasses such as low-use customers, low-income customers, and renters. Further, installing solar under the COSSA/SEIA rates will provide meaningful savings and should support the distributed solar industry moving forward.”⁵⁷

⁵⁴ *Id.* at 47:12-48:4.

⁵⁵ Hearing Exhibit 900, Rev. 1 at 13:16-22, 14:5-6 (Table 1) (Answer Testimony of Mr. Lucas).

⁵⁶ *Id.* at 14:9-15:2.

⁵⁷ *Id.* at 15:5-9.

e. WRA

60. WRA accepted the peak period proposed by PSCo (3:00 p.m. to 7:00 p.m.), but proposed to eliminate the shoulder periods from PSCo's proposal. This would have resulted in an off-peak period from 12:00 a.m. to 3:00 p.m. and 7:00 p.m. to 12:00 a.m. According to WRA, "[e]liminating the shoulder period allows a rate with a greater [peak-to-off-peak price] ratio, which sends a stronger signal to customers to encourage them to reduce energy use."⁵⁸

f. Remaining Intervenors

61. CEO supported PSCo's peak, off-peak, and shoulder time periods. EOC and Boulder took no position on PSCo's peak, off-peak, and shoulder time periods.

2. Peak/Off-Peak Rate Ratio**a. Staff and OCC**

62. Staff agreed that "[a] price ratio of 2 to 1 is an appropriate price ratio at this time, considering that the rate is new to most of Public Service's residential ratepayers."⁵⁹ Likewise, the OCC supported PSCo's ratio based on "the principle of gradualism" and the negative impact of adopting a higher ratio that could lead to ratepayer backlash and resentment.⁶⁰ Both Staff and the OCC suggested that a higher ratio could be justified in the future after ratepayers become acclimated to TOU rates.⁶¹

b. CEO

1. CEO stated that the ratio:

is integral for achieving the goals and objectives of the rate that are related to load shifting and energy use reduction, such as GHG emission reductions, reducing

⁵⁸ Hearing Exhibit 1001 at 7:3-4 (Answer Testimony of Mr. Howe).

⁵⁹ Hearing Exhibit 400 at 41:17-19 (Answer Testimony of Mr. Haglund).

⁶⁰ Hearing Exhibit 301 at 21:3-11 (Answer Testimony of Mr. Skluzak).

⁶¹ Hearing Exhibit 400 at 41:17-19; Hearing Exhibit 301 at 21:3-11.

system peak stress, reducing fuel costs, and avoiding the need for future investments in new generation or energy storage. If the price ratio is too low, it could negate the entire purpose of the TOU rate.⁶²

Based on the foregoing, CEO believed “that the proposed price ratio is too low and will contribute to the rate failing to produce as much peak load reduction that occurred in the Trial.”⁶³ For this reason, CEO recommended that the ratio used in the trial (2.4:1) be adopted in the default TOU rate design.⁶⁴

c. SWEEP/Vote Solar

63. SWEEP/Vote Solar proposed a 3:1 Peak/Off-Peak ratio during the summer and 2:1 ratio during the winter. As justification, SWEEP/Vote Solar stated that the 2:1 ratio proposed by PSCo is too weak of a price signal during the summer and thus risks being ignored by ratepayers, which would not lead to a significant summer consumption reduction.⁶⁵ The 2:1 winter ratio would “reduce that season’s rate impacts, while still encouraging customers to shift consumption.”⁶⁶

d. COSSA/SEIA

64. COSSA/SEIA proposed a 2.5:1 price ratio for the Peak/Off-Peak periods. As noted above, COSSA/SEIA also proposed a “super off-peak” period (SOP) from 12 a.m. to 5 a.m. The SOP/Off-Peak ratio proposed by COSSA/WEIA is 0.56/1.⁶⁷ According to COSSA/SEIA, its proposed rate design, including its proposed ratios, “does not offer the highest savings to the most customers of the analytical rates I tested, but . . . str[ikes] the right balance

⁶² Hearing Exhibit 46:11-16 (Answer Testimony of Mr. Hay).

⁶³ *Id.* at 48:4-7.

⁶⁴ *Id.* at 50:2-6.

⁶⁵ Hearing Exhibit 801, Rev. 1 at 52:8-53:2 (Answer Testimony of Mr. Gilliam).

⁶⁶ *Id.* at 53:7-8.

⁶⁷ Hearing Exhibit 900, Rev. 1 at 87:14-88:1 (Figure 23, Column for “SEIA 12”) (Answer Testimony of Mr. Lucas).

between savings opportunities, bill stability, revenue adequacy, and customer understandability, while also positioning the [PSCo] and its customers to advance Colorado’s policy goals.”⁶⁸

e. WRA

65. WRA recommended a 3:1 Peak/Off-Peak ratio because it would “send[] a stronger signal to customers to encourage them to reduce energy use.”⁶⁹ According to WRA, “[t]he greater the POPP ratio is from 1.0, the greater is the peak price relative to the off-peak price and the stronger the signal to shift usage from peak to off-peak.”⁷⁰ However, limiting the Peak/Off-Peak ratio to 3:1 was “a reasonable and realistic balance between rate impact and desired consumer 13 action and is within the framework of regulatory incrementalism.”⁷¹

f. Remaining Intervenors

66. EOC and Boulder took no position on PSCo’s proposed Peak/Off-Peak ratio.

3. Summer-Only Versus Year-Round

67. As noted above, PSCo proposes to apply the Modified Schedule RE-TOU only during the summer months (June 1 to September 30). During the remainder of the year, all hours would be billed at the off-peak rate. In their answer testimony, Staff, CEO, SWEEP/Vote Solar, and WRA all disagreed, as detailed below.

a. Staff

68. Staff argued that the TOU rate should apply year-round, rather than just during the summer months. As justification, Staff argued that a full-year TOU rate “aligns better with the peaks in demand on the Company’s system than a summer-only rate” and “makes

⁶⁸ *Id.* at 155:26-156:4.

⁶⁹ Hearing Exhibit 1001 at 6:12, 7:3-4 (Answer Testimony of Mr. Howe).

⁷⁰ *Id.* at 9:16-18.

⁷¹ *Id.* at 12:11-13.

it easier for ratepayers to understand and adapt their consumption habits.”⁷² As to the former, Staff stated that January (5,067 MW), December (4,783 MW), November (4,336 MW), and May (4,503 MW) are projected to have higher peak demand net of renewables than September (4,432 MW) in 2022.⁷³ As to the latter, Staff argued that “[a] full-year rate relieves ratepayers of the burden of having to keep track of how their rate changes by season.”⁷⁴

b. CEO, SWEEP/Vote Solar, and WRA

69. CEO, SWEEP/Vote Solar, and WRA agree with Staff that the summer-only TOU rates proposed by PSCo are confusing to customers.⁷⁵ CEO and SWEEP/Vote Solar also contend that summer-only TOU rates will not maximize emissions reductions.⁷⁶ In contrast, year-round rates will more significantly lower CO₂ emissions and also maximize the likelihood that ratepayers will be able to adapt their usage to take advantage of the TOU rates.⁷⁷ They will also reduce load and lower fuel costs in the winter⁷⁸ and “mitigate the need to build or acquire new generating resources to meet growth in that peak.”⁷⁹

⁷² Hearing Exhibit 400 at 48:11-16 (Answer Testimony of Mr. Haglund).

⁷³ *Id.* at 48:18-50:2. Staff argued that the rate design should be based on load net of renewables because that is the cost-based way of designing rates. As Staff stated, “[l]oad net of renewables shows most clearly the hours in which system demand exceeds the capacity that renewables provide to the system, and therefore which hours drive the costly additional investments in capacity.” *Id.* at 44:22-45:2. In contrast, Staff asserted that PSCo’s approach of basing rate design on average hourly CO₂ emissions is not cost-based. *Id.* at 44:17-45:20.

⁷⁴ *Id.* at 51:2-5.

⁷⁵ Hearing Exhibit 700, Rev. 1 at 36:3-9, 40:16-43:14 (Answer Testimony of Mr. Hay); Hearing Exhibit 801, Rev. 1 at 51:16-52:2 (Answer Testimony of Mr. Gilliam); Hearing Exhibit 1000 at 29:1-21 (Answer Testimony of Ms. Farnsworth).

⁷⁶ Hearing Exhibit 700, Rev. 1 at 36:3-36:15, 40:10-15; Highly Confidential Hearing Exhibit 700 at 36:16-40:15 (Answer Testimony of Mr. Hay); Hearing Exhibit 801, Rev. 1 at 51:9-15 (Answer Testimony of Mr. Gilliam).

⁷⁷ Hearing Exhibit 700, Rev. 1 at 40:16-43:14; Hearing Exhibit 801, Rev. 1 at 51:16-52:2.

⁷⁸ Hearing Exhibit 700, Rev. 1 at 44:1-13.

⁷⁹ Hearing Exhibit 801, Rev. 1 at 51:15-16.

4. Customer Protections for Low-Income Ratepayers and Ratepayers Who Use Medical Equipment

a. Low-Income

70. As noted above, PSCo proposed to eliminate the low-income hold harmless provision, stating that other assistance programs (LEAP, EAP, and the EOC's low-income program) are available. PSCo states that the hold-harmless provision in the trial at least mitigated, and perhaps eliminated, the incentive for low-income customers to shift consumption.⁸⁰ Additionally, PSCo states that, based on the trial results showing that low-income participants experienced an average bill increase of \$0.16, it does not believe low-income ratepayers will suffer significant bill increases resulting from Modified Schedule RE-TOU.⁸¹

71. In response, Staff, EOC, SWEEP/Vote Solar, and WRA recommended that low-income ratepayers be allowed to opt-out of the Modified Schedule RE-TOU.

(1) Staff

72. According to Staff, "there is little evidence to support the assumption that the TOU rate will negatively affect low-income ratepayers."⁸² Nevertheless, Staff supported an opt-out provision for low-income ratepayers. As support, Staff cited the Commission's previous expressions expressed concern with protecting low-income ratepayers from adverse effects of rate changes and § 40-3-106(1)(d)(I), C.R.S., allows the Commission to do so.⁸³ Staff further argued that qualification for the opt-out should be based on qualification for LEAP and that those

⁸⁰ Hearing Exhibit 101 at 54:11-14 (Direct Testimony of Ms. Trammell).

⁸¹ Hearing Exhibit 102 at 50:10-20 (Direct Testimony of Mr. Wishart).

⁸² Hearing Exhibit 400 at 54:1-2 (Answer Testimony of Mr. Haglund).

⁸³ *Id.* at 53:12-54:4.

who qualify should receive service on a flat rate proposed by Staff, as explained in more detail below.⁸⁴

(2) EOC

73. EOC cites PSCo's workpapers as establishing that 82 percent of low-income ratepayers will experience a bill increase because of the transition to Modified Schedule RE-TOU, and the average increase will be 3.6 percent. In contrast, 69 percent of the general population will experience a bill increase, and the average increase for that group will be 3.0 percent. Based on these numbers, EOC concludes that the transition to Modified Schedule RE-TOU will disproportionately burden low-income customers.⁸⁵

74. EOC disagrees with PSCo that low-income customers did not have an adequate incentive to modify on-peak consumption during the Schedule RE-TOU trial. After all, the hold-harmless provision in the trial provided that low-income participants would be billed the lower of the existing rate or the TOU rate. Instead, EOC believes that other factors prevented low-income participants from shifting their use to take advantage of the TOU rates in the trial, and would remain after transition to Modified Schedule RE-TOU. These factors are the higher likelihood that: (a) low-income households will have higher numbers of people, at least some of whom will be present in the house at all times; and (b) members of such households are more likely to work at night and on the weekends.⁸⁶ These factors thus corroborate the data summarized above establishing that low-income households will be disproportionately impacted by the change to Modified Schedule RE-TOU.⁸⁷

⁸⁴ *Id.* at 54:6-17.

⁸⁵ Hearing Exhibit 501, Rev.1 at 21:11-22:2 (Answer Testimony of Mr. Woolf); Hearing Exhibit 500 at 18:8-13 (Answer Testimony of Mr. Bennett).

⁸⁶ Hearing Exhibit 500 at 17:11-18:7.

⁸⁷ *Id.* at 18:10-13.

75. Finally, EOC states that Demand-Side Management programs “lose their impact for low-income customers” because they can reduce a low-income ratepayer’s overall consumption, but the savings gained therefrom can be “undercut if a customer is unable to shift the time that they use electricity.”⁸⁸ EOC also states that the LEAP, EAP, and the EOC-administered programs are insufficient to provide the help needed by low-income ratepayers. As a result, low-income ratepayers will be disproportionately negatively impacted by the change to Modified Schedule RE-TOU and they are the least able ratepayers to deal with the resulting bill increases. For these reasons, EOC advocated for allowing low-income ratepayers to opt-out of the Modified Schedule RE-TOU to “current Schedule R, the Medical Rate, a modified PIPP/EAP rate, or another option.”⁸⁹ EOC also advocated that shadow billing be provided for low-income ratepayers and that the hold-harmless provision from the trial be provided for two years to low-income ratepayers who do not opt-out of Modified Schedule RE-TOU.⁹⁰

(3) SWEEP/Vote Solar

76. SWEEP/Vote Solar recommends three provisions for low-income ratepayers. First, low-income ratepayers should be able to opt-out to Schedule R “to minimize the adverse impact from TOU rates.”⁹¹ Second, PSCo should collect six months of data before transitioning to TOU rates “to more directly provide targeted education and outreach to customers, and identify those customers that may be most impacted by the transition to TOU rates.”⁹² Third, during the six-month transition period, PSCo should provide shadow billing to “increase[e]

⁸⁸ *Id.* at 25:11-16.

⁸⁹ *Id.* at 35:9-11.

⁹⁰ *Id.* at 36:4-37:14.

⁹¹ Hearing Exhibit 800 at 35:1-8 (Answer Testimony of Mr. Brant).

⁹² *Id.* at 35:11-13.

[ratepayer] understanding of the impacts of TOU rates on their individual energy usage and total electricity bill.”⁹³

(4) WRA

77. Based on an analysis of data from a limited number of low-income households that participated in the RE-TOU Schedule trial, WRA concluded “that the circumstances of each low-income household vary significantly.”⁹⁴ However, it is clear that at least some low-income households will face significant barriers to transferring their usage from peak hours to off-peak or shoulder hours. For this reason, WRA concluded that “it would make sense to allow low-income customers to opt-out of the TOU rate chosen by the Commission and opt into Schedule R or a suitable flat rate schedule.”⁹⁵

b. Medical Exemption

78. All parties supported PSCo’s medical exemption provision in the Modified RE-TOU Schedule.

5. General Opt-Out

79. As originally proposed, PSCo’s Modified Schedule RE-TOU was a default/mandatory rate that ratepayers could not opt out of, except for those ratepayers with a medical exemption.

a. OCC

80. OCC advocated for an opt-out provision for all ratepayers, stating that it should be available even though few customers are likely to take advantage of it. In addition, to

⁹³ *Id.* at 35:19-20.

⁹⁴ Hearing Exhibit 1001 at 18:13-14 (Answer Testimony of Mr. Howe).

⁹⁵ *Id.* at 19:2-4. *See also* Hearing Exhibit 1000 at 21:10-14 (Answer testimony of Ms. Farnsworth).

low-income ratepayers, OCC believes that an opt-out provision would be important for ratepayers who are financially impacted by COVID-19. OCC recommends using the Medical Exemption Program rate of \$0.06237 as the rate for those opting out of TOU rates.⁹⁶

b. CEO

81. CEO argued that establishing Modified Schedule RE-TOU as the default rate is appropriate in general, but that the rate could unfairly increase the energy burden of certain ratepayers who cannot shift their energy consumption. For this reason, CEO proposed to maintain Schedule R as an option for such ratepayers. CEO asserted that a significant number of customers will not opt-out to Schedule R.⁹⁷

c. Boulder

82. Boulder (Lehrman) argued that ratepayers should be able to opt-out of Modified Schedule RE-TOU. Boulder expressed its “concern[] about the disparate financial impact to lower-income residents and fixed-income seniors, particularly those with disabilities or underlying health conditions that prevent them from modifying their energy use to mitigate against bill increases.”⁹⁸ For this reason, Boulder supported allowing ratepayers to opt-out to a “Residential General tariff.”⁹⁹

6. Implementation

83. As explained above, PSCo originally proposed to transition ratepayers to the Modified Schedule RE-TOU as follows: (a) on January 1, 2021, ratepayers participating in the Schedule RE-TOU trial would be transitioned; and (b) the remainder of the ratepayers would be

⁹⁶ Hearing Exhibit 301 at 23:7-11, 29:11-30:2, 36:2-6 (Answer testimony of Mr. Skluzak).

⁹⁷ Hearing Exhibit 700, Rev. 1 at 20:15-34:18 (Answer Testimony of Mr. Hay).

⁹⁸ Hearing Exhibit 600 Rev. 1 at 5:14-17 (Answer Testimony of Mr. Lehrman).

⁹⁹ *Id.* at 6:18.

transitioned as PSCo installs advanced meters on each ratepayer's residence and the AMI in the ratepayer's area. PSCo will begin deploying AMI in the second quarter of 2021 and anticipates that the final ratepayers will be transitioned to Modified Schedule RE-TOU in 2024. At that time, service under Schedule R would no longer be available.

a. Staff

84. Staff generally agreed with PSCo's proposal, but argued that on January 1, 2021, Schedule R should be replaced with a flat rate to which all Schedule R ratepayers (except current Schedule RE-TOU trial participants) would be moved. Ratepayers would then be transitioned from the flat rate to Modified Schedule RE-TOU on the schedule proposed by PSCo. Staff proposed this intermediate step because Schedule R "forces high-usage customers to subsidize lower usage customers, and . . . discourages the goal of 'beneficial electrification.'"¹⁰⁰

85. As to the former, Staff argued that because PSCo is permitted to collect a fixed amount of revenue, "if [it] charges a higher rate for energy consumption above 500 kWh (as under Schedule R) then it must necessarily charge a lower rate for consumption below 500 kWh."¹⁰¹ The delta between the two prices is a subsidy flowing from high-usage to low-usage ratepayers "because it does not cost more on a per unit basis to deliver 600 kWh compared to 500 kWh."¹⁰²

86. As to the latter, Staff stated:

Tiered rates discourage ratepayers from replacing fossil fuel use with electricity because they effectively penalize high-volume electricity use. For example, a tiered rate would make a person considering replacing their traditional car with an

¹⁰⁰ Hearing Exhibit 400 at 18:7-8 (Answer Testimony of Mr. Haglund).

¹⁰¹ *Id.* at 19:17-19.

¹⁰² *Id.* at 19 n.7.

electric vehicle (EV) less likely to purchase the EV because charging it would be much more expensive.¹⁰³

87. Because the roll-out of TOU rates proposed by PSCo will take an extended period, Staff believed it is in the public interest to first transition ratepayers from Schedule R to a flat rate that mitigates the subsidies of Schedule R and does not disincentivize beneficial electrification. The new flat rate proposed by Staff was \$0.09800, which includes the charges for all riders.¹⁰⁴ Staff argued that transitioning from the new flat rate to TOU rates would be better for two reasons:

First, eliminating the tiers well before the introduction of TOU rates will reduce ratepayer confusion about the bill impact of eliminating the tiers and the bill impact of TOU rates.

. . . .

Second, moving directly to TOU rates from the tiered rates will result in an estimated 39 percent of customers experiencing bill decreases with no shift in usage. Moving first to a flat rate will result in 63 percent of customers experiencing bill decreases on the TOU rate with no shift in usage.¹⁰⁵

b. EOC

88. EOC opposed Staff's proposal to adopt a flat rate on which all ratepayers would be placed before they were transitioned to Modified Schedule RE-TOU. In fact, EOC filed a Motion to Strike those portions of Staff's answer testimony requesting the establishment of the flat rate, arguing that it violated the statutory notice requirements of § 40-3-104(1)(c)(II)-(III), C.R.S. EOC withdrew the Motion to Strike as a result of the settlement agreement reached by the parties.

¹⁰³ *Id.* at 20:5-11.

¹⁰⁴ *Id.* at 59 (Table ERH-1). *See also* Hearing Exhibit 401 at 17 (Table FDS-1) (Answer Testimony of Ms. Sigalla).

¹⁰⁵ Hearing Exhibit 401 at 18:4-5, 13-16 (Answer Testimony of Ms. Sigalla).

89. EOC also opposed making Modified Schedule RE-TOU the default rate, stating that EOC never intended that the trial would be implemented as a tariffed rate, the Pilot was to be for study only, and that EOC would not have signed settlement if they understood that PSCo would implement the rate as a requirement of all residential customers.¹⁰⁶ EOC stated that PSCo ratepayers do not have sufficient understanding of TOU rates.¹⁰⁷ As a result, EOC recommended rejection of PSCo's proposal and implementing TOU rates gradually after customer education. Additionally, EOC recommends that the program be opt-in, allow for shadow billing, and offer alternative rates.¹⁰⁸

7. Revenue Decoupling

90. Staff argued that the Revenue Decoupling Adjustment pilot program (RDA Pilot) established in Proceeding No. 16A-0546E should be both expanded to include Modified Schedule RE-TOU and extended through 2024 (it is currently scheduled to expire in 2023), when all Residential customers will be moved to Modified Schedule RE-TOU.¹⁰⁹ Including Modified Schedule RE-TOU in the RDA Pilot would ensure that there is no over- or under-collection of revenues resulting from implementation of Modified Schedule RE-TOU.

91. SWEEP/Vote Solar agreed with Staff that Modified Schedule RE-TOU should be included in the RDA Pilot. SWEEP/Vote Solar requested that the Commission confirm that Modified Schedule RE-TOU, if approved, would be in the RDA Pilot.¹¹⁰

¹⁰⁶ Hearing Exhibit 501, Rev. 1 at 7:9-8:19 (Answer Testimony of Mr. Woolf).

¹⁰⁷ *Id.* at 14:3-10.

¹⁰⁸ *Id.* at 21:1-9.

¹⁰⁹ Hearing Exhibit 401 at 33:7-34:17 (Answer Testimony of Ms. Sigalla).

¹¹⁰ Hearing Exhibit 800 at 19:17-20:2 (Answer Testimony of Mr. Brant).

8. Ratepayer Education

92. The OCC noted the wide range of incremental customer education expenses for which PSCo is seeking deferred accounting and stated its hope that a narrower range could be identified “after taking into consideration comments from intervenors regarding education.”¹¹¹ Staff, EOC, CEO, and WRA noted the lack of detail in PSCo’s plan and urged PSCo to work with community partners, including the parties to this proceeding, to develop detailed education plans.¹¹² Finally, SWEEP/Vote Solar argued that customer education needs to be segmented (tailor education to ratepayer groups who are likely to be similarly and significantly impacted by the transition to TOU rates) and personalized (provide individual recommendations of specific actions that each ratepayer can take to reduce peak consumption and otherwise manage his/her bill).¹¹³

9. Reporting

93. Staff argued that PSCo should be required to file data quarterly so that the Commission can monitor revenue collected under the TOU rates. Ms. Sigalla proposes that these filings include shadow bill data and any explanations for why the rate may be collecting more or less than anticipated.¹¹⁴ WRA asserted that PSCo should be required to report the results of the Modified TOU Schedule by March 1 in 2023 and 2024 and then an Advice Letter by March 1, 2025 in which PSCo would address whether to modify the Modified TOU Schedule based on changes to the mix of generation resources on its system and corresponding CO₂ emissions.¹¹⁵

¹¹¹ Hearing Exhibit 301 at 41:16-17 (Answer Testimony of Mr. Skluzak).

¹¹² Hearing Exhibit 401 at 25:13-20 (Answer Testimony of Ms. Sigalla); Hearing Exhibit 500 at 7:11-13 (Direct Testimony of Mr. Bennett); Hearing Exhibit 700, Rev. 1 at 8:7-9 (Answer Testimony of Mr. Hay); Hearing Exhibit 1000 at 30:15-20 (Answer Testimony of Ms. Farnsworth).

¹¹³ Hearing Exhibit 800 at 38:1-15 (Answer testimony of Mr. Brant).

¹¹⁴ Hearing Exhibit 401 at 6:13-19 (Answer Testimony of Ms. Sigalla).

¹¹⁵ Hearing Exhibit 1000 at 6:3-7 (Answer Testimony of Ms. Farnsworth).

F. PSCo's Revisions in Rebuttal Testimony

94. In its Rebuttal testimony, PSCo made six primary changes to its proposal in response to the Intervenors' answer testimony.

95. First, PSCo agreed to allow ratepayers who qualify for LEAP to opt-out of Modified Schedule RE-TOU to Schedule R at any time, if they provide at least 30-days' prior notice of their desire to opt-out. PSCo proposed that if a LEAP-qualified ratepayer opts out of Modified Schedule RE-TOU, but then decides to opt back in, that ratepayer would have to stay on Modified Schedule RE-TOU for 12 consecutive months. PSCo continues to believe that low-income ratepayers do not face greater difficulty than non-low-income ratepayers in altering their electricity usage to minimize the potential for higher bills resulting from moving to the Modified Schedule RE-TOU.¹¹⁶ Nevertheless, PSCo has proposed to allow LEAP-qualified ratepayers to opt out of Modified Schedule RE-TOU to Schedule R "in consideration of the Intervenor focus on opt-out issues, the Commission's express concern with protecting low-income customers from adverse rate impacts as noted by Staff, and the Company's desire to minimize any potential negative impacts of its rate design on low-income customers."¹¹⁷

96. Second, PSCo changed the Peak/Off-Peak ratio from 2:1 to 2.15:1. This change was driven by the decision to decrease the off-peak/winter rate from \$0.05539 to \$0.05461, which is the current Tier 1 base rate charge. To generate the same amount of revenue, this change required an increase in the proposed peak rate from \$0.11078 to \$0.11735 and the shoulder rate from \$0.08309 to \$0.08598. These changes resulted in a 2.15:1 Peak/Off-Peak ratio.¹¹⁸ The purpose of the change was to "provide[] greater continuity of rates in the transition

¹¹⁶ Hearing Exhibit 106 at 35:20-36:5, 37:11-20 (Rebuttal Testimony of Ms. Trammell).

¹¹⁷ *Id.* at 38:1-5.

¹¹⁸ Hearing Exhibit 107 at 11:10-19 and Table SWW-R-1 (Rebuttal Testimony of Mr. Wishart).

to Modified Schedule RE-TOU” by having the same rate for off-peak and winter hours as ratepayers currently pay for the first 500 kWh of consumption during the summer months and all kWh during the winter.¹¹⁹ Conversely, this change would “minimize the changes in the new rates that customers would see.”¹²⁰

97. Third, PSCo proposed a more gradual transition plan in which each ratepayer would transition to Modified Schedule RE-TOU after one summer passed since installation of the ratepayer’s Advanced Meter. Between installation of the Advanced Meter and the transition to Modified Schedule RE-TOU, TOU usage information would be available to each ratepayer on his/her bill and the online portal. This change would provide ratepayers the opportunity “to review their usage distribution among the TOU periods for a minimum of one summer before transitioning to Modified Schedule RE-TOU.”¹²¹ This change would not impact participants in the RE-TOU Schedule trial, who would have still transitioned to Modified Schedule RE-TOU on January 1, 2021.

98. Fourth, PSCo updated and provided more detail concerning its Customer Education and Communications Plan and agreed to engage in a stakeholder process in refining and implementing that plan.¹²² PSCo also updated its cost deferral request to \$5.129 million, which consists of \$4.914 million of incremental customer education/communications expenses and \$215,000 in billing and programming costs.¹²³

¹¹⁹ Hearing Exhibit 106 at 17:17-18.

¹²⁰ Hearing Exhibit 107 at 40:9-10.

¹²¹ Hearing Exhibit 106 at 17:24-18:4.

¹²² Hearing Exhibit 108 at 21:1-22:18 (Rebuttal Testimony of Ms. Wozniak).

¹²³ *Id.* at 24:1-22 and Attach. JBW-4 at 12-18; Hearing Exhibit 106 at 62:8-18.

99. Fifth, PSCo agreed that Modified Schedule RE-TOU would be included in the RDA Pilot. Accordingly, the revenue collected under Modified Schedule RE-TOU would be analyzed in the RDA Pilot, which would provide additional reporting concerning the performance of Modified Schedule RE-TOU through the end of 2023 when the RDA Pilot ends.¹²⁴

100. Finally, PSCo agreed to additional reporting by May 1 in 2024 and 2025. Specifically, the information provided would be the number of customers on the Modified Schedule RE-TOU and the number of Low-Income Customers who have opted-out of the rate, analysis of sales by TOU period and associated revenue, and “actual hourly load net of renewables so that the Commission and other parties can assess if the established TOU time periods accurately reflect the operation of the system.”¹²⁵

G. Public Comments

101. Two hundred and fifty-six written comments were filed in this proceeding by members of the public. In addition, seven members of the public provided oral comments at the remote public comment hearing conducted on April 16, 2020. Virtually all of the public comments were filed before the parties filed the Settlement Agreement. In addition, an overwhelming majority of the comments were against the TOU proposal. The comments coalesced around four primary themes.

102. First, many commenters expressed concern about the significant change in rate design, rate implementation, and potential bill impacts taking place during the COVID-19 pandemic that has forced many to work and attend school from home. According to many of

¹²⁴ Hearing Exhibit 106 at 42:1-13.

¹²⁵ *Id.* at 44:11-45:3.

these commenters, these changes are causing ratepayers' electricity usage to increase. The changes caused by the pandemic have also decreased the ability of ratepayers to shift usage to lower-cost periods. As a result, the change to TOU rates during the pandemic will increase the bills of many ratepayers.

103. Second, many commenters assert that TOU rates will disproportionately negatively impact retirees and other ratepayers who spend more time at home than "typical" ratepayers. The assumptions upon which this conclusion is based appear to be that such ratepayers have relatively high usage during shoulder and peak periods and a relatively low ability to shift their usage from those periods to the off-peak period. The conclusion drawn by such commenters (either implicitly or explicitly) is that the adoption of TOU rates will cause such ratepayers to experience higher bills.

104. Third, many commenters argue that the shift of the peak period from 3:00 p.m. to 6:00 p.m. to 3:00 to 7:00 p.m. is unfair because ratepayers typically get home from work from 5:00 to 6:00 p.m. and prepare dinner (typically involving using their ranges/ovens) and start laundry from 6:00 to 7:00 p.m. They further noted that it is not reasonable to expect ratepayers to shift their preparation of their evening meals one-hour later to 7:00 p.m. As a result, the proposed change of the peak period will lead to higher bills for many ratepayers.

105. Finally, many commenters state or suggest that PSCo is seeking the change to TOU rates to increase its revenue. This concern is often stated in terms of the proposal representing a "rate increase." The change to TOU rates is characterized as being motivated primarily, if not exclusively, by PSCo's financial interest.

H. Settlement Agreement

106. In the Settlement Agreement, the parties agree to replace Schedule R with Modified Schedule RE-TOU (with further modifications agreed to by the parties detailed below) over time as specified in the Settlement Agreement. As a result, Modified Schedule RE-TOU will eventually become the default rate for PSCo's residential ratepayers. The Settlement Agreement changes the following provisions of Modified Schedule RE-TOU proposed by PSCo through its rebuttal case: (a) the Peak, Shoulder, and Off-Peak periods and the application thereof; (b) the Peak/Off-Peak rate ratio; (c) the lack of an opt-out provision; (d) the application of decoupling; (e) the communications plan; (f) reporting; and (g) cost deferral. The Settlement Agreement also included the following provisions that were not included in PSCo's original proposal, as modified in its rebuttal case: (a) a rate that would apply during the transition to Modified Schedule RE-TOU and to which ratepayers will be transferred if they choose to opt-out; (b) a data sharing agreement; (c) a deadline for filing PSCo's next electric Phase II proceeding; and (d) a deadline for filing PSCo's next Phase I proceeding. Each is addressed in turn.

1. Peak, Shoulder, and Off-Peak Time Periods and Application

107. The parties agreed to eliminate the evening shoulder period, maintaining the peak period from 3:00 p.m. to 7:00 p.m., and making the off-peak period all other hours, including weekends and holidays. In addition, the parties agreed to make the weekday rate differentiation apply year-round, not just during the summer months. The following shows the differences

between the peak, shoulder, and off-peak periods in the Trial Schedule RE-TOU, Modified Schedule RE-TOU, and settlement agreement:

	<u>Trial Schedule RE-TOU</u>	<u>Modified Schedule RE-TOU</u>	<u>Settlement Agreement</u>
<u>Weekday TOU Rate Differentiation</u>	Year-Round	Summer Only (June through September)	Year-Round
<u>Peak Period (Weekday Excluding Holidays)</u>	Year-Round – 2:00 p.m. to 6:00 p.m., excluding weekends and holidays	Summer Only – 3:00 p.m. to 7:00 p.m., excluding holidays	Year-Round – 3:00 p.m. to 7:00 p.m., excluding holidays
<u>Shoulder Period (Weekday Excluding Holidays)</u>	Year-Round – 9:00 a.m. to 2:00 p.m. and 6:00 p.m. to 9:00 p.m.	Summer Only – 11 a.m. to 3:00 p.m. and 7 p.m. to 10 p.m.	Year-Round – 1:00 p.m. to 3:00 p.m.
<u>Shoulder Period (Weekends & Holidays)</u>	Year-Round – 9:00 a.m. to 9:00 p.m.	N/A	N/A
<u>Off-Peak Period</u>	Year-Round – 9 p.m. to 9 a.m., including Holidays	Summer Weekdays – 10 p.m. to 11 a.m. Summer Weekends & Holidays – All Hours Winter Hours & Holidays – All Hours	Year-Round – All Other Hours (Weekdays Excluding Holidays – 7 p.m. to 1 p.m. the next day) (Weekends & Holidays – All Hours)

108. The changes to the peak, shoulder, and off-peak time periods, and applying them year-round, are designed “to promote year-round energy awareness,” “encourage customers to focus on usage during the period 1 [p].m. to 7 p.m.,”¹²⁶ and “strike[] an appropriate balance between the objectives of targeting the rate to reflect the hours of system peak demand and

¹²⁶ *Id.* at 27:4,7.

maintaining customer acceptability.”¹²⁷ The new rate design in the settlement agreement will also be “easier for customers to understand and adapt to for the long term, and will reduce [greenhouse gas] emissions to a greater extent, in line with public policy goals.”¹²⁸

109. Subject to a few exceptions that will be discussed more fully below, the Settlement Agreement generally prohibits PSCo from filing an advice letter changing the rates in, or structure of, Modified Schedule RE-TOU before April 1, 2025.¹²⁹ One of the exceptions is to add an evening shoulder period before April 1, 2025 if the “hours after 7pm are demonstrating significant increased loads.”¹³⁰ The Settlement Agreement defines “significant” as “a threshold of 22 out of the top 100 load net of renewable hours between 7pm and 9pm in one year.”¹³¹ However, the parties to the Settlement Agreement “reserve the right to take any position in response to such an advice letter filing.”¹³²

110. The reason that an evening shoulder period may become necessary is because the TOU peak period ends as solar production is decreasing. Rooftop solar decreases the load during the afternoon, which is the period of maximum solar production. As a result, a utility’s generation net of renewables decreases during the period of highest solar production, but then increases as solar production increases. The generation net of renewables curve thus “shows a low in the middle of the days, and then has to increase sharply as dusk approaches. This eventually creates a much sharper and shorter peak as evening approaches than has typically

¹²⁷ Hearing Exhibit 402 at 21:3-5 (Settlement testimony of Mr. Haglund).

¹²⁸ Hearing Exhibit 702 at 9:7-9 (Settlement Testimony of Mr. Hay).

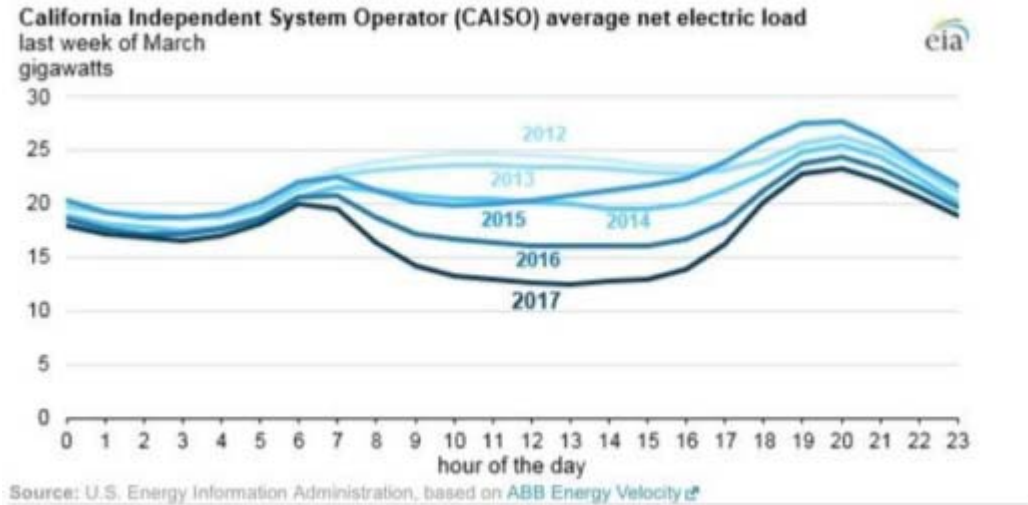
¹²⁹ Other residential rate schedules from which customers will move to Modified Schedule RE-TOU, including Schedule R, may change prior to April 1, 2025 as the result of interim Phase II rate cases.

¹³⁰ Hearing Exhibit 109 at 19 (Settlement Agreement).

¹³¹ *Id.*

¹³² *Id.* at 20.

been the case in utility history.”¹³³ A utility’s graph showing its generation net of renewables ends up roughly resembling a duck, as shown below.¹³⁴



111. If the TOU rate design succeeds in transferring load from the peak to the off-peak period, the peak of a utility’s generation net of renewables curve at the transition between peak and off-peak hours can increase, which would create an accentuated duck curve. The parties recognize that such a result could potentially justify an evening shoulder period to incentivize ratepayers to smooth the load transition in the late afternoon/early evening hours.¹³⁵ The Settlement Agreement recognizes this possibility by allowing PSCo to file an advice letter before April 1, 2025 seeking an evening shoulder period if the load increases “significantly” after 7:00 p.m.

¹³³ Hearing Exhibit 1001 at 14:5-8 (Answer Testimony of Mr. Howe).

¹³⁴ *Id.* at 13 (Table DJH-4).

¹³⁵ See Hearing Exhibit 402 at 23:17-24:6 (Settlement Testimony of Mr. Haglund); Hearing Exhibit 302 at 11:19-12:11 (Settlement Testimony of Mr. Pereira).

2. Peak/Off-Peak Rate Ratio

112. The parties agreed in the Settlement Agreement to make the peak/off-peak rate ratio 2.7:1 in the summer and 1.7:1 in the winter, with the shoulder rate remaining the midpoint between the peak and off-peak rates.¹³⁶ The proposals for the ratio in the Trial Schedule RE-TOU, Modified Schedule RE-TOU, and Settlement Agreement, and the resulting rates, are:

	<u>Trial Schedule RE-TOU</u>		<u>Modified Schedule RE-TOU (Summer Only)</u>	<u>Modified Schedule RE-TOU (Rebuttal) (Summer Only)</u>	<u>Settlement Agreement</u>	
	<u>Summer</u>	<u>Winter</u>			<u>Summer</u>	<u>Winter</u>
<u>Peak/Off-Peak Rate Ratio</u>	2.4:1 ¹³⁷	1.75:1 ¹³⁷	2:1	2.15:1	2.7:1	1.7:1
<u>Peak Rate</u>	\$0.13814	\$0.08880	\$0.11078	\$0.11735 ¹³⁸	\$0.13861	\$0.08727
<u>Shoulder Rate</u>	\$0.08420	\$0.05413	\$0.08309	\$0.08598 ¹³⁸	\$0.09497	\$0.06930
<u>Off-Peak Rate</u>	\$0.04440	\$0.04440	\$0.05539	\$0.05461 ¹³⁸	\$0.05134	\$0.05134 ¹³⁹

¹³⁶ Hearing Exhibit 111 at 9:7-13 (Settlement Testimony of Mr. Wishart).

¹³⁷ These rates do not satisfy the ratio because the riders are applied using a rate that is charged per kWh. The correct ratio is achieved after the addition of the riders. See Hearing Exhibit 102 at 51 (Table SWW-D-10) (showing Schedule RE-TOU rates including application of riders that achieve the 2.4:1 summer ratio and 1.75:1 winter ratio) (Answer testimony of Mr. Wishart). In contrast, the parties in this proceeding have advocated changing the application of the riders from a rate per kWh charge to a percentage of base energy charge for each rider. This change “will allow rate[] riders . . . to exhibit the same time of use characteristics as Residential base rates.” *Id.* at 11:21-12:3.

¹³⁸ Hearing Exhibit 107 at 11 (Table SWW-R-1) (Rebuttal Testimony of Mr. Wishart).

¹³⁹ Hearing Exhibit 109 at 8 (¶ 14).

Summer is defined in the Settlement Agreement as June to September, and winter is all other months.¹⁴⁰

113. PSCo calculated the rates using the same methodology it used in its direct and rebuttal cases. First, PSCo estimated the usage in each TOU period based on a weather normalized Residential load shape. PSCo then decreased summer on-peak usage by 2 percent and added the same amount of energy to the off-peak period, which was PSCo's estimate of how customers may shift their usage patterns in response to TOU pricing. The final step was to solve for the rates that meet the price ratios specified in the Settlement and that result in an average monthly bill that is equal to the average monthly bill for the current Schedule R. This process yields Modified Schedule RE-TOU rates that are *designed* to be revenue neutral to the existing default residential rates on Schedule R.¹⁴¹ As explained below, if the Modified Schedule RE-TOU rates do not turn out to be revenue neutral in reality, the parties agreed that PSCo's RDA Pilot will apply to Modified Schedule RE-TOU. Finally, the parties to the Settlement Agreement understand that the rates in Modified Schedule RE-TOU will change as a result of the Phase II or combined Phase I/II proceeding that PSCo will file in 2020.¹⁴²

114. As noted above, applying the TOU rates year-round with different peak/off-peak rate ratios during the summer and winter is designed to promote year-round energy awareness

¹⁴⁰ *Id.*

¹⁴¹ Hearing Exhibit 111 at 10:9-11:3 & Attach. SWW-10.

¹⁴² Hearing Exhibit 109 at 17 (¶ 25) (Settlement Agreement).

and thereby lower CO₂ emissions even more than initially proposed¹⁴³ and “strike[] an appropriate balance between the objectives of targeting the rate to reflect the hours of system peak demand and maintaining customer acceptability.”¹⁴⁴

3. Transition

115. The parties have agreed to transition groups of customers to Modified Schedule RE-TOU twice per year in either the spring or the fall. The triggering event for transition is the installation of an advanced meter on a ratepayer’s residence, but the transition will take place between four to nine months after the installation.¹⁴⁵ During the interim period between installation of the advanced meter on a ratepayer’s residence and transition to Modified Schedule RE-TOU, the ratepayer will continue paying the existing Schedule R rates (or modified Schedule R rates resulting from PSCo’s Phase II or combined Phase I/II proceeding to be filed 2020),¹⁴⁶ but ratepayer-specific TOU usage data will be included on the ratepayer’s bill and on the ratepayer’s MyAccount page on PSCo’s website.¹⁴⁷ As Ms. Trammell stated, “[t]his transition plan allows customers to familiarize themselves with their household kWh usage in the

¹⁴³ Hearing Exhibit 402 at 21:3-5, 22:10-16 (Settlement Testimony of Mr. Haglund); Hearing Exhibit 702 at 9:7-9 (Settlement Testimony of Mr. Hay).

¹⁴⁴ Hearing Exhibit 402 at 21:3-5 (Settlement Testimony of Mr. Haglund).

¹⁴⁵ As the table below shows, the exception to this rule is that those ratepayers receiving their advanced meter during April 2021 will receive up to an additional one month of TOU usage date.

¹⁴⁶ Hearing Exhibit 110 at 46:15-47:8 (Settlement Testimony of Ms. Trammell). At the hearing on the Settlement Agreement, PSCo introduced and obtained the admission of Hearing Exhibit 112, Rev.1, which corrected two minor typographical errors in Ms. Trammell’s settlement testimony, which is Hearing Exhibit 110. Because the transcript contains citations to Hearing Exhibit 110, not Hearing Exhibit 112, Rev. 1, in this Decision the ALJ will cite to Hearing Exhibit 110 for Ms. Trammell’s settlement testimony.

¹⁴⁷ Hearing Exhibit 109 at 13 (¶ 21) (Settlement Agreement).

TOU rate periods (On-Peak, Shoulder, Off-Peak) prior to transitioning to the TOU rates in Modified Schedule RE-TOU.”¹⁴⁸ The transition schedule is as follows:

<u>Advanced Meter Installs</u>		<u>Transition to Modified Schedule RE-TOU During Billing Cycle that Includes:</u>
<u>From:</u>	<u>To:</u>	
April 1, 2021	December 31, 2021	April 1, 2022
January 1, 2022	June 30, 2022	October 1, 2022
July 1, 2022	December 31, 2022	April 1, 2023
January 1, 2023	June 30, 2023	October 1, 2023
July 1, 2023	December 31, 2023	April 1, 2024
January 1, 2024	June 30, 2024	October 1, 2024
July 1, 2024	December 31, 2024	April 1, 2025 ¹⁴⁹

116. There are five exceptions to this transition schedule. First, participants in the RE-TOU Trial who are receiving service under the RE-TOU Schedule as of December 31, 2020 will be transitioned to Modified Schedule RE-TOU during their billing cycles that include January 1, 2021. Second, ratepayers that sign up for the RE-TOU Trial between November 1, 2020 and December 31, 2021 will transition to Modified Schedule RE-TOU “by March 1, 2021” to provide time for the installation of a bridge meter.¹⁵⁰ Third, beginning on January 1, 2021, participants in the Schedule RE-TOU trial assigned to the control group of the trial (and thus not receiving service under Schedule RE-TOU), and participants in the Schedule RE-TDR trial who have received an advanced meter, may opt-in to Modified Schedule RE-TOU upon the provision of 30 days’ notice to PSCo. Fourth, ratepayers on Schedule R can opt-in to Modified

¹⁴⁸ Hearing Exhibit 110 at 37:13-16 (Settlement Testimony of Ms. Trammell).

¹⁴⁹ Hearing Exhibit 109 at 12 (¶ 19), 81 (Settlement Agreement).

¹⁵⁰ *Id.* at 81.

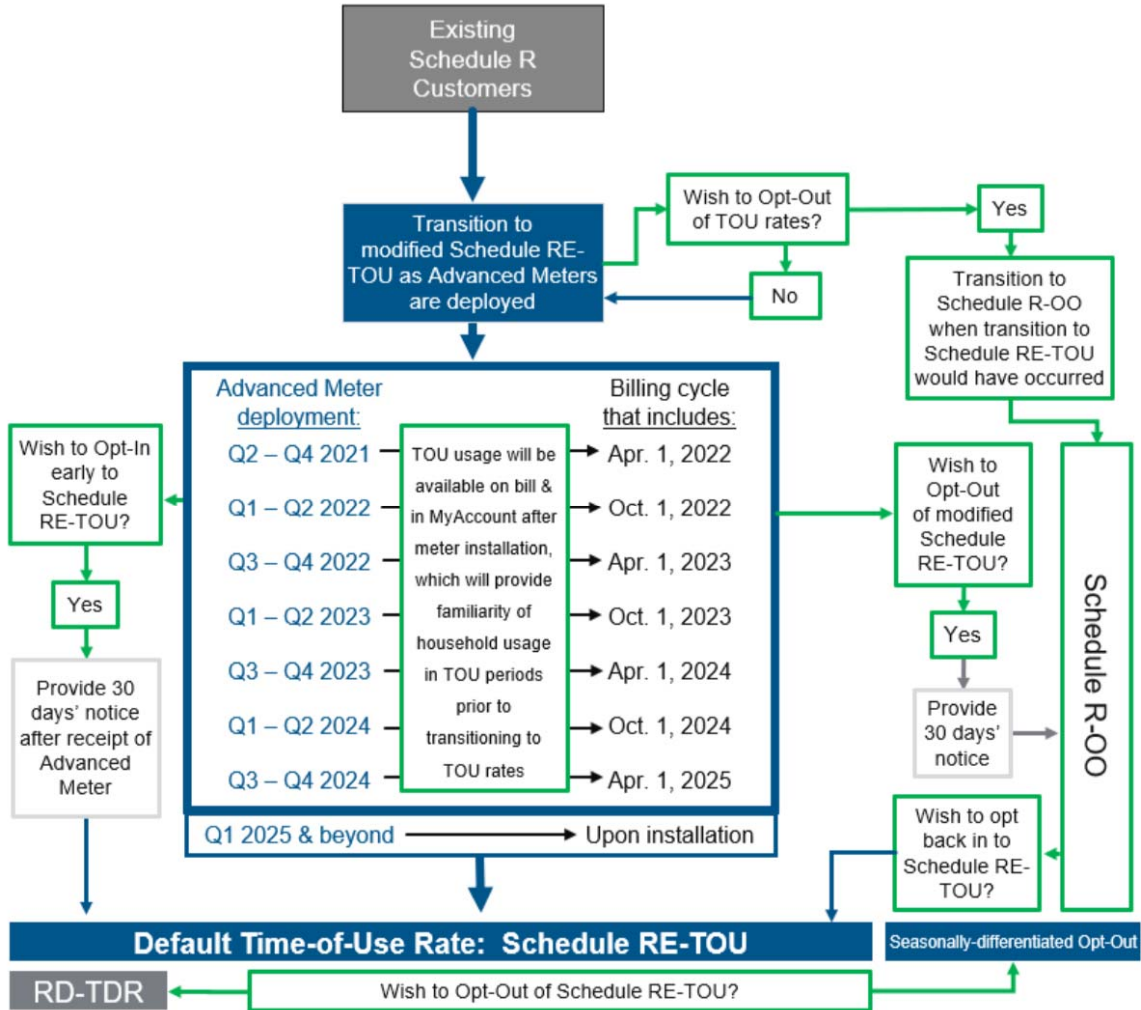
Schedule RE-TOU after installation of an advanced meter on their residences and upon the provision of 30 days' notice to PSCo. Finally, ratepayers that move into a residence that already has an advanced meter and the previous occupants had been transitioned to the Modified Schedule RE-TOU will be placed on Modified Schedule RE-TOU upon initiation of new service.¹⁵¹

4. Opt-Out and Schedule R-OO

117. The parties agree in the Settlement Agreement to allow any residential ratepayer to opt out of Modified Schedule RE-TOU after the ratepayer's transition date provided the ratepayer gives 30 days' notice to PSCo. The opting-out ratepayer will be placed on Schedule R-OO, which is a new seasonally differentiated flat rate that will become effective on January 1, 2021, or any other Schedule that is available at the time of the opt-out decision. However, such a ratepayer will not have the option of returning to Schedule R. If a ratepayer opts-out of Modified Schedule RE-TOU before being transitioned to Modified Schedule RE-TOU, the parties further agree that the ratepayer will remain on Schedule R until the ratepayer's transition date, at which point the ratepayer will be placed on Schedule R-OO or any other schedule that is available at that time. Schedule R will not be available to such a

¹⁵¹ *Id.* at 81-82.

ratepayer after the transition date. The following chart summarizes the transition schedule and opt-out options for ratepayers:¹⁵²



¹⁵² Hearing Exhibit 110 at 40 (Figure BAT-S-2) (Settlement Testimony of Ms. Trammell).

118. The rates in Schedule R-OO and Schedule R are as follows:

<u>Season</u>	<u>Schedule R</u>	<u>Schedule R-OO</u>
Winter	\$0.05461	\$0.05461
Summer	0-500 kWh = \$0.05461	\$0.07240
	501+ kWh = \$0.09902	
Summer – Medical Exemption	\$0.06237	\$0.06237

As shown by the table above, the winter flat rate (October through May) and the summer medical exemption rate in Schedules R and R-OO are the same.¹⁵³ In addition, the summer flat rate has been “derived such that it is revenue neutral to other Residential rates.”¹⁵⁴ As a result, Schedule R-OO is designed to be revenue neutral with Schedule R.

119. According to PSCo, the Schedule R-OO rates “send[] a signal that the cost of providing electricity is more expensive in the summer months, and that thoughtful management of energy use is even more critical at that time.”¹⁵⁵ Staff states that Schedule R-OO is a fairer rate on which to place ratepayers who opt out of Modified Schedule RE-TOU because:

[t]he IBR structure of the current Schedule R creates an obvious subsidy for low-usage ratepayers. If ratepayers were presented with the choice between the (more cost-based) RE-TOU and a tiered Schedule R, it is likely that low-usage ratepayers would recognize the advantage of the subsidy they would receive under Schedule R and they would disproportionately opt out of RE-TOU. The result would be both unfair (giving only one group of ratepayers the ability to choose a subsidized rate) and likely erode revenues (because few high-usage ratepayers would select the tiered Schedule R to pay the subsidy that keeps Tier 1 rates artificially low).

The flat rate structure of Schedule R-OO eliminates the volumetric subsidy of the existing Schedule R. By doing so, it reduces the opportunity for a particular

¹⁵³ Hearing Exhibit 110 at 32:11-12 (Settlement Testimony of Ms. Trammell).

¹⁵⁴ Hearing Exhibit 109 at 10 (¶ 17) (Settlement Agreement).

¹⁵⁵ *Id.* at 34:14-26.

subset of ratepayers to be able to select a rate that obviously subsidizes their usage.¹⁵⁶

120. The Schedule R-OO rates are described as “initial” in the Settlement Agreement because, like the rates in Modified Schedule RE-TOU, they will change as a result of the Phase II or combination Phase I/II proceeding that PSCo will file in 2020.¹⁵⁷ PSCo has also agreed to propose a flat rate, either with or without seasonal differentiation, to replace Schedule R in that Phase I and/or II proceeding. In that proceeding, PSCo is permitted to also propose one or more alternatives to a flat rate to replace Schedule R.¹⁵⁸ Staff states that this outcome represents an agreement by the parties to address in PSCo’s Phase I and/or Phase II proceeding any remaining dispute over Staff’s proposal to replace Schedule R with a flat rate during the transition to Modified Schedule RE-TOU.¹⁵⁹

5. Decoupling

121. In the Settlement Agreement, PSCo agreed to revise the RDA Pilot tariff (through a compliance filing) to include revenues collected from Modified Schedule RE-TOU and Schedule R-OO in the revenue decoupling calculation. As a result, the RDA Pilot decoupling calculation will determine whether there is an over-recovery or under-recovery of the expected revenue recovery from Modified Schedule RE-TOU and Schedule R-OO.¹⁶⁰ According to Staff,

This means that if the Company collects base rate revenues from the Residential class in excess of its Commission-approved fixed cost recovery, those excess revenues will be returned to ratepayers via the RDA. Similarly, if the Company

¹⁵⁶ Hearing Exhibit 402 at 11:10-22 (Settlement Testimony of Mr. Haglund).

¹⁵⁷ Hearing Exhibit 109 at 20 (¶ 17), 17 (¶ 25) (Settlement Agreement); Hearing Exhibit 110 at 32:20-33:2 (Settlement Testimony of Ms. Trammell).

¹⁵⁸ Hearing Exhibit 109 at 16-17 (¶ 25).

¹⁵⁹ Hearing Exhibit 402 at 26:8-17 (Settlement Testimony of Mr. Haglund).

¹⁶⁰ Hearing Exhibit 111 at 28:1-12 (Settlement Testimony of Mr. Wishart).

collects insufficient base rate revenues to recover its fixed costs, that deficiency will be collected from ratepayers via the RDA.¹⁶¹

PSCo states that “[a]pplication of the RDA Pilot to the new time differentiated rates provides additional customer protections regarding revenue neutrality for the duration of the Pilot.”¹⁶²

6. Reporting, Revenue Neutrality, and Possible Future Advice Letters

a. Analysis of Annualized Average Base Rates

122. The RDA Pilot ends in 2023. As a result, the parties agreed to additional mechanisms to assess and address, as necessary, the revenue neutrality of the changes in the Settlement Agreement.¹⁶³ Specifically, PSCo will calculate annualized average base rates for Modified Schedule RE-TOU and Schedules R and R-OO, and compare them to a “baseline” average rate. The baseline average rate is defined as the hypothetical average rate if all Residential customers had been on Schedule R-OO. If these reports show that annualized actual average base rates collected under Modified Schedule RE-TOU or Schedules R or R-OO differ from the baseline average by specified percentages, the Settlement Agreement requires PSCo to file an Advice Letter to modify the appropriate rate schedule(s) in order to maintain revenue

¹⁶¹ Hearing Exhibit 402 at 14:8-12 (Settlement Testimony of Mr. Haglund).

¹⁶² Hearing Exhibit 110 at 42:13-15 (Settlement Testimony of Ms. Trammell).

¹⁶³ See Hearing Exhibit 402 at 15:1-16:15 (Settlement Testimony of Mr. Haglund).

neutrality compared to the baseline.¹⁶⁴ The following table shows the specific schedule and average base rate deviation thresholds that trigger the Advice Letter filing.¹⁶⁵

<u>Report Filing Deadline</u>	<u>Report Includes Data Through</u>	<u>Threshold for Advice Letter Filing</u>	<u>Advice Letter Filing Deadline (If Triggered)</u>
March 1, 2023	December 31, 2022	Average base rates for Schedules R, RE-TOU, or R-OO are 3% greater or less than baseline	April 1, 2023
December 31, 2023	October 31, 2023	Average base rates for Schedules R, RE-TOU, or R-OO are 2% greater or less than baseline	January 31, 2024
March 1, 2025	December 31, 2024	No threshold; PSCo must file	April 1, 2025

123. Using Schedule R-OO as the baseline involves “the simplest least ambiguous calculation of an average rate for all Residential customers” because it “requires only the total Residential kWh consumption by date and the number of ratepayers.”¹⁶⁶ In contrast, the same calculation under Schedule R is more complex and involves assumptions about the daily distribution of energy use within a billing cycle. Specifically, because ratepayer billing cycles begin and end on different days of the month and often span parts of two months, PSCo would have to pro-rate (using the assumptions noted above) each ratepayer’s consumption during May to June when Schedule R switches from winter to summer rates “to determine how much (if any) of the June consumption is billed at the Tier 2 rate.”¹⁶⁷ If the assumptions used in the pro-rating process are inaccurate, the average rate calculation will be inaccurate.

¹⁶⁴ Hearing Exhibit 109 at 18 (Settlement Agreement).

¹⁶⁵ *Id.* at 19 (¶ 26).

¹⁶⁶ Hearing Exhibit 402 at 17:2-9 (Settlement Testimony of Mr. Haglund).

¹⁶⁷ *Id.* at 17:11-19:4 (Settlement Testimony of Mr. Haglund).

124. Using Schedule R as the baseline could lead to inaccuracies during hot summers as well. During a hotter than normal summer, most incremental sales under Schedule R will be at the higher tier, which will drive up the average rate. In contrast, Schedule R-OO has a flat rate during the summer, so the overall average rate will be less impacted by unusually hot weather. As a result, the parties to the Settlement Agreement believe that using Schedule R-OO as the baseline will provide the most stable and accurate baseline for purposes of determining the revenue neutrality of Modified Schedule RE-TOU and Schedule R-OO.¹⁶⁸

b. Data Addressing Additional *Indicia* of the Performance of Modified Schedule RE-TOU

125. In the Settlement Agreement, PSCo agrees to file in this proceeding on November 1, 2023 and November 1, 2024 reports containing various data addressing revenue collections (items 1-2), customer and sales information including average, minimum, and maximum bill impacts (items 3-8, 10), system information (items 9 and 15), customer satisfaction (item 14), and estimates of the impacts of TOU rates (items 11-13, 16).¹⁶⁹ The reports are designed to provide additional transparency of the performance of Modified Schedule RE-TOU.¹⁷⁰ The Settling Parties also committed to meet after the last report to discuss the effectiveness of the reported information and the appropriate reporting commitments, including duration of reporting, going forward.¹⁷¹

¹⁶⁸ Transcript of June 26, 2020 Settlement Hearing at 103:4-104:14.

¹⁶⁹ Hearing Exhibit 109 at 14-15 (¶ 22). *See also* Hearing Exhibit 111 at 20:1-24:3 (Settlement Testimony of Mr. Wishart).

¹⁷⁰ Hearing Exhibit 110 at 44:13-16 (Settlement Testimony of Ms. Trammell).

¹⁷¹ Hearing Exhibit 109 at 14-15 (¶ 22).

7. Communications Plan

126. PSCo and the other parties to this proceeding agree that PSCo must use best efforts to adopt a communications plan that provides to all customers at a minimum: (1) interval usage data on their bills and MyAccount portal beginning with receipt of the Advanced Meter; (2) hypothetical bill impact data for generic customer examples comparing a no action scenario to an energy savings action scenario via an appropriate communication pathway; and (3) customer tips on managing energy usage during the TOU periods.¹⁷² Further, the parties agree that the education and outreach plan will “tailor communications approaches . . . based on [PSCo’s] data-driven segmentation analysis of the residential customer class, including specific education and outreach targeted to low-income customers.”¹⁷³ Finally, PSCo will engage in a “stakeholder engagement process” with the other parties to this proceeding that addresses the communications plan starting “in Q4 2020 and meet with stakeholders bi-annually through at least 2022.”¹⁷⁴ The stakeholder engagement process will “develop and improve programs and tools that utilize Advanced Meter data to engage with its customers for increased energy savings, peak demand reduction, and help customers manage their bills and energy use under a TOU rate through ongoing or new Demand Side Management products, measures, or pilots.”¹⁷⁵

8. Cost Deferral

127. The parties agree that PSCo can defer and track in a regulatory asset, for review and cost recovery in a future rate proceeding, the incremental costs that PSCo will incur to

¹⁷² *Id.* at 13 (¶ 21).

¹⁷³ *Id.* at 13-14 (¶ 21).

¹⁷⁴ *Id.* at 13 (¶ 21).

¹⁷⁵ *Id.* at 14 (¶ 21).

implement TOU rates as the default rate for all residential customers. These include costs associated with the transition plan, for billing and programming work, and the customer education outreach and communications plan. The parties further agree that if PSCo continues to incur expenses after the test period utilized in an Electric Phase I rate case, the deferral will continue and review, approval, and recovery of those incremental costs will be addressed in a subsequent Phase I rate proceeding.¹⁷⁶ PSCo currently estimates that these incremental costs will be \$5,146,281.¹⁷⁷

II. LEGAL PRINCIPLES AND BURDEN OF PROOF

A. **Commission Jurisdiction and Rate Setting Process**

128. The Commission's authority to regulate PSCo's electric utility rates, services, and facilities derives from Article XXV of the Colorado Constitution. The Commission is charged with ensuring the provision of safe and reliable utility service at just and reasonable rates for customers pursuant to §§ 40-3-101, 40-3-102, 40-3-111, and 40-6-111, C.R.S.

129. Pursuant to § 40-3-101(1), C.R.S., "[a]ll charges made, demanded, or received by any public utility for any rate, fare, product, or commodity furnished or to be furnished or any service rendered or to be rendered shall be just and reasonable." In interpreting that statute, the Colorado Supreme Court has held that the primary purpose of utility regulation is to ensure that the rates charged are not excessive or unjustly discriminatory.¹⁷⁸

¹⁷⁶ Hearing Exhibit 110 at 45:9-20 (Settlement Testimony of Ms. Trammell). *See also* Hearing Exhibit 109 at 16 (¶ 24) (Settlement Agreement).

¹⁷⁷ Hearing Exhibit 110 at 46:14 (Table BAT-S-1) (Settlement Testimony of Ms. Trammell).

¹⁷⁸ *Cottrell v. City & County of Denver*, 636 P.2d 703 (Colo. 1981).

130. Further, § 40-3-102, C.R.S., states that “[t]he power and authority is hereby vested in the public utilities commission of the state of Colorado and it is hereby made its duty to adopt all necessary rates, charges, and regulations to govern and regulate all rates, charges, and tariffs of every public utility of this state to correct abuses; to prevent unjust discriminations and extortions in the rates, charges, and tariffs of such public utilities of this state.”

131. The decision to establish rates that will be charged by public utilities is a legislative function that has been delegated to the Commission.¹⁷⁹ The Commission must adopt rates and rate structures that are just and reasonable.¹⁸⁰ Setting rates “is not an exact science but a legislative function involving many questions of judgment and discretion.”¹⁸¹ Under this standard, “it is the result reached, not the method employed, which is controlling.”¹⁸²

132. Finally, the Commission is obliged to independently consider and determine matters affecting the public interest.¹⁸³

B. Burden of Proof

133. Except as otherwise provided by statute, the Administrative Procedure Act imposes the burden of proof in administrative adjudicatory proceedings upon “the proponent of an order.”¹⁸⁴ PSCo, as the party seeking an order by the Commission, bears the burden of proof

¹⁷⁹ *City and County of Denver v. Public Utilities Comm’n.*, 266 P.2d 1105, 1106 (1954).

¹⁸⁰ *Integrated Network Services, Inc. v. PUC*, 875 P.2d 1373, 1381 (Colo. 1994).

¹⁸¹ *Id.*; see also *PUC v. Northwest Water Corporation*, 168 Colo. 154, 551 P.2d 266 (1969).

¹⁸² *Federal Power Comm’n. v. Hope Natural Gas Co.*, 320 U.S. 591, 602 (1944).

¹⁸³ Decision No. C12-1107 issued in Proceeding No. 11A-833E on September 24, 2012 at 9 (¶ 31) (citing *Caldwell v. PUC*, 692 P.2d 1085, 1089 (Colo. 1984)).

¹⁸⁴ § 24-4-105(7), C.R.S.

by a preponderance of the evidence.¹⁸⁵ The evidence must be “substantial evidence,” which is defined as “such relevant evidence as a reasonable mind might accept as adequate to support a conclusion ... it must be enough to justify, if the trial were to a jury, a refusal to direct a verdict when the conclusion sought to be drawn from it is one of fact for the jury.”¹⁸⁶ This standard requires the finder of fact to determine whether the existence of a contested fact is more probable than its non-existence for a party to carry its burden.¹⁸⁷

C. Analytical Approach

134. In rendering this Decision, the ALJ has carefully reviewed and considered all the evidence introduced by the Parties during the hearing, including the testimony and hearing exhibits, even if this Decision does not specifically address all of the evidence presented, or every nuance of each party’s position in each issue. In addition, the ALJ has weighed the evidence and evaluated the credibility of all the witnesses and hearing exhibits.¹⁸⁸ Finally, the ALJ has considered all the legal arguments set forth in the SOPs, even if the Decision does not explicitly address every legal argument.

III. ANALYSIS

A. Introduction

135. As explained in more detail below, the ALJ finds and concludes that the Settlement Agreement reasonably balances the interests of ratepayers, PSCo, and the broader public interest. The ALJ further finds and concludes that the rates and rate structure provided in

¹⁸⁵ Section 24-4-105(7), C.R.S.; § 13-25-127(1), C.R.S.; Rule 1500 of the Rules of Practice and Procedure, 4 CCR 723-1.

¹⁸⁶ See, e.g., *City of Boulder v. PUC*, 996 P.2d 1270, 1278 (Colo. 2000) (quoting *CF&I Steel, L.P. v. PUC*, 949 P.2d 577, 585 (Colo. 1997)).

¹⁸⁷ *Swain v. Colorado Department of Revenue*, 717 P.2d 507 (Colo. App. 1985).

¹⁸⁸ See *Durango Transportation, Inc. v. Colorado Public Utilities Comm'n.*, 122 P.3d 244, 252 (Colo. 2005); *RAM Broadcasting of Colo., Inc. v. Public Utilities Comm'n.*, 702 P.2d 746, 750 (Colo. 1985).

the Settlement Agreement are just and reasonable. The components of the Settlement Agreement are analyzed below.

B. Evidentiary Record

136. As noted above, at the conclusion of the hearing on the Settlement Agreement, the ALJ kept the evidentiary record open in light of the limited time the ALJ had to consider the Settlement Agreement and testimony in support thereof in advance of the hearing. The ALJ informed the parties that a further hearing day would be scheduled if necessary. Because no further evidence is required for the ALJ to rule on the Joint Motion, the ALJ now closes the evidentiary record.

C. Modified Schedule RE-TOU

1. Time Periods and Peak/Off-Peak Ratios

137. The ALJ finds and concludes that the peak/off-peak ratio, peak, shoulder, and off-peak time-periods, and the seasonal differences between the ratio and time-periods adopted in the Settlement Agreement, are just and reasonable. The combination yields rates that assign and recover the cost of utility electric service to residential customers and send clear price signals to ratepayers concerning the relative costs of delivering electricity during the different time periods. The rates should thus incentivize residential customers to shift some of their usage away from the peak and shoulder periods when PSCo's cost of delivering electricity is at its highest.

138. In so doing, the rates proposed in the Settlement Agreement will also decrease CO₂ emissions. Such emissions are at their highest during the peak and shoulder periods established in the Settlement Agreement. The rates and rate structure will incentivize ratepayers to shift their consumption to lower-cost periods and thereby lower CO₂ emissions, which is in the public interest.

139. The new rates should also decrease PSCo's long-run investments. If, as expected, the new rates reduce load during system peak demand, PSCo may be able to avoid or reduce its investments in peaking plants and/or energy storage facilities in the future.¹⁸⁹ With the not-insignificant projected growth in Colorado's population and demand for electricity, these savings could be significant and will redound to the benefit of ratepayers.

140. The Modified Schedule RE-TOU rates and rate structure will also incentivize beneficial electrification in general and the adoption of EVs in particular. As noted, consumers who replace a gas-powered vehicle with an EV thereby increase their consumption of electricity due to the required charging of their EVs. Under the current IBR structure, purchasers of EVs cannot choose between different rates in charging their EVs. As a result, the purchase and use of EVs cause many ratepayers to significantly increase their consumption of electricity at the higher rate under the current IBR structure. In contrast, the TOU rates proposed in the Settlement Agreement allow a ratepayer to charge an EV at the lowest rate during the off-peak hours, which will lead to a significant reduction in the operating costs of EVs compared to gas-powered vehicles. This could, in turn, cause ratepayers to purchase more EVs, which will further decrease CO₂ emissions.

141. Finally, the new rates will provide many ratepayers with greater control over their electricity bills. Under the current IBR rates, once ratepayers have undertaken all measures to reduce their consumption of electricity, they cannot lower their electricity bill any further. With the rates and rate structure proposed in the Settlement Agreement, however, such ratepayers can further reduce their bills by shifting some of their usage from the peak period to the shoulder or off-peak period, or from the shoulder period to the off-peak period.

¹⁸⁹ Hearing Exhibit 102 at 16:17-21 (Direct Testimony of Mr. Wishart).

142. Applying the Modified Schedule RE-TOU year-round, but with seasonally-different ratios between peak and off-peak rates and time-periods, also achieves these goals. Specifically, a year-round Modified Schedule RE-TOU better addresses the peaks in demand on, and the CO₂ emissions of, PSCo's system.¹⁹⁰ In addition, a year-round rate is easier for ratepayers to understand, remember, and adapt to. As a result, the TOU rates with seasonally-adjusted ratios between peak and off-peak rates and time-periods proposed by PSCo and the other parties to this proceeding adequately balances the interests of ratepayers and the broader public interest.

143. Accordingly, based on the foregoing, the ALJ finds and concludes that the seasonally-adjusted peak/off-peak ratio, and peak, shoulder, and off-peak time periods adopted in the Settlement Agreement, are in the public interest and yield just and reasonable rates.

2. Default Rate, Opt-Out, Medical Exemption, and Communication and Transition Plans

144. The ALJ finds and concludes that making Modified Schedule RE-TOU the default rate, while allowing ratepayers to opt-out and maintaining the MEP, is just and reasonable. As noted above, implementing Modified Schedule RE-TOU as the default schedule will: (a) incentivize ratepayers to move their consumption to times when demand, marginal energy costs, and CO₂ emissions are lower; (b) reduce load during system peak demand, CO₂ emissions, and PSCo's costs and long-term future investments in peaking plants and energy storage facilities; and (c) give ratepayers the most potential control over their bills.

145. Maintaining Schedule R as the default schedule will not achieve the same ends. Specifically, the current IBR rates in Schedule R do not provide a strong incentive for ratepayers

¹⁹⁰ Hearing Exhibit 400 at 48:11-16 (Answer Testimony of Mr. Haglund); Highly Confidential Hearing Exhibit 700, Rev. 1 at 38:3-40:9 (Answer Testimony of Mr. Hay).

to lower generation costs and CO₂ emissions because they do not send accurate price signals about when the marginal energy cost and CO₂ emissions are at their highest. In addition, because it has only two rates and their application is determined by the overall consumption of ratepayers, Schedule R does not provide as much control to ratepayers over their bills. Specifically, unlike Modified Schedule RE-TOU, Schedule R does not allow ratepayers to lower their bills by consuming the same amount of electricity but shifting some consumption from the peak period to the shoulder or off-peak periods. As a result, replacing Schedule R with Modified Schedule RE-TOU is in the public interest.

146. The continuation of the MEP, the broad opt-out provision, and the transition and communication plans contribute to the conclusion that making Modified Schedule RE-TOU the default schedule is also just and reasonable. Ratepayers with medical conditions who are dependent on electric medical equipment cannot shift the usage of their equipment to lower-cost time periods. As a result, such ratepayers have less control over their usage and imposing TOU rates on them could increase their bills. For these reasons, it is just and reasonable to continue the MEP.

147. Similarly, other ratepayers also have relatively less control over their usage due to circumstances beyond their control. For example, low-income ratepayers “may have more people in a home, may have jobs with off hours, or may be more likely to work weekends.”¹⁹¹ Such households have fewer, if any, longer periods in which their homes are unoccupied during shoulder and peak periods when usage can be minimized. EOC asserted that most households with 500 kWh of monthly usage, which is on the low-end of the usage spectrum and consistent with the usage level of many low-income households, will likely see a bill increase under the

¹⁹¹ Hearing Exhibit 500 at 17:14-16 (Answer Testimony of Mr. Bennett).

proposed TOU rates.¹⁹² Accordingly, it is in the public interest and just and reasonable to allow such ratepayers to opt-out of TOU rates. It could be argued that a narrowly tailored opt-out clause designed to capture only those ratepayers who legitimately cannot shift their usage due to circumstances beyond their control would be preferable to the broad opt-out clause proposed in the Settlement Agreement. However, no party has proposed such a clause and it is not clear that one exists. And, as explained below, given the significance of the change to TOU rates, the Settlement Agreement's broad opt-out clause will increase ratepayer acceptance of the change.

148. Finally, the transition and communications plans proposed by the parties will provide ratepayers with the time and information they need to mitigate the potential bill impact of the transition to TOU rates. As noted above, ratepayers will be transitioned to Modified Schedule RE-TOU gradually. After ratepayers receive their advanced meters but before they are transitioned to Modified Schedule RE-TOU, they will be provided with their household kWh usage in the TOU rate periods. They will also receive hypothetical bill impact data for generic customer examples comparing a no action scenario to an energy savings action scenario via an appropriate communication pathway and customer tips on managing energy usage during the TOU periods.¹⁹³ This gradual transition plan will thus provide ratepayers with information over time that will help them prepare to manage their usage under TOU rates and thereby maximize the likelihood of a successful transition to Modified Schedule RE-TOU.

149. Gradualism and ratepayer acceptability are important factors in the ratemaking process.¹⁹⁴ As noted above, Modified Schedule RE-TOU represents a significant change for

¹⁹² *Id.* at 15:4-9.

¹⁹³ *Id.* at 13 (¶ 21).

¹⁹⁴ *See* Hearing Exhibit 301 at 21:3-11 & n.11 (Answer Testimony of Mr. Skluzak); Hearing Exhibit 400 at 10:12-11:6, 12:15-21 (Answer Testimony of Mr. Haglund); Hearing Exhibit 1004 at 7:1-3, 23:10-13 (Settlement Testimony of Ms. Farnsworth).

ratepayers, but the Settlement Agreement's gradualist approach is designed to mitigate the impact of the change on ratepayers. The MEP program, the broad opt-out provision, and the transition and communications plans are important components of the parties' gradualist approach and will maximize the likelihood that ratepayers will understand, manage, and accept the transition.

150. For the foregoing reasons, the ALJ finds and concludes that adopting Modified Schedule RE-TOU as the default schedule for residential ratepayers pursuant to the gradualist transition plan proposed by the parties, but allowing ratepayers to opt-out and maintaining the MEP, fairly balances the interests of PSCo, the Intervenors, and the ratepayers. The ALJ further finds and concludes the balance achieved is in the public interest and yields just and reasonable rates.

D. Replacing Schedule R with Schedule R-OO

151. The ALJ also finds that replacing Schedule R with Schedule R-OO is just and reasonable. As described above, Schedule R-OO has a winter flat rate (October through May) equal to the prevailing Tier 1/winter rate from Schedule R and a summer flat rate that is designed to be revenue neutral to Schedule R. In addition, the MEP rate on Schedule R-OO is the same as the MEP rate on Schedule R, and the Applicable Rate Riders for Schedule R-OO will use percentage-based riders to reflect the seasonal differential in rates, just as will be done under Modified Schedule RE-TOU.

152. As noted above, under the Settlement Agreement, any residential ratepayer who opts out of Modified Schedule RE-TOU will be placed on Schedule R-OO after the ratepayer's transition date. In other words, after a ratepayer's transition date, Schedule R will not be

available to that ratepayer if he/she opts out of Modified Schedule RE-TOU. In that sense, Schedule R is being replaced with Schedule R-OO.

153. The parties have agreed to replace Schedule R with Schedule R-OO because Schedule R-OO's rates more accurately signal that the cost of providing electricity is more expensive in the summer months. Schedule R's summer two-tiered rates based on volume of usage send a less accurate cost-based price signal. In addition, Staff contends that Schedule R-OO eliminates the volumetric-based subsidy of low-usage ratepayers (≤ 500 kWh/billing cycle) by higher usage ratepayers (> 500 kWh/month) inherent in Schedule R. In that sense, Schedule R-OO is a fairer rate on which to place ratepayers who opt out of Modified Schedule RE-TOU.¹⁹⁵

154. Based on the foregoing, the ALJ finds and concludes that introducing Schedule R-OO as the opt-out rate schedule and phasing out Schedule R as described in the Settlement Agreement is in the public interest and yields just and reasonable rates.

E. SB 20-030 – Revenue Neutrality, Bill Impact, and Impact on Low-Income Ratepayers

155. Senate Bill 20-030, which was signed into law on June 29, 2020, amended § 40-3-106(2), C.R.S. It states in relevant part:

[F]or rates resulting from a rate design change approved by the Commission on or after September 1, 2020, the Commission shall require utility revenue or billing adjustment mechanisms to ensure that a utility's change in rate design results in a revenue-neutral outcome. In adopting new rate designs for residential customers, the commission shall evaluate the potential for higher bills due to changes in rate design. Rate designs that disproportionately negatively impact low-income residential customers compared to other residential customers of the utility are presumed to be contrary to the public interest.

¹⁹⁵ Hearing Exhibit 402 at 11:10-22 (Settlement Testimony of Mr. Haglund).

156. Pursuant to Senate Bill 20-030, the Commission must: (a) “require utility revenue or billing adjustment mechanisms to ensure that a utility’s change in rate design results in a revenue-neutral outcome;” (b) “evaluate the potential for higher bills due to changes in rate design;” and (c) analyze whether PSCo’s change in rate design “disproportionately negatively impact[s] low-income residential customers compared to other residential customers.” Each is addressed in turn.

1. Revenue Neutrality

157. The ALJ finds and concludes that the rate design change proposed by the parties in the Settlement Agreement contains adequate “revenue or billing adjustment mechanisms to ensure that a utility’s change in rate design results in a revenue-neutral outcome.” Specifically, the revenue-neutral design of the rates, the mechanisms included in the Settlement Agreement designed to keep Modified Schedule RE-TOU and Schedule R-OO over time, and the use of Schedule R-OO as the baseline for purposes of analyzing revenue neutrality will ensure that PSCo’s change in rate design will result in a revenue-neutral outcome. Each is addressed in turn.

a. Rate Design

158. As noted above, PSCo has presented persuasive evidence that it designed the rates in Modified Schedule TOU and Schedule R-OO to be revenue neutral. Mr. Wishart presented this evidence and it shows that the overall average rates paid by ratepayers under Schedule R, Modified Schedule RE-TOU, and Schedule R-OO are projected to be the same.¹⁹⁶ In reaching this conclusion as to Modified Schedule RE-TOU, Mr. Wishart assumed that switching to the rates in that schedule will cause ratepayers to transfer 2 percent of their usage from the peak to

¹⁹⁶ Hearing Exhibit 111 at 10:9-12:5, 13:11-14:12 (Settlement Testimony of Mr. Wishart).

the off-peak periods.¹⁹⁷ All of the parties to the Settlement Agreement agreed that this assumption is rational and reasonable.¹⁹⁸ Based on this assumption, Mr. Wishart concluded that the switch from Schedule R to Modified Schedule RE-TOU will yield a revenue neutral result for PSCo.¹⁹⁹

159. The ALJ finds and concludes that PSCo designed the rates in Modified Schedule RE-TOU and Schedule R-OO to be revenue neutral.

b. Mechanisms to Ensure Modified Schedule RE-TOU and Schedule R-OO Remain Revenue-Neutral

160. It is possible (perhaps probable) that Modified Schedule RE-TOU and/or Schedule R-OO will fall out of revenue neutrality over time. As Mr. Wishart readily conceded, his rate design and revenue neutrality analysis are based on assumptions and projections that, by their very nature, are unlikely to be entirely accurate.²⁰⁰ For this reason, PSCo and the other parties built into the Settlement Agreement other mechanisms designed to ensure that the change to Modified Schedule RE-TOU and Schedule R-OO remains revenue neutral over time.

161. One such mechanism is the agreement to amend the RDA Pilot to include Modified Schedule RE-TOU and Schedule R-OO. Once completed, the decoupling calculations in the RDA Pilot will determine whether there is an over-recovery or under-recovery compared to the expected revenue recovery from Modified Schedule RE-TOU and Schedule R-OO.²⁰¹ If PSCo collects base rate revenues in excess of its Commission-approved fixed cost recovery from

¹⁹⁷ *Id.* at 10:15-11:1.

¹⁹⁸ Hearing Exhibit 109 at 8 (¶ 14) (“The Settling Parties recognize that customers are expected to reduce their on-peak usage in response to on-peak rates; therefore, two percent of the baseline on-peak summer usage was shifted to the summer off-peak time period.”) (Settlement Agreement).

¹⁹⁹ Hearing Exhibit 111 at 10:9-12:5 (Settlement Testimony of Mr. Wishart).

²⁰⁰ Hearing Exhibit 111 at 12:6-19 (Settlement Testimony of Mr. Wishart).

²⁰¹ Hearing Exhibit 111 at 28:1-12 (Settlement Testimony of Mr. Wishart).

residential ratepayers, those excess revenues will be returned to ratepayers. Conversely, if PSCo under-recovers, that deficiency will be collected from ratepayers.²⁰² The RDA Pilot will return to, or collect from, ratepayers the over-recovery or under-recovery, respectively, each year through December 31, 2023.

162. The parties also agreed that PSCo will file reports by March 1, 2023 and December 31, 2023 that will lead to the correction of the rates if they deviate from revenue neutrality by specified amounts. Specifically, the reports will compare annualized average base rates for Modified Schedule RE-TOU and Schedules R and R-OO to a baseline average rate calculated based on the assumption that all Residential customers had been on Schedule R-OO during the relevant time period. If these reports show that the annualized actual average base rates collected under Modified Schedule RE-TOU or Schedules R or R-OO differ from the baseline average by 3 percent in the March 31, 2023 report and 2 percent in the December 31, 2023 report, PSCo is required to file an advice letter to modify the appropriate rate schedule(s) in order to maintain revenue neutrality compared to the baseline.²⁰³

163. As Ms. Trammell testified at the hearing, one reason why the parties did not require an advice letter filing based on *any* deviation from revenue neutrality is because of the need to maintain as much stability in Modified Schedule RE-TOU and Schedule R-OO during the extended transition period. As shown above, groups of ratepayers will be transitioned to Modified Schedule RE-TOU every April 1 and October 1 from 2022 to April 2025. The parties

²⁰² Hearing Exhibit 402 at 14:8-12 (Settlement Testimony of Mr. Haglund).

²⁰³ Hearing Exhibit 109 at 18 (Settlement Agreement).

have sought to minimize changes to Modified Schedule RE-TOU or Schedule R-OO during this period to avoid disruption of the transition process and ratepayers' learning of, and adaptation to, the new TOU rates.²⁰⁴ Moreover, it is possible that, because all ratepayers will not be transitioned to Modified Schedule RE-TOU or Schedule R-OO until April 1, 2025, any revenue neutrality analysis conducted before then could yield skewed results as to any particular rate schedule. Finally, Advice letter filings such as the ones addressed here typically lead to proceedings in which attorney and expert fees are incurred that can be significant. Given that such costs are typically passed along to ratepayers, it is reasonable to require an advice letter filing to adjust the rates on revenue-neutrality grounds only when the deviation is material, particularly during this transition period. This conclusion is supported by the fact that Modified Schedule RE-TOU, Schedule R-OO, and Schedule R will be included in the RDA Pilot, which will ensure that any deviations from revenue neutrality are corrected through credits (overcollection) or surcharges (undercollection) of PSCo's revenue requirement. Accordingly, under the circumstances of this proceeding, the Settlement Agreement's thresholds for triggering advice letter filings to modify the rates based on revenue neutrality is in the public interest.²⁰⁵

164. Finally, PSCo is also required to file a report on March 1, 2025 that will perform the same comparative annualized average base rate analysis for data generated from November 1, 2023 to December 31, 2024. Under the Settlement Agreement, PSCo is required to file an advice letter by April 1, 2025 in which it will "propos[e] to either modify or maintain Schedule RE-TOU, which may include, but is not limited to, rate structures, price ratios, time periods of on-peak, off-peak, or shoulder periods, [or] . . . revenue neutrality."²⁰⁶ If PSCo has

²⁰⁴ Transcript of June 26, 2020 Hearing at 60:25-66:15.

²⁰⁵ *See id.* at 97:11-98:21.

²⁰⁶ *Id.* at 19.

over-recovered from November 1, 2023 through December 31, 2024, the report filed on March 1, 2025 will state as much. PSCo, the parties, and the Commission can then determine how to address the over-recovery in the proceeding that will result from the filing of the April 1, 2025 advice letter.

165. The foregoing evidence establishes that: (a) any deviation from revenue neutrality through December 31, 2023 will be corrected through payments to, or from, ratepayers via the RDA Pilot; (b) the rates will also be revised if they deviate from revenue neutrality above the thresholds discussed above, as shown in PSCo's March 1, 2023 and December 31, 2023 reports, via advice letter filings on April 1, 2023, and January 31, 2024; and (c) the March 1, 2025 report required by the Settlement Agreement will provide PSCo, the Commission, and any intervenors with the information necessary to address any deviation from revenue neutrality after October 31, 2023 in the proceeding that will follow the advice letter that PSCo will file on April 1, 2025.

166. Based on the foregoing, the ALJ finds and concludes that the mechanisms described above are reasonably designed to ensure that the change to Modified Schedule RE-TOU and Schedule R-OO remains revenue neutral over time.

c. Schedule R-OO as Baseline

167. Using Schedule R-OO as the baseline against which the performance of Modified Schedule RE-TOU, Schedule R, and Schedule R-OO will be measured for purposes of assessing revenue neutrality, is just and reasonable and complies with Senate Bill 20-030. As explained above, PSCo will calculate annualized average base rates for Modified Schedule RE-TOU and Schedules R and R-OO, and compare them to the hypothetical average rate as if all residential customers had been on Schedule R-OO. If these reports show that annualized actual average

base rates collected under Modified Schedule RE-TOU or Schedules R or R-OO differ from the baseline average by specified percentages, the Settlement Agreement requires PSCo to file an Advice Letter to modify the appropriate rate schedule(s) in order to maintain revenue neutrality.²⁰⁷

168. The parties to the Settlement Agreement agreed to use Schedule R-OO as the baseline, rather than Schedule R, for purposes of simplicity and accuracy. As explained above, using Schedule R-OO as the baseline “requires only the total Residential kWh consumption by date and the number of ratepayers”²⁰⁸ whereas using Schedule R requires a complicated calculation based on assumptions. Using Schedule R as the baseline for determining revenue neutrality would be, therefore, more prone to inaccuracies due to its reliance on assumptions, but also because the two tiers of rates in Schedule R will increase the average overall rate during hot summers. In contrast, Schedule R-OO has a flat rate during the summer, so the overall average rate will be less impacted by unusually hot weather. As a result, the parties to the Settlement Agreement believe that using Schedule R-OO as the baseline will provide the most stable and accurate baseline for purposes of determining the revenue neutrality of Modified Schedule RE-TOU, Schedule R-OO, and Schedule R.²⁰⁹ The ALJ agrees and further finds and concludes that using Schedule R-OO as the baseline for purposes of assessing the revenue neutrality of Modified Schedule RE-TOU, Schedule R-OO, and Schedule R, is in the public interest, yields just and reasonable rates, and complies with the revenue neutrality provision of Senate Bill 20-030.

²⁰⁷ Hearing Exhibit 109 at 18 (Settlement Agreement).

²⁰⁸ Hearing Exhibit 402 at 17:2-9 (Settlement Testimony of Mr. Haglund).

²⁰⁹ Transcript of June 26, 2020 Settlement Hearing at 103:4-104:14.

169. Based on the foregoing, the ALJ finds and concludes that, under the particular circumstances of this proceeding, the Settlement Agreement complies with the revenue neutrality provision of Senate Bill 20-030.

2. Bill Impact

170. Senate Bill 20-030 also requires the Commission to “evaluate the potential for higher bills due to changes in rate design.” Here, PSCo has designed the rates in Modified Schedule RE-TOU and Schedule R-OO to be revenue neutral, which means that the average bill resulting from the rates in Modified Schedule RE-TOU and Schedule R-OO are designed to be identical (or nearly identical) to the average bill under Schedule R.²¹⁰ However, as noted above, the rate design is based on assumptions that may or may not be entirely accurate. As a result, the parties agreed in the Settlement Agreement that PSCo will provide reports to the Commission on November 1, 2023 and November 1, 2024 of, among other things, the actual bill impacts of Modified Schedule RE-TOU and Schedule R-OO. The reports will provide data showing the average, minimum, and maximum bill impacts resulting from the transition to Modified Schedule RE-TOU and Schedule R-OO. The Commission will have that information in any advice letter proceeding addressing Modified Schedule RE-TOU and Schedule R-OO filed on or before April 1, 2025.

171. Based on the foregoing, the ALJ finds and concludes that the parties to the Settlement Agreement have provided, and will provide, a reasonable analysis of the potential for higher bills due to the changes in rate design that will be effectuated in Modified Schedule RE-TOU and Schedule R-OO.

²¹⁰ Hearing Exhibit 111 at 10:9-14:12 (Settlement Testimony of Mr. Wishart).

3. Impact on Low-Income Residential Ratepayers

172. Finally, Senate Bill 20-030 requires the Commission to analyze whether PSCo's change in rate design "disproportionately negatively impact[s] low-income residential customers compared to other residential customers." Any rate design that does so is presumed to be contrary to the public interest.

173. PSCo and certain Intervenors presented substantial evidence of the impact of the transition to PSCo's originally proposed Modified Schedule RE-TOU on low-income ratepayers. Specifically, PSCo's analysis of the RE-TOU trial showed that the usage of low-income ratepayers was 15 percent less than the usage of all PSCo's ratepayers in the summer, and 5 percent higher in the winter.²¹¹ PSCo's analysis also showed:

that based on the RE-TOU Trial, low income customers use less On-Peak energy than average customers, which will help minimize the bill impacts associated with the migration to time of use rates. Data from LEAP qualified customers also show that this customer group also tends to use more energy in the winter months than average customers, presumably due to the greater prevalence of electric space heating.²¹²

PSCo also noted that "there is great diversity in the LEAP qualified customer group. Average usage ranges from 50 kWh per month to over 2,500 kWh. Therefore the Modified Schedule RE-TOU rates will have different impacts for different customers."²¹³ Based on the foregoing, PSCo concluded that, as a general matter, "bills for low income customers will not be subject to any greater change than bills for the average residential customer."²¹⁴

²¹¹ *Id.* at 45:10-22.

²¹² Hearing Exhibit 102 at 26:6-27:1 (Direct Testimony of Mr. Wishart).

²¹³ *Id.* at 45:18-21.

²¹⁴ Hearing Exhibit 102 at 10:5-7 (Direct Testimony of Mr. Wishart).

174. PSCo has not provided similar in-depth analysis of the impact of the Settlement Agreement on low-income ratepayers. Instead, in her testimony supporting the Settlement Agreement, Ms. Trammell stated as follows:

Even though I am not an attorney, the Settlement Agreement in our view also supports the condition in SB20-30 that Modified Schedule RE-TOU shall not disproportionately negatively impact low-income residential customers because the Settlement Agreement's Modified Schedule RE-TOU rate structure provides the same opportunity for all customers to shift usage to off-peak periods in order to save money on their bills. In other words, the potential for bill impacts is dependent on customer actions and, pursuant to the Settlement Agreement, if a customer is unable to shift their usage, they are able to opt-out of Modified Schedule RE-TOU onto Schedule R-OO. Therefore, the change in the rate structure from current Schedule R to Modified Schedule RE-TOU does not disproportionately negatively impact low-income customers.²¹⁵

PSCo also highlighted the parties' agreement in the Settlement Agreement to a stakeholder process to develop an education and outreach plan that, among other things, provides tailored communications to low-income ratepayers.²¹⁶

175. In addition, Mr. Bennett of EOC has concluded that the Settlement Agreement "ensure[s] [that] low-income customers are not negatively disproportionately impacted" by the rate design change.²¹⁷ As support, Mr. Bennett cited:

- i. The ability for all residential customers (including any low-income customers) to opt out of Schedule RE-TOU to an alternative rate based on overall energy usage rather than time of use;
- ii. A low-income specific education and outreach plan with stakeholder input;
- iii. The provision of significant information to all residential customers prior to, and a gradual transition to, customers being placed on a default RE-TOU rate, consistent with stakeholder input; and

²¹⁵ Hearing Exhibit 110 at 22:13-23 (Settlement Testimony of Ms. Trammell).

²¹⁶ *Id.* at 22:23-23:3; 43:3-44:2.

²¹⁷ Hearing Exhibit 504 at 23:10-12 (Settlement Testimony of Mr. Bennett).

iv. The Company retaining the summer-IBR Schedule R as the precursor to Modified RE-TOU for the time being.²¹⁸

Because it is convinced that these customer protections will mitigate the risk of a disproportionate impact on low-income ratepayers, EOC supports the Settlement Agreement.²¹⁹ EOC's support is significant because it is a non-profit whose sole mission is to "ensure that all low-income Coloradans can meet their home energy needs," provided advocacy in this proceeding on behalf of low-income ratepayers, and is a party to the Settlement Agreement.²²⁰

176. Based on the foregoing, the ALJ finds and concludes there is a low likelihood that the rate design change at issue here will disproportionately negatively impact low-income residential customers compared to the other residential customers of PSCo. The ALJ also finds and concludes that the Settlement Agreement complies with Senate Bill 20-030. In so holding, the ALJ does not endeavor here to provide a comprehensive statement of what Senate Bill 20-030, which only recently became law, requires in every rate design change. Instead, the ALJ merely finds and concludes that, under the particular circumstances of this proceeding, the Settlement Agreement satisfies the requirements of Senate Bill 20-030.

F. Cost Deferral

177. As noted above, the parties agree in the Settlement Agreement that PSCo can defer and track in a regulatory asset, for review and cost recovery in a future rate proceeding, the incremental costs of implementing their transition plan to Modified Schedule RE-TOU/Schedule R-OO. PSCo currently estimates that these incremental costs will be \$5,146,281.²²¹ The parties further agree that if PSCo continues to incur expenses after the test

²¹⁸ *Id.* at 23:14-24:5 (footnote 27 omitted).

²¹⁹ *Id.* at 6:1-5.

²²⁰ Hearing Exhibit 500 at 5:8-9 (Answer Testimony of Mr. Bennett).

²²¹ Hearing Exhibit 110 at 46:14 (Table BAT-S-1) (Settlement Testimony of Ms. Trammell).

period utilized in an Electric Phase I rate case, the deferral will continue and review, approval, and recovery of those incremental costs will be addressed in a subsequent Phase I rate proceeding.²²² The ALJ finds and concludes that the parties' request to defer and track in a regulatory asset the incremental costs described in the Settlement Agreement is just and reasonable.

G. Request to Waive Response Time

178. In the Joint Motion, the parties requested a waiver of response time thereto. The request is denied-as-moot.

H. Conclusion

179. For the foregoing reasons, the ALJ finds and concludes that: (a) the rates resulting from the Settlement Agreement are just and reasonable; and (b) approval of the Settlement Agreement, without modification, is in the public interest.

IV. ORDER

A. The Commission Orders That:

1. The evidentiary record in this proceeding is closed.
2. The Unopposed Joint Motion to Approve Unanimous and Comprehensive Settlement Agreement and Modify Procedural Schedule and Request for Waiver of Response Time (Joint Motion) filed by Public Service Company of Colorado (PSCo) on June 11, 2020 is granted in part and denied as moot in part consistent with the discussion above.
3. The Unanimous and Comprehensive Stipulation and Settlement Agreement filed on June 12, 2020 is approved without modification.

²²² Hearing Exhibit 110 at 45:9-20 (Settlement Testimony of Ms. Trammell). *See also* Hearing Exhibit 109 at 16 (¶ 24) (Settlement Agreement).

4. The tariff sheets filed by PSCo pursuant to Advice Letter No. 1814 are permanently suspended.

5. PSCo shall file, on not less than five days' notice to the Commission, the tariff sheets included with Hearing Exhibit 109. The effective date of the newly filed tariff sheets shall be January 1, 2021, as requested in Advice Letter No. 1814.

6. This Recommended Decision shall be effective on the day it becomes the Decision of the Commission, if that is the case, and is entered as of the date above.

7. As provided by § 40-6-106, C.R.S., copies of this Recommended Decision shall be served upon the parties, who may file exceptions to it.

a. If no exceptions are filed within 20 days after service or within any extended period of time authorized, or unless the Recommended Decision is stayed by the Commission upon its own motion, the Recommended Decision shall become the decision of the Commission and subject to the provisions of § 40-6-114, C.R.S.

b. If a party seeks to amend, modify, annul, or reverse a basic finding of fact in its exceptions, that party must request and pay for a transcript according to the procedure stated in § 40-6-113, C.R.S. If no transcript or stipulation is filed, the Commission is bound by the facts set out by the administrative law judge, and the parties cannot challenge these facts. This will limit what the Commission can review if exceptions are filed.

8. If exceptions to this Recommended Decision are filed, they shall not exceed 30 pages in length, unless the Commission for good cause shown permits this limit to be exceeded.

(S E A L)



THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

CONOR F. FARLEY

Administrative Law Judge

ATTEST: A TRUE COPY

A handwritten signature in cursive script that reads "Doug Dean".

Doug Dean,
Director