

Belews Creek – Commentary on De-Selected Options

1-8-19

Several options were originally part of the analysis process that began in 2015 but were not carried forward as the options were more fully evaluated. They were included by reference in the Options Analysis Summary Report provided to NC DEQ on 11/15/18. Duke Energy was requested to provide additional context and information regarding these de-selected options and why they were dropped from further consideration.

Option 2 – Hybrid Commentary related to Option 2 is included in the Options Analysis summary document provided on 11/15/18, but additional information is as follows:
The original Hybrid Option 2 involved removal of all ash across the northern (deepest) portion of the basin footprint. The resulting elevation differential from top of the ash stack to the valley floor (ash basin bottom) was of such height that slope stability required a more substantial feature to ensure stability of that transition slope. Option 6 leaves the deposited ash in the original valley topography in the area to the north of the transition slope, enabling a less complex stability feature to be utilized. In Option 6, the ash downstream of this is then closed with the engineered cover system. The cost of Option 2 was re-estimated in July of 2018 to be \$147,000,000 and duration was estimated to be slightly longer than Option 6. Option 2 was removed from continued consideration due to the additional transition complexity as compared to option 6.

Option 3 – New Landfill within the Basin Footprint Due to the time to construct this option it was removed from further consideration. Estimates developed showed the duration to be 17 years, making it well beyond the CAMA deadline. Its cost was estimated in 2018 as \$485,000,000, driven upward by the required double-handling of over 2,000,000 cy of ash, which would be required to clear an area for the landfill to be developed.

Option 5 – Closure by Removal to Offsite Landfill Originally the basis for inclusion of the option with off-site disposal was to avoid any impacts to current operation by presuming the existing landfill space would be utilized. Following discussions with DEQ in mid-2018, the use of a new on-site landfill was further evaluated. Once it was determined that there was space available outside of the basin footprint for a full on-site excavation option, the off-site disposal Option 5 was removed from further consideration due to the impacts to the local community from moving ash on the public roads to a yet-to-be-identified offsite landfill location. In 2016, the cost of Option 5 was estimated to be over \$900,000,000. This cost was not reviewed nor updated for 2018.