Colorado PUC E-Filings System

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

APPLICATION OF TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC. FOR APPROVAL OF ITS 2020 ELECTRIC RESOURCE PLAN)) PROCEEDING NO. 20A-0528E))	
UNOPPOSED COMPREHENSIVE SETTLEMENT AGREEMENT		

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SECTION 1 INTRODUCTION AND IDENTIFICATION OF PARTIES

1.1. Settling Parties. This Unopposed Comprehensive Settlement Agreement ("Settlement Agreement" or "Agreement") is filed on behalf of Tri-State Generation and Transmission Association, Inc. ("Tri-State") Poudre Valley Rural Electric Association, Inc., Empire Electric Association, Inc., Highline Electric Association, K.C. Electric Association, Morgan County Rural Electric Association, Mountain View Electric Association, Inc., Southeast Colorado Power Association, Y-W Electric Association, Inc. (together, the "Joint Cooperative Movants"), Big Horn Rural Electric Company, Carbon Power & Light, Inc., High West Energy Inc., Wheatland Rural Electric Association, Wyrulec Company, Inc., Niobrara Electric Association, High Plains Power, Inc., Garland Light & Power Co. (together, the "Wyoming Cooperatives"), Trial Staff ("Staff") of the Colorado Public Utilities Commission ("Commission"), Western Resource Advocates ("WRA"), the Office of the Utility Consumer Advocate ("UCA"), the Colorado Energy Office ("CEO"), the Colorado Independent Energy Association ("CIEA"), the Colorado Solar and Storage Association and Solar Energy Industries Association (collectively, "COSSA/SEIA"), Natural Resource Defense Council ("NRDC"), Sierra Club, Western Colorado Alliance ("WCA") (together, "Conservation Coalition"), International Brotherhood of Electrical Workers, Local #111 ("IBEW"), Interwest Energy Alliance ("Interwest"), and Southwest Energy Efficiency Project ("SWEEP") (each a "Settling Party" and collectively the "Settling Parties").

- 1.2. Parties Taking No Position. As represented in the Motion accompanying this Settlement Agreement, Vote Solar and Delta Montrose Electric Association take no position on the Settlement Agreement.
- 1.3. Resolution of Phase I of Tri-State's 2020 Electric Resource Plan. This Settlement Agreement resolves, among the Settling Parties, all of the issues that were actually raised or that could have been raised with respect to Tri-State's Application ("Application") for Approval of its 2020 Electric Resource Plan ("2020 ERP"). As more specifically described below, each of the Settling Parties agrees that the compromise reached in this Settlement Agreement constitutes a just and reasonable resolution of Phase I of Tri-State's 2020 ERP and requests, consistent with the Motion accompanying this Settlement Agreement, that the Commission issue a Phase I decision under Commission Rules 3605(g)(III) and 1408 adopting the Settlement Agreement in full.

SECTION 2 RECITALS

- 2.1. On December 1, 2020, Tri-State submitted to the Commission its Application, including Direct Testimony and Attachments, requesting approval of Tri-State's 2020 ERP.
- **2.2.** Tri-State's Application did not include a Clean Energy Plan.
- 2.3. Tri-State submitted a Supplemental Filing on January 15, 2021, which provided additional materials in response to Decision No. C20-0820, issued in Proceeding No. 21M-0218E.

- **2.4.** Tri-State submitted Supplemental Direct Testimony and Attachments on February 12, 2021 in response to a January 25, 2021 Staff Notice of Deficiencies.
- 2.5. On September 28, 2021, Tri-State filed Second Supplemental Direct Testimony and Attachments. Among other things, Tri-State submitted to the Commission the results of modeling six additional Phase I scenarios (the "Phase I Additional Scenarios").
- 2.6. The Phase I Additional Scenarios included five scenarios developed at the direction of certain parties to this proceeding as well as one scenario put forward by Tri-State, referred to as Tri-State's Revised Preferred Plan (the "Revised Preferred Plan").
- **2.7.** On November 23, 2021, certain parties filed answer testimony.
- **2.8.** On January 4, 2022, certain parties filed cross-answer testimony, and Tri-State filed rebuttal testimony.
- Tri-State submitted as Highly Confidential Attachment LKT-4 to the Rebuttal Testimony of Tri-State witness Lisa K. Tiffin a Verification Workbook (the "Verification Workbook") developed consistent with the March 2021 Clean Energy Plan Guidance (the "CEP Guidance") developed by the Colorado Department of Public Health and Environment's Air Pollution Control Division ("APCD").
- 2.10. The Verification Workbook calculates a 2005 baseline (the "2005 Baseline") for Tri-State's greenhouse gas ("GHG") emissions reductions related to Tri-State's wholesale sales of electricity in Colorado.

- 2.11. The Verification Workbook also projects for 2030, based on the generic resources modeled in Tri-State's Revised Preferred Plan as presented in the Rebuttal Testimony of Tri-State witness Lisa K. Tiffin, an eighty-four percent (84%) reduction in Tri-State's GHG emissions related to Tri-State's wholesale sales of electricity in Colorado (the "2030 Emissions Reduction Projection").
- 2.12. Tri-State's Application and supporting testimony and attachments, as modified, supplemented, and amended by Tri-State's January 14, 2021 Supplemental Filing, February 12, 2021 Supplemental Direct Testimony and Attachments, September 28, 2021 Second Supplemental Direct Testimony and Attachments, and January 4, 2022 Rebuttal Testimony is referred to herein as "Tri-State's ERP Filings."
- 2.13. On January 14, 2022, the APCD filed into this proceeding a motion (the "APCD Motion") requesting limited participation in this proceeding including, but not limited to, submitting ERP Verification Reports. The APCD Motion included, as Attachments C and D, a Verification Report and supporting Verification Workbook (together, the "APCD Phase I Verification") verifying Tri-State's 2005 Baseline as well as the 2030 Emissions Reduction Projection.

SECTION 3 SETTLEMENT TERMS

3.1. Phase I Approvals. The Settling Parties agree that Tri-State's 2020 ERP should be approved pursuant to Commission Rule 3605(g)(III). Specifically, the Settling Parties agree that the Commission should approve the following:

- 3.1.1. The modeling inputs and assumptions underlying Tri-State's Revised Preferred Plan, except to the extent those inputs and assumptions are expressly modified by Section 3.6 below.
- 3.1.2. Tri-State's proposed Request for Proposals ("Phase II RFP"), as further described in Tri-State's ERP Filings and section 3.4 below, including the model contracts and the proposed bid evaluation criteria; and
- 3.1.3. Tri-State's plans for acquiring additional resources through an all-source competitive acquisition process as further described in Tri-State's ERP Filings and section 3.4 below.
- 3.2. Craig Unit 3 Economic Dispatch. Tri-State agrees to assume that Craig Unit 3 is operated under economic dispatch within the reliability considerations of a bilateral market and the requirements of the Western Energy Imbalance Service market immediately after the Phase I decision in this proceeding.
- 3.3. Tri-State's Commitment to Greenhouse Gas Emissions Reductions. The Settling Parties agree as follows with respect to Tri-State's Greenhouse Gas Emissions Reductions. Tri-State's commitments in this section expressly survive the conclusion of Proceeding No. 20A-0528E.
 - 3.3.1. The Settling Parties agree that Tri-State has provided a Verification Workbook and that the APCD Phase I Verification verified Tri-State's 2005 Baseline and its 2030 Emissions Reduction Projection for the Phase I Revised Preferred Plan.

- 3.3.2. The Settling Parties agree that the 2005 Baseline calculated in Tri-State's Verification Workbook should be used as the baseline for calculating Tri-State's GHG emissions reductions in this proceeding, including in Phase II of this proceeding.
- 3.3.3. The Settling Parties agree that Tri-State's Verification Workbook shows that Tri-State's Revised Preferred Plan, as modeled in its Rebuttal Testimony, achieves at least an eighty percent (80%) reduction in GHG emissions related to Tri-State's wholesale sales of electricity in Colorado compared to the 2005 Baseline.
- 3.3.4. Tri-State agrees that, going forward, it will operate its system in a manner that achieves, at a minimum, with respect to its APCD-verified 2005 Baseline, the following reductions in GHG emissions related to Tri-State's wholesale sales of electricity in Colorado (the "Interim-Year Emissions Reductions"): A twenty-six percent (26%) reduction in calendar-year 2025; a thirty-six percent (36%) reduction in calendar-year 2026; and a forty-six percent (46%) reduction in calendar-year 2027.
- 3.3.5. Tri-State also agrees that, going forward, it will operate its system in a manner that achieves, at a minimum, with respect to its APCD-verified 2005 Baseline, an eighty percent (80%) reduction in GHG emissions related to Tri-State's wholesale sales of electricity in Colorado in calendar-year 2030 ("the 2030 Emissions Reduction").

- 3.3.6. The Settling Parties agree that the Interim-Year Emissions Reductions and 2030 Emissions Reduction will be calculated and reported consistent with Section 3.3.11 below and with the methodology adopted by APCD for the Verification Workbook.
- 3.3.7. Tri-State agrees that the Interim-Year Emissions Reductions and 2030 Emissions Reduction will be incorporated into Tri-State's future Electric Resource Plan ("ERP") filings as a binding regulatory requirement.
- 3.3.8. In order to achieve the Interim-Year Emissions Reductions and 2030 Emissions Reduction, Tri-State will dispatch its resources in priority of reliability, affordability, and environmental considerations while meeting the above carbon reduction targets. Although the Interim-Year Emissions Reductions are binding, the Settling Parties agree that Tri-State retains sole discretion over the resource dispatch decisions used to achieve the Interim-Year Emissions Reductions.
- 3.3.9. In conjunction with Tri-State's Interim-Year Emissions Reductions and 2030 Emissions Reduction:
 - 3.3.9.1. For any renewable energy Tri-State uses to serve Colorado load that is attributed a GHG emissions rate of zero pounds per megawatt hour, Tri-State will retire the related renewable energy credits ("RECs") in either the year the energy was generated or the year that Tri-State

- actually receives the associated RECs, whichever is sooner; and
- 3.3.9.2. For any Tri-State energy purchases used to serve Colorado load that are assigned a market-based, eGRID,¹ or system emissions rate and have associated RECs, Tri-State will retire the related RECs in either the year the energy was generated or the year Tri-State actually receives the associated RECs, whichever is sooner.
- 3.3.10. The Settling Parties recognize that Tri-State is required to report the GHG emissions associated with its wholesale sales of electricity in Colorado to the APCD under Colorado Air Quality Control Commission Regulation 22 ("Regulation 22"), Part A, Section IV.
- 3.3.11. The Settling Parties agree that, in each year following a year in which Tri-State has committed to Interim-Year Emissions Reductions or the 2030 Emissions Reduction, Tri-State also will include in its ERP Annual Progress Report (the "Annual Progress Report") submitted to the Commission under Commission Rule 3618 the following information:
 - 3.3.11.1. The amount of GHG emissions, in tons, related to Tri-State's wholesale sales of electricity in Colorado for the prior calendar year, as reported by Tri-State to the

¹ "eGRID" refers to the Emissions & Generation Resource Integrated Database maintained by the U.S. Environmental Protection Agency.

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Colorado Air Quality Control Commission under Regulation 22; and

- 3.3.11.2. The percentage reduction in GHG emissions related to Tri-State's wholesale sales of electricity in Colorado for the prior calendar year, computed using the CEP Guidance and the 2005 Baseline. The percentage reduction will be consistent with the tonnages that Tri-State reports under Regulation 22.
- 3.3.12. The Settling Parties recognize that using the emissions rate methodology, including forecast 2030 market emissions rates, specified by the CEP Guidance for unspecified energy purchases may underestimate the actual emissions rate that Tri-State will report under Regulation 22 and section 3.3.10 above. In the Annual Progress Reports it submits under Commission Rule 3618 for the years identified in section 3.3.11 above, Tri-State will provide information on how the emission rate for unspecified energy purchases specified by the CEP Guidance differed from the actual annual reported emissions rate for those purchases. Tri-State also will provide information as to whether any adjustments in operations or resource acquisitions are needed in order to ensure Tri-State meets the Interim-Year Emissions Reductions or 2030 Emissions Reductions.

- 3.4. Tri-State's Phase II Resource Solicitation. The Settling Parties agree that, for purposes of Tri-State's Phase II resource solicitation, the Commission should approve the following:
 - 3.4.1. Tri-State will modify its Phase II RFP to include language that requires bidders to submit data regarding each project's projected tax-revenue impact to the community where it is sited.
 - 3.4.2. Tri-State will modify its Phase II RFP to include language identifying how a bidder may contact Tri-State to discuss, if applicable, the bidder's interest in any land owned by Tri-State.
 - 3.4.3. Tri-State will evaluate for inclusion in its Phase II modeling, using the evaluation criteria listed in the RFP, all bids with a commercial operation date on or before December 31, 2025.
 - 3.4.4. Tri-State also will evaluate 2026 Bids for renewable energy and energy storage resources and will advance 2026 Bids to computer modeling if they are highly competitive as described in Section 3.4.4.2 below.
 - 3.4.4.1. A "2026 Bid" is a bid that first contributes to capacity needs in July 2026 and is expected to be online for the majority of 2026 in order to significantly contribute to carbon reduction. Tri-State acknowledges that 2026 Bids include resources with commercial operations dates in December 2025.

- 3.4.4.2. Whether a 2026 Bid is highly competitive will be determined based on the price and non-price factors summarized on page 4 of Tri-State witness Susan K. Hunter's Rebuttal Testimony.
- 3.4.5. The Settling Parties agree that Tri-State will revise its Phase II RFP to include the language modification identified on page 38 of the Second Supplemental Testimony and Attachments of Lisa K. Tiffin.
- 3.4.6. The Settling Parties agree that Tri-State will revise its Phase II RFP to include language, as part of the Bidder Response Form, that requires a bidder to identify whether the bidder has bid the same project into another RFP and to keep Tri-State informed if such a project bid into another RFP has entered into a contract with another utility/customer with respect to the bid.
- 3.4.7. Except with respect to the specific modifications described in this Section 3.4, Tri-State will use the Phase II RFP, bid evaluation criteria, and model PPAs for Phase II proposed in Tri-State's ERP Filings.

3.5. Phase II Modeling Software

- 3.5.1. For its Phase II modeling, Tri-State intends to use the EnCompass software ("Encompass") developed by Anchor Power.
- 3.5.2. For the purpose of benchmarking EnCompass against the Plexos software that Tri-State used in its modeling of Additional Scenarios in Phase I, Tri-State agrees to re-model its Phase I Revised

Preferred Plan and Additional Scenario 4 using EnCompass (the "Benchmarking Model Runs"), using the same input assumptions that were used when those Scenarios were modeled in the Plexos software.

- 3.5.3. Tri-State agrees to provide to all of the parties to this proceeding the results of the Benchmarking Model Runs by May 15, 2022.
- 3.5.4. The results provided to the parties will include EnCompass output files and related workpapers, if any, a brief written summary of any inputs or outputs that changed in the Benchmarking Model Runs, and a written summary comparison of the Benchmarking Model Runs to the Plexos outputs provided in Tri-State's ERP Filings. If no workpapers are provided, Tri-State will explain in detail why the workpapers were not provided.
- 3.5.5. Tri-State agrees to hold a meeting to discuss with all parties to this proceeding how bid evaluation criteria will be used and the results of the Benchmarking Model Runs and, if Tri-State and the parties all agree, Tri-State will use EnCompass for all of its Phase II modeling.
- 3.5.6. If the parties do not all agree to the use of EnCompass for Tri-State's Phase II modeling, Tri-State will complete its Phase II modeling using the Plexos software it used in Phase I.
- 3.6. Phase II Modeling Inputs and Assumptions. The Settling Parties agree that the Commission should approve the following terms regarding Phase II modeling inputs and assumptions:

- 3.6.1. Tri-State will apply the Interim-Year Emissions Reductions and 2030 Emissions Reduction in its Phase II modeling as constraints in both the capacity expansion and dispatch steps of its modeling.
- 3.6.2. Tri-State will use the Social Cost of Carbon ("SCoC") and Social Cost of Methane ("SCoM") values defined in Colorado House Bill 21-1238.
- 3.6.3. Tri-State will update its demand-side management ("DSM") potential study and beneficial electrification ("BE") potential study using 2021 End-Use Survey data. Tri-State agrees to update parties on the status of these studies no later than May 15, 2022. Tri-State will incorporate the information resulting from these updated studies into its Phase II modeling if the studies are available when Phase II modeling begins. In any case, Tri-State will model at least the Minimum Energy Efficiency Levels identified in section 3.11.9 below.
- 3.6.4. Tri-State will include in its Phase II modeling its most current long-term load forecast, including load impacts resulting from anticipated Partial Requirements contracts.
- 3.6.5. Tri-State will include in its Phase II modeling the transmission capacity it recently acquired in the Wyoming to Eastern Colorado transmission link.
- 3.6.6. Tri-State will model Craig 3 in the ECON designation starting in 2024, allowing the model to economically commit and dispatch the unit subject to the minimum up and down times identified in Tri-State's September 28, 2021 Second Supplemental Testimony.

- 3.6.7. Tri-State will allow the model to select a retirement date for Craig 3 using the constraint that the model will not be allowed to select a date earlier than January 1, 2026 or later than December 31, 2029.
- 3.6.8. Tri-State will model the cost of new natural gas plants using a depreciation period of no more than 20 years.
- 3.6.9. Tri-State will update the following Phase II modeling inputs to the most recently updated information available prior to the beginning of modeling: Tri-State's load forecast; coal, gas, and power forward curves; renewable resources and storage prices; and existing PPA information.
- 3.6.10. The Settling Parties agree that all other modeling assumptions for the Phase II portfolio modeling will be the same as those used in Tri-State's Revised Preferred Plan, except as specified in this Section 3.6, and except where Tri-State has more current information available at the time the Phase II modeling begins. Tri-State agrees to inform parties to this proceeding and interested stakeholders of the modeling assumption updates in advance of beginning the modeling. Tri-State will provide a complete list of updated modeling assumptions in this proceeding to inform the Commission of the changes.
- **3.7. Phase II Portfolios**. The Settling Parties agree that the Commission should approve the following provisions regarding Tri-State's Phase II portfolios (the "Phase II Portfolios"):

- 3.7.1. Tri-State will model the following five Phase II Portfolios:
 - 3.7.1.1. A portfolio consistent with Tri-State's Revised Preferred

 Plan, except as otherwise modified by this Settlement

 Agreement (the "Revised Preferred Plan Portfolio");
 - 3.7.1.2. A least-cost portfolio (the "Least-Cost Portfolio");
 - 3.7.1.3. A portfolio that advances the Interim-Year Emissions Reductions and 2030 Emission Reduction by one year (the "Early GHG Reduction Portfolio"), such that Tri-State is modeling at least a twenty-six percent (26%) reduction in GHG emissions in calendar-year 2024, a thirty-six percent (36%) reduction in GHG emissions in calendar-year 2025, a forty-six percent (46%) reduction in GHG emissions in calendar-year 2026, and an eighty percent (80%) reduction in GHG emissions in calendar-year 2029;
 - 3.7.1.4. A portfolio of potential Back-up Bids (the "Back-Up Bid Portfolio") by technology cohort. This portfolio will possibly require multiple optimizations depending on the number of unique technology types in the preferred portfolio; and
 - 3.7.1.5. A portfolio showing significantly reduced load (the "Reduced Load Portfolio").
- 3.7.2. Tri-State also will conduct one extreme weather sensitivity analysis for each Phase II Portfolio dispatch, for a limited number of years.

- 3.7.3. Tri-State will conduct a high gas price sensitivity analysis for each portfolio dispatch.
- 3.7.4. If both the Revised Preferred Plan and the Least Cost portfolio that Tri-State presents in the ERP Implementation Report result in Craig Unit 3 retiring after December 31, 2026, Tri-State agrees to model one additional portfolio with all of the same inputs and constraints as the portfolio Tri-State identifies in the ERP Implementation Report as its preferred portfolio, except that the retirement window for Craig Unit 3 will be modeled as July 1, 2025 through December 31, 2026 (the "Craig 3 Early Retirement Portfolio").
- 3.7.5. If Tri-State models the Craig 3 Early Retirement Portfolio, Tri-State will make best efforts to present the Craig 3 Early Retirement Portfolio in its ERP Implementation Report but commits to present the results of the Craig 3 Early Retirement Portfolio no later than two weeks after Tri-State files its Implementation Report. Tri-State will present the same categories of information concerning the Craig 3 Early Retirement Portfolio as it presents for the other Phase II Portfolios presented in the Implementation Report.
- 3.7.6. The Settling Parties agree that both the Reduced Load Portfolio and one other Phase II Portfolio to be selected by Tri-State will be modeled to allow the retirement of Tri-State's Burlington units starting in 2025, if economically selected by the model. Tri-State

agrees, with respect to these two Phase II Portfolios, to provide in the ERP Implementation Report a detailed analysis showing whether and to what extent any early retirement of the Burlington units results in impacts to the reliability of Tri-State's system.

- 3.7.7. All portfolios will be modeled to achieve at least the Interim-Year Emissions Reductions and 2030 Emissions Reduction. Tri-State will submit a Verification Workbook with its Implementation Report that presents the GHG emissions for each portfolio. Tri-State agrees to seek APCD verification of the GHG emissions reductions achieved by each Phase II Portfolio it presents.
- 3.7.8. Tri-State agrees to submit a Verification Workbook for the final portfolio approved by the Commission (the "Approved Plan"). Tri-State will submit the Verification Workbook for the Approved Plan as directed by the Commission.
- 3.7.9. Tri-State acknowledges that affordability is a key consideration in the selection of any resource plan; therefore, Tri-State's presentation and analysis of the Phase II Portfolios will include projected present-value revenue requirements ("PVRR") and annual revenue requirements associated with each Portfolio. Tri-State will consider the SCoC and SCoM when determining which Phase II Portfolio to support. Tri-State will carefully compare all Phase II Portfolios against the Least Cost Portfolio and against whichever Phase II Portfolio results in the lowest GHG emissions. Tri-State will take

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these comparisons into significant account when determining which portfolio to support in Phase II.

- 3.7.10. Tri-State does not expect a significant amount of overlap between bids being submitted into its Phase II RFP and bids being submitted into the anticipated Public Service Company of Colorado ("PSCo") Phase II RFP. However, to the extent such overlap occurs and the preferred portfolio Tri-State identifies in its Implementation Report includes project(s) that are included in PSCo's preferred portfolio(s), Tri-State reserves its right to request additional time to conduct additional modelling of back-up bids. The Settling Parties agree to not oppose Tri-State's request for a reasonable amount of time to conduct the modelling of back-up bids.
- 3.7.11. Within 30 days after bids are received in response to Tri-State's Phase II RFP, Tri-State will make a filing with the Commission identifying: the number of bids received; the quantity of MW offered by bidders; a breakdown of the number of bids and MW received by resource type; and a description of the prices of the resources offered. Within 45 days after bids are received in response to the Phase II RFP, Tri-State will provide detailed information to Commission Staff and UCA on bids advanced to computer modeling, on a highly confidential basis. Tri-State will collaborate with Commission Staff and UCA to determine the level of bid detail to be provided.

- 3.7.12. The Settling Parties agree that generic resources will be used in all of the Phase II Portfolios for years 2027 through 2040. If Tri-State does not receive enough highly competitive 2026 Bids to meet the 2026 resource need, Tri-State will notify and meet with parties to the proceeding, excluding any bidders who have responded to the Phase II RFP, to mutually determine appropriate handling of 2026 resources before proceeding to modeling in Phase II.
- 3.8. Phase II Resource Procurement. The Settling Parties request Commission approval for Tri-State to solicit (a) 2025 bids and (b) 2026 Bids, as described in section 3.4.4.1 above, for highly competitive renewable energy resources, including storage.
- 3.9. Tri-State's ERP Implementation Report. Tri-State agrees to file its ERP Implementation Report no later than 150 days after Tri-State receives bids in response to its RFP. In addition to the information required under Commission Rule 3605(h), Tri-State agrees to provide the following information in its ERP Implementation Report:
 - 3.9.1. Annual carbon dioxide emissions for each portfolio;
 - 3.9.2. Annual methane emissions for each portfolio;
 - 3.9.3. The net present value of carbon dioxide and methane emissions calculated separately and brought back to present value with a 2.5% discount rate, or lower discount rate if updated by the federal Interagency Working Group on the Social Cost of Greenhouse Gases, and presented for each portfolio, consistent with HB21-1238;

- 3.9.4. Map of bids included in each portfolio using either the Colorado Department of Public Health and Environment's ("CDPHE") best available mapping of disproportionately impacted communities or similar mapping approved by the Commission such that the Commission can consider the impacts of bids that are proposed in disproportionately impacted communities when evaluating Phase II portfolios;
- 3.9.5. Separate heat map graphics for the Phase II Portfolio Tri-State identifies as its preferred portfolio. Each graphic will be presented as modeled data for each year in the RAP on an average hour by seasonal month (January, April, July, October) basis ("24 x 4" basis). The heat map graphics will include: (a) modeled average GHG emissions (lb/kWh or similar intensity metric); (b) modeled demand net of renewables (MW); (c) modeled curtailment of solar (MWH); and (d) modeled curtailment of wind (MWH); and
- 3.9.6. Analysis of curtailments under each portfolio.
- 3.9.7. Tri-State will present bids that are in the West End of Montrose County consistent with paragraph 3.12.9 below.
- 3.10. Reliability Considerations in ERP Implementation Report. Tri-State will use and provide in its ERP Implementation Report the output of the reliability checks within the EnCompass modeling, which include analyses of energy not served and curtailed energy. Tri-State also will provide the following specific reliability analyses:

- 3.10.1. An analysis of each portfolio's impact on reliability.
- 3.10.2. An analysis of each portfolio's impact on reliability when Craig 3 is not available to serve load based on the EnCompass reliability checks.
- 3.10.3. For any portfolio that includes the retirement of dispatchable resources, Tri-State will provide a detailed analysis of how load will be served from intermittent resources and Tri-State's other system resources under different service conditions, such as extreme weather events.
- 3.10.4. The Settling Parties agree to discuss and agree on specific reliability considerations and metrics to be used prior to the modeling of the Phase II Portfolios. The reliability analysis conducted will assume that reliability will be met using only Tri-State resources.
- 3.11. Tri-State's Next ERP Filing. With respect to Tri-State's next ERP filing, the Settling Parties agree as follows. The Settling Parties' commitments in this section regarding Tri-State's Next ERP expressly survive the conclusion of Proceeding No. 20A-0528E.
 - 3.11.1. The Settling Parties agree that Tri-State will submit a Verification Workbook and will use the 2005 Baseline verified by APCD for calculating Tri-State's GHG emissions reductions in Tri-State's next ERP filing.
 - 3.11.2. Tri-State will update its generic resource pricing and other technical assumptions in the next Phase I resource plan to incorporate the

most current resource prices and prices from bids received in the 2022 Phase II solicitation as additional data points. Among the other technical assumptions that Tri-State will update are any changes by the federal Interagency Working Group on Social Cost of Greenhouse Gases to the SCoC and SCoM.

- 3.11.3. For planning purposes and monitoring GHG reduction targets, Tri-State will use published system, region or market rates as applicable and consistent with APCD regulations and guidance for unspecified source market and contract purchases in annual carbon reduction calculations.
- 3.11.4. Tri-State will convene a meeting before the next ERP to discuss the emissions rate for unspecified energy purchases, including the impacts of the forecasted rate on emissions reporting, with interested stakeholders, including APCD, WRA, Commission Staff, CEO and other Colorado utilities to the extent they are interested in participating.
- 3.11.5. Tri-State will hold at least three meetings with interested stakeholders prior to December 31, 2022, and in advance of beginning modeling of the next ERP, to seek input on DSM programmatic best practices and updates to the DSM Potential Study.
- 3.11.6. At a minimum, Tri-State will model the energy efficiency targets listed in section 3.11.9 below.

- 3.11.7. Tri-State will use its most up to date DSM and BE Potential Studies based on Tri-State's 2021/2022 end use survey data for modeling. Because Tri-State does not have direct control over implementation of DSM and BE at the retail level, the analysis will include assumptions with regard to different levels of DSM and BE penetration. However, at least two scenarios in the updated DSM Potential Study will contain energy savings that are greater than or equal to the energy efficiency targets listed in section 3.11.9 below.
- 3.11.8. Tri-State will either conduct an RFP for demand response prior to submitting its next ERP or develop in-house demand response offerings in Colorado by 2025 that are designed to control at least 4% of Tri-State's Colorado peak load.
- 3.11.9. Tri-State will implement, and commits to, incremental annual energy efficiency savings targets for its Colorado Utility Member system load of at least 0.35% in 2023, 0.5% by 2024, 0.75% by 2025, and 1% by 2030. Tri-State agrees to develop a written plan and budget estimate for program expansion to meet these targets in consultation with stakeholders that will be filed informationally in this docket by September 1, 2022. The Settling Parties agree to collaborate with Tri-State to identify low- to no-cost financial resources needed to achieve these targets and reduce cost impacts on Tri-State Members.

- 3.11.10. Tri-State will hold at least two meetings with interested stakeholders to seek input on BE programmatic best practices in advance of beginning modeling for the next ERP.
- 3.11.11. At a minimum, Tri-State will model in its next ERP Achievable-Moderate levels of BE, as reflected in the updated BE Potential Study described in section 3.11.7 above.
- 3.11.12. Tri-State will hold at least two meetings with interested stakeholders in advance of beginning Phase I modeling for the next ERP, with the intention of collaboratively identifying scenarios to be modeled.
- 3.11.13. Tri-State will hold at least two meetings with interested stakeholders in advance of beginning Phase I modeling for the next ERP to seek input on its Effective Load Carrying Capability Study, modeling treatment of hybrid resources, and valuation of storage.
- 3.11.14. Tri-State will model stakeholder-requested reductions or eliminations of the dispatch of Tri-State's allocation of Craig Unit 3, Laramie River Station Units 2 and 3, and Springerville Unit 3 in at least one of the Phase I scenarios in the next ERP; with the units, unit dispatch, and scenario(s) to be modeled to be identified following collaboration with interested stakeholders in advance of the start of Phase I modeling for Tri-State's next ERP. Tri-State will include, as part of its next ERP filing, an analysis of the reliability of each scenario modeled and assessment of whether additions of new intermittent capacity under each scenario can serve load and maintain reliability. The analysis

- will assume that reliability objectives will be satisfied using only Tri-State resources regardless of bilateral or organized market access.
- 3.11.15. Tri-State will include in the generic resource data set for its next ERP innovative technology options for which it has sufficiently robust cost and energy/capacity profile information, where the technology options are determined in consultation with interested stakeholders.
- 3.12. Workforce Transition and Community Assistance. The Settling Parties agree to the following terms regarding workforce transition and community assistance. The terms in this section expressly survive the conclusion of Proceeding No. 20A-0528E as set forth below.
 - 3.12.1. Tri-State agrees to submit to the Colorado Office of Just Transition a Workforce Transition Plan with respect to Craig Station (the "Workforce Transition Plan") that meets the requirements of C.R.S. § 8-83-505 on or before December 31, 2022.
 - 3.12.2. Tri-State agrees to work with the Office of Just Transition, the City of Craig, Moffat County, the Colorado Energy Office, and the Office of the Utility Consumer Advocate (the "Collaborating Parties") to develop a scope of work and select a mutually agreed upon independent third-party facilitator to lead a process for the Collaborating Parties to discuss community assistance opportunities for the City of Craig and Moffat County and to develop a report addressing those opportunities (the "Informational Community Assistance Plan").

- 3.12.3. As part of the process of facilitating the development of the Informational Community Assistance Plan, the third-party facilitator will consider information provided by the Collaborating Parties, including information regarding other utilities' community assistance efforts.
- 3.12.4. This community assistance approach will take into consideration the unique aspects of Craig and Moffat County and Tri-State's not-forprofit business structure, along with associated impacts to Tri-State's Utility Members.
- 3.12.5. The Collaborating Parties will meet no later than March 1, 2022, to begin developing the scope of work for the facilitated process.
- 3.12.6. The Informational Community Assistance Plan developed through the facilitated process may include recommendations for next steps.
- 3.12.7. The Office of Just Transition will cover the cost of the facilitator up to a cap of \$100,000 and any remaining amount will be paid for by Tri-State. The total cost of the facilitator shall not exceed \$300,000.
- 3.12.8. Within 60 days of the completion of the facilitated process, Tri-State will file with the PUC in a miscellaneous proceeding, and on an informational basis, the Workforce Transition Plan described in section 3.12 above. Tri-State will include, as an attachment to the filing, the Informational Community Assistance Plan, also on an informational basis.

- 3.12.9. In the ERP Implementation Report in the 2020 ERP, Tri-State agrees to present, on a highly confidential basis in a separate list, bids that it received that are in the West End of Montrose County and agrees to clearly describe those bids.
- 3.13. Transmission. The Settling Parties agree to the following terms regarding transmission. The terms in this section expressly survive the conclusion of Proceeding No. 20A-0528E as set forth below.
 - 3.13.1. The Settling Parties recognize that the Colorado Coordinated Planning Group ("CCPG") has decided to analyze an interregional interconnection from Craig to PacifiCorp and that Tri-State is a participant in the CCPG process.
 - 3.13.2. Tri-State agrees to file an application for a Certificate for Public Convenience and Necessity ("CPCN") with the Commission for a transmission project or projects resulting from the CCPG Responsible Energy Plan Task Force ("REPTF") analyses. Tri-State agrees to make such a filing no later than April 30, 2022.
 - 3.13.3. Tri-State agrees to treat the transmission project or projects described in section 3.13.2 above as planned upgrades not yet in service for the purposes of determining overall transmission costs in the Phase II modeling. Tri-State's CPCN filing will enable bidders in the Phase II RFP in this proceeding to select a point of interconnection ("POI") for the project subject to the CPCN.

- 3.13.4. The Settling Parties recognize that if the costs, timing, and/or study findings with respect to an interconnection request are dependent on new transmission project(s), and if those transmission project(s) are delayed or not built, that could cause a need for re-studies of the transmission interconnection request or a reassessment of the interconnection facilities and/or network upgrades and/or costs and timing.
- 3.14. Regional Markets. The Settling Parties agree to the following terms regarding regional markets. The terms in this section expressly survive the conclusion of Proceeding No. 20A-0528E as set forth below.
 - 3.14.1. Tri-State agrees to convene in 2022 at least two stakeholder meetings to discuss existing and potential organized markets and receive stakeholder input. Discussion topics will include issues related to having more than one organized wholesale market in Colorado and issues related to GHG accounting in prospective wholesale markets. Tri-State agrees to receive and respond to stakeholder input.
- 3.15. Renewable Power Purchase Agreements. The Settling Parties agree that certainty in power purchase agreement contractual commitments is essential for developer market protection, in the public interest of Colorado, and supports meeting Colorado's emission reduction statutory goals set forth in HB19-1261.

SECTION 4 GENERAL TERMS AND CONDITIONS

- 4.1. Except as expressly set forth herein, including but not limited to Tri-State's commitments regarding its GHG emissions reductions and next ERP filing, nothing in this Settlement Agreement is intended to have precedential effect or bind the Settling Parties with respect to positions they may take in any other proceeding regarding any of the issues addressed in this Settlement Agreement. No Settling Party concedes the validity or correctness of any regulatory principle or methodology directly or indirectly incorporated in this Settlement Agreement. Furthermore, this Settlement Agreement does not constitute agreement, by any Settling Party, that any principle or methodology contained within or used to reach this Settlement Agreement may be applied to any situation other than the above-captioned proceeding, except as expressly set forth herein.
- 4.2. The Settling Parties agree the provisions of this Settlement Agreement, as well as the negotiation process undertaken to reach this Settlement Agreement, are just, reasonable, and consistent with and not contrary to the public interest and should be approved and authorized by the Commission.
- Agreement have been conducted in accordance with Rule 408 of the Colorado Rules of Evidence. Nothing in this Settlement Agreement shall constitute a waiver by any Settling Party with respect to any matter not specifically addressed in this Settlement Agreement.

- A.4. The Settling Parties agree to support, or not oppose, all aspects of the Settlement Agreement embodied in this document, including in any hearing conducted to determine whether the Commission should approve this Settlement Agreement, and/or in any other hearing, proceeding, or judicial review relating to this Settlement Agreement or the implementation or enforcement of its terms and conditions. Each Settling Party also agrees that, except as expressly provided in this Settlement Agreement, it will take no formal action in any administrative or judicial proceeding that would have the effect, directly or indirectly, of contravening the provisions or purposes of this Settlement Agreement. However, except as expressly provided herein, each Settling Party expressly reserves the right to advocate positions different from those stated in this Settlement Agreement in any proceeding other than one necessary to obtain approval of, or to implement or enforce, this Settlement Agreement or its terms and conditions.
- 4.5. The Settling Parties do not believe any waiver or variance of Commission Rules is required to effectuate this Settlement Agreement but agree jointly to apply to the Commission for a waiver of compliance with any requirements of the Commission's Rules and Regulations, if necessary, to permit all provisions of this Settlement Agreement to be approved, carried out, and effectuated.
- 4.6. This Settlement Agreement is an integrated agreement that may not be altered by the unilateral determination of any Settling Party. There are no terms, representations or agreements among the parties which are not set forth in this Settlement Agreement. This Settlement Agreement may be modified by the

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Settling Parties, subject to Commission approval, only if the modification is agreed to by all Settling Parties in writing.

- 4.7. This Settlement Agreement shall not become effective until the Commission issues a final decision addressing the Settlement Agreement. In the event the Commission modifies this Settlement Agreement in a manner unacceptable to any Settling Party, that Settling Party may withdraw from the Settlement Agreement and shall so notify the Commission and the other Settling Parties in writing within ten (10) days of the date of the Commission order. In the event a Settling Party exercises its right to withdraw from the Settlement Agreement, this Settlement Agreement shall be null and void and of no effect in this or any other proceeding.
- 4.8. There shall be no legal presumption that any specific Settling Party was the drafter of this Settlement Agreement. All Settling Parties have had the opportunity to participate in the drafting of this Settlement Agreement and the term sheet upon which it was based.
- 4.9. This Settlement Agreement may be executed in counterparts, all of which when taken together shall constitute the entire Agreement with respect to the issues addressed by this Settlement Agreement. This Settlement Agreement may be executed and delivered electronically and the Settling Parties agree that such electronic execution and delivery, whether executed in counterparts or collectively, shall have the same force and effect as delivery of an original document with original signatures, and that each Settling Party may use such facsimile signatures as evidence of the execution and delivery of this

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Settlement Agreement by the Settling Parties to the same extent that an original signature could be used.

IN WITNESS WHEREOF, the Settling Parties have executed this UNOPPOSED COMPREHENSIVE SETTLEMENT AGREEMENT as of this 18th day of January, 2022.

[Signature pages follow]

Agreed on behalf of:

Tri-State Generation and Transmission Association, Inc.

By:

Name: <u>Duane Highley</u>

Title: Chief Executive Officer

Approved as to form:

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PROCEEDING NO. 20A-0528E

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Trent Loutensock, General Manager

Approved as to form:

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