Decision No. R21-0284

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 20A-0375E

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF THE PPA TERMINATION AGREEMENT WITH KEPCO SOLAR OF ALAMOSA, LLC AND AUTHORITY TO ESTABLISH A REGULATORY ASSET AND RECOVER COSTS ASSOCIATED WITH THE PPA TERMINATION AGREEMENT THROUGH THE ELECTRIC COMMODITY ADJUSTMENT.

RECOMMENDED DECISION OF ADMINISTRATIVE LAW JUDGE ROBERT I. GARVEY DENYING APPLICATION

Mailed Date: May 11, 2021

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I. STATEMENT

1. On September 8, 2020, Public Service Company of Colorado (Public Service or the Company) filed its verified application seeking Commission approval to terminate the Solar Energy Purchase Agreement (PPA) with KEPCO Solar of Alamosa, LLC (KEPCO) and to recover the costs that are necessary to execute the transaction.

2. On September 18, 2020, the Colorado Office of Consumer Counsel (OCC) filed its Notice of Intervention of Right, Request for Hearing and Entry of Appearance. The OCC listed a series of issues they wished to investigate.

3. On October 1, 2020, the Colorado Public Utilities Commission Trial Staff (Staff) filed a Notice of Intervention as of Right, Entry of Appearance, Notice Pursuant to Rule 1007(a), and Request for Hearing.

4. On October 28, 2020, by Minute Order, Proceeding No. 20A-0375E was referred to an Administrative Law Judge (ALJ).

5. On November 10, 2020 by Decision No. R20-0797-I, a prehearing conference was scheduled for November 30, 2020.

6. On November 25, 2020, Public Service filed its Notice of Consensus Procedural Schedule.

7. On December 1, 2020, by Decision No. R20-0821-I, the proposed procedural schedule was adopted, and an evidentiary hearing was scheduled for April 13 and 14, 2021.

8. On April 13, 2021, the above-captioned proceeding was called via video conferencing at 9:00 a.m.[1]

[1] The hearing was held via video conferencing due to the Covid-19 pandemic.

9. Hearing Exhibits 100 through 108, 110 through 112, 300, 400 through 402 and Hearing Exhibit 109, page 18, lines 8-12 and page 19, lines 10-13, were admitted by stipulation of the parties. Hearing Exhibits 302 and 303 were admitted during the hearing.

10. Public Service offered the testimony of Ms. Brooke Trammel. Staff offered the testimony of Mr. Gene Camp and Mr. William Dalton. The OCC offered the testimony of Mr. Chris Neil. At the conclusion of the evidence, the record was closed. The matter was then taken under advisement.

11. Pursuant to § 40-6-109, C.R.S., the ALJ now transmits to the Commission the record of the hearing and a written recommended decision in this proceeding.

II. <u>FINDINGS OF FACT</u>

12. Ms. Brook Trammell is the Regional Vice President, Rates and Regulatory Affairs for Public Service.

13. Mr. Arthur Freitas is the Manager of Revenue Analysis for Public Service.

14. A Section 123 resource refers to § 40-2-123, C.R.S., which requires the Commission to consider new clean energy and energy-efficient technologies in addressing a utility's proposed resource plan.[2]

15. As part of Phase II of the Company's 2007 Electric Resource Plan (ERP), the Company issued its 2009 All-Source Solicitation that sought new electric power supplies for years 2009 through 2015.[3]

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[2] Hearing Exhibit 101, p. 19, l. 13-15.

[3] *Id.* at p. 23, l. 1-3.

16. The Alamosa Solar Generating Project was bid into the 2009 All-Source Solicitation by Cogentrix Solar Services, LLC (Cogentrix). In its bid, the project was described as a 30 MW dual-axis tracking, highly concentrating photovoltaic (PV) facility using Amonix technology that would be located in Alamosa County, Colorado, with a 20 to 25-year contract beginning in 2011 (the Facility).[4]

17. The Facility located near Alamosa, Colorado, consists of concentrating optics and multi-junction solar cell panels that are controlled by more than 500 dual-axis, pedestal-mounted solar trackers.[5]

18. The solar trackers concentrate sunlight by a multiple of 500 onto high-efficiency, multi-junction solar cells.[6] The dual-axis tracking system utilizes a hydraulic motor to rotate and tilt the solar cells throughout the day so the surface of the solar panel maintains an optimal angle with the sun's movement to maximize its direct sun exposure and, as a result, its electricity production. The "multi-junction" solar cells are made of different semi-conductor materials and are capable of absorbing different wavelengths of sunlight, which was expected to make them more efficient at converting sunlight into electricity than the then-existing traditional fixed-mount, single-junction solar cells. It was estimated at the time that the multi-junction solar cells would nearly double the efficiency of more conventional PV panels.[7]

[4] *Id.* at p. 24, l. 5-9.
[5] *Id.* at p. 24, l. 18-20.
[6] *Id.* at p. 25., l. 2-3.
[7] *Id.* at l. 12-21.

19. Public Service entered into the 20-year PPA with Cogentrix to acquire the energy from the 30 MW highly concentrating PV solar Facility. The Facility went into commercial operation in April 2012, and it was sold to KEPCO in April 2017.[8]

20. The PPA has a clause limiting damages for replacement energy costs at $4,500,000.[9]

21. The Commission's 2007 ERP decisions designated resources utilizing highly concentrating photovoltaic technologies as Section 123 resources for purposes of the 2007 ERP proceeding.[10] Cost recovery of a Section 123 resource is done through the Electric Commodity Adjustment (ECA) rather than the Renewable Energy Standard Adjustment.

22. In September 2011, the Department of Energy (DOE) issued a $90.6 million loan guarantee to finance the project.[11]

23. The PPA requires KEPCO to deliver at least 85 percent of the Committed Solar Energy from the Facility in any rolling 12-month period. [12]

24. In early 2019, KEPCO contacted the Company to discuss concerns that it was at risk of falling below the 85 percent Committed Solar Energy requirement.[13]

25. The Facility has experienced degradation due to failure of the HCPV components of the Facility resulting in under-performance of generation.[14]

[8] *Id.* at p. 24, l. 12-15

[99] Hearing Exhibit 101 Attachment BA1-2, p. 41.

[10] Decision No. C09-1257 at Ordering ¶6, Proceeding No. 07A-447E.

[11] Hearing Exhibit 101 at. P. 26, l. 8-9.

[12] *Id.* at p. 29-30 l. 20-1.

[13] *Id.* at p. 31, l. 2-4

[14] *Id.* at p. 31, l. 13-14

26. KEPCO cannot repair or replace the HCPV equipment due to the fact that the only U.S. manufacturer of the HCPV equipment is no longer in business.[15] KEPCO has proposed a "cure plan" that would involve repowering the Facility with conventional solar PV to address the performance issues and achieve the required output.[16]

27. KEPCO and Public Service entered into negotiations for a Termination Agreement in September of 2019. In June of 2020, the negotiations resulted in the termination agreement that is in question in this proceeding.[17]

28. In August of 2020, two articles were written in the Korean business press stating that KEPCO would liquidate the "money losing" facility and leave the industry.[18]

29. The termination agreement calls for a $41 million payment from Public Service. The $41 million payment will be made directly to the DOE, thereby eliminating KEPCO's outstanding debt on the DOE loan. KEPCO may have other loans that will not be paid off.

30. The DOE and the Federal Regulatory Commission have approved the termination agreement.[19]

31. Public Service intends to recover this amount by creating a regulatory asset amortized over 11 years. Public Service intends to recover the amounts through the ECA.

III. ISSUES

32. Should the application seeking Commission approval to terminate the PPA with KEPCO be approved?

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[15] *Id.* at p. 32, l. 8-12.

[16] *Id.* at p. 33, l. 1-3.

[17] Hearing Transcript, p. 57, l. 13-14

[18] Hearing Exhibit 400, pp. 28-29

[19] Hearing Transcript, p. 38, l. 4-8.

IV. APPLICABLE LAW

33. As the proponent of a Commission order, Public Service has the burden of persuasion in this proceeding pursuant to Rule 1500, 4 *Code of Colorado Regulations* 723-1, of the Commission's Rules of Practice and Procedure.

34. The evidence must be "substantial evidence," which is defined by the Colorado Supreme Court as: "such relevant evidence as a reasonable [person's] mind might accept as adequate to support a conclusion ... it must be enough to justify, if the trial were to a jury, a refusal to direct a verdict when the conclusion sought to be drawn from it is one of fact for the jury." *City of Boulder v. Colorado Public Utilities Commission,* 996 P.2d 1270, 1278 (Colo. 2000) (quoting *CF&I Steel, L.P. v. Public Utilities Commission*, 949 P.2d 577, 585 (Colo. 1997)). The preponderance standard requires the finder of fact to determine whether the existence of a contested fact is more probable than its non-existence. *Swain v. Colorado Department of Revenue*, 717 P.2d 507 (Colo. App. 1985). A party has met this burden of proof when the evidence, on the whole and however slightly, tips in favor of that party.

35. The Commission has an independent duty to determine matters that are within the public interest. *See Caldwell v. Public Utilities Commission*, 692 P.2d 1085, 1089 (Colo. 1984).

V. ARGUMENTS OF THE PARTIES

A. Public Service

36. Public Service argues that the Termination Agreement is in the best interest of the rate payers since it will result in savings to ratepayers. The Company explains that in order to meet the terms of the PPA, the cure plan anticipates "overbuilding" the site with conventional PV technology, such that its output would average 115 percent of the Committed Solar Energy. Per the PPA, the Company would be obligated to purchase this higher quantity of energy at the

escalating price schedule established in the PPA. That price is on the order of six times the price of solar-generated electricity available on the market today. The Company contends that the savings offered by the Termination Agreement are present even after accounting for its upfront costs, by avoiding the escalating contracted energy price from KEPCO between the effective date of the Termination Agreement and the otherwise effective end of the PPA term in 2032.

37. Public Service states that the Termination Agreement was a fully negotiated agreement. Public Service further states that the proposed cure plan of KEPCO would be uneconomical and this Termination Agreement avoids that risk.

38. If the Termination Agreement is approved, Public Service seeks recovery of the $41 million payment and the regulatory asset through the ECA. Public Service also believes that the Commission should address policy issues concerning Section 123 designations and cost recovery and that this proceeding provides a good opportunity to do so.

39. Public Service contends that because customer savings could not be guaranteed if the potential breach of contract were addressed in district court, the Termination Agreement should be approved by the Commission.

B. OCC

40. The OCC characterizes the proceeding as a commercial dispute between Public Service and KEPCO.

41. The OCC asserts that the risks Public Service claims would be present in commercial litigation are speculative. The OCC argues that such risk is in reality the risk of the contract, *i.e.,* that there would be a 115 percent energy output, which was agreed to by Public Service when it entered into the contract.

42. The OCC believes that if a court found the proposed cure plan was insufficient, it would likely result in the termination of the contract by default, without any termination payment borne by the ratepayers.

43. The OCC contends that the ratepayer savings claimed by Public Service if the Termination Agreement is approved are illusory and speculative.

44. The OCC argues that the Termination Agreement is not in the public interest because the ratepayers are the only entity bearing the burden of the Termination Agreement. Although Public Service advances the funds, the Company seeks to create a regulatory asset and earn a return at the WACC and to retain the right to not move forward with the Termination Agreement if the regulatory asset is not approved.

45. The OCC argues KEPCO has no additional burden and only benefits, since the payment will eliminate part of its debt to the DOE. And the DOE is receiving ratepayer money to repay its loan even though the loan was not made on behalf of the ratepayers.

46. Staff simply argues that the Termination Agreement is not in the public interest and should be rejected for that reason.

47. Staff characterizes the Termination Agreement as a failed busines venture between Public Service and KEPCO that would be bailed out by the ratepayers.

48. In addition, Staff believe that the termination payment is unnecessary since KEPCO has stated that it intends to liquidate the facility before the application in question was filed.

VI. DISCUSSION

49. The question presented for this proceeding is whether the Termination Agreement should be approved by the Commission. To prevail, Public Service must show by a

preponderance of the evidence that this Termination Agreement is just and reasonable and in the public interest.

50. Public Service is asking the Commission to approve this Termination Agreement and thereby making any breach of contract claim by Public Service moot. Public Service also requests that a regulatory asset be created to recover the $41 million payoff and that the recovery be made through the ECA as this PPA was designated as a Section 123 resource.

51. The Termination Agreement is the product of the failure of KEPCO to meet the requirements of the PPA signed by it and Public Service. The energy to be produced by KEPCO, under the terms of the PPA, was to be produced by a dual-axis tracking, highly concentrating PV. There is no question that KEPCO has failed to meet the requirements of the PPA and will be unable to produce the Committed Solar Energy using highly concentrating PV.[20] The ability of the KEPCO facility to produce electricity from the Facility degrades more each year, if not each day, and there is no way to stop the degradation.

52. It is also without question that Public Service itself has not breached the contract.[21] Public Service has no risk other than attorney fees if the potential breach by KEPCO is litigated in district court.

53. There is also evidence that KEPCO intends to liquidate its U.S. solar power company, including the Facility. Specifically, Mr. Camp's testimony includes parts of an article

[20] Hearing Exhibit 402C, p. 16.

[21] Hearing Transcript, p. 57, l. 20-25.

from *Pulse*, a publication of Maeil Business News Korea, and CMFE Research, a publication of a U.S.-based research firm in the chemicals, materials, food, beverages, energy, and power industries.

54. The August 26, 2020 article in the *Pulse* article states the following:

> South Korea's state utility firm Korea Electric Power Corp. (KEPCO) will liquidate its money-losing U.S. solar power company as its international status comes under challenge amid waning competitiveness from government-led phase-out of traditional fossil and nuclear fuel.
>
> According to KEPCO documents obtained by Representative Yang Geum-hee of the United Future Party on Tuesday, the company's board last month decided to give up its 30-megawatt solar power plant in Colorado, U.S.
>
> The state utility firm invested $17 million in the U.S. solar energy plant in July 2016 and began operation in April 2017 on expectations that the business would generate $230 million in revenue over 25 years from the sale of electricity from the plant to provide an annual average dividend income of $1.2 million.
>
> Output turned out to be 80 to 88 percent of its original estimate. Its expected profit rate was also lower than 7.25 percent on an annual average due to high general management cost and solar power panel maintenance cost.
>
> Its return rate was 4.7 percent in 2017 and fell to 0.7 percent in the following year. In 2019, KEPCO suffered 1.1 billion won [South Korean currency] in losses from the project.
>
> KEPCO plans to sell the plant's assets including the plant land in the second half of next year and completely liquidate the corporation in the second quarter of 2022.[22]

55. The August 26, 2021 article in CMFE Research contained the following passage:

> While the actual amount of power generated was only 80-88 per cent of the preparation plan, the actual profit rate amounted to an annual average of 7.25 per cent, lower than expected. According to KEPCO, its Board of Directors proceeded with the liquidation of a 30MW solar power plant in Colorado last month. It is, however, scrutinized that the investment cost of 17 million dollars amounting to around 19 billion won was dropped due to this liquidation decision.[23]

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[22] Hearing Exhibit 400, pp. 28-29, l. 5-3.

[23] *Id.* at p. 29, l. 29-35.

56. Public Service presented no evidence to contradict the evidence provided in these two articles. While the Termination Agreement was signed before these articles were printed, the Commission does have, and must consider, this information.

57. There was no evidence from anyone associated with KEPCO. There was no evidence from KEPCO that the proposed cure plan was feasible. There was no evidence provided by KEPCO to refute the articles or to show how a company losing money on the Facility could afford or would choose to take on additional debt to refit the Facility.

58. Further, there was no evidence presented by Public Service or KEPCO as to why a company that failed to produce the energy required by the contract would not only be able to meet that requirement but increase it by 30 percentage points. Rather, the Commission is left to take the word of Public Service that there is a risk that KEPCO will be able to produce energy at a higher level creating higher energy costs to ratepayers.

59. The only evidence presented to show that the Termination Agreement is just and reasonable was the fact that it ostensibly guarantees a potential saving to ratepayers. The claimed savings, however, are speculative. Moreover, there was no evidence that the potential savings are in any way proportionally appropriate to the situation.

60. The public interest asserted by the Company is based upon the fact that the breach of contract litigation is "not guaranteed"[24] as there are inherent risks. Public Service is correct that in litigation, nothing is guaranteed, but in reaching a negotiated settlement, the positions of the parties and the **risks to *both* sides** *(emphasis added)* must be taken into consideration. There is no evidence that this was done.

[24] Public Service Statement of Position, p. 13.

61. If KEPCO loses in district court because the court finds that the contract was breached and the cure plan is not acceptable, the following risks would be present (based on the limited amount of information provided in this proceeding). KEPCO would be responsible for at least 41 million dollars in loans to the DOE in addition to any other loans. KEPCO could be found to owe 4.5 million dollars to Public Service/ratepayers for replacement energy. The facility would no longer have any income, and KEPCO would be responsible for the cost of litigation. At a minimum, these are the risks that KEPCO would have based on the limited amount of information in the record. The risk, however, could be greater. No one from KEPCO testified to answer these questions.

62. On the other hand, if KEPCO were to win in district court and the cure plan was found to be acceptable, allowing regular PV to replace concentrated PV, KEPCO would have to either come up with the money to refit the Facility or borrow additional funds to refit the Facility if anyone would lend it the money. KEPCO would also need to maintain a facility that apparently is losing money and remain in a business it intends to leave. Additionally, KEPCO risks the district court lowering the per megawatt hour rate due to the energy no longer being from concentrated PV.

63. Moreover, if Public Service were to lose in district court because the court allowed KEPCO to cure by suppling non-concentrated PV, Public Service itself potentially would be out only legal fees associated with the litigation. Public Service did not demonstrate any other risk to the Company.

64. If the cure plan is approved, ratepayers are only in a worse position if KEPCO is able to produce energy in excess of the Facility's current output and the per megawatt hour rate is not reduced by a district court. If after implementing the cure plan, KEPCO produces at or below

the Facility's current production level, ratepayers are in the same position as if the PPA had not been breached. Furthermore, the cure plan could be found acceptable by a district court, but at a lower per megawatt per hour rate and the ratepayers could pay less than under the current PPA.

65. With the Termination Agreement, however, the party that has not lived up to their end of the contract, KEPCO, walks away with 41 million dollars to pay off its loan. The DOE has its loan paid off in full. Public Service makes interest on a loan to the ratepayers while the ratepayers pay 53 million dollars (including the $12 million in interest payments to Public Service over the life of the regulatory asset) for the opportunity to potentially save 38 million.[25] It is hard to see how the Termination Agreement does not favor every other party over the ratepayers.

66. Inexplicably, Public Service failed to file the breach of contract claim in district court. The mere threat of litigation cannot help but make for a better settlement.

67. KEPCO and DOE incur no costs as a result of this proceeding. Public Service, who will recover its legal fees for this proceeding from the ratepayers, ultimately incurs no costs as well. Only the ratepayers will bear the financial burden of this proceeding and if the Termination Agreement is approved, only ratepayers will bear the cost of the termination payment by Public Service to KEPCO.

68. Public Service has failed to meet its burden to show that the Termination Agreement is just and reasonable or in the public interest.

69. Since the Termination agreement is not being approved, the other questions presented by Public Service are moot.

[25] Hearing Exhibit 102, pp.17-18,

VII. CONCLUSION

70. The verified application seeking Commission approval to terminate the PPA with KEPCO and to recover the costs that are necessary to execute the transaction is denied.

VIII. ORDER

A. The Commission Orders That:

1. The verified application seeking Commission approval to terminate the Solar Energy Purchase Agreement with KEPCO Solar of Alamosa, LLC and to recover the costs that are necessary to execute the transaction, filed by Public Service Company of Colorado on September 8, 2020 is denied.

2. This Recommended Decision shall be effective the day it becomes the Decision of the Commission, if that is the case, and is entered as of the Mailed Date above.

3. As provided by § 40-6-109, C.R.S., copies of this Recommended Decision shall be served upon the parties, who may file exceptions to it.

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

b) If a party seeks to amend, modify, annul, or reverse basic findings of fact in its exceptions, that party must request and pay for a transcript to be filed, or the parties may stipulate to portions of the transcript according to the procedure stated in § 40-6-113, C.R.S. If no transcript or stipulation is filed, this proceeding is bound by the facts set out by the Administrative Law Judge.

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

(S E A L)

STATE OF COLORADO
THE PUBLIC UTILITIES COMMISSION
NIL SINE NUMINE

ATTEST: A TRUE COPY

Doug Dean

Doug Dean,
Director

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

ROBERT I. GARVEY

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Administrative Law Judge