

**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 (A) FOR A CERTIFICATE)
OF PUBLIC CONVENIENCE AND) PROCEEDING NO. 14A-0287E
NECESSITY FOR THE PAWNEE TO)
DANIELS PARK 345KV TRANSMISSION)
PROJECT, AND (B) FOR SPECIFIC)
FINDINGS WITH RESPECT TO EMF AND)
NOISE.)

IN THE MATTER OF THE APPLICATION)
OF PUBLIC SERVICE COMPANY OF)
COLORADO FOR APPROVAL OF THE)
600 MW RUSH CREEK WIND PROJECT) PROCEEDING NO. 16A-0117E
PURSUANT TO RULE 3660(H), A)
CERTIFICATE OF PUBLIC)
CONVENIENCE AND NECESSITY FOR)
THE RUSH CREEK WIND FARM, AND A)
CERTIFICATE OF PUBLIC)
CONVENIENCE AND NECESSITY FOR)
THE 345KV RUSH CREEK TO MISSLE)
SITE GENERATION TIE TRANSMISSION)
LINE AND ASSOCIATED FINDINGS OF)
NOISE AND MAGNETIC FIELD)
REASONABLENESS.)

IN THE MATTER OF THE PETITION OF)
PUBLIC SERVICE COMPANY OF)
COLORADO FOR A VARIANCE OF THE) PROCEEDING NO. 16V-0314E
CONSTRUCTION SCHEDULE FOR THE)
PAWNEE TO DANIELS PARK 345KV)
TRANSMISSION PROJECT.)

2019 Semi-Annual Progress Report # 5

Pawnee-Daniels Park 345kV Transmission Project

January 23, 2020

Colorado PUC E-Filings System

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EXECUTIVE SUMMARY

The Company is filing additional detailed Pawnee-Daniels Park Project cost information, including costs incurred as compared to the Company's budget, in this Semi-Annual Progress Report as required by Decision No. R14-1405 in Proceeding No. 14A-0287E and consistent with the terms of the Rush Creek Settlement Agreement in Proceeding No.16A-0117E and Proceeding No.16V-0314E. Decision No. R14-1405 at Paragraph 7 provides as follows:

Public Service shall file with the Commission, as compliance filings in this proceeding, Semi-Annual Progress Reports for the Project. The first report shall be filed within 30 days following receipt of the last route permit determining route of the Project. Subsequent reports shall be filed no later than six months following the due date of the prior report. Semi-Annual Progress Reports shall continue to be filed until the Project is reported therein to be complete. Each Semi-Annual Progress Report must report:

- a: monthly actual expenses incurred and monthly budgeted expenditures by activity;
- b: any modifications, by month, to subsequent forecasted expenditures for the remainder of the Project;
- c: a cumulative comparison of actual performance of the Project to budget;
- d: an explanation of any changes to the overall budget for the Project;
- e: an explanation of any changes to the Project schedule;
- f: efforts to reduce the cost of the Project; and
- g: a narrative statement of the overall Project status.

The Company's last route permit was received on December 13, 2017. Therefore, in compliance with the Commission's directive, the Company filed the first Semi-Annual Progress Report on January 12, 2018, the second Semi-Annual Progress Report on July 12, 2018, the third Semi-Annual Progress Report on January 14, 2019, the fourth Semi-Annual Progress Report on July 17, 2019 and this fifth and final Semi-Annual Progress Report on January 21, 2020. The Pawnee-Daniels Park 345kV system was completed and the last segment energized on December 26, 2019. There are approximately \$1.3 million of expenditures forecasted through April 2020 to complete

Phases 8 and 9 of the Smoky Hill 230 Substation (east and west bus differential modifications), FAA structure lighting communications check, project site restoration and transmission line corridor revegetation. This is submitted as the final Semi-Annual Progress Report. If the remaining expenditures change materially from what is estimated in 2020, the Company will file another report. The Pawnee-Daniels Park Project is estimated to come in under the originally forecasted budget and was completed as scheduled.

SECTION A

Monthly actual expenses incurred and monthly budgeted expenditures by activity.

The data and graphs included as Exhibit 1 report the actual project/activity expenditures for 2018 and prior year end summary budgets vs. actuals; 2019 monthly budget estimates/forecasts vs. actuals; and remaining budget estimates/forecasts through April 2020.

SECTION B

Any modifications, by month, to subsequent forecasted expenditures for the remainder of the Project.

There were forecast changes made compared to the forecast reported in the fourth Semi-Annual Progress Report (through June 30, 2019) as explained below in Section D. This fifth progress report reports the known changes in the forecasts compared to budget reflected in Exhibit 1.

SECTION C

A cumulative comparison of actual performance of the Project to budget.

See Section A above.

SECTION D

An explanation of any changes to the overall budget for the Project.

The data and graphs included as Exhibit 1 report that the overall Pawnee-Daniels Park 345kV Transmission Project estimate is within approximately 5 percent of the project estimate of \$177,800,000 included in the Company's first application submitted with the Commission in 2014. As of December 31, 2019, the project estimate at completion is \$169,400,000 as a result of scope changes and project cost savings as explained in Section F. The estimate has increased approximately \$7.6 million since the last Semi-Annual Progress Report was filed on July 17, 2019 due to increased project costs for contractor labor (premium time) for construction sequencing changes, foundation and structure field design changes, helicopter construction and additional traffic control for Interstate-25 and Parker Road, overhead line construction required by Colorado Department of Transportation and the Federal Aviation Administration, Company substation construction and equipment failure mitigations, as well as a corresponding increase to the project overheads and contingency explained in more detail below.

SECTION E

An explanation of any changes to the Project schedule.

As reported in the Company's amendment to Section E submitted October 25, 2019, the Company had approved a two month extension to the overall projection schedule for completion of the project. Siting and Land Rights activities (permitting, land and easement acquisitions) have in most part been completed on schedule. However, two construction permit delays for transmission line construction through Douglas County and the City of Aurora contributed to a delayed start and construction resequencing on the Harvest Mile-Daniels Park 345kV line and subsequent construction finish dates. The last land use/route permit application (City of Aurora) was approved and received December 13, 2017. The last two construction permits were due to receive approvals in February 2019, but instead were approved and issued in April and May 2019; respectively, which delayed construction. The Project was completed, commissioned and declared in-service on December 26, 2019.

SECTION F

Efforts to reduce the cost of the Project.

As part of the Public Service Life Cycle Project Process, one requirement is to identify potential project risks and risk mitigation related to both cost and schedules of the project. Specific areas the Company was able to reduce project costs include:

- Completing Siting and Land Rights activities (permitting, land and easement acquisitions) early and as scheduled to not impact any project segment construction dates.

- Ensuring there are ongoing meetings that include Project Management, Project Controls, Engineering, Construction and Transmission Operations to identify and approve (early on) required system outages and ensure all engineering is complete, construction drawings issued, and construction resources secured to avoid delays and subsequent project cost impacts.

- Utilizing best utility and value-added engineering practices, both of the industry and within Public Service; to verify and refine the scope of the project and all segments.

- Holding at a minimum, three levels of constructability meetings to identify any potential project design and field constructability concerns and mitigation.

- Planning the construction sequencing for substations and transmission line segments to take advantage of synergies of system outages on like elements and combining construction resources for project segments in the same substation areas and transmission line corridors.

-Developing and utilizing consulting, contractor and material/equipment alliances for cost effective engineering support, construction support, and material/equipment procurement for early, on time delivery.

Major scope changes and budget cost variances from the originally forecasted amount include:

-Permitting, right-of-way (“ROW”) acquisition and engineering optimization activities resulted in the reduction of final line route mileage for Line 7109 (Harvest Mile-Daniels Park 345) of 10 miles (\$4.9 million).

-Better/more competitive substation and transmission material and construction contractor labor pricing on major project components (\$1.0 million).

- As the project and segments progressed into major construction phases, approximately \$3.5 million of the project’s Risk Reserve (Contingency) was released early and reported as a budget underrun. There is no longer a budget underrun as a result of unused Risk Reserve (Contingency) because it was necessary to use the Risk Reserve (Contingency) to support the reported changes noted in Section D.

-Refined Transmission Planning studies determined that a reactor installation was not required at Pawnee 345kV Substation, as included in the initial estimate (\$2.5 million).

SECTION G

A narrative statement of the overall Project status.

The project includes: construction of approximately 115 miles of double circuit 345kV transmission lines from the Pawnee Substation, northeast of the Denver-metro area, to the Daniels Park Substation, south of the Denver-metro area. The project will include a new Smoky Hill Substation to Daniels Park Substation 345kV transmission line. The

project also includes building a new Harvest Mile 345kV Substation southeast of Denver and expansion at five other substations along the route. The project is required to facilitate generation development, including Public Service's Rush Creek Generation Project. It will also help support the acquisition of other eligible energy generation development in the region, meeting the intent of SB-100 for Energy Resource Zones (ERZ) 1 and 2. Lastly, the project will also improve system reliability.

Construction of the Harvest Mile 345kV Substation is complete, commissioned and was declared in-service on December 20, 2018.

The Smoky Hill 230kV Substation is mostly complete (through phase 7 of 9), and the Smoky Hill 345kV Substation construction is complete, commissioned, and was declared in-service on December 20, 2018. Phases 8 and 9 of the Smoky Hill 230 Substation East and West bus differential work have been extended to April 2020 but do not impact the 345kV system.

The Missile Site 345kV Substation construction is complete, commissioned, and was declared in-service on October 26, 2018. The project went in service on time to support Public Service's Energy Supply backfeed date for the Rush Creek generation facility testing, commissioning, and ultimate commercial operation date of the Rush Creek wind project.

The Pawnee 345kV Substation construction is complete, commissioned, and was declared in-service on November 19, 2019.

The Daniels Park 345kV Substation construction is complete, commissioned, and was declared in-service on December 26, 2019.

Construction is complete on all 12 transmission line segments. 7109 (Missile Site-Byers Transition Site 345) was completed June 1, 2018. 5467 (Pawnee-Smoky Hill 230) was completed January 16, 2018. 5165 (Brick Center-Smoky Hill 230) and 7111 Phase 1 (Pawnee-Missile Site 345) was completed May 15, 2018. 5163 (Sulphur-Smoky Hill

230) was completed May 6, 2018. 7081 (Missile Site-Smoky Hill 345) was completed October 19, 2018. 5179 (Smoky Hill-Harvest Mile 230) and 7087 (Smoky Hill-Harvest Mile 345) was completed December 10, 2018. 5113 (Missile Site-Daniels Park 230) was completed December 12, 2018. 7111 Phase 2 and 7091 (Pawnee-Missile Site 345) was completed November 19, 2019. 7153 (Harvest Mile-Daniels Park 345) was completed December 23, 2019. 7109 (Missile Site-Daniels Park 345) was completed December 26, 2019