Decision No. C07-0676

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

DOCKET NO. 06A-478E

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS 2007 RENEWABLE ENERGY STANDARD COMPLIANCE PLAN AND FOR WAIVER OF RULE 3661(F)(I).

ORDER APPROVING PUBLIC SERVICE'S 2007 COMPLIANCE PLAN WITH MODIFICATIONS

Mailed Date: August 9, 2007
Adopted Date: August 8, 2007

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I. BY THE COMMISSION

A. Introduction

1. This matter comes before the Commission for consideration of Public Service Company of Colorado's (Public Service or Company) 2007 Renewable Energy Standard Compliance Plan. The Renewable Energy Standard (RES) is part of the Rules Regulating Electric Utilities, 4 *Code of Colorado Regulations* (CCR) 723-3-3650 through 3665. The Renewable Energy Standard Rules (RES Rules) were developed as a result of Amendment 37, which was passed by Colorado voters on November 2, 2004. Generally, the RES requires a Qualifying Retail Utility (QRU) operating in Colorado to obtain three percent of its electricity from renewable energy resources by 2007, increasing to 10 percent by 2015. The RES also calls for four percent of the mandated amount of renewable energy to come from solar resources, at least half of which must be from on-site solar electric generating systems. The RES limits the maximum retail rate impact to one percent of a customer's total electric bill. Public Service collects the funds for implementing the RES through its Renewable Energy Service Adjustment (RESA).

2. On March 27, 2007, Governor Bill Ritter signed House Bill 07-1281 (HB 1281) which, among other things, doubled the RES compliance percentages from 10 percent to 20 percent by the year 2020 for investor owned QRUs, and increased the maximum retail rate impact to two percent. We note here that we are required to evaluate Public Service's 2007 Compliance Plan based on the statutes and rules in effect as of the date it was filed. Those statutes provide that the 2007 compliance percentage is to be three percent and the maximum retail rate impact is to be one percent of a customer's bill.

3. A QRU's performance in implementing the RES is evaluated through two separate proceedings before the Commission - a Compliance Plan and a Compliance Review Report. Rule 3657 requires QRUs to file a Compliance Plan on or before July 1 detailing how it intends to comply with the RES Rules during the upcoming Compliance Year.[1] Subparagraphs (I)(A) through (I)(J) of Rule 3657(a) describe the contents of what the Compliance Plan should address at a minimum. Rule 3657(b) provides that the Commission shall either approve the QRU's Compliance Plan or order modifications.

4. Rule 3662 addresses the requirements of the Annual Compliance Report. Each QRU is required to file a Compliance Review Report on June 1 of the year following the Compliance Year. This report details whether the QRU achieved compliance with the RES.

B. Procedural History

5. This proceeding was initiated on August 31, 2006, when Public Service filed its 2007 QRU Compliance Plan (Plan). Public Service requests an Order approving its Plan without modification. The Plan includes three volumes of material. Volume One contains the Executive

[1] Because the RES Rules took effect on July 2, 2006, the 2007 Compliance Plans were scheduled to be filed on or before August 31, 2006.

Summary, an Introduction, a Retail Energy Forecast section, a Renewable Energy Credits (RECs) Estimates section, an Acquisition Plans section, a Retail Rate Impact/Budget section, a Cost Recovery/Accounting Treatment section, a Net Metering section, and an Interconnection section. Volumes Two and Three are the supporting tables and appendices to the Plan. As part of its application, Public Service sought a waiver of Rule 3661(f)(I).[2] The application and attached material sets forth how Public Service intends to comply with the RES Rules for the 2007 Compliance Year.

6. The Commission issued its Notice of Application Filed on September 7, 2006. At our October 18, 2006 Commissioners' Weekly Meeting, we allowed the application to be deemed complete on its "auto-deem" date of October 25, 2006. Thus, under § 40-6-109.5(3), C.R.S., we had until May 23, 2007, to complete our review of this application.

7. On October 13, 2006, Commission Staff (Staff) filed a Motion to Consolidate this docket with Docket No. 06A-534E, which was Public Service's application for approval of a solar energy purchase agreement with SunE Alamosa1, LLC (SunE Alamosa).

8. On October 25, 2006, we granted the interventions of CF&I Steel, L.P. and Climax Molybdenum Company (CF&I/Climax), Colorado Solar Energy Industry Association (CoSEIA), Holy Cross Energy (Holy Cross), the Colorado Office of Consumer Counsel (OCC), Mr. Sol Shapiro, Staff, and Western Resource Advocates (WRA). A pre-hearing conference was set for November 9, 2006. *See*, Decision No. C06-1282.

9. On November 1, 2006, we denied Staff's Motion to Consolidate in Decision No. C06-1354.

[2] This rule concerns the computer modeling used to determine the retail rate impact.

10. As a result of the November 9, 2006 pre-hearing conference, we adopted a procedural schedule setting hearing dates of February 21 to 23, 2007 and setting various testimony filing dates. *See*, Decision No. C06-1323.

11. On October 30, 2006, Public Service filed its direct testimony and exhibits supporting the application from nine witnesses.

12. On December 14, 2006, Public Service filed a Motion to Alter the Procedural Schedule for the filing of Answer, Rebuttal, and Cross-Answer testimonies as well as changing the hearing dates to February 28, 2007 through March 2, 2007. By Decision No. C06-1477, we granted in part the motion by amending the testimony filing dates. We waived the response time to the motion to amend the testimony filing dates since no party would be prejudiced by providing additional time to prepare testimony. We declined to rule on the proposed change in hearing dates because response time to the motion had not fully lapsed.

13. By Decision No. C07-0081, we granted the remaining portion of Public Service's motion to alter the procedural schedule and changed the hearing dates to February 28, 2007 through March 2, 2007 since no party filed a response opposing the request.

14. On January 5, 2007, the following parties filed answer testimony: Holy Cross, OCC, and Staff. Holy Cross and OCC each submitted testimony from one witness. Staff submitted testimony from four witnesses. CoSEIA filed a pleading entitled Response to the Application of Public Service Company of Colorado for Approval of its 2007 Renewable Energy Standard Compliance Plan and for Waiver of Rule 3661(f)(I).

15. On January 11, 2007, Ratepayers United of Colorado, LLC (RUC) filed a petition for late intervention.

16. On January 26, 2007, Public Service filed a Supplement to its application, an application for waiver of Rule 3655(f), a request to amend the procedural schedule, and a request to shorten response time to the request to amend the procedural schedule. The Supplement included a Volume Four, which is comprised of an Introduction, a Forecast section, a Solar Resource Acquisition section, a Table section, a Contracts–Request for Proposals (RFP) section, and a Contracts–Medium Offer section. In addition, the Company provided supplemental direct testimony of three witnesses. Public Service proposed to amend the procedural schedule to include filing dates for supplemental answer testimony and supplemental rebuttal testimony, but it did not propose to change the hearing dates.

17. By Decision No. C07-0095, we struck CoSEIA's responsive pleading because it was not in the proper form of testimony, was not sponsored by a witness, and no certificate of service was included to indicate that it was properly served on the parties in this proceeding. We also granted the intervention of RUC, and shortened response time to Public Service's motion to amend the procedural schedule.

18. By Decision No C07-0109, we vacated the remaining procedural schedule for the filing of cross-answer and rebuttal testimonies, vacated the hearings scheduled for February 28, 2007 to March 2, 2007, and denied Public Service's motion to amend the procedural schedule. We ordered another pre-hearing conference to take place on February 12, 2007.

19. At the February 12, 2007 pre-hearing conference, Public Service offered to waive the statutory 210-day deadline and timely filed a pleading affirmatively waiving the deadline. Based on that representation, we established a new procedural schedule for the filing of cross-answer, rebuttal, supplemental answer, supplemental cross-answer, and supplemental rebuttal testimonies. We also set the matter for hearing on April 16 through 18, 2007 with April 19, 2007

held in reserve as a contingent date. A Public Comment Hearing was established for the afternoon and evening of April 16, 2007. Statements of Position (SOPs) were set to be due on May 3, 2007. *See*, Decision No. C07-0124.

20. On February 21, 2007, Public Service filed a waiver of statutory deadline for its application pursuant to § 40-6-109.5(3), C.R.S.

21. On February 23, 2007, CoSEIA filed cross-answer testimonies of five witnesses and Staff filed cross-answer testimony of one witness. Public Service filed rebuttal testimonies of nine witnesses.

22. On March 9, 2007, Staff filed a Motion for Leave to File Surrebuttal Answer Testimony along with the supplemental answer testimonies of two witnesses. On April 2, 2007, WRA filed a Motion for Steven S. Michel to Appear *Pro Hac Vice*. In Decision No. C07-0286, we granted both motions.

23. On March 30, 2007, Public Service filed supplemental rebuttal testimonies of three witnesses.

24. On April 16, 2007, the Commission called the matter for hearing at the assigned time and place. During the course of the hearing testimony was presented by the following witnesses: For Public Service -- Mr. Daniel Ahrens, Ms. Beth Chacon, Ms. Darla Figoli, Ms. Karen Hyde, Mr. Tim Kawakami, Ms. Robin Kittel, Ms. Jannell Marks, Mr. Mark McGree, Mr. Ted Niemi, and Ms. Ruth Sakya; For OCC -- Dr. P.B. Schechter; For CoSEIA -- Mr. Rick Gilliam, Mr. Blake Jones, and Mr. T.J. Slocum; For Staff -- Mr. William Harris, Mr. Karlton Kunzie, Dr. Richard Mignogna, and Mr. Robert Skinner. Exhibits 1 to 31, 33, 34, 36 to 52 were marked, offered, and admitted into evidence. Exhibits 32 and 35 were not offered or admitted.

25. We conducted a Public Comment Hearing on April 16, 2007, and six members of the public spoke.

26. The evidentiary hearing concluded on April 19, 2007, at which time we reminded the parties that SOPs were due on May 3, 2007 with no opportunity for Reply Briefs. We also provided the opportunity for parties to file legal briefs by May 10, 2007 on Public Service's proposed Developer Model. We directed that the legal briefs were to include what modifications to statutes or Commission rules would be required to make the Developer Model legal, if a party contended it was illegal. Upon conclusion of the evidentiary hearing, we took the matter under advisement.

27. On May 3, 2007, the following parties filed SOPs: CF&I/Climax, CoSEIA, OCC, Public Service, Staff, and WRA. Included with Staff's SOP was a motion to exceed the 30-page limit for SOPs.

28. On May 10, 2007, the following parties filed legal briefs on Public Service's proposed Developer Model: CoSEIA, OCC, Public Service, Staff, and WRA.

29. On May 30, 2007, we conducted a Deliberations Meeting on the matter. As a preliminary matter to the Deliberations, we granted Staff's Motion to exceed the 30-page limit for its SOP.

C. Waiver of Rule 3661(f)(I)

1. Public Service's Position

30. Public Service seeks a waiver of Rule 3661(f)(I) for the renewable resources (775 MW of wind and a small amount of biomass) it has acquired through its 2005 All-Source RFP. Rule 3661(f)(I) addresses the computer modeling used in the development of the retail rate impact. Under the rule, a QRU is required to conduct two computer modeling runs -- a RES Plan

and a NoRES Plan. If a renewable energy generating resource is commercially operational at the time of these two computer modeling runs, its costs are included in both model runs (as a "sunk" resource). If a renewable energy generating resource is not commercially operational at the time of these two computer modeling runs, its costs are included in only the RES model run (as a "new" resource). Through the waiver, Public Service asks the Commission to treat the renewable resources it is acquiring through the 2005 All-Source RFP as a sunk resource for computer modeling purposes under Rule 3661(f)(I), rather than considering them as new. As part of the Plan, Public Service presented three analyses demonstrating how these 2005 All-Source renewable resources would impact RESA over a ten-year period.[3]

31. Public Service provides the following reasons in support of the waiver. First, it contends that these resources were not acquired to meet the RES, but were acquired under the Commission's Least-Cost Planning (LCP) process. As a result, their costs should flow through the Electric Commodity Adjustment (ECA) just as other purchase power agreements. Second, Public Service asserts that if these resources are considered new, then the RESA rider will need to be raised to its maximum level of one percent. According to the Company's analysis, even if the RESA is raised to the full one percent level Public Service will run out of money in the year 2015.[4] Third, treating these resources as sunk allows the Company to keep the RESA at 0.6 percent. Lastly, Public Service believes that the granting of the waiver is within the intent of the RES Rules.

[3] *See*, Revised Table 6-5 (Rule Alternative - 0.6 percent Rider), Revised Table 6-6 (Rule Alternative 1.0 percent Rider), and Revised Table 6-7 (Waiver Alternative – 0.6 percent Rider).

[4] *See*, Table 6-6, page 1 of 4. In Revised Table 6-6, page 1 of 4, the RESA rolling account balance goes negative in the year 2012 instead of the year 2015.

32. In Ms. Kittel's rebuttal testimony, she asserts that the 775 MW of wind does not create additional savings, but rather adds additional costs. She contends that the effect of treating these resources as new would be to reduce the amount of money which could be spent on new renewable resources. Public Service also argues that because these resources were already under contract, they could not be "avoided" and replaced by non-renewables resources in the NoRES Plan.

33. In her supplemental rebuttal testimony, Ms. Kittel indicates that it is unclear how to apply Rule 3661(f)(I) to these four renewable contracts for the 2008 Compliance Plan. She speculates whether these four contracts, which would have to be considered new resources for the 2007 Compliance Plan, could be treated as sunk resources in later Compliance Plan calculations of the retail rate impact, because they will be commercially operational by then.

2. Staff's Position

34. Staff recommends that the Commission deny the waiver request. It provides a series of reasons supporting its recommendation. Staff contends that Public Service has based its analysis on deficient Production Simulation (PROSYM) computer model runs because it did not apply the full cost of each scenario. Staff asserts that Public Service has overbought solar RECs by paying too much, and acquiring too many, too soon. Staff argues that if Public Service were to coordinate its acquisition with a gradual ramp-up it could reduce the retail rate impact. Staff asserts that Public Service should re-run the models to correct the deficiencies, and only include sufficient solar acquisition to meet the RES. Staff asserts that the wavier is not based on an inability to meet the retail rate impact in 2007, but rather the inability to meet the retail rate impact in later years. Lastly, Staff offers that Rule 3661(f)(I) creates a "time fence" of January 1,

2007 for renewable resources and how they are treated with respect to being considered either new or sunk.

3. OCC's Position

35. The OCC recommends that the Commission grant the waiver request, but only for a specified time period. OCC provides a series of reasons supporting its recommendation. For example, it asserts that the rationale underlying the waiver request is intuitively reasonable, and the waiver appears to be consistent with the RES statute. OCC goes on to argue that granting the waiver request will not adversely impact ratepayers, nor does the waiver request appear to violate any public policy standard. OCC also points out that the waiver is only temporary since it does not appear that it will be necessary for the 2008 Compliance Plan.

4. Other Parties' Position

36. WRA supports the granting of the wavier request, or alternatively granting the requested clarification of Rules 3661(f)(I) and 3661(f)(II) for purposes of this proceeding only. CF&I/Climax support the granting of the waiver request, however, they also believe it should be for a specific period of time. CoSEIA states that the waiver request can be granted given its present knowledge,[5] but asks the Commission to make clear that it is not precedent setting.

5. Commission Findings

37. The information presented in Revised Tables 6-5 to 6-7 was beneficial to understanding the impact of the 2005 All-Source renewable resources as either new or sunk resources. We find Public Service's arguments for granting the waiver persuasive. Namely, that these resources were acquired prior to the date when the RES Rules took effect. We also find

[5] CoSEIA notes that due to the highly confidential status given to some of the information in the record, it could not review all of the material that it would have liked to in order to form a complete recommendation.

merit in the arguments presented by OCC and CF&I/Climax that any waiver should be temporary in nature. Because Public Service's 2008 Compliance Plan is due to be filed on July 1, 2007,[6] and the Commission has stated in prior orders that it will undertake a comprehensive examination of the RES Rules following one compliance cycle, we find that the waiver should cover the 2007, 2008, and 2009 Compliance Plans. It is hoped that the Commission can finish its comprehensive examination of the RES Rules prior to the scheduled filing of the 2010 Compliance Plans on July 1, 2009. Therefore, we grant a temporary waiver of Rule 3661(f)(I) for the renewable resources acquired by Public Service under its 2005 All-Source RFP for the 2007, 2008, and 2009 Compliance Plans.

38. Staff's discussion regarding the creation of a "time fence" by Rules 3661(f)(I) and 3661(f)(II) was informative. However, the grant of the temporary waiver negates the need for us to address it as part of this proceeding. We are further compelled not to address the "time fence" concept because the calculation of the retail rate impact is a critical component of the RES Rules and any possible changes to it are more appropriately addressed in the context of a rulemaking proceeding.

D. Computer Modeling for the Retail Rate Impact

1. Public Service's Position

39. In Mr. McGree's rebuttal testimony, he explains the Company's methodology to determine the retail rate impact through the use of the RES and NoRES modeling scenarios. In developing the RES scenario, Public Service uses PROSYM with its existing generating resources and adds to it the renewable resource relevant to the RES at a zero cost. Mr. McGree

[6] In Docket No. 07M-195E, Public Service filed a petition in which it seeks a variance in the filing date of its 2008 Compliance Plan until 60 days after the issuance of a final decision in this case. The Commission granted the petition in Decision No. C07-0558.

contends that this PROSYM run would generate the best estimate for energy and capacity of these renewable resources. The PROSYM model estimated the total system cost for supplying the Public Service system for the RES Plan. Mr. McGree indicates that Public Service assumed a zero cost for the renewables because they are "must run" resources and that it is preferable to keep track of the incremental costs of the renewable resources in the RESA rider and to recover the base costs of these renewable resources through the ECA.

40. For modeling the NoRES Plan, he indicates Public Service substituted within PROSYM, non-renewable resources for the capacity that the renewable resources provided in the RES Plan. The substitute resources were a 75 megawatt (MW) gas-fired combined cycle plant for the 775 MW of wind. According to Mr. McGree, the Company used the 10 percent capacity assumption for wind resources from its recent LCP case. The other substitute resource, for the solar resources, was a gas-fired peaking plant. This resource started at 2 MW for the year 2007 and grew to 37 MW by the year 2020. For the energy provided by the new renewable resources in the RES Plan, PROSYM dispatched the cheapest available energy available in each hour to meet the energy needs. The difference in costs between the two model runs (the RES Plan with renewables at zero costs, and the NoRES Plan with the substituted gas plants) provided the "avoided cost" of the RES Plan.

41. In order to determine the portion of the renewable cost that matched the cost of the non-renewable resources that should go through the ECA, Mr. McGree testified that Public Service had two choices. It could use PROSYM or use an Excel® spreadsheet. Public Service chose the spreadsheet because it is simpler to use and yields a more transparent path. Mr. McGree provides that, in order to avoid a double counting in the modeling approach, a zero cost for the relevant renewable resources in PROSYM must be assumed. He contends that, because

the amount of energy these renewable resources will produce each year and the price is known, the calculation of their costs is an easy process within a spreadsheet.

42. Mr. McGree continues his explanation that, because Public Service assumed zero costs for the relevant renewable resources, the cost difference between the two plans represents the avoided cost of the NoRES Plan when the new nonrenewable resource are displaced by new renewable resources. Within the Compliance Plan this is referred to as the Modeled ECA Costs.

43. Public Service then compares the projected total costs of the new renewable resources with the Modeled ECA Costs. The difference represents the incremental costs of the new renewable resources. This difference, plus the program administration costs, less the amount collected from wholesale customers is what is limited by the retail rate impact cap and what is designed to be collected through the RESA.

2. Staff's Position

44. Within its answer testimony Staff took issue with the Company's use of assigning zero costs to the renewable resources rather than using the actual system costs. In Staff's opinion, the difference calculated by Public Service represents only the cost of natural gas not utilized rather than actual or even projected costs. Dr. Mignogna expresses further concerns with Public Service's modeling, arguing that through the use of substituted natural gas plants, Public Service is using higher cost marginal resources. Staff contends that if renewables were an integral component of the system, they would be replacing not just marginal resources, but the average portfolio of resources. It asserts that over time, as more renewables are brought onto the system, those renewables will be replacing average system resources, not peaking resources. As a result, Staff recommends replacing the renewables with a portfolio of resources in the same percentages as they exist in the system, but priced at current rates for each of those generators.

45. In Mr. McGree's rebuttal testimony, he takes issues with Staff's position regarding the use of natural gas plants. He first argues that Dr. Mignogna's contention ignores the capacity costs of the possible substituted plants. Mr. McGree contends that, roughly speaking, a natural gas peaking plant costs about $500 per kilowatt (kW) to build, a combined cycle plant about $700 per kW, and a pulverize coal plant about $2,000 per kW to build. He asserts that when both the capacity and the energy costs are considered, the total of the three alternatives are much closer. He also argues that, given the capacity factors of renewable resources, in the 20 to 40 percent range, a system planner would choose a peaking or combined cycle plant over coal because it would have cheaper total costs.

46. To address Staff's position regarding the use of the actual costs of renewable resources in PROSYM instead of the Company's modeling assumption of zero costs, Mr. McGree provides Exhibit MPM-1 to his rebuttal testimony. The exhibit illustrates a comparison between a PROSYM analysis using the full renewable costs for the renewable resources in the RES Plan, to the spreadsheet values shown in Revised Tables 6-5 or 6-6 for Columns E, F, and G.. Review of Exhibit MPM-1 reveals that the cost differences for the years 2007 to 2016 vary by no more than $5,593 dollars in any given year.

47. Staff also contended that the Company's method cannot calculate the actual retail rate impact as required by Rule 3661 because its method of conducting the modeling does not yield the total revenue requirement of each scenario. In Public Service witness, Ms. Sakya's rebuttal testimony, she disputes Staff's claim regarding net retail rate impact. She notes that by comparing Columns G, H, I, and K to Column J on Revised Tables 6-5 to 6-7, it can easily be determined whether the Company can meet its RES requirements under the 1 percent cap.

48. Dr. Mignogna also argued in his answer testimony that Public Service should perform sensitivity analyses on important parameters such as natural gas prices and REC prices. In his rebuttal testimony, Mr. McGree asserts that Public Service does do extensive sensitivity analyses regarding key assumptions and critical parameters. However, for this case, it did not do so because Rule 3661(d) directs QRUs to use the most recently approved LCP methodologies and assumptions. He notes the Company used the most recent fuel price assumptions approved by the Commission in the stipulation reached in Docket No. 05A-543E.

49. Within his supplemental answer testimony, Dr. Mignogna asserts that Revised Tables 6-1 to 6-7 and Ms. Sakya's supplemental testimony bring us no closer to the actual retail rate impact than we were before. He develops a total Cost of Service (CoS) approach for the RES and NoRES Plans using Exhibit MPM-1 as the starting point for his analysis. Dr. Mignogna's Table 1 in his supplemental answer testimony shows the retail rate impact at 0.63 percent for 2007, but for all other years through 2016 it is above 1 percent.[7] He relies on his Table 1 to reaffirm his recommendation that the waiver should not be granted. Dr. Mignogna concludes this portion of his testimony by noting that, unfortunately, his analysis does reflect what the retail rate impact would be if Public Service acquired the proper amount of solar resources. He acknowledges that this would require running the RES and NoRES models again.

50. In her supplemental rebuttal testimony Public Service witness Ms. Sakya contends that Dr. Mignogna's CoS approach is not consistent with the statute and the RES Rules because the retail rate impact is not expressed as a percent of the NoRES Plan. Instead, it is expressed as a percent of customer bills. She is also critical of two aspects of his analysis. First, she disagrees with his use of the annual RESA rider revenue from Column J in Revised Table 6-6

[7] The highest yearly percentage is 1.94 percent and that occurs in the year 2012.

to back into the total cost of service for the NoRES Plan. Ms. Sakya asserts that the Company's projected retail rate revenue is not a measure of the cost of service of the NoRES Plan. She further explains that, ironically, by using one percent of the Company's annual revenue as a surrogate for what Dr. Mignogna claims is the cost of service of the NoRES Plan, his analysis provides a comparison between the incremental cost of the RES Plan and the maximum retail rate impact allowed by statute. Said another way, his percentages represent the relationship between the incremental costs of the RES Plan, and the maximum rate impact cap of one percent. Ms. Sakya also claims Dr. Mignogna's analysis failed to take into account the revenues Public Service will receive from its wholesale customers who purchase renewable energy.

51. Ms. Sakya provides, through Supplemental Exhibit RMS-1, her version of Dr. Mignogna's Table 1, which shows that his corrected results are virtually identical to the Company's analysis. Ms. Sakya reiterates in her testimony that she believes Public Service's modeling approach is superior to Staff's approach since it has more transparency, and its methodology can easily and clearly identify those costs which should be recovered through the ECA and RESA. She concludes that even when corrected, Dr. Mignogna's analysis demonstrates that the Company will not be able to collect enough money on an annual basis under a one percent retail rate cap to comply with the RES beginning in 2010.

3. Other Parties' Position

52. Both WRA and CoSEIA reiterated their concerns with the extraordinary protections granted to certain data, which they believe is critical to their understanding of this case.[8] No other party addressed the computer modeling issues.

[8] *See,* Decision Nos. R06-1440-I, R07-0167-I, and R07-0170-I

4. Commission Findings

53. While both the corrected Dr. Mignogna's CoS analysis and Supplemental Exhibit RMS-1 arrive at essentially the same annual retail rate impact percentages, we find Public Service's computer model approach to be preferable. The Company's computer modeling for the retail rate cap is more transparent, and shows clearly which costs should be recovered through the ECA and the RESA. We find the splitting of renewable energy costs between the ECA and the RESA allows the retail rate impact to be determined on a net of new non-renewable resources basis. However, the arguments presented by Staff regarding the substitute resources for determining the portion of the costs which are collected through the ECA may certainly have merit in the future as more renewable resources are brought onto the system. We conclude that this issue should be more fully developed as part of our comprehensive examination of the RES Rules. We find that Public Service's proposed computer modeling for the retail rate impact comports with both the spirit and the letter of our RES Rules. Consequently, we approve this portion of the Company's 2007 Compliance Plan without modification, as amended by the waiver request.

E. Least-Cost Planning Assumptions

1. Public Service's Position

54. Mr. McGree stated in his direct testimony that Public Service has used the same modeling assumptions that the Company stipulated to use for evaluating the 2013 resources in Docket No. 05A-543E. According to Mr. McGree, these modeling assumptions are the most recently approved LCP assumptions as required by Rule 3661(d).

2. Staff's Position

55. In his answer testimony, Dr. Mignogna comments that he believes that a proper value for wind RECs is on the order of $2 to $4 per MWh in the current market, not the $8.75 per MWh provided for in the LCP settlement. He contends that the true REC value is zero, at least up to the point where compliance with the RES is achieved.

3. Other Parties' Position

56. WRA expressed concerns that the $8.75 REC payment agreed to in the LCP Settlement should be used in the calculation of the retail rate impact. In footnote 14 to its SOP, Public Service stated that it did not incorporate the $8.75 REC payment because the renewable resources were considered a zero cost, must run resource. WRA argues that Public Service assumed all renewable resources selected under the 2005 All-Source RFP were selected in the RES Plan so there was no need to impute a REC value to force that selection.

4. Commission Findings

57. We find Public Service's explanation as to how it treated the $8.75 REC value from the LCP Settlement reasonable and appropriate. Because this REC value was an imputed value (not an actual cash value associated with a bid) for the bid selection under the LCP process, it should not be used in the retail rate impact calculation. We therefore approve this portion of the Company's 2007 Compliance Plan without modification.

F. RESA Rider Level

1. Public Service's Position

58. In her direct testimony, Ms. Kittel states that Public Service proposes to continue the RESA rider at 0.6 percent if the waiver of Rule 3661(f) is granted. However, in the event the

waiver is not granted, Public Service seeks permission to raise the RESA rider to the full 1 percent and bank the excess funds until future compliance years.

59. In Ms. Sakya's supplemental direct testimony, she explains that, based on updated information resulting from its recent electric rate case,[9] corrections to the wholesale energy forecast, and updated projected customer-sited solar programs costs, Public Service could actually reduce the RESA starting in 2009 if the waiver is granted. The Company's analysis is shown in Revised Table 6-7. It indicates that the RESA rider could remain at 0.6 percent for 2007 and 2008 and then decrease to 0.465 percent for 2009 to 2016. She noted that at the time she wrote this testimony that the Colorado General Assembly was considering increasing the RES compliance percentages and if that legislation[10] were to pass, all of the Company's projections would need to be revised and the RESA rider levels would increase as well.

2. Staff's Position

60. In his answer testimony, Dr. Mignogna advocates for continuation of the RESA at 0.6 percent.

3. Other Parties' Position

61. CF&I/Climax support the continuation of the 0.6 percent RESA rider. CoSEIA recommends that the Commission allow Public Service to increase the RESA to the two percent level, at the Company's option, until the issue can be further examined during the 2008 Compliance Plan.

[9] *See*, Docket No. 06S-234EG.

[10] *See*, HB 1281discussion, *infra.*

4. Commission Findings

62. In light of HB 1281's higher compliance percentage levels and higher allowed retail rate impact percentage, we find that the issue of whether to raise the current 0.6 percent RESA is better deferred until the 2008 Compliance Plan. We note that Public Service's 2008 Compliance Plan should be filed in a matter of months and this would be an appropriate proceeding for the Commission to examine the impacts of HB 1281 on the RESA rider. We approve this portion of the Company's 2007 Compliance Plan without modification and allow the RESA to remain at 0.6 percent.

G. RESA Account Balance

1. OCC's Position

63. In his answer testimony, OCC witness Dr. Schechter argued for two changes to the accounting for the RESA account balance. He recommends increasing the interest rate paid on excess collections from the Customer Deposit Interest Rate (CDIR), which is currently 4.76 percent, to the Company's Weighted Average Cost of Capital (WACC), which is currently 8.85 percent. Dr. Schechter explains that he does not believe even the WACC is the appropriate rate for this account because the cost to the average customer to borrow money is probably higher. He suggests that, instead of arguing over what is the actual cost of borrowing for customers, it would be appropriate instead to use the WACC. In her rebuttal testimony, Public Service witness Ms. Sakya notes that RES Rule 3660(b)(I) requires that interest shall accrue on the unexpended balance of funds collected from a forward-looking rider at the CDIR at the time of the RESA rider.

64. Dr. Schechter also recommends that, because it is unclear from the Company's testimony and application how Public Service proposes to treat the RESA account balance for

regulatory purposes, it should be treated similar to the case of customer deposits. That is, the account balance is subtracted from the Company's calculation of its ratebase. Ms. Sakya states that Public Service will not include the RESA deferred account balance in its ratebase calculations.

2. Commission Findings

65. We find that there are no remaining disputed issues regarding the RESA account balance. As a result, we approve this portion of Public Service's 2007 Compliance Plan without modification.

H. ECA/RESA Cost Recovery Issues

1. Public Service's Position

66. As discussed more fully above, in his rebuttal testimony, [11] Mr. McGree notes that, regarding the computer modeling for the RES and NoRES Plan, the Company contended that it would be preferable to track the incremental cost of renewable resources in the RESA rider and to recover the base costs of these resources (the portion of the renewable resource cost that matched the cost of the non-renewable resources) through the ECA. He further explained that the costs going through the ECA would represent the avoided energy and capacity costs.[12]

67. According to Public Service witness Mr. Ahrens, Public Service proposes to recover the cost of renewable energy through two rate mechanisms -- the ECA and the RESA. He provides that Public Service would recover the "Modeled ECA Costs," which is the portion of renewable energy that the Company would have incurred if it had acquired nonrenewable resources in lieu of renewable energy. He refers to the Modeled ECA Costs as the "road not

[11] *See*, Page 23, lines 7 to 17.

[12] *See*, McGree Rebuttal testimony, page 23, lines 11 to 13.

taken." The RESA would recover the incremental costs or net costs of renewable energy along with the costs of program administration costs.

68. According to Mr. Ahrens, Public Service seeks permission to include the 2007 Modeled ECA Costs from either the Rule Alternative (Revised Tables 6-5 or 6-6) or Waiver Alternative (Revised Table 6-7), depending upon which method the Commission approves, over the remaining calendar quarters of 2007 in the ECA.

2. Staff's Position

69. Staff witness Mr. Kunzie recommends rejecting ECA tariff sheets 111A and 111B included with the Plan because there is no true-up of the Modeled ECA Costs to actual energy costs within the proposed ECA tariff sheets. Staff envisions that the true-up mechanism for Modeled ECA Costs would be the same or very similar to the true-up mechanism already in place. Staff further argues that Public Service's proposal not to true-up the ECA for Modeled ECA Costs represents the first time in which forecasted costs are not trued-up to actual costs on an after-the-fact basis.

70. Public Service witness Mr. Ahrens responds that Staff is looking at the ECA in isolation, whereas the Company's proposal looks at the combination of the ECA and RESA for cost recovery. Mr. Ahrens asserts that Public Service will recover, through a combination of the ECA and RESA, the actual known and measurable, used and useful costs of renewable resources. It proposes to track actual costs incurred through the RESA, and true-up projected costs to actual costs through the RESA with any revenues in excess of these total costs being carried over to the next year through the RESA deferred account balance. He argues that the portion of the renewable energy costs that match the projected costs of the avoided non-renewable resources that is recovered through the ECA is likely to remain fairly stable.

71. Mr. Aherns goes on to argue that to implement Staff's recommendation would require the Company to rerun the RES and NoRES Plans at the end of each Compliance Period in order to determine a new "road not taken." Public Service would then either debit or credit the ECA deferred account balance with any difference between the projection at the time of filing the Compliance Plan, and the projection at the time of filing the Compliance Report. He goes on to argue that, for any adjustments made to the ECA, a counterbalancing adjustment would be required to the RESA deferred account balance. Mr. Ahrens concludes that the double true-up suggested by Staff creates more complications, more rate instability, and is unnecessary.

3. Other Parties' Position

72. WRA supports Public Service's proposal to split cost recovery between the ECA and RESA. No other party advocated a position on this issue.

4. Commission Findings

73. We are persuaded by Public Service's arguments that when taken together, the ECA and the RESA will collect no more than the actual costs for renewable energy, RECs, and program costs. Consistent with our earlier ruling granting the waiver of Rule 3661(f) for sunk resources for the 2007 to 2009 Compliance Plans, we approve Public Service's proposal to split the cost recovery between the ECA and the RESA for the 2007 to 2009 Compliance Plans.

74. It appears that Public Service's proposal to use the combination of PROSYM modeling and the Excel® spreadsheet of the RES and NoRES scenarios to determine the portion of the costs collected through the ECA, has the effect of allocating proxy capacity costs of the substitute natural gas plants to the ECA. We note that the ECA is designed to provide recovery of only energy costs and not capacity costs. Therefore, in granting Public Service's requested treatment to split cost recovery between the ECA and the RESA, we are making a limited

exception to our historical practice of allowing only energy costs to be recovered through the ECA.

75. Revised Table 6-7 shows Modeled ECA Costs of $23,000 for 2006 and $371,000 for 2007. Public Service may collect these amounts through the ECA over the remaining months of 2007. Consequently, we find that this portion of the 2007 Compliance Plan is approved without modification. However, we note that the proposal to split cost recovery treatment between the ECA and the RESA is for the 2007 to 2009 Compliance Plans only.

I. Waiver of Rule 3655(f)

76. As part of Public Service's Supplement to its application, the Company sought a waiver of Rule 3655(f). The rule requires all QRUs to conduct two competitive solicitations for eligible renewable energy from On-Site Solar Electric Generating Systems (On-Site Solar Systems) each year for 2006 and 2007. Public Service indicates that it expects to acquire sufficient Solar On-Site RECs (SO-RECs) from the June and December 2006 RFP solicitations to meet the RES. However, the Company contends that there is still some uncertainty as to whether the SO-RECs it projects will all be delivered through executed contracts. Therefore it requests the flexibility to conduct additional competitive solicitations in 2007, as they become necessary, rather than be required to conduct two solicitations.

77. Staff states that it supports this waiver request. No other party advocated a position on this waiver request. We grant the waiver of Rule 3655(f) in light of Public Service's expectation that it will acquire sufficient SO-RECs to meet the RES for 2007.

J. The Buy-All/Sell-All Model and the Developer Model

1. Public Service's Position

78. Public Service originally proposed a Buy-All/Sell-All model for the contracts it would enter into with third-party developers as part of its June 2006 RFP. Under the Buy-All/Sell-All model, the third-party developer would provide all, or part of the financing for the On-Site Solar System, and recover that investment through a 20-year power purchase agreement with Public Service. Public Service would buy all the energy and the RECs produced by the On-Site Solar System under a Renewable Energy Supply Contract and would sell to the customer, whose premises contain the On-Site Solar System, all of the renewable energy sold from the system by the third-party developer to Public Service at the same price as Public Service paid for the renewable energy. Public Service would also retain all of the SO-RECs and use them for compliance with the RES.

79. In Public Service witness Ms. Chacon's supplemental direct testimony, she explains that Public Service concluded that the Buy-All/Sell-All model was overly complicated to administer and difficult for customers to understand. As a result, the Company proposed the Third-Party Developer Model (Developer Model) for the June and December 2006 RFPs. Under the Developer Model, the third-party developer owns and maintains the installations on customer sites, the developer enters into the SO-REC contract with Public Service to receive the monthly REC payment directly, the developer then contracts with the end-use customer for the receipt of the generation, the developer enters into the interconnection agreement with Public Service, the end-use customer receives the rebate, and the end-use customer is eligible for net metering and receives the financial benefit of excess generation being returned to the grid. As part of the contract with the developer, Public Service requires the developer to acknowledge that Public

Service is a regulated utility and has the exclusive right to sell electric energy within its Commission-certified service territory and that Public Service is waiving this certificated right only to the extent necessary to facilitate the installation of On-Site Solar Systems to comply with the RES.

2. Staff's Position

80. Dr. Mignogna and Mr. Skinner of Staff both express concerns regarding the regulatory and legal implication of the Developer Model under current Colorado statutes. Mr. Skinner notes that Section 1.8 of the revised RFP states that Public Service is willing to temporarily waive its service territory rights to permit third-party developers to own photovoltaic (PV) facilities located on the premises of the Company's retail customers, and to sell the electric energy from these facilities to the Company's customers. Mr. Skinner asserts that § 40-5-105, C.R.S., does not appear to address what Public Service is contemplating with third-party developers. He further asserts that retail electric service must be provided only by regulated certificated utilities, and that it appears that third-party developers could set their own rates for the energy furnished to the customers. Mr. Skinner concludes that because third-party developers are not regulated utilities, there would be no governmental determination whether their rates are just and reasonable nor would the ability to monitor and enforce service quality standards exist.

81. Dr. Mignogna suggests that Staff could undertake an investigation into the legality of the Developer Model and commit to complete its investigation before Public Service must issue its next RFP for customer-sited solar resource. In the meantime, Staff recommends that Public Service revert back to its Buy-All/Sell-All model.

82. At the conclusion of the hearing, the Commission directed any interested party to file legal briefs regarding Public Service's proposed Developer Model. We indicated that the legal briefs should include what modifications to statutes or Commission rules would be necessary to ensure that the Developer Model is legal, if a party contended it was illegal.

K. Public Service's Proposed Developer Model

83. As indicated above, Public Service prefers (and according to its representations, so do bidders from its 2006 RFPs) to utilize the Developer Model over the Buy-All/Sell-All approach for structuring the three-way arrangements for the installation of On-Site Solar Systems. According to Public Service, the Developer Model is superior to the Buy-All/Sell-All model and the public interest is best served by its adoption. We agree that the Developer Model best effectuates the legislative intent in implementing Amendment 37. Having concluded that the Developer Model is preferable, we must now determine whether such a contract structure is permissible under state utility laws.

84. Article XXV of the Colorado Constitution vests in the Commission, as the General Assembly may delegate, all power to regulate the facilities, service, rates, and charges of every public utility operating within Colorado. *See* Colo. Const. art. XXV. Through the Public Utilities Law, as applicable here, §§ 40-1-101 to 40-7-117, C.R.S. (2006), the General Assembly has assigned to the Commission, the authority "to do all things, whether specifically designated in articles 1 to 7 of this title or in addition thereto, which are necessary or convenient in the exercise of such power." § 40-3-102, 11 C.R.S. (2006). Accordingly, the Commission has power to accomplish functions delegated to it by the Public Utilities Law and article XXV. *See Miller Bros. v. Public Utils. Comm'n*, 525 P.2d 443 (Colo.1974); *Public Service Company of Colorado v. Trigen-Nations Energy Co., L.L.L.P.*, 982 P.2d 316 (Colo.1999); *Mountain States Tel. & Tel.*

Co. v. Public Utils. Comm'n, 763 P.2d 1020, 1025 (Colo.1988); *City of Montrose v. Public Utils. Comm'n,* 629 P.2d 619, 622 (Colo.1981).

85. The General Assembly vests in the Commission extensive and broad regulatory authority. *Public Service Company v. Public Utils. Comm'n*, 350 P.2d 543, *cert denied*, 385 U.S. 984 (1960). Among other things generally included within that authority is the duty to protect the public interest regarding utility rates and charges. *City of Montrose v. Public Utils. Comm'n, supra*; *Consolidated Freightways Corp. v. Public Utils. Comm'n*, 406 P.2d 83 (Colo. 1965). The Commission is further charged with ensuring that the regulations, practices, equipment, facilities, and service of a public utility, as well as the methods of manufacture, distribution, transmission, storage, or supply employed by the public utility are just, reasonable, safe, proper, adequate, and sufficient. *See*, § 40-4-101, C.R.S., *et seq.* Most relevant to this proceeding, the Commission further has the authority to grant certificates of public convenience and necessity (CPCNs) for a specific geographic area pursuant to § 40-5-101(1), C.R.S. However, § 40-2-101(2), C.R.S., requires that the Commission, in order to avoid duplication of service among public utilities, assign specific territories by the issuance of a CPCN to one or each of the competing public utilities. *Public Service Co. of Colorado v. Public Utils. Comm'n,* 765 P.2d 1015, 1020-1021 (Colo. 1988).

86. "Once an area has been certificated to one utility, it and it alone has the right to serve the future needs of that area provided it can do so. This is essential to the doctrine of regulated monopoly." *See Public Service Company of Colorado v. Trigen-Nations Energy Company, L.L.L.P supra* at 324 n.9.

87. It is undisputed that, when the Commission grants a CPCN to allow a public utility to provide service for an exclusive geographic area, such a grant of authority creates a

property right in that service area which inures to that public utility. As such, a public utility holding a CPCN to serve a specific geographic area must be afforded all due process, including adequate notice and a right to be heard whenever its authority to serve under a CPCN is affected, or may be affected by any grant of authority by the Commission. *Public Service Co. of Colorado v. Public Utils. Comm'n, supra* at 1021; *Public Utils. Comm'n v. DeLue*, 486 P.2d 1050 (Colo. 1971).

88. While a public utility's CPCN inures a property right in that utility subject to due process requirements, the utility may nonetheless sell, assign, or lease its CPCN as any other property, but only by Commission authorization, and upon any terms and conditions as the Commission may prescribe. *See,* § 40-5-105(1), C.R.S.

89. The Commission enjoys undisputed broad authority and considerable discretion to accomplish its functions. *Colorado Ute Electric Association v. Public Utils. Comm'n*, 602 P.2d 861 (Colo. 1979). Nonetheless, such authority and discretion is tempered by the legislative authority delegated by the General Assembly. *Mountain States Legal Foundation v. Public Utils. Comm'n*, 590 P.2d 495 (Colo. 1979). We must consider *all* statutory requirements when utilizing our authority and discretion. Consequently, in determining whether Public Service may voluntarily, and temporarily waive a portion of its CPCN authority, we must consider not only the statutes discussed above, but also more recently enacted statutes such as the renewable energy standards contained in § 40-2-124, C.R.S.

90. The passage of Amendment 37 and HB 07-1281 have instituted new statutory mandates for renewable energy standards. Sections 40-2-124(1)(c)(I) and (II), C.R.S., require a QRU such as Public Service to acquire electricity from On-Site Solar Systems. Section 40-2-

124(1)(f)(IV), C.R.S., requires QRUs to consider proposals offered by third parties for the sale of renewable energy or renewable energy credits.

91. The legislative intent as indicated at the conclusion of § 40-2-124, C.R.S., holds as follows:

> Therefore, in order to save consumers and businesses money, attract new businesses and jobs, promote development of rural economies, minimize water use for electricity generation, diversify Colorado's energy resources, reduce the impact of volatile fossil fuel prices, and improve the natural environment of the state, it is in the best interests of the citizens of Colorado to develop and utilize renewable energy resources to the maximum practicable extent.

Therefore, our task is clear - to reconcile this legislative intent with the statutory authority contained in the doctrine of regulated monopoly.

92. When we read statutes, we are to give each statute its full and meaningful effect. We may not ignore the provisions of a statute for convenience. When considering several statutes, we must harmonize and give meaning to potential conflicting statutes. *Gamble v. Levitz Furniture Co.*, 759 P.2d 761 (Colo. App. 1988), *cert. denied*, 782 P.2d 1197 (Colo. 1989). Statutes must be construed to further the legislative intent evidenced by the entire statutory scheme. *Bynum v. Kautzky*, 784 P.2d 735 (Colo. 1989).

93. We acknowledge that a certain tension exists between the regulated monopoly statutes and the statutory mandates of Amendment 37 and HB07-1281 as detailed in § 40-2-124, C.R.S. We agree with Public Service that the mandates of Amendment 37 infringe upon the exclusive service territory of a QRU by requiring the QRU to accept On-Site Solar Systems and allow them to be supplied by third party developers.

94. However, we find the tension between the competing statutes is relieved in part by Public Service's willingness to temporarily waive, through contracts with third party

developers, its right to be the exclusive provider of retail electricity and to allow those third parties to own the solar panels installed on Public Service's host customers' properties. Public Service represents that it willingly waives its property rights in order to avoid unnecessary billing hassles, encourage broader participation in its Solar*Rewards program, and provide more competition in order to keep the price of SO-RECs down.[13]

95. We find the tension between the competing statutes is further relieved through the role of the third party developer. We agree with the OCC that the developers are not public utilities as contemplated under applicable statutes. The energy generated by the solar facility will be used only by the customer or exported into Public Service's system should the customer's generated energy exceed usage. The third party developer will not sell any excess generation from the solar facility to any other entity. There is no opportunity for a developer to "cherry pick" customers or impose additional burdens on residential and commercial customers of Public Service. Consequently, we find that third party developers do not meet the statutory definition of a public utility. They are not required to hold themselves out to serve all who request service within a geographic area. The third party developer merely provides a service to those with whom it contracts. As such, the formalities required pursuant to § 40-5-105(1), C.R.S., for the assignment of a CPCN are not necessary in these Developer Model contracts.

96. We further note that the due process concerns raised by Staff are not implicated through the Developer Model. This is not a case where a public utility seeks to provide service in Public Service's certificated service area requiring a hearing to determine whether Public

[13] We are further reassured by Public Service's representations that as part of the contract with third party developers, Public Service will require the developer to acknowledge that Public Service is a regulated utility and has the exclusive right to sell electricity within its Commission certified service territory, and that Public Service is waiving its certificated right only to the extent necessary to facilitate the installation of On-Site Solar Systems to comply with the RES.

Service provides adequate service. Rather, Public Service proposes to voluntarily and temporarily waive a small portion of its CPCN to accommodate the RES requirements.

97. While we find that third party developers are not utilities under the statutory definition, and therefore no application by Public Service is necessary to assign portions of its CPCN, we do find it prudent to generally monitor those contracts. Therefore, we require Public Service to file annually, a list of all contracts entered into through its Developer Model. The filing shall include the name, address, telephone number, and e-mail address of the third party developer, along with the name and address of the underlying customers. The Company need not file the actual contracts.

L. Solar*Reward and Other Contracts

1. Staff's Position on Standard Contracts

98. Staff witness Mr. Skinner recommends the Commission decline to endorse the rebate, REC and solar energy purchase contracts, and assignment of contract document included in Volume 3 of the Plan on the basis that those instruments contain property right implications which are beyond the Commission's jurisdiction or expertise to approve. He contends that the Colorado Division of Real Estate is the appropriate governmental body to address real property issues.

99. Mr. Skinner maintains that it is unclear whether some of the contracts associated with the solar electric generation systems create a personal right or a property right that "runs with the land" once they are installed. Staff has additional concerns regarding property rights implications. For example, Staff argues that the On-Site Solar Systems may constitute fixtures to the real property and therefore become part of the real estate Colorado real property law. Staff also raises the concern that it is not within the Commission jurisdiction to determine whether,

and to what extent this property right is transferable to subsequent owners. Another concern is the possible obligation on the seller to disclose to prospective buyers that the property may be encumbered with a 20-year obligation to maintain and remain connected to the grid associated with the contracts. Staff also indicates that liens may attach to the solar electric generation systems resulting in unknown consequences.

2. Other Parties' Position on Standard Contracts

100. In pre-filed cross-answer testimony, CoSEIA witness Mr. Slocum argues that standard contracts are essential to successful implementation and they should be approved by the Commission. He maintains that standard contracts are necessary because they reduce transaction costs of negotiating every detail of every deal. Mr. Slocum also asserts that as a result of Commission approval, customers can be reasonably confident that the standard contracts fairly balance the liability shared between the customer and the utility. Lastly, he contends that standard contracts ensure reasonable uniformity among the various classes of customers.

3. Public Service's Position on Standard Contracts

101. In her rebuttal testimony, Ms. Chacon explains that in administering the Solar*Reward program, the primary concern of homeowners does not concern property rights, but rather their potential liability. According to Ms. Chacon, customers want the ability to release any liability that they may have had under the Solar*Rewards contract at the time they sell their homes. She states that Public Service did not want to create any encumbrances on residential property that ran with the land for fear that it would discourage participation. Public Service's solution was to revise the standard contracts by adding language to limit damages to the homeowner who installs the PV system to a prorated portion (based upon years of contract compliance) of the rebate and SO-REC payment. Public Service also added language that allows

the selling homeowner to assign the Solar*Rewards contract to the new property owner. If the new owner assumes the contract, the selling property owner is released and does not owe any damages. The new homeowner has the option to assume the contract or not to assume the contract.

102. Ms. Chacon states that she disagrees with Staff's recommendation for the Commission not to approve the contracts and points to Rule 3657(a)(I)(F), which requires the QRU to include as part of its Compliance Plan its Standard Rebate Offer (SRO), and Rule 3657(a)(I)(I), which requires the QRU to file any standard contracts that will be used in the competitive acquisition of renewable energy. Ms. Chacon also comments that it should be obvious to a prospective homeowner that the property has solar panels on its roof, and at any rate, this disclosure will be accomplished.

103. In his supplemental answer testimony, Mr. Skinner modifies his recommendation by suggesting that the Commission should approve just the rebate and REC purchase contracts included in Volumes 3 and 4 to the extent the provisions relate to the payment of rebates and RECs. He also recommends that the Commission not approve the security fund declaration forms since they do not relate to the payment of rebates and RECs.

104. In her supplemental rebuttal testimony, Public Service witness Ms. Kittel indicates that, to avoid prolonging this dispute over contract provisions, Pubic Service is willing to agree to Staff's recommendation that the Commission approve only the rebate provisions and REC prices in the form contracts submitted in Volumes 3 and 4 of the Plan, with the understanding that this limited approval would constitute approval to recover the costs incurred under these contracts through retail rates.

4. Commission Findings on Standard Contracts

105. We find reasonable Public Service's acquiescence to Staff's recommendation for the Commission to approve only the rebate provisions and REC prices in the form contracts submitted in Volumes 3 and 4 of the Compliance Plan, with the understanding that this limited approval would constitute approval to recover in retail rates the costs incurred under these contracts.[14] Therefore, we grant limited approval of the standard contracts those aspects relating to the rebate provisions and REC prices. This limited approval also includes the associated cost recovery for the rebate payments and REC prices through retail rates.

106. Staff raised interesting real property issues, and we would encourage its continued efforts to work with the Colorado Division of Real Estate.[15]

5. Staff's Position on Security Funds

107. Mr. Skinner recommends that the Commission not approve the security fund declaration forms since they do not relate to the payment of rebates and RECs. He notes that the contracts that have security fund provisions require a fund of $125 per kW of installed solar generation capacity and that the security fund must remain viable for the entire 20-year life of the contract. There are three security fund declaration forms for the RFP documents and two security fund declaration forms for the 10kW to 100kW solar electric generating systems.

6. Other Parties' Position on Security Funds

108. CoSEIA supports Staff's concern regarding security funds. CoSEIA advocates that the security fund requirements should be eliminated or greatly reduced because those

[14] We note that in many of the contracts included in Volume 4, the Commission is referred to as the Colorado Public Utility Commission and not the Colorado Public Utilities Commission. *See for example*, Solar*Reward 2006 RFP Rebate Contract, page 2 or 4, item S. All references to the Commission within these contracts should be corrected.

[15] *See*, Dr. Mignogna's Answer testimony, page 72, lines 4 to 5.

requirements have the effect of increasing the cost of solar electric systems. CoSEIA also argues the requirements impose a hardship or barrier to entry for small companies and require the citizens of Colorado to guarantee Public Service protection from risk and then pay for it again through the costs by the businesses who bear the cost of the security fund.

7. Commission Findings Security Funds

109. During cross-examination, Mr. Skinner acknowledge that Staff would be more comfortable with the security fund provisions given the representation by Public Service that it would use the security fund monies to purchase RECs or put them into the RESA should a developer not perform under its solar contract.[16] We are persuaded by the arguments of Public Service during this cross-examination that it is relying upon these on-site solar project owners/developers to produce what they have promised and the security fund is a means to ensure performance. We find that the imposition of a security fund is appropriate given our nascent position in the development of on-site solar resources under the RES.

110. Because there is no current market price for SO-RECs in Colorado, there is no mathematical basis to determine whether the proposed security fund level of $125 per kW would provide a sufficient level of funds to acquire the equivalent number of promised SO-RECs under a defaulted contract. As a result, we find that we should err on the side of setting a security fund which is too high, rather than too low. Therefore we reject CoSEIA's argument that the security fund should be greatly reduced.

111. We are aware that security funds impose a cost on the owners/developers, yet we have to balance the protection of the ratepayer with the development of the on-site solar market

[16] *See*, April 19, 2007 Transcript, pages 156 to 161.

in Colorado. We find that the $125 per kW achieves such balance today. We will note that, it may turn out that once we have more experience with these on-site solar resources some of the security fund could be returned to the customer/developer once they have proven their on-site solar resource performs as promised. Thus, we adopt Public Service's proposed security fund amount of $125 per kW without modification.

M. Solar Electric Acquisition Programs and REC Payment Levels

1. Public Service's Position

112. In her direct testimony, Ms. Chacon explains that Public Service reviewed other on-site solar programs across the nation to determine the best approach. She discusses Public Service's goal of setting a SRO that was comparable to the total incentives offered in other states. As a result of its review, the Company decided to continue its current $4.50 per watt incentive payment, which is a combination of a $2.00 per watt rebate and a $2.50 per watt SO-REC payment for the 10kW and under systems. Mr. Chacon explained that Public Service wanted to stimulate the on-site solar market at a rapid enough level to meet compliance requirements for 2007, but did not want to over-subsidize the program. She contends that this incentive payment provides approximately 50 percent of the cost to install a system, which Public Service believes was consistent with the data it reviewed.

113. In her rebuttal testimony, Ms. Chacon expresses some concern that Public Service could face significant increases in the cost of SO-RECs if the Energy Policy Act of 2005 (EPACT) tax incentives are not renewed beyond the end of 2008. Additionally, Public Service could also be faced with declining customer interest in participating in the solar programs. Ms. Chacon acknowledged that the task of achieving compliance with the solar portion of the RES is

made more difficult by the fact that the Company must rely on the participation of customers who are willing to invest their own money in solar electric systems.

114. In her supplemental direct testimony, Ms. Chacon describes the Company's June and December 2006 RFPs. She notes that Public Service made some modifications to the June RFP regarding projects by third-party developers. In addition, it modified some of the Solar*Rewards Purchase Contracts that were part of the June and December RFPs. Ms. Chacon also notes that the December RFP did not include systems in the 10kW to 100kW size range. She also states that Public Service has undertaken a Standard Offer for solar electric systems in the 10kW to 100kW size range.

115. Ms. Chacon further indicates that Public Service undertook a standard offer for medium sized systems, greater than 10kW to 100kW, based on customer feedback from the June 2006 RFPs. Those customers advised Public Service that a predictable and reliable option would allow for better planning, engineering, and financing of such projects. As proposed by Public Service, the standard offer for medium sized systems would receive the $2.00 per watt rebate along with monthly REC payments of $115 per MWh. Ms. Chacon explains that the $115 per MWh REC payment is a market price determined by project financial feasibility calculations combined with evaluating the results of bids received in the June and December 2006 RFPs. She states that, when the rebate is combined with the REC payment, the result averages to $256 per MWh. Public Service has declared that it will limit qualified applications under the medium sized program to fill out one MW worth of capacity, then it will reevaluate the REC price and the current compliance budget and goals to determine how to proceed.

116. As discussed *supra,* Ms. Chacon explained that Public Service had proposed the Buy-All/Sell-All model for the June RFP. The Company concluded that the Buy-All/Sell-All

model was overly complicated to administer and difficult for customers to understand. As a result, Public Service proposed to use the Developer Model for the June RFP. In Ms. Chacon's supplemental answer testimony, she indicates that the Company contacted the short-listed bidders from the June RFP to allow them to revise their bids to account for the Developer Model.[17] According to her testimony at the hearing, all of the June bidders decided to continue their participation in the RFP process.[18]

2. Staff's Position on Customer Sited Solar Electric Systems

117. Dr. Mignogna takes issue with several of Public Service's proposals relating to customer sited solar electric systems. He recommends that the Commission limit Public Service's acquisition of RECs to those needed for compliance because, in Staff's opinion, the Company is acquiring too many solar RECs at too high of a cost, too soon. Related to this concern, Staff also recommends that Public Service limit its acquisition of RECs from the 10kW to 2 MW customer sited systems to only the amount needed to satisfy the RES.

118. Ms. Kittel responds in her rebuttal testimony that the RES Rules set minimum, not maximum, standards for the acquisition of solar energy. Ms. Chacon states that there are significant federal tax incentives under EPACT for on-site solar facilities and REC prices would need to be increased by 60 to 80 percent if EPACT benefits were eliminated. She contends that Public Service felt it was important to acquire these resources when prices were lowered by the tax incentives, and when customers found investments in solar systems to be attractive. Ms. Chacon states that given the shelf life of SO-RECs under the RES Rules, none of the SO-RECs

[17] *See*, Section 1.8 of the June RFP.

[18] *See*, Non-confidential portion of the April 17, 2007 transcript, page 9, lines 13 to 21.

are surplus and will all be eventually retired to meet the RES. Ms. Kittel notes that HB 1281 contains specific language that a QRU may acquire more than the minimum amount of eligible renewable energy resources and RECs provided that the retail rate cap is not exceeded. She also contends that RES Rules give the QRU the discretion to determine when to buy RECs and the price to pay for RECs.

119. Dr. Mignogna recommends that Public Service consider revising the 20-year advance SO-REC price of $2.50 per watt downward. Ms. Chacon contends that Staff is improperly focusing only on the level of incentive offered by the utility and that the relevant question is: What is the expected payback time frame for a customer investment in on-site solar systems? Her Exhibit BJC-1 shows simple payback calculations for PV systems in California, New Jersey, Colorado, and in Austin, Texas. According to the exhibit, the payback in California is approximately 16 years, Colorado is 20 years, New Jersey is 21 years, and the City of Austin is 23 years. She concludes that Public Service has set its incentive payment at an appropriate level.

120. Staff also asserts that, to the extent a lump sum payment is desirable for small solar electric systems, a declining block schedule is preferred because it would provide better cost control and enhanced flexibility in responding to market signals. Ms. Chacon disputes Staff's recommendation to adopt a declining block pricing structure because she finds it counterintuitive. She believes the current design, which treats all small customers similarly is better understood and appears more equitable. Ms. Chacon posits that block pricing would cause a rush of customers to obtain the higher block prices and require additional administrative requirements to communicate the complexity of the block structure.

121. Dr. Mignogna advocates an investigation into the possibility of shifting to a performance based incentive mechanism in order to spread out the costs over the life of the solar

electric system. On the other hand, Ms. Chacon indicates she was perplexed by Staff's recommendation to shift to performance based RECs rather than paying the entire amount up front for SO-RECs, because Rule 3658(c)(VIII) requires the QRU to offer a one-time payment for the SO-RECs. Ms. Chacon maintains that Staff's recommendation is not allowed under the RES Rules. She notes that Public Service already pays for SO-RECs on a performance basis for solar electric systems larger than 10kW.

122. Dr. Mignogna also argues that Public Service should work with Staff to redesign the SRO to achieve greater social equity and to investigate methods and criteria for evaluating community-based and public sector projects. Ms. Chacon asserts that the RES Rules do not give the QRUs the flexibility to achieve social equity by picking and choosing who qualifies for the rebates and for purchases of SO-RECs. She notes that rebates must be made available on a non-discriminatory, first-come, first-served basis. Ms. Chacon contends that public sector customers did effectively participate in the June and December 2006 RFPs based on the fact that of the 66 bids received for the June RFP, 48 bids were public works projects, including schools and cities. Further, of the 65 bids from the December RFP which met the minimum bid criteria, 24 bids were public entities including schools, city-owned buildings, and other federal and regional entities. Ms. Chacon argues that the Company's proposed Developer Model assists public and non-profit entities, which do not have the ability to use the EPACT tax benefits, because it allows them to partner with a developer that can use these tax benefits.

123. Dr. Mignogna also advocates for Public Service to apply an optimization approach to obtain the most cost-effective set of resources, subject to budgetary constraints for the 10kW to two MW solar electric systems. According to Dr Mignogna, it does not appear that Public Service directly addressed Staff's recommendation regarding optimization in its solar

acquisition process in its rebuttal testimony. While the Company included statements in its rebuttal testimony that it currently has substantial customer willingness to invest in on-site solar systems encouraged in part by the federal tax incentives[19] and the imposition of a 1 MW cap for medium size (10kw to 100kW) systems as a threshold for evaluation of possible changes in REC prices,[20] we find merit in Staff's recommendation. Although it appears that Public Service will be able to achieve compliance for 2007 with the RES with its current 0.6 percent RESA, we strongly encourage Public Service to incorporate into future compliance plans an explanation of how it plans to integrate its solar acquisition strategies from the three types of solar programs it offers: small systems (10kW and less) medium systems (10kw to 100 kW), and large systems (greater than 100kW to two MW).

124. Dr. Mignogna recommends that Public Service combine the June and December 2006 solicitations by selecting projects commensurate with a 5 percent RES. To the extent that there are obligations that do not comport with Staff's recommendation, he argues that the Company's shareholders should bear those obligations. Ms. Chacon maintains that Dr. Mignogna's proposal is not required by the RES Rules, interferes with Public Service's management discretion as to the best way to acquire SO-RECs, and is counterproductive.

125. Ms. Chacon explains that under Rule 3655(f), Public Service was required to conduct two competitive solicitations for on-site solar systems in 2006. According to Ms. Chacon, the June bidders have been notified and have been sent executed contracts by Public Service. However, some of the June bidders are concerned about executing these contracts due to the uncertainties created by Staff's recommendation. Ms. Chacon asserts that it would be

[19] *See*, Rebuttal testimony of Ms. Chacon, page 3, lines 3 to 10.

[20] *See*, Ms. Chacon's Rebuttal testimony page 11, lines 1 to 4.

unfair to go back to bidders who have received contracts under the June RFP and ask them to throw their projects back into the ring for reselection based on the December RFP, and be judged based upon criteria never disclosed to them. She further suggests that successful bidders stand to be harmed by Staff's recommendation because it would artificially limit the number of contracts that can be awarded and the bidders could very well have unrecoverable costs if their contracts are revoked. Public Service is also concerned that to backtrack now would send a strong signal to the market that Colorado is not a favorable forum for solar development due to regulatory uncertainty and micromanaging by the Commission.

126. Dr. Mignogna recommends that Public Service temporarily set aside plans for the 10kw to 100kW standard offer because the generation will not be needed. Ms. Chacon replies that Rule 3658(a) requires QRUs to make available a standard rebate offer for on-site solar systems up to 100kW in size. Public Service takes the position that Staff's recommendation would be a violation of the rule. She asserts that they designed this standard offer based on input from customers who expressed a preference for a predictable structure because it would allow the customer to better plan, engineer and finance such projects. Ms. Chacon notes that Public Service is not currently exceeding the rate cap and believes it can provide a standard offer for the 10kw to 100kw systems without exceeding the rate cap.

3. Other Parties' Position

127. CoSEIA witness Mr. Jones expresses concern that Public Service could see dramatic changes in demand in the second year of the incentive program because early adopters tend not to be primarily motivated by financial considerations. He also suggests that any changes in the rebate levels should be gradual, incremental, and more frequent so as to avoid

deadline rushes. CoSEIA witness Mr. Gilliam asserts that there needs to be a balance drawn between the ideal incentive (performance based) and simplicity.

4. Commission Findings Regarding Customer Sited Solar Electric Systems

128. Given that we are in only the first compliance year of the RES, we are not persuaded that changes should be made to the REC payment levels or to a tiered declining block structure at this time. We share CoSEIA's concern that it would be inadvisable to alter the REC payments now. We are unsure what the future holds for continued customer participation. We concur with Ms. Chacon that the solar component of the RES is a challenging aspect for the QRUs and we were concerned by her February 2007 rebuttal testimony that the Company had experienced an approximately 45 percent decline in applications over the past three months.[21] Ms. Chacon did indicate in her testimony at the hearing that Public Service has seen an up-tick in the March applications and they are back to what the Company typically has observed.[22] We agree with Public Service that its proposed REC structure and REC payment for solar electric systems are reasonable. We find the payback analysis conducted by Ms. Chacon supports the conclusion that the incentive level for these systems is appropriate.

129. We do not adopt Staff's recommendation to combine the June and December 2006 RFPs and conduct a re-selection process. We conclude that if the recommendation was adopted, there would most likely be immediate and long-term damage to Colorado's solar market. In light of language in HB 1281 allowing for the acquisition of RECs above the minimum, as long as the rate cap is not exceeded, Staff's argument is further diminished. Review of the type and number of bidders to the June and December RFPs indicates a good level of public sector participation in

[21] *See*, Rebuttal testimony of Ms. Chacon, Page 7, lines 7 to 8.

[22] *See*, April 17, 2007 transcript, page 28, lines 7 to 20.

the Company's solar acquisition programs. We find that with our holding on the Developer Model issue, public sector and even low-income customers should have a better opportunity to participate in using solar electric generating systems.

130. As discussed above, we encourage Public Service to incorporate into future compliance plans an explanation of how it plans to integrate its solar acquisition strategy from the three types of solar programs it offers. We approve this portion of the Company's 2007 Compliance Plan without modification.

5. CoSEIA's Concern with the Inclusion of Rebates in Bid Evaluation

131. CoSEIA expresses concern with the apparent inclusion of the two dollar per watt rebate, mandated under Amendment 37 for solar electric systems sized 100kW, and in the bid evaluation process. CoSEIA reiterates that it was unable to obtain the discovery on this issue due to the extraordinary protection regarding the June 2006 bids. However through cross-examination, CoSEIA contends that Dr. Mignogna confirmed that the bids in the 10kW to 100kW size range were evaluated with the cost of the rebates and REC payments included. CoSEIA objects to this bid evaluation approach because in its opinion, this penalizes the medium size bids and provides an advantage to the larger size bids. CoSEIA urges the Commission to include in its Order, the mandate that in future evaluations of bids or other renewable energy acquisitions, QRUs are not allowed to include the rebate or other incentive required by Amendment 37, thereby unfairly weighting the evaluation in the QRU's favor.

6. Commission Finding on CoSEIA's Concern with the Inclusion of Rebates in Bid Evaluation

132. We have reviewed the relevant portion of the transcript[23] and would note that Dr. Mignogna contended that the inclusion of the rebate payment in the bid evaluation process was fair since it is part of the total cost to ratepayers. He noted that large solar electric systems also get the two dollar per watt rebate, but that it is limited to the first 100kW of the system's overall size. We agree with Dr. Mignogna's statements and deny CoSEIA's request. Therefore, we approve this portion of the Company's 2007 Compliance Plan without modification.

N. REC Estimates

1. Staff's Position

133. In his supplemental answer testimony, Dr. Mignogna contends that the number of solar RECs Public Service plans to acquire is unclear. He asserts that discrepancies exist between the monthly reports filed in Docket No. 06S-016E, the Compliance Plan's Tables 4-2 to 4-4, and Staff's audit of the Company's SRO database. He explains that Ms. Chacon, in her supplemental direct testimony, indicated certain values for RECs from the SRO program and the off-grid purchase program. However, according to Dr. Mignogna, none of those values agree with the values shown in Tables 4-2 to 4-4, nor do they agree with data contained in the corresponding monthly reports. He also asserts that Staff's audit showed different values for RECs as well.

134. Dr. Mignogna represents that he tried to resolve the differences, which only identified additional inconsistencies. He explains that Staff initially thought the discrepancy between the annual REC values and those shown on the December 2006 RESA Report could be

[23] *See*, April 18, 2007 transcript, page 151, line 4 to page 153, line 5.

attributed to the fact that the RESA Report included values from 2004 to 2006, while the database showed annual RECs. However, when the January 2007 RESA report was submitted, Staff determined that was not a possible cause for the discrepancy, according to Dr. Mignogna.

135. Ms. Chacon explains that her Supplemental Exhibit BCJ-5 contains three additional revisions to Tables 4-2 to 4-4. According to Ms. Chacon, Tables 4-2 to 4-4 contained two errors—one relating to an inadvertent omission of RECs transferred to Aquila in 2006 and an incorrect count of RECs from the REC-Only program in 2006. The third revision was to include a projection of SO-RECs that Public Service anticipates from the winning bids from the December 2006 RFP.

136. Ms. Chacon goes on to describe the purpose of each report. She states that the monthly report simply provides a monthly status update of the REC-Only and Standard Offer applications received and processed during that month. Ms. Chacon notes that these monthly reports do not include any of the RECs that were generated in the years 2004 to 2006 that could be used for compliance in 2007.

137. According to Ms. Chacon, Revised Tables 4-2 to 4-4 provide the complete plan, which includes both the forecasted and actual historical RECs for the 2007 Compliance Plan year, as well as RECs acquired for the years 2004 to 2006 from the 10kW and under program for both the Standard Offer and REC-Only program. Ms. Chacon concludes that Revised Tables 4-2 to 4-4 should be used for the best forecasted figures and actual estimates of RECs since they represent the complete picture.

138. She contends that the figures provided in her supplemental direct testimony were meant to provide a snapshot of how the 10kW and under program had performed as of the year 2006, and cannot be directly traced back to the revised tables, because the revised tables include

forecasted figures from the Standard Offer program as well as projected amounts from the June and December 2006 RFPs.

139. Ms. Chacon further explains that there is not a direct comparison to the monthly reports because the applications identified in the monthly reports are not related to the project installation date, but instead to the date the rebate check was processed by Public Service. Another reason Ms. Chacon offers for any differences between her supplemental direct testimony figures and the monthly reports is that the monthly reports include the 25 percent in-State bonus.

2. Commission Findings

140. We find Ms. Chacon's explanations of the differences between the monthly reports, Revised Tables 4-2 to 4-4, and her supplemental direct testimony to be reasonable and that no discrepancies exist. We recognize that the values shown reflect different points in time. As discussed in the Monthly Reporting portion of this Order, the inclusion of the historical information in the monthly reports should assist Staff and the public in monitoring how well the Company is moving forward with compliance in future years. Therefore, we approve this portion of the Company's 2007 Compliance Plan without modification.

O. Purchased S-RECs

1. Public Service's Position

141. In her rebuttal testimony, Ms. Kittel explains that there was insufficient time to construct a central solar electric generating facility to meet the 2007 RES. As a result, Public Service purchased S-RECs through a REC broker, 3 Phases Energy Services. Revised Table 4-2, page 1 and Revised Table 6-7, page 1 shows that Public Service plans to pay $304,000 to acquire 16,000 S-RECs for the 2007 Compliance Year.

2. Staff's Position

142. Dr. Mignogna recommends that the Commission withhold approval of these out-of-state S-RECs until such time as the title to the S-RECs can be verified and determined to be eligible for compliance in Colorado. Public Service witness Mr. Kawakami explains in his rebuttal testimony, that all of the S-RECs purchased from 3 Phases Energy Services will be "Green-e Certified" and the associated certification documents will be included with the invoices.

143. Dr. Mignogna acknowledges that Public Service had little choice but to go out of state to purchase S-RECs for compliance. However, he argues that a better solution might be for Public Service to borrow forward S-RECs from future compliance years and use these funds for some beneficial purpose in state. He suggests possibly a community solar demonstration project. Ms. Kittel argues that there is no legal support for such a recommendation. To fund a community solar demonstration project arguably does little in the way of meeting compliance, which is the intent of Amendment 37. Ms. Kittel argues that the RES Rules afford the utilities, rather than Commission Staff, the discretion as to where the company purchase RECs.

3. Other Parties' Position

144. CoSEIA supports Staff's concern that out-of-state S-RECs do not benefit the Colorado economy and therefore should not be looked upon favorably by the Commission. It suggests that the Commission indicate its unwillingness to approve them.

4. Commission Findings

145. We agree with Public Service that the RES Rules provide significant management discretion to a QRU on how it intends to meet compliance with the RES. We find Public Service's proposed acquisition of S-RECs from 3 Phase Energy Services reasonable and

allowed under the RES Rules. We are persuaded that the Green-e Certification alleviates many concerns regarding the S-REC authenticity and validity for compliance purposes in Colorado. We therefore approve this portion of Public Service's 2007 Compliance Plan without modification.

P. REC Tracking System

1. Public Service's Position

146. Public Service witness Mr. Kawakami testified that Public Service is developing its own internal REC Tracking System (RTS) through the use of an outside vendor. He explains that the RTS will certify, track, and count all RECs by type of renewable resource, date of generation, identification of the generator, and location where the REC was generated. Mr. Kawakami submits that Public Service has followed the development of both Western Renewable Energy Generation Information System (WREGIS) and the Midwest Renewable Energy Tracking System (MRETS) regional tracking systems and has incorporated most of their preliminary requirements into its RTS. He notes that RTS will be operational at the beginning of 2007.

2. Staff's Position

147. Dr. Mignogna states that the Commission should find the expenditures made for RTS prudent only if two conditions are met. First, it should be link to the WREGIS system. Second, require Public Service to share the costs with its two sister utilities (i.e., no more than one-third of the cost charged to Public Service).

148. In response to Staff's first condition, Mr. Kawakami commits that Public Service will join WREGIS. In response to Staff's second condition, Ms. Sakya states that it has developed a RES megawatt-hour cost allocator for assigning the costs of the REC tracking

database among the three operating utilities within Xcel Energy. For 2007, Public Service's share would be 30.98 percent. Ms. Sakya estimates that for 2008 Public Service's share would be 26.47 percent based on the pre-HB 1281 compliance percentage levels.

3. Commission Findings

149. There appears to be no disputed issues among the parties relating to the use of RTS, the level of costs incurred, or how its costs will be allocated. We therefore approve this portion of Public Service's 2007 Compliance Plan without modification.

Q. REC Accounting Treatment

1. Staff's Position

150. In his answer testimony, Dr. Mignogna recommends that Last-In First-Out (LIFO) accounting be used for REC inventory management because it reduces costs to ratepayers. He prepared a simple example to demonstrate that LIFO accounting reduces the costs to ratepayers by more than 7 percent as compared to a First-In First-Out (FIFO) method.

2. Public Service's Position

151. In her rebuttal testimony, Ms. Sakya argues that Dr. Mignogna commingles three related, but separated issues in his LIFO accounting recommendation. She contends that he does not delineate the inventory treatment of RECs (what method should be used to retire RECs); the accounting treatment of eligible renewable energy resources and RECs (the method to cost the energy and the RECs); and the cost allocation of resources (the jurisdictional split between retail and wholesale customers). Ms. Sakya explains that if the Commission adopts Staff's recommendation, the result would be that retail customers receive preferential access to its lowest cost generation compared to the Company's firm wholesale obligations. She asserts that this would be inconsistent with the Company's longstanding ratemaking practices and the

Commission's own regulations and ratemaking practices for assigning fuel costs between retail and wholesale jurisdictions.

152. Public Service witness Ms. Figoli points out in her rebuttal testimony that currently there are no authoritative guidance or concept papers related to the accounting for RECs by any oversight body in the accounting industry or by the Federal Energy Regulatory Commission (FERC). She indicates that Public Service has followed the FERC accounting guidance related to SO_2 emission allowances, since they are similar in nature.

153. Ms. Figoli states that often there is no separate price listed for the RECs in its purchase power contracts. As a result, the RECs are recorded with a zero cost. She maintains that this does not mean the RECs have no value, rather that the Company's cost basis is zero. Ms. Figoli asserts that the FERC guidance for SO_2 emission allowances specifies the use of the weighted average costing inventory method for financial accounting purposes. Public Service will use the weighted average costing method to value RECs retired for compliance or sold to third parties. In his rebuttal testimony Mr. Kawakami states that the REC Tracker system will utilize the oldest available RECs as the basis to retire RECs for compliance purposes because RECs have a limited shelf life.

3. Commission Findings

154. We find Public Service's proposed accounting method for RECs is reasonable. Therefore, we approve this portion of Public Service's 2007 Compliance Plan without modification.

R. The SunE Alamosa Solar Electric Generating Facility and Its S-RECs

1. Staff's Position

155. Dr. Mignogna recommends the Commission protect ratepayers by requiring Public Service to undertake diligent efforts to contract with wholesale customers for the purchase of excess generation from the SunE Alamosa facility. He calculates the cost of this excess generation is up to $1.36 million per year. Dr. Mignogna recommends that this excess generation be absorbed by Public Service shareholders, but that the shareholders be able to sell the excess RECs on the open market.

2. Public Service's Position

156. In his rebuttal testimony, Mr. McGree disputes Staff's calculation of the cost of the excess generation from the SunE Alamosa facility. He argues that Dr. Mignogna's analysis fails to adjust for the value of the peak energy produced by the solar facility. In addition, Dr. Mignogna's testimony is not based on the expected production, but an unlikely higher production level. Mr. McGree also argues that Dr. Mignogna's testimony ignores the fact that electricity production is expected to decline by about half a percent per year for the facility. According to Mr. McGree, when the energy is accounted for it reduces the costs of the potential banked RECs by 30 percent.

157. Mr. McGree also challenges Staff's suggestion that Public Service must sell all RECs generated in excess of the level needed for compliance in any one year, or carry these RECs at shareholder expense without rate recovery. According to Mr. McGree, this proposal is a violation of the carry forward provision of RES Rule 3654(d)(III). He argues that because the RECs can be carried forward, the cost of the alleged excess is only the time value of money for buying RECs in advance. Mr. McGree calculates that the carrying charge for all the potential

excess renewable energy for the SunE Alamosa facility accumulated in 2008, 2009, and 2010 would be $269,219. He concludes that this is a prudent cost to pay to hedge against the decisions of its wholesale customers and other uncertainties.

158. In response to Staff's recommendation that shareholders bear the costs of eligible renewable energy that is not needed to meet the minimum levels of the RES, Mr. McGree points to Rule 3660(g). This rule, according to Mr. McGree, clearly states that a QRU is entitled to full cost recovery of those renewable resources and associated RECs not fully paid for by wholesale customers. In her supplemental rebuttal testimony, Ms. Kittel reiterated that the RES Rules set minimum targets rather than maximum levels for compliance. She also notes that HB 1281 expands the acquisition of renewable energy starting in 2008 and prohibits the Commission from restricting utilities from acquiring more than the minimum levels, as long as the retail rate cap is not exceeded.

3. Commission Findings

159. Because the SunE Alamosa facility will most likely become operational near the end of 2007, the issue of possible excess REC during the 2007 Compliance year is moot. As a result, this portion of the 2007 Compliance Plan is approved without modification.

S. Wholesale Customers Purchase of Renewable Energy and RECs

1. Holy Cross Energy

160. Holy Cross witness Mr. Worley contends that Holy Cross is entitled to the number of RECs that correspond to its energy load ratio share of all of Public Service's generation and purchase resources that are used to meet Holy Cross's load obligation, which are defined as eligible renewable resources. He goes on to maintain that under its cost-based wholesale power

contract with Public Service, Holy Cross pays for the cost of wind energy purchases by Public Service through the fuel charge component of its wholesale rate.

2. Public Service's Position

161. In her rebuttal testimony, Ms. Hyde represents that Public Service is largely in agreement with its wholesale customers regarding the principles for agreements governing the transfer of RECs. She indicates that Public Service believes it will be able to work out any details with Holy Cross regarding how many RECs Holy Cross has already purchased.

162. Ms. Hyde also contends that Rule 3660(g) imposes two conditions on wholesale customers before they are entitled to the transfer of RECs. The first condition is that the wholesale customer is itself a QRU. The second condition is that the wholesale customer must agree to pay the full acquisition costs incurred by Public Service to acquire renewable resources.

163. We are not aware of any requirement in our RES Rules or the RES statutes which necessitate the imposition of Public Service's first proposed condition. It is possible that, a scenario could occur in which a non-QRU wholesale customer wishes to purchase either solar or non-solar RECs, along with the associated energy, so that the wholesale customer can claim to its own customers that renewable energy resources are generating some of the electricity its customers consume.

164. In Mr. McGree's rebuttal testimony, he notes that Rule 3660(g) does not set a specific deadline for wholesale customers to exercise the option given them to acquire a portion of Public Service's eligible renewable energy. According to Mr. McGree, this uncertainty requires Public Service to be conservative and acquire enough eligible renewable energy and RECs sufficient to meet the RES plus the potential entitlement of its wholesale customers. He favors Commission imposed time limits relating to the period of time wholesale customers have

to exercise their option under this rule. He suggests that Public Service only be obligated to extend an offer to its wholesale customers that is available to the wholesale customer for 60 days.

3. Commission Findings

165. We find that Public Service's proposed condition that any wholesale customer that wishes to purchase renewable energy and the associated RECs must be a QRU itself is inconsistent with the RES Rules and the RES statutes. Therefore, we do not approve that aspect of the 2007 Compliance Plan. Public Service shall make a modification to its 2007 Compliance Plan to remove the specific condition that any wholesale customer that wishes to purchase renewable energy and the associated RECs must be a QRU.

166. We agree with the remaining aspects of Public Service's wholesale customer proposal, including the 60-day time period in which a wholesale customer must notify Public Service if it wishes to exercise its option under Rule 3660(g). This time frame appears to be consistent with the timeframe specified in HB 1281.[24] Therefore, the remaining portions relating to wholesale customers of the Company's 2007 Compliance Plan is approved without further modification.

T. Revision of Certain REC Rules

1. Staff's Position

167. Dr. Mignogna suggests in his answer testimony that the Commission may wish to revisit the REC Rules regarding REC shelf life attribute, the REC geographic distribution attribute, and consider eliminating the dichotomy between allowing unbundled RECs for compliance and prohibiting unbundling.

[24] *See*, Supplemental Exhibit RLK-1, page 8 of 13, Roman (II).

2. Public Service's Position

168. Ms. Kittel contends the Dr. Mignogna does not like certain portions of the current RES Rules and is evaluating the Company's Plan not as the RES Rules currently exist, but as Staff would prefer the RES Rules to be.

3. Commission Findings

169. We find that Dr. Mignogna's recommendations regarding possible changes to certain REC Rules are beyond the scope of this docket. Proposed changes to the REC Rules are more appropriately accomplished through rulemaking proceeding, not an adjudicatory proceeding such as this.

U. Monthly Reporting

1. Public Service's Position

170. Ms. Kittel requests that the Commission discontinue the monthly reporting that it had agreed to do in implementing the RESA rider through Advice Letter No. 1448-Electric.[25] She notes that monthly reporting is not required under the RES Rules.

2. Staff's Position

171. In response, Mr. Kunzie argues that the monthly reporting provides only a portion of the information that is required in the Annual Compliance Report and contains information that Public Service already tracks. He notes that under the RES Rules neither the Staff nor the public would receive information on the progress of the Company's compliance with the RES until Public Service files its 2007 Compliance Report on June 1, 2008. Mr. Kunzie further contends that the monthly reporting requirement is not burdensome.

[25] *See*, Decision No. C06-0155 in Docket No. 06S-016E.

172. On the other hand, Ms. Kittel takes the position that the monthly reports are extremely burdensome and are unnecessary, particularly the requirement to provide copies of all customer applications and installation reports. She offers a compromise proposal to provide the information required under the SunE Alamosa stipulation,[26] and the information contained in Attachment B to the RESA Stipulation, but discontinue the requirement to provide copies of all customer applications and installation reports.

173. In her supplemental rebuttal testimony, Ms. Kittel clarifies the compromise proposal for monthly reporting through her Supplemental Exhibit No. RLK-3. She reiterates the request to discontinue providing copies of the customer applications and completed installation reports. In her testimony at hearing, Ms. Kittel refined the Company's compromise proposal such that the Company would provide electronic updates to the database containing data from the SRO installations, in lieu of providing paper copies of the customer applications and completed installation reports. In its SOP, Staff states that, assuming the database continues to record all of the data elements contained in the paper reports, this would be acceptable to Staff.

174. Ms. Chacon represents that the monthly reports will now include production from 2004 to 2006 so that the reports provide a cumulative view. She also explains that because the Company reads meters throughout the month and does not plan to prorate the production to match the month, each monthly report will include only the meter reads obtained by the end of the month.

3. Commission Findings

175. Although not part of the 2007 Compliance Plan, we find the compromise monthly reporting proposal as amended at the hearing reasonable and adopt Public Service's proposal.

[26] *See*, Decision No. C07-0100 in Docket No. 06A-534E.

V. Tariff Issues

1. Public Service's Position

176. In his direct testimony, Mr. Niemi offers that Public Service proposes to consolidate its current Residential PV (RPV) tariff and its Commercial PV (CPV) tariff into one tariff which would be applicable to all customers having on-site solar generation systems of less than two MW. He states that Public Service has determined that there is no need for separate tariffs applicable to different classes or voltages because the same photovoltaic service provisions would apply to all customers. Additionally, the billing for service is a combination of the provisions under the general rate schedule and the net metering schedule.

2. Staff's Position

177. Mr. Skinner notes in his answer testimony that there are still some minor cross references to the RPV and CPV rate schedules in the proposed tariffs. However, his overriding concern is that these proposed tariffs may be in violation of Rule 3658(a) and Rule 3658(c)(IX), because they allow for the third-party developer to be paid the REC and to sell electricity to the customer. In his rebuttal testimony Mr. Niemi acknowledges that the Company will file other minor tariff revisions related to references to PV service through its tariff as part of its compliance filing in this docket. Mr. Niemi reiterates Public Service's desire to use the Developer Model as part of its Compliance Plan.

178. As discussed *supra*, we approve the use of the Developer Model and the use of the ECA to collect a portion of the renewable energy costs, without a true-up occurring within the ECA. As a result, Mr. Kunzie's recommendation to reject ECA tariff sheets 111A and 111B included with the Compliance Plan because there is no true-up and Mr. Skinner's recommendation relating to tariff sheets containing reference to Developer Model are moot.

3. Commission Findings

179. We find that the general intent contained in the tariff sheets with Public Service's 2007 Compliance Plan are reasonable and are therefore approved. We note, however, that the tariff sheets are to be consistent with this decision and that all unnecessary cross-references shall be removed in Public Service's compliance filing.

II. ORDER

A. The Commission Orders That:

1. The Motion to Exceed the Thirty Page Limit for its Statement of Position filed on May 3, 2007, by Staff of the Commission is granted.

2. The 2007 Compliance Plan filed by Public Service Company of Colorado (Public Service) on August 31, 2006 and supplemented on January 26, 2007 is approved with the following modifications:

a. Wholesale customers of Public Service are not required to be Qualifying Retail Utilities in order to receive any Renewable Energy Credits associated with purchase power contracts, as long as the wholesale customer pays the full cost of acquisition of the associated Renewable Energy Credits.

b. The Standard Contracts included in Volumes 3 and 4 of Public Service's Compliance Plan are approved only for the rebate provisions and REC prices. This limited approval constitutes approval to recover the costs incurred under these contract through retail rates.

c. The Third-Party Developer contracts included Volumes 3 and 4 of the Compliance Plan are approved in their entirety. This approval constitutes approval to recover the costs incurred under these contracts through retail rates.

d. Public Service's proposal to split the costs between the Electric Commodity Adjustment and the Renewable Energy Standard Adjustment is granted for the 2007, 2008, and 2009 Compliance Plans.

3. The request by Public Service for a temporary waiver of Rule 3661(f)(I) for the renewable resources acquired by Public Service under its 2005 All-Source RFP for the 2007,

2008, and 2009 Compliance Plans is granted. These renewable resources may be considered sunk resources for computer modeling purposes under this rule during those years.

4. The request by Public Service for permanent waiver of Rule 3655(f) so that Public Service does not have to perform two solicitations from on-site solar electric generation systems for the year 2007 is granted.

5. Public Service may collect the Modeled ECA Costs of $23,000 for 2006 and $371,000 for 2007 as shown in Revised Table 6-7 through the Electric Commodity Adjustment over the remaining months of 2007.

6. The compromise monthly reporting proposal, as amended at hearing, is approved and shall start within 30 days after a final decision is reached in this case, but in no event, later than September 30, 2007.

7. Public Service shall file compliance tariffs consistent with this Decision within 30 days after a final decision is reached in this case, but in no event later than September 30, 2007.

8. The 20-day time period provided by § 40-6-114(1), C.R.S., to file an application for rehearing, reargument, or reconsideration shall begin on the first day after the effective date of this Order.

9. This Order is effective on its Mailed Date.

B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING August 8, 2007.

(S E A L)

ATTEST: A TRUE COPY

Doug Dean,
Director

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

RON BINZ

POLLY PAGE

CARL MILLER

Commissioners