**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO**

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IN THE MATTER OF THE APPLICATION	**)**
OF PUBLIC SERVICE COMPANY OF	**)**
COLORADO FOR APPROVAL OF ITS	**) PROCEEDING NO. 21A-0141E**
2021 ELECTRIC RESOURCE PLAN AND	**)**
CLEAN ENERGY PLAN	**)**

SUPPLEMENTAL DIRECT TESTIMONY OF JAMES F. HILL

ON

BEHALF OF

PUBLIC SERVICE COMPANY OF COLORADO

August 13, 2021

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GLOSSARY OF ACRONYMS AND DEFINED TERMS

Acronym/Defined Term	Meaning
2021 ERP & CEP	2021 Electric Resource Plan and Clean Energy Plan
BOT	Build-Own-Transfer
CEP	Clean Energy Plan
CEPR	Clean Energy Plan Rider
Commission	Colorado Public Utilities Commission
ERP	Electric Resource Plan
IE	Independent Evaluator
MW	Megawatt
NPV	Net Present Value
PPA	Power Purchase Agreement
Public Service or Company	Public Service Company of Colorado
SCC	Social Cost of Carbon
XES	Xcel Energy Services Inc.
Xcel Energy	Xcel Energy Inc.

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO**

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IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS 2021 ELECTRIC RESOURCE PLAN AND CLEAN ENERGY PLAN	**) PROCEEDING NO. 21A-0141E**

<u>SUPPLEMENTAL DIRECT TESTIMONY OF JAMES F. HILL</u>

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is James F. Hill. My business address is 1800 Larimer Street, Denver, Colorado 80202.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?

A. I am employed by Xcel Energy Services Inc. ("XES") as Director, Resource Planning. XES is a wholly owned subsidiary of Xcel Energy Inc. ("Xcel Energy"), and provides an array of support services to Public Service Company of Colorado ("Public Service" or the "Company") and the other three utility operating company subsidiaries of Xcel Energy on a coordinated basis.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THE PROCEEDING?

A. I am testifying on behalf of Public Service.

Q. HAVE YOU PREVIOUSLY PROVIDED TESTIFIED BEFORE THE COLORADO PUBLIC UTILITIES COMMISSION ("COMMISSION")?

A. Yes, I filed Direct Testimony in this proceeding on March 31, 2021.[1]

Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL DIRECT TESTIMONY?

A. The purpose of my Supplemental Direct Testimony is to address two issues raised in the Joint Brief filed by the Company and 14 other intervenors in this proceeding on August 2, 2021, both of which relate to portfolio development in the Phase II process of this 2021 Electric Resource Plan and Clean Energy Plan ("2021 ERP & CEP") proceeding. First, I build on the prior discussion in Volume II of the 2021 ERP & CEP (Attachment AKJ-2) to provide a more detailed explanation of how portfolios can be developed or viewed in the Phase II process, to address intervenor concerns about EnCompass delivering one optimal answer versus multiple options via additional portfolios. Second, I propose an approach to evaluate whether satisfaction of the ownership targets under § 40-2-125.5(5)(b), C.R.S. "comes at reasonable cost and rate impact."

Consistent with these objectives, the Company is bringing forward an approach to allow for development of different alternate resource portfolios using the same set of inputs and assumptions. In addition, the Company has developed a framework for the evaluation of the cost impacts of satisfying the ownership targets. As set forth in the Joint Brief, the parties felt it was important to have this additional information in the record to avoid the need for a fully litigated Phase II

[1] Hearing Exhibit 104, Direct Testimony of James F. Hill.

hearing. I am providing it here so that the Commission can make findings regarding the portfolio development process and ownership target evaluation in Phase I, then utilize the traditional Phase II process provided under Electric Resource Plan ("ERP") Rules to approve a cost-effective resource plan.

II. PORTFOLIO DEVELOPMENT PROCESS

Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A. The purpose of this section of my Supplemental Direct Testimony is to provide additional detail regarding how the Company will develop portfolios in the Phase II process. The Company is using the EnCompass model for the first time in a Colorado ERP proceeding. While this is the first time using this model in this state, we believe it provides benefits as compared to the Strategist model. Moreover, we have developed an approach to ensure that: (1) the Commission and parties have a variety of resource portfolios to compare the preferred plan against in the 120-Day Report; and (2) these resource portfolios are developed in a manner—with the oversight of the Independent Evaluator ("IE")—consistent with past proceedings. I address our proposed approach in this section of my Supplemental Direct Testimony.

Q. WHAT IS THE FIRST STEP IN THE COMPANY'S PROPOSED PORTFOLIO DEVELOPMENT APPROACH?

A. The first step is to develop a preferred portfolio, which will be brought forward in the Company's 120-Day Report. In the Phase II process, the Company will develop a preferred portfolio with a 50 percent ownership target for energy and capacity and that meets or exceeds the clean energy targets of Senate Bill 19-236, i.e., an 80 percent emission reduction from 2005 levels by 2030. To target a 50 percent level of ownership, the Company intends to set parameters in EnCompass to solve for a "band" of between approximately 48 and 52 percent of the total energy and capacity being acquired in the portfolio as Company-owned, with the objective of landing on a total percentage of energy and capacity close to the statutory ownership target. The final band ultimately applied may differ depending on the megawatt ("MW") size of bids received through the Phase II competitive solicitation, but once the Company—working in concert with the IE—establishes a more precise bid-informed band for evaluating the ownership target in this general range, it would use the same band for all portfolios that utilize the 50 percent ownership target without further change. For purposes of establishing ownership, Company-owned generation can take several forms, including through self-builds or build-own-transfer ("BOT") arrangements.

Q. IS IT POSSIBLE THAT THE COMPANY WILL DEVELOP MORE THAN ONE PREFERRED PORTFOLIO?

A. Yes. Under the Company's proposed approach, there is a variable that could result in the presentation of multiple preferred portfolios. After the filing of the 2021 ERP & CEP, the General Assembly passed House Bill 21-1324, which provides for the evaluation and potential acquisition of zero-emission dispatchable generation that can benefit areas of Colorado affected by the clean energy transition. Accordingly, to the extent zero-emission dispatchable generation under House Bill 21-1324 is included in the preferred portfolio, the Company would provide a preferred plan with this generation *and* a preferred plan without this generation to allow for a comparison of the two, consistent with the legislation.

This preferred portfolio would again adhere to the 50 percent ownership target provided for in § 40-2-125.5(5)(b), C.R.S., using the approach I discussed above.

Q. WILL THE COMPANY DEVELOP ALTERNATE PORTFOLIOS THROUGH ITS PROPOSED PORTFOLIO DEVELOPMENT PROCESS?

A. Yes, and this represents the second step in our proposed portfolio development approach. The Company understands that the Commission and parties want to see different portfolios beyond just the preferred portfolio(s), consistent with past presentations in 120-Day Reports. At the same time, the functionality of EnCompass differs in certain respects from that of Strategist, as Strategist would produce hundreds—if not thousands—of suboptimal plans that the Company could draw from to present in the 120-Day Report. EnCompass does not produce the same volume of plans as Strategist, but it offers significant benefits over Strategist because it uses a different optimization logic that can solve more complicated logic problems and with higher precision. Therefore, the Company believes the best approach for developing alternate portfolios is to provide specific parameters to the model to build the alternate portfolios that are optimized to meet those parameters, as opposed to selectively picking from a list of portfolios that were optimized using other objectives.

Q. PLEASE DESCRIBE THE COMPANY'S PROPOSED PARAMETERS FOR ALTERNATE PORTFOLIO DEVELOPMENT.

A. The Company would develop alternate bid portfolios by taking the amount of nameplate capacity by resource type in the preferred portfolio, reducing that nameplate amount by 10 percent, and developing multiple reoptimized portfolios from which EnCompass is able to select from all bids that are advanced to computer modeling as was done in optimizing the preferred portfolio.

Q. PLEASE EXPLAIN.

A. The Company anticipates receiving bids from a variety of resource types in the Phase II competitive solicitation, including: (1) wind; (2) solar; (3) standalone storage; and (4) flexible and fully dispatchable generation (for example, natural gas combustion turbines). The Company would identify the nameplate capacity levels of these resource types in the preferred plan, and then introduce a constraint into the EnCompass model. The constraint would be to limit the level of the resource type for that alternate portfolio to be at the level of nameplate capacity of that resource type in the preferred plan, less 10 percent. This process would be repeated for each of the resource types individually. The approach would allow for development of additional bid portfolios by developing a series of reoptimized portfolios, utilizing all bids advanced to computer modeling that would cap a single resource type at 10 percent less capacity in nameplate MW than that same resource type in the preferred portfolio outcome. Accordingly, the number of alternate portfolios produced would be equal to the number of resource type categories.

Q. CAN YOU PROVIDE AN EXAMPLE AS TO HOW ONE OF THE ALTERNATE PORTFOLIO RUNS WOULD BE CONDUCTED?

A. Yes. To provide a simple example, if there was 2,000 MW (nameplate) of wind in the preferred portfolio, the Company would constrain the model to be no more than 1,800 MW of wind additions (i.e., the 2,000 MW less 200 MW, which equals 10 percent of the 2,000 MW nameplate capacity). The Company would then develop an alternate portfolio by reoptimizing the model and allowing it to select a fully optimized portfolio from all the bids advanced to computer-based modeling, subject only to the wind constraint introduced in the run. We would perform this exercise for each identified resource type, resulting in four additional alternate portfolios.

Q. WHY IS THE COMPANY LIMITING THE RESOURCE TYPES TO FOUR CATEGORIES?

A. The Company believes that the four resource type categories broadly cover bids that will be received in the Phase II competitive solicitation without unnecessarily increasing the number of alternate portfolios that would be developed for purposes of the 120-Day Report. While we anticipate receiving bids for combination projects (e.g., solar plus storage) and potentially other types of resources beyond wind, solar, storage, and flexible and fully dispatchable generation, the Company believes developing alternate portfolios based on the four general identified resource types will result in the development of a reasonable number of alternate portfolios and allow for diverse alternate portfolio development. To that point, for combination projects like solar plus storage, the Company would take all nameplate MW associated with the project and put it into one resource type category. Accordingly, if a 200 MW solar with 50 MW storage project were in the preferred portfolio, 250 MW would be counted toward the solar resource type nameplate capacity category to determine the 10 percent reduction. Similarly, if it were a wind plus storage combination project, all MW would go into the wind resource type nameplate capacity category.

Q. ARE THERE OTHER CONSTRAINTS THAT THE COMPANY WOULD UTILIZE IN DEVELOPING THE ALTERNATE PORTFOLIOS?

A. Yes. All alternate portfolios, except for the reference case (i.e., the "business as usual" case developed to meet the ERP need as opposed to a Clean Energy Plan ("CEP") portfolio), would be developed with an 80 percent emission reduction minimum and the same ownership target band approach as that utilized for the preferred plan. The alternate portfolios would also be built using the carbon proxy approved by the Commission (i.e., a $0/ton or social cost of carbon ("SCC") proxy). The Company has proposed SCC7 as its preferred plan and therefore believes the SCC is the appropriate proxy. Moreover, while the Company could build portfolios with both carbon proxies as directed by the Commission, it will double the number of portfolios and increase time pressure on an already fast-paced bid evaluation period.

Q. WHAT ALTERNATE PORTFOLIOS WOULD THIS PROCESS PRODUCE?

A. Assuming the Commission approves a single set of coal actions, e.g., the SCC7 plan that converts Pawnee to natural gas at the end of 2028, limits the operations of Comanche 3 to a 33 percent capacity factor at the end of 2029, and retires Comanche 3 in 2040, this approach would result in the development of four alternate portfolios (also assuming the use of a single carbon proxy like the SCC).

Q. WHAT ARE THESE FOUR ALTERNATE PORTFOLIOS?

A. The four alternate portfolios are as follows:

- Lowered wind and Commission-approved carbon proxy;
- Lowered solar and Commission-approved carbon proxy;
- Lowered storage and Commission-approved carbon proxy; and
- Lowered flexible and fully dispatchable generation and Commission-approved carbon proxy.

Q. WHAT DOES THIS APPROACH PROVIDE TO THE COMMISSION AND PARTIES IN THE PHASE II PROCESS FROM YOUR PERSPECTIVE?

A. This approach allows using the EnCompass model in an automated manner to build a diverse set of bid portfolios for parties and the Commission to assess. It also allows for the development of a preferred plan and alternate portfolios with predetermined parameters and to have the Commission, parties, and bidders in alignment as to how portfolios will be developed prior to the Phase II process. One of the strengths of the Phase II process—in my experience—is that the Company gets strong proposals from bidders due to certainty provided by the defined timeline for the Phase II process and because the Company is prepared to act to develop and acquire projects post-Phase II. This approach preserves these established benefits that have made the Colorado ERP process a model for resource procurement.

III. FRAMEWORK FOR OWNERSHIP EVALUATION

Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A. The purpose of this section of my Supplemental Direct Testimony is to provide additional detail regarding a proposed framework for the evaluation of whether satisfaction of the ownership targets under § 40-2-125.5(5)(b), C.R.S. "comes at reasonable cost and rate impact." The Company has four prisms for evaluation of the "reasonable cost and rate impact" of ownership.

Q. WHAT IS THE FIRST PRISM?

A. The first prism is how a preferred portfolio interacts with the Clean Energy Plan Rider ("CEPR") framework set forth in § 40-2-125.5(5)(a), C.R.S. The General Assembly directed a retail rate impact framework for evaluating CEPs through Senate Bill 19-236, and this serves as a test of whether a proposed portfolio comes at reasonable cost and rate impact. The inquiry here will evaluate whether the plan fits within the CEPR parameters during the CEPR's existence or whether it will result in a deferred balance to be recovered in the future, as provided for under § 40-2-125.5(5)(a)(V), C.R.S. The creation of a deferred balance for future recovery does not necessarily mean a portfolio is not able to be acquired at a reasonable cost and rate impact, but it does provide a relevant benchmark for evaluating the cost and rate impacts of a portfolio.

Q. WHAT IS THE SECOND PRISM?

A. For the second prism, the Company will provide an informational "least-cost plan" for purposes of benchmarking the cost of the preferred portfolio. To be clear, a least-cost plan is a different plan than the reference case, which is a "business as usual" case developed to meet the ERP needs without the 80 percent emission reduction requirements that CEP portfolios must meet. The least-cost plan would be developed through EnCompass with no specific ownership requirements for energy and capacity. The least-cost-plan may end up containing some level of Company ownership if economically selected, but it would not be a constraint on the optimization. The least-cost plan would be required to meet an 80 percent emission reduction from 2005 levels by 2030, and the Company would develop it using the Commission-ordered carbon proxy. The least-cost plan will provide an informational benchmark much like in the Colorado Energy Plan proceeding (Proceeding No. 16A-0396E).

Q. WHY DO YOU SAY THAT THE LEAST-COST PLANS ARE "INFORMATIONAL"?

A. I say this for two reasons. First, the Commission does not subscribe to a least-cost planning approach, and the commitment to cost-effective resource planning is embodied in Rule 3601. Second, this proceeding is also unique given the statutory parameters applicable to this 2021 ERP & CEP that, among other things, provide for specific targets for utility ownership. For these reasons and given the benefits of utility ownership described in more detail in our direct case, it is appropriate to treat the least-cost plan as an informational benchmark as opposed to a plan eligible for selection as consistent with Senate Bill 19-236.

Q. WHAT IS THE THIRD PRISM?

A. The third prism is provided through two additional proposed portfolios that the Company would develop for comparative purposes. More specifically, the Company will provide varying levels of ownership by building: (1) a portfolio using a 45 percent ownership minimum; and (2) a portfolio using a 55 percent ownership minimum. This approach will show lower levels of ownership and higher levels of ownership, which would be developed to meet the statutory target of 50 percent ownership of energy and capacity using the approach described earlier in my Supplemental Direct Testimony. It will also result in differing portfolios for comparative purposes with the preferred plan and assist in evaluating whether satisfaction of the ownership targets comes at a reasonable cost and rate impact, consistent with § 40-2-125.5(5)(b), C.R.S.

Q. WHAT IS THE FOURTH PRISM?

A. The fourth prism is not related to comparing net present values ("NPVs") of different portfolios, but it is equally important. In the Direct Testimony of Alice K. Jackson in this proceeding, she provides testimony around the fact that the Company's financial health and credit ratings affect customers and shareholders—and ultimately State of Colorado energy policy.[2] Financial metric considerations, in particular the impact of high levels of power purchase agreements ("PPAs") on the Company's balance sheet, can result in increased cost to customers. This

[2] *See* Hearing Exhibit 101, Direct Testimony and Attachments of Alice K. Jackson, at 35:4-21; *see also* Hearing Exhibit 103, Direct Testimony of Brooke A. Trammell, at 37:3 – 38:9, 56:12 – 57:2.

factor must be considered in evaluating different resource portfolios and the ownership levels in the resource portfolios. Therefore, it provides a fourth prism for consideration that steps beyond simply comparing portfolios on an NPV basis as the Commission makes its determination regarding a cost-effective resource plan in this proceeding.

Q. HOW DO THE FOUR PRISMS FIT TOGETHER?

A. They fit together by providing a comprehensive framework with a cost test through the CEPR and benchmarks provided by the least-cost plan, lower ownership plan, and higher ownership plan, respectively, and considerations for other financial implications that may be present at different levels of PPA concentration in a portfolio. With this comprehensive framework, the Commission and parties have multiple views of the cost of ownership and a robust record upon which to make a finding that satisfaction of the ownership targets in a preferred portfolio presented by the Company can come at reasonable cost and rate impact.

Q. PLEASE PROVIDE A SUMMARY OF ALL PORTFOLIOS THAT WOULD BE PROVIDED UNDER THE COMPANY'S APPROACH AND THE PURPOSE OF EACH PORTFOLIO.

A. The Company would provide up to nine portfolios under this proposed approach per set of coal actions, which I also want to address. Before doing so, however, the portfolios provided are as follows:

- ***Preferred portfolio.*** The Company's preferred portfolio recommended for approval by the Commission in the 120-Day Report. It will be developed consistent with the 50 percent ownership target using the approach described in my Supplemental Direct Testimony and include a minimum 80 percent emission reduction by 2030 from 2005 levels.

- ***Preferred portfolio without House Bill 21-1324 resources***. This portfolio would be provided *if* the preferred plan includes a resource or resources pursuant to House Bill 21-1324. It will be developed consistent with the 50 percent ownership target using the approach described in my Supplemental Direct Testimony and include a minimum 80 percent emission reduction by 2030 from 2005 levels. This portfolio is a preferred portfolio proposed for Commission approval depending upon whether the Commission approves development of the House Bill 21-1324 resources or not.

- ***Least-cost informational portfolio.*** This informational portfolio would utilize no ownership minimum in the EnCompass modeling. The purpose of this portfolio is to provide a benchmark for whether the preferred portfolio and the Company ownership included within it can be acquired at "reasonable cost and rate impact," consistent with § 40-2-125.5(5)(b), C.R.S. This portfolio will include a minimum 80 percent emission reduction by 2030 from 2005 levels.

- ***45 percent ownership test portfolio****.* This portfolio would utilize a 45 percent ownership minimum in the EnCompass modeling. The purpose of this portfolio is to provide a benchmark and test for whether the preferred portfolio and the Company ownership included within it can be acquired at "reasonable cost and rate impact," consistent with § 40-2-125.5(5)(b), C.R.S. This portfolio will include a minimum 80 percent emission reduction by 2030 from 2005 levels.

- ***55 percent ownership test portfolio.*** This portfolio would utilize a 55 percent ownership minimum in the EnCompass modeling. The purpose of this portfolio is to provide a benchmark and test for whether the preferred portfolio and the Company ownership included within it can be acquired at "reasonable cost and rate impact," consistent with § 40-2-125.5(5)(b), C.R.S. This portfolio will include a minimum 80 percent emission reduction by 2030 from 2005 levels.

- ***Lower Wind Alternate Portfolio.*** This portfolio will be developed using a constraint in EnCompass to limit the nameplate capacity level of wind to the level in the preferred portfolio less 10 percent. It will be developed using the 50 percent ownership target described in my Supplemental Direct Testimony and include a minimum 80 percent emission reduction by 2030 from 2005 levels.

- ***Lower Solar Alternate Portfolio.*** This portfolio will be developed using a constraint in EnCompass to limit the nameplate capacity level of solar to the level in the preferred portfolio less 10 percent. It will be developed using the 50 percent ownership target described in my Supplemental Direct Testimony and include a minimum 80 percent emission reduction by 2030 from 2005 levels.

- ***Lower Storage Alternate Portfolio.*** This portfolio will be developed using a constraint in EnCompass to limit the nameplate capacity level of storage to the level in the preferred portfolio less 10 percent. It will be developed using the 50 percent ownership target described in my Supplemental Direct Testimony and include a minimum 80 percent emission reduction by 2030 from 2005 levels.

- ***Lower Flexible and Fully Dispatchable Alternate Portfolio.*** This portfolio will be developed using a constraint in EnCompass to limit the nameplate capacity level of flexible and fully dispatchable generation to the level in the preferred portfolio less 10 percent. It will be developed using the 50 percent ownership target described in my Supplemental Direct Testimony and include a minimum 80 percent emission reduction by 2030 from 2005 levels.

Q. WILL EACH OF THESE PORTFOLIOS ALSO BE RUN THROUGH ANY COMMISSION-APPROVED SENSITIVITIES?

A. Yes. Each of the portfolios above would be subjected to all sensitivities approved by the Commission in its Phase I Decision, consistent with past 120-Day Report presentations.

Q. WHAT DID YOU WANT TO ADDRESS ABOUT THE COAL ACTIONS ISSUE?

A. The approach outlined in my Supplemental Direct Testimony could result in the development of nine total portfolios, assuming that: (1) the Commission approves a specific set of coal actions as part of its Phase I Decision; and (2) the Commission does not require the use of more than one carbon proxy. This number of portfolios is consistent with past ERP cycles and 120-Day Report presentations; however, this number of portfolios reinforces the need for the Commission to decide on the coal transition actions at Comanche 3 and Pawnee as part of its Phase I decision, as multiple coal action scenarios compound the number of alternate portfolios presented and could create an untenable Phase II process in the allotted timeline. Put another way, if the Commission requests modeling of two or even three different sets of coal actions, then the Company could be in a position of having to bring forward as many as 18 or even 27 portfolios, respectively, and these numbers would be doubled if the portfolios were created using both a $0/ton and SCC proxy. These higher numbers of portfolios could introduce significant challenges given the Phase II compressed timeline; further, it would represent a number of portfolios far greater than have been presented in past ERP cycles.

IV. CONCLUSION

Q. DO YOU HAVE CONCLUDING COMMENTS REGARDING THE PORTFOLIO DEVELOPMENT PROCESS?

A. The Company has developed this approach consistent with its representations in its Joint Brief with 14 other parties to this proceeding. The approach to portfolio development will provide a number of comparative looks to aid in the evaluation of the preferred portfolio. Further, with the four prisms for evaluating ownership described in my Supplemental Direct Testimony, the Commission will have multiple views of the cost of ownership and a robust record for evaluation of the preferred plan.

Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL DIRECT TESTIMONY?

A. Yes, it does.

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IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS 2021 ELECTRIC RESOURCE PLAN AND CLEAN ENERGY PLAN	)))) PROCEEDING NO. 21A-0141E)))

AFFIDAVIT OF JAMES F. HILL
ON BEHALF OF
PUBLIC SERVICE COMPANY OF COLORADO

I, James F. Hill, being duly sworn, state that the Supplemental Direct Testimony was prepared by me or under my supervision, control, and direction; that the Supplemental Direct Testimony is true and correct to the best of my information, knowledge and belief; and that I would give the same testimony orally and would present the same attachments if asked under oath.

Dated at Denver, Colorado, this 12th day of August, 2021.

James F. Hill

James F. Hill
Director, Resource Planning

Subscribed and sworn to before me this 12th day of August, 2021.

Holly Mashburn

Notary Public

My Commission expires April 13, 2025

Holly A. Mashburn
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20214014663
MY COMMISSION EXPIRES April 13, 2025