energizeEASTSIDE

Memo - DRAFT

2022/2024 Energize Eastside Schedule and Cost Change Summary

April 11, 2024

Schedule

In 2019, the project schedule showed construction starting at the Richards Creek substation in 2020 and the south half transmission line work beginning in 2021, with the north half transmission line construction starting and being completed in 2022. Due to continued extraordinary permitting challenges and delays, construction of Energize Eastside was revised to start in 2021 within the City of Renton (a portion of the south half of the project). The Renton permits were issued later than expected and the south Bellevue permits were still behind what was anticipated. Not only did this delay the start of construction, but limited the amount of work that could be accomplished in 2021 due to outage constraints and wet weather construction limitations. This resulted in south Bellevue segment construction being pushed into 2022.

It was also anticipated that Newcastle permits would be issued in 2022 since the city had develop their draft Conditional Use Permit (CUP) staff report by December 2020. However, due to additional delays at the City of Newcastle, the CUP was not issued until April 2022 and the subsequent construction permits were not issued until June 2023. Although the Renton and south Bellevue portions of the project had been constructed by the end of 2022, the Newcastle section could not be completed until 2023. Delays in issuance of the Bellevue north CUP, which took a year longer to process than the south half of the project, pushed construction of the north half of the transmission lines out until 2024. Additionally supply chain issues related to conductor and other components could have impacted construction of the north half transmission lines. However, based on the timing of permit approvals, the supply chain delays were not realized.

Budget

2023

For 2023, the lifetime budget for Energize Eastside (Richards Creek substation and transmission lines) was $297,321,631. This included a $22,276,275 increases in 2023 resulting from some of the following factors:

- Additional pipeline protection requirements were implemented by Olympic Pipeline Company. These included more intensive corridor access analysis, double matting in most collocation areas, and adding a dedicated Damage Prevention Specialists. The double matting also includes additional civil work that could not be anticipated.
- Extended construction into 2025 due to delays in permitting – North Bellevue and Rose Hill substation plus the Willows Mitigation site.
- Limited outage windows.
- Construction delays due to supply chain issues.
- Additional land liaison support needed to interact with property owners.
- Note: The above are related to the transmission lines and are documented in the change orders.

- Permitting and weather delays, contaminated soil removal, and site dewatering at Richards Creek substation.
- Delays in permitting the Newcastle segment have pushed construction from 2022 to 2023 for that segment.
- Delays in permitting and conductor availability have pushed the construction of the north Bellevue segment out from 2023 to 2024.

2024

A revised 2024 Energize Eastside transmission line forecast was developed based on the actual costs realized during south half transmission line construction. The vast majority of these cost increases are associated with permit delays and compliance with permit conditions, as well as increased labor and materials costs. Additional change orders and associated costs have been realized and/or are anticipated above the approved 2024 budget of $50,837,039. These additional costs are expected to total $69,348,456, bringing the 2024 budget to $120,185,495.

The following are descriptions of the additional costs necessary to complete the 2024 construction:

- The costs for the north half tree removal were not included in the original bid as the details of their removal and associated permit conditions were not known at that time.
- Since the transmission line construction has taken two years longer than planned, additional funds are being requested that cover project management time, as well as the land liaisons. Additionally, due to the shortage of construction laydown yards in the project area, additional costs will be incurred to store materials and equipment. The shortage of construction yards is primarily a result of the Sound Transit light rail construction and general growth on the eastside. Additionally, the existing yards are not large enough, so multiple yards are required.
- A fourth year of construction has resulted in additional mobilization fees from Wilson Construction's and their subcontractors.
- This includes costs increases associated with the extension of the construction into a fourth year. Both labor rates and material costs have increased since 2021.
- Matting for the north half of the project is expected to be at about the same level required for the south half. Based on those extensive requirements, Wilson is estimating that the matting may be as much as $18MM. Once we receive the final access approvals from BP/OPL, we will be able to refine this estimate. We have received the Redmond approvals from BP/OPL and the Bellevue approvals are expected by the end of April.
- Based on the geotechnical review of the final design, this includes the estimated costs to extend approximately eight foundations by around 5 feet in depth. Costs include the design, additional materials, and labor. Firm costs are expected by the end of March.
- <u>Construction Related Changes.</u>
    - At pole 0/10 in Redmond, the pole foundation type changed to accommodate construction area limitations and exiting physical conflicts, including OPL access restrictions in a wetland. At this location, it was determined that a micro-pile approach would allow for better equipment access into the area and pole stability due to the wet soils. Additional casings are expected at some of the pole locations based on review from BP/OPL.

  - There are eight locations where the distribution lines are in potential conflict with the new 230 kV lines. These need to be relocated or adjusted. It is expected that a couple of locations will require undergrounding via horizontal boring. Since Wilson Construction is named on the permits and will need to coordinate with the high line crews, the distribution relocation work that has not already been started by Potelco, will be performed by Wilson.
  - Upon completion of the transmission lines, but prior to energization at the higher 230 kV voltage, final vegetation clearances will need to be assessed and additional tree trimming may be required.
  - After energization, the corridor will be flown using LiDAR/UV surveys to ensure proper clearance and assess the overall assembly (minimal corona emissions).
  - Additional security at the three storage yards and along the corridor is anticipated.
  - In order to meet PSE standard pole resistance and reduce potential interaction with the existing petroleum pipelines, it may be necessary to install ground wells. This would be above and beyond the originally bid that included standard grounding rods. This can only be determined following pole installation.
- Potential additional costs for the location of the construction yards that may result in construction delays.
- In the Bridle Trails area, there are a number of horses that need to be kept safe during certain construction activities. One of the wire pulling sites is at the Acura automotive dealership in Bellevue, requiring temporary relocation and storage of their vehicles (~80 to 100). It is estimated that more than fifty gates/fences will need to be removed and replaced along the corridor. Approximately five septic systems in the Bridle Trails area may be in conflict and require additional protection during construction.

2025

The 2025 approved budget was $3,446,416, which did not include the funds necessary to complete the transmission line corridor restoration or the Willows Creek mitigation work. To complete all of the necessary closeout work associated with transmission line construction, an additional $11,896,495 is needed. This will bring the overall lifetime budget for the transmission lines to $373,733,309.