



1. Adopt a Resolution (Attachment 1) recommending that both Potomac Avenue and the Railroad Corridor Alternatives be designated as “least objectionable alternatives” for the 230kV transmission line; and
2. Authorize the City Manager to enter Memorandums of Agreement (MOAs) with Dominion outlining the process and terms related to Dominion’s proposed purchase of certain real property rights related to the transmission line consistent with the terms of the agreements (Attachment 5) and take all actions necessary to implement the foregoing.

**BACKGROUND:** Since mid-2014, the City has been working with Dominion Energy on the utility’s proposal for a new 230-kilovolt underground transmission line from the existing Glebe Substation in Arlington County to Pepco’s existing Potomac River Substation in north Old Town. Dominion has cited multiple electric reliability studies that have determined by summer 2020 the existing transmission facilities in the City and Arlington County will no longer adequately meet demand and mandatory North American Electric Reliability Corporation (NERC) reliability criteria. Dominion initially proposed nine potential alignments for a transmission line and requested that the City identify an alternative that it could support as part of Dominion’s planned submission to the State Corporation Commission (SCC), which is the state entity charged with approving transmission line proposals.

After extensive public outreach and considering earlier recommendations of the UTLWG, the City in May 2016 adopted a resolution opposing any overhead transmission lines and identifying a route that included the Potomac Yard Railroad Corridor as a “least objectionable alternative” for the transmission line. Dominion then worked with CSX for more than a year to meet the railroad’s technical requirements. However, in December 2017, Dominion returned to the City noting that, due to requests by CSX, costs for the railroad corridor alternative had increased by \$100 million to \$420 million which may make this option unapprovable by the SCC. Dominion requested the City reconsider an alignment on Potomac Avenue. To do so, the City reconvened the UTLWG to contemplate Dominion’s request and recommend next steps.

**DISCUSSION:** The UTLWG has now completed its deliberations and, by a 6-2 vote (with two members absent), recommended the City Council reconsider Potomac Avenue as a location for the underground line. The UTLWG’s recommendation letter is included as Attachment 2. The group held three meetings which were open to the public from January through March 2018 to evaluate the Dominion proposal. In the meetings, Dominion provided information about the potential impacts, costs and benefits to residents and businesses from this alignment. The group understood it could reconsider a Potomac Avenue alignment or reject it entirely. (It is important to note that the UTLWG in 2016 recommended Potomac Avenue as a “least objectionable alternative” until the Council removed it as an option.)

The primary initial concerns of the UTLWG included: (1) loss of trees, (2) impacts to open space, (3) electric and magnetic fields (EMF) and (4) construction impacts including noise, nighttime work and traffic. Staff worked with Dominion to develop a question/response format on each concern. The information is catalogued on the City project website and contributed to the understanding of how a Potomac Avenue alignment, if approved, would progress. Dominion’s proposal for an alignment under Potomac Avenue would use a variable width right-of-way that removes fewer trees with minimal long-term impacts to existing utilities and City open space. There are two types of fields associated with power lines: electric and magnetic fields (EMF). The underground installation of transmission lines dramatically reduces electric fields to be virtually imperceptible. Magnetic fields are also reduced with underground installations, but not eliminated. While some community members have expressed concerns about magnetic field exposure from an underground transmission lines, there is no conclusive evidence that EMF affects health.

If Council reconsiders Potomac Avenue as a “least objectionable alternative,” Dominion has indicated it will become its preferred alternative for an expected July application to the SCC. Should Council reject Potomac

Avenue, Dominion will proceed with the Railroad Corridor as its primary and an option to reconductor an existing 230kV line under Route 1 (Rebuild Alternative). Dominion staff believe the SCC would likely reject the Railroad Corridor due to the increased costs associated with recent CSX demands. In this event, the Rebuild Alternative would be more likely to proceed. Dominion would then be required to seek a Certificate of Public Necessity from the SCC under the terms of the City's franchise agreement. In preparation for the SCC filing, the City would execute a Memorandum of Understanding (MOU) for the Potomac Avenue Alternative and the Railroad Corridor Alternative (Attachment 5) with Dominion which outlines the process and terms related to Dominion's proposed purchase of certain real property rights related to each of those Alternatives. The Rebuild Alternative needs no MOU as Dominion already has the legal authority to utilize the Rebuild Alternative right-of-way.

In summary, if Council approves the resolution and MOAs, Dominion will submit three alternatives to the SCC:

- 1. Potomac Avenue Alternative:** A proposed new underground line connecting the substations with an estimated total construction cost of \$330 million (see Attachment 3). Dominion's preferred alternative would require an easement from the City for \$43.3 million in compensation. It would be constructed using open trench methodology with impacts in North Old Town, Old Town Greens, Potomac Yard and at Four Mile Run. The expected construction duration would be approximately three years. However, impacts to Potomac Avenue would be 9 months to one year overall with shorter segment impacts. It would include a proposal to relocate the North Potomac Yard substation and underground overhead lines at Four Mile Run.
- 2. Railroad Corridor Alternative:** A proposed new underground line connecting the substations with an expected total construction cost of \$420 million (Attachment 4). The costs are higher due to legal and technical requirements by CSX, including that Dominion use microtunnel construction. This alternative would result in fewer impacts to City right-of-way (for which \$14.6 million in compensation would be paid) but would include North Old Town, Old Town Greens and Four Mile Run. The expected construction duration would also be three years and would also include a proposal to relocate Dominion's North Potomac Yard substation and underground overhead lines at Four Mile Run.
- 3. Rebuild Alternative:** Reconductoring of existing transmission facilities in Fairfax County plus an existing 230kV line in Alexandria that runs from the Carlyle Substation to the North Potomac Yard Substation (Attachment 5). This is the only other underground 230kV line in Alexandria (some above-ground facilities exist along interstates) and has been in place for more than 30 years. Rebuilding this line would cost an estimated \$290 million and would not include compensation to the City since Dominion can perform this work pursuant to its franchise agreement. This alternative would involve extended construction impacts to multiple neighborhoods and some open space from Carlyle, King Street Metro, George Washington Middle School, south Potomac Yard, Del Ray and the west side of Potomac Yard along Route 1. The expected construction duration would be 3 to 4 years, including the need to perform double work in the construction area since only one circuit can be replaced at a time. Dominion notes that the condition of the existing 30 to 40-year-old conduit containing the 230kV lines is unknown and may require more expansive excavation and construction impacts than projected. This alternative also includes a proposal to relocate Dominion's North Potomac Yard substation and underground the overhead lines at Four Mile Run. Finally, it is important to note that while this solution resolves the current NERC criteria violations, Dominion has stated this solution would not obviate the potential need for a future new line connection to the Pepco system at the Potomac River substation.

**FISCAL IMPACT:** If Dominion proceeds with either the Railroad Corridor or Potomac Avenue, it will be

required to compensate the City at fair market value for impacts to City-owned right-of-way. Dominion is seeking a perpetual easement for its proposed underground transmission line. The City would receive no compensation for the Rebuild Alternative.

The attached MOAs (Attachment 6) note the compensation to the City: \$14.6 million for impacts to City right-of-way associated with the Railroad Corridor alternative or \$43.3 million for the Potomac Avenue Alternative. Staff notes the compensation offers would be over-and-above the estimated \$22 million to relocate the North Potomac Yard substation and bury overhead lines at Four Mile Run, which Dominion has indicated would be an element of any project it submits to the SCC. Other obligations in the agreements between Dominion and the City would include:

- Stipulation the Potomac Yard Metrorail Station would receive priority should construction schedules of the two projects overlap;
- Requirement that Dominion coordinate with the City and North Potomac Yard developers to ensure the 230kV line does not delay or impact proposed infrastructure;
- Stipulation that Dominion install separate conduit for a future City fiber optic line (which is subject to CSX approval for the Railroad Corridor);
- Replacement in-kind of any damaged park/trail property, including 1:1 replacement of trees;
- Language providing Dominion expanded access rights for maintenance of the 230kV line; and
- Agreement that compensation would be provided upon SCC approval, expected in late 2019

Although I have proposed that Council consider a repeal of the Tier II Tax District contingent on receiving at least \$14.6 million in compensation from Dominion for either the Potomac Avenue Alternative or the Railroad Corridor Alternative, Council's consideration of the attached Resolution and MOAs do not obligate the City now to determine at this time how the \$28.7 million balance of funds from the Potomac Avenue Alternative would be allocated. After the SCC decision on which alternative to approve, if the Potomac Avenue alternative is selected, Council may wish to create a community process to determine how to allocate the \$28.7 million balance of the related right-of-way funds. Since these are one-time monies, applying them towards public capital improvements would be appropriate.

If the SCC approves the Potomac Avenue or the Railroad Corridor Alternatives, the City will need to grant Dominion a perpetual easement. This will require a determination by the City's Planning Commission that the line complies with section 9.06 of the City Charter and subsequent approval by the City Council. Dominion would be obligated, at that time, to compensate the City with the amounts previously noted. Staff expects the SCC process and subsequent 9.06 determination to take at least 12 to 18 months until finalized. Council could, at this point, decide how to allocate any balance of the compensation not previously applied to the Tier II Tax District.

**ATTACHMENTS:**

- Attachment 1: Resolution
- Attachment 2: Working Group Recommendation
- Attachment 3: Potomac Avenue Alternative
- Attachment 4: Railroad Corridor Alternative
- Attachment 5: Rebuild Alternative

Attachment 6: Memorandums of Agreement  
Attachment 7: Presentation

**STAFF:**

Emily A. Baker, P.E., Deputy City Manager  
Yon Lambert, Director, Transportation and Environmental Services (T&ES)  
Khattab Shammout, Deputy Director, T&ES  
Jeff Farner, Deputy Director, Planning & Zoning  
Karen Snow, Deputy City Attorney  
Bill Eger, Energy Manager, General Services  
Jack Browand, Division Chief, Recreation, Parks & Cultural Activities (RPCA)  
Lisa Jaatinen, Civil Engineer IV, T&ES  
Dana Wedeles, Principal Planner, RPCA