City of Jonesboro – CWL Transmission Determination

Planning Sub-Committee

November 15, 2022

Purpose & Key Takeaways

Purpose:

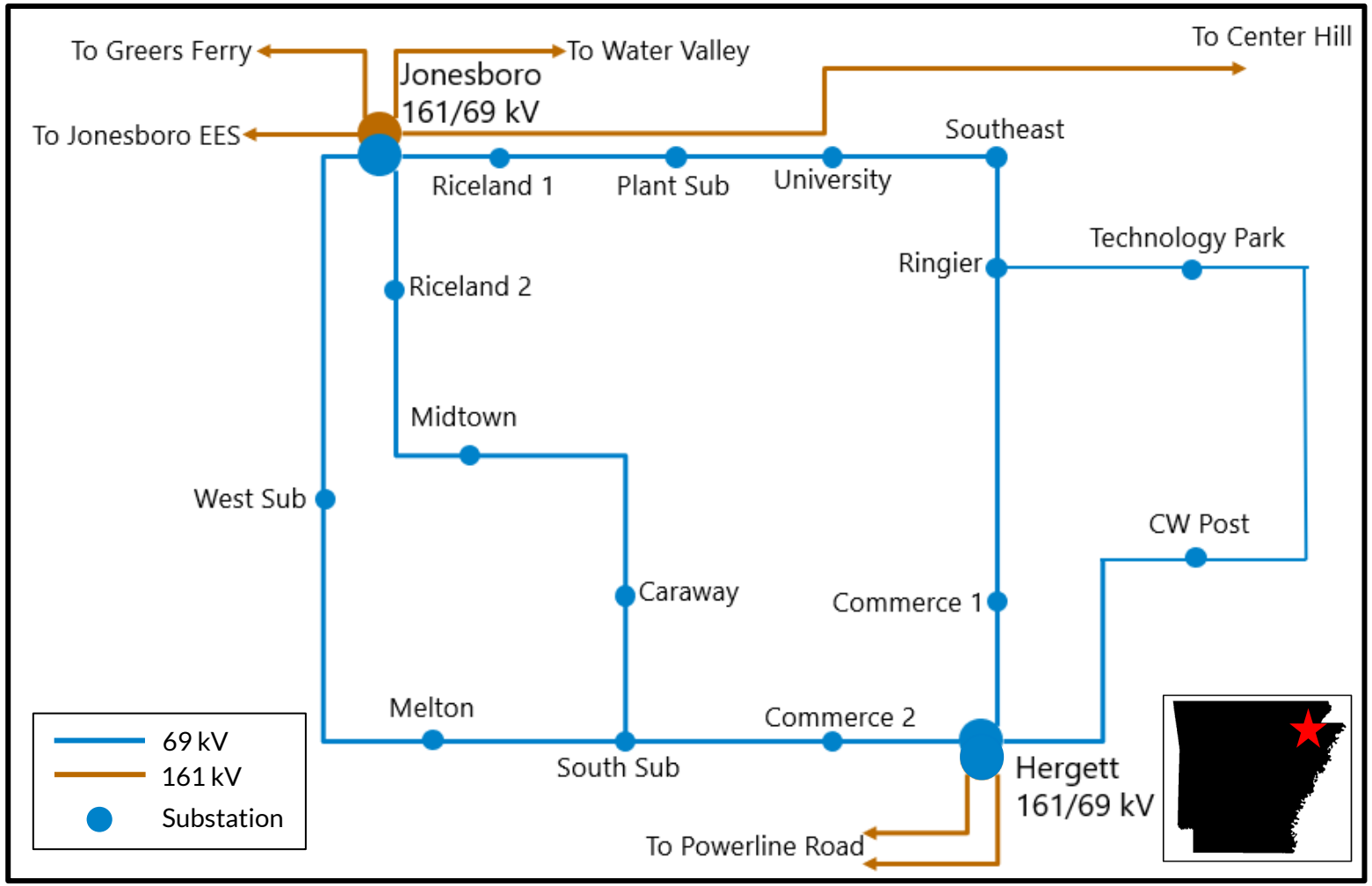
Review the 7-factor transmission determination test for the CWL system

Key Takeaways:

- The Jonesboro 69kV system has been determined to be transmission after performing the 7-factor test
- Stakeholder feedback has been requested on this determination

City of Jonesboro's (CWL) system in Northern Arkansas

- Jonesboro system
  - 2x 161/69 kV Sub
    - Low side Jonesboro and all Hergett
    - Six 161/69kV Transformers
  - 6x 69 kV Line
    - Two Jonesboro to South Sub lines
    - South sub to Hergett
    - Jonesboro to Ringier
    - Two Ringier to Hergett lines
- Surrounding system
  - Interconnected between Entergy and SPA 161kV Transmission



Transmission Determination Background

- MISO strives to apply the Seven Factor Test in a manner that is consistent and comparable to a test that would be performed by FERC
- MISO staff will review relevant system data and determine whether facilities are distribution or Transmission based on the totality of the circumstances based on the FERC Seven Factor Test
- MISO will consider how facilities are utilized as opposed to how the facilities could be utilized. The following descriptions of each factor should be viewed as general guidance rather than being considered all-inclusive as it is FERC precedence that should ultimately be followed

Jonesboro CWL 69 kV Facilities are determined to be Transmission based on the 7 Factor Test

Factor from FERC Order No. 888	MISO determination	Transmission or Distribution
1. Local distribution facilities are normally in close proximity to retail customers	The Jonesboro system under determination physically is primarily within the city limits of Jonesboro, with the longest segment of line being ~12 miles. Electrically the 69kV lines feed taps which step down to a lower kV which feeds load within the city of Jonesboro	Supports Distribution
2. Local distribution facilities are primarily radial in character	The Lines are not Radial. All lines form a loop between existing transmission, and none terminate at a local load serving only 69kV substation. All lines connect to a 161kV sub and another looped 69kV substation	Supports Transmission
3. Power flows into local distribution systems; it rarely, if ever, flows out	Using meter data, from April 2018 to April 2022, there were 11 hours where power was flowing into Hergett 161kV, through the Jonesboro 69kV, and back out onto the 161kV at Jonesboro. Additionally, there were 4 hours where power was flowing into Jonesboro 161kV, through Jonesboro 69kV, and back out onto the 161kV at Hergett.	Supports Distribution

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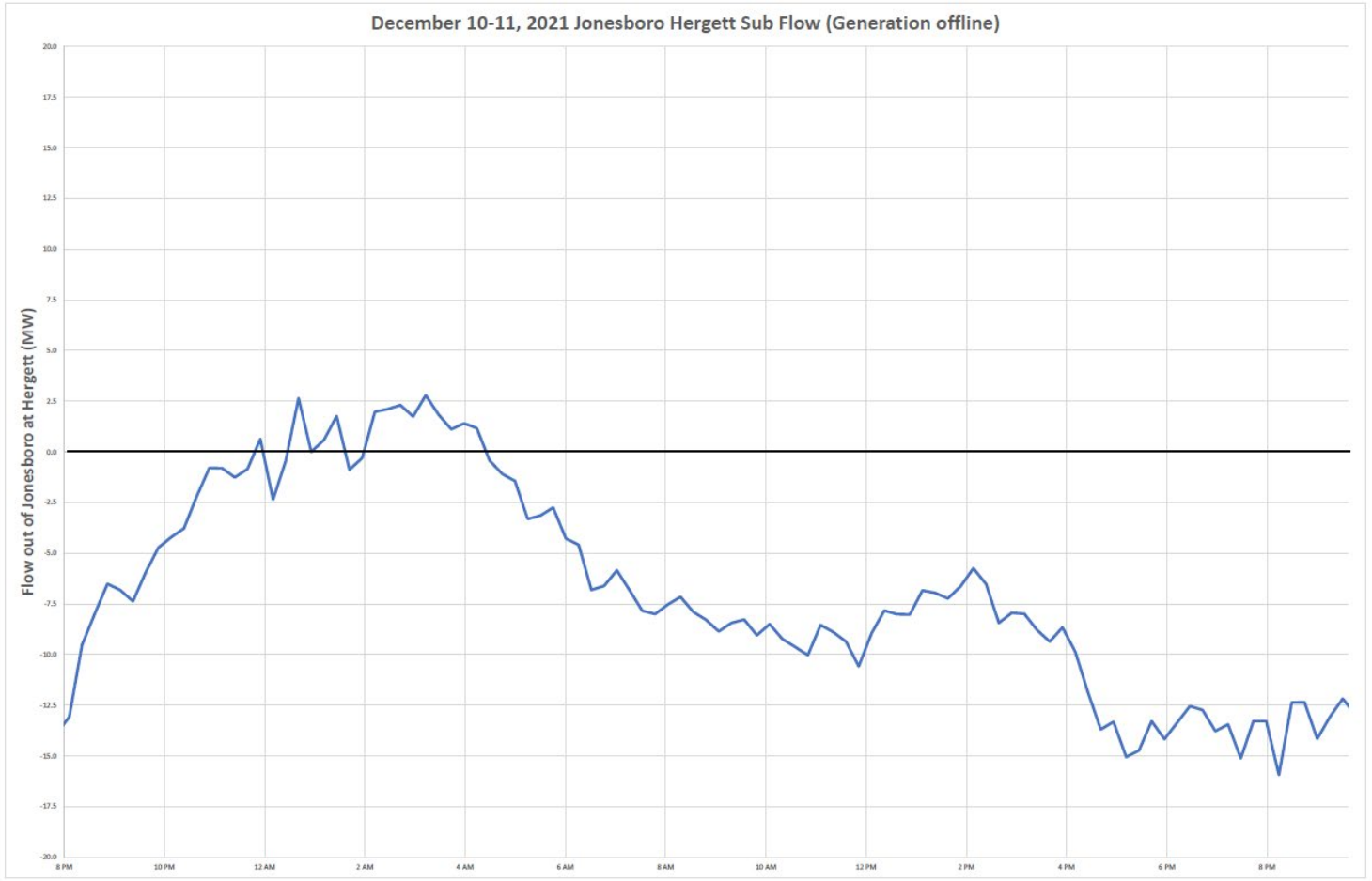
Factor from FERC Order No. 888	MISO determination	Transmission or Distribution
4. When power enters a local distribution system, it is not re-consigned or transported on to some other market.	On March 11, 2022, power was entering Hergett, flowing through the 69kV and exiting the CWL system back onto the 161kV at Jonesboro. Jonesboro Generation was offline, so this flow relates directly to power entering the CWL system to be transported back to existing transmission at Jonesboro. A similar event occurred on December 10-11, 2021 in the opposite direction.	Supports Transmission
5. Power entering a local distribution system is consumed in a comparatively restricted geographical area.	Based upon real time data, the CWL system has shown power entering at Hergett, flowing through the CWL system, and exiting the Jonesboro 161kV substation to be consumed elsewhere on the existing transmission system. The same has occurred in the opposite direction.	Supports Transmission
6. Meters are based at the transmission/local distribution interface to measure flows into the local distribution system.	Meters are on the high side of each of the 161/69kV transformers. These are bidirectional meters designed to be able to measure the flow in and out of the Jonesboro system	Supports Transmission
7. Local distribution systems will be of reduced voltage.	FERC has previously found that 69kV facilities were not considered a reduced voltage class	Supports Transmission

Stakeholder Feedback Request

- MISO is requesting feedback on the results of this transmission determination by **November 29, 2022**
- Feedback requests and responses are managed through the Feedback Tool on the MISO website: https://www.misoenergy.org/stakeholder-engagement/stakeholder-feedback/

Appendix

On December 10-11, CWL experienced flow through their system from Jonesboro to Hergett 161kV



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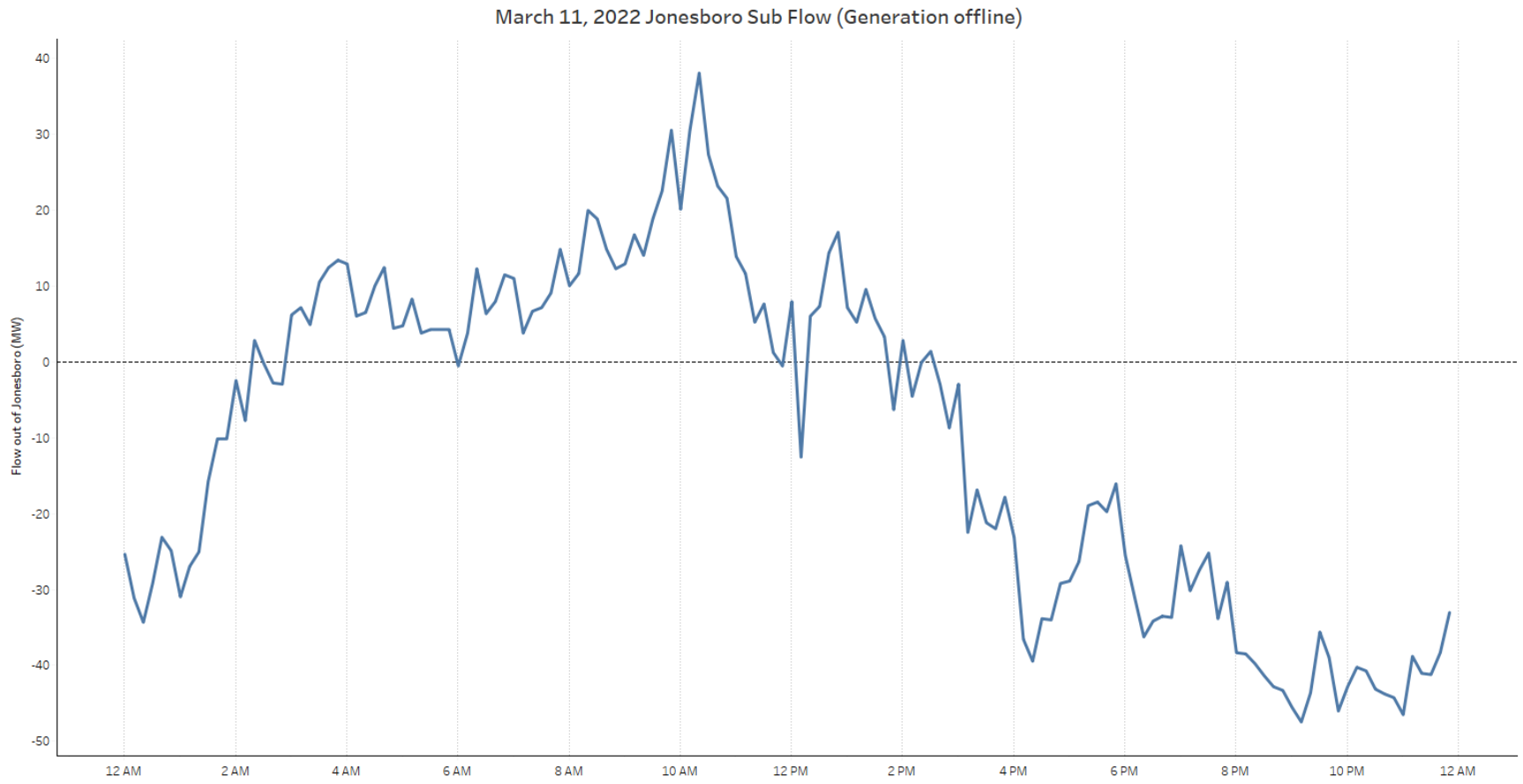

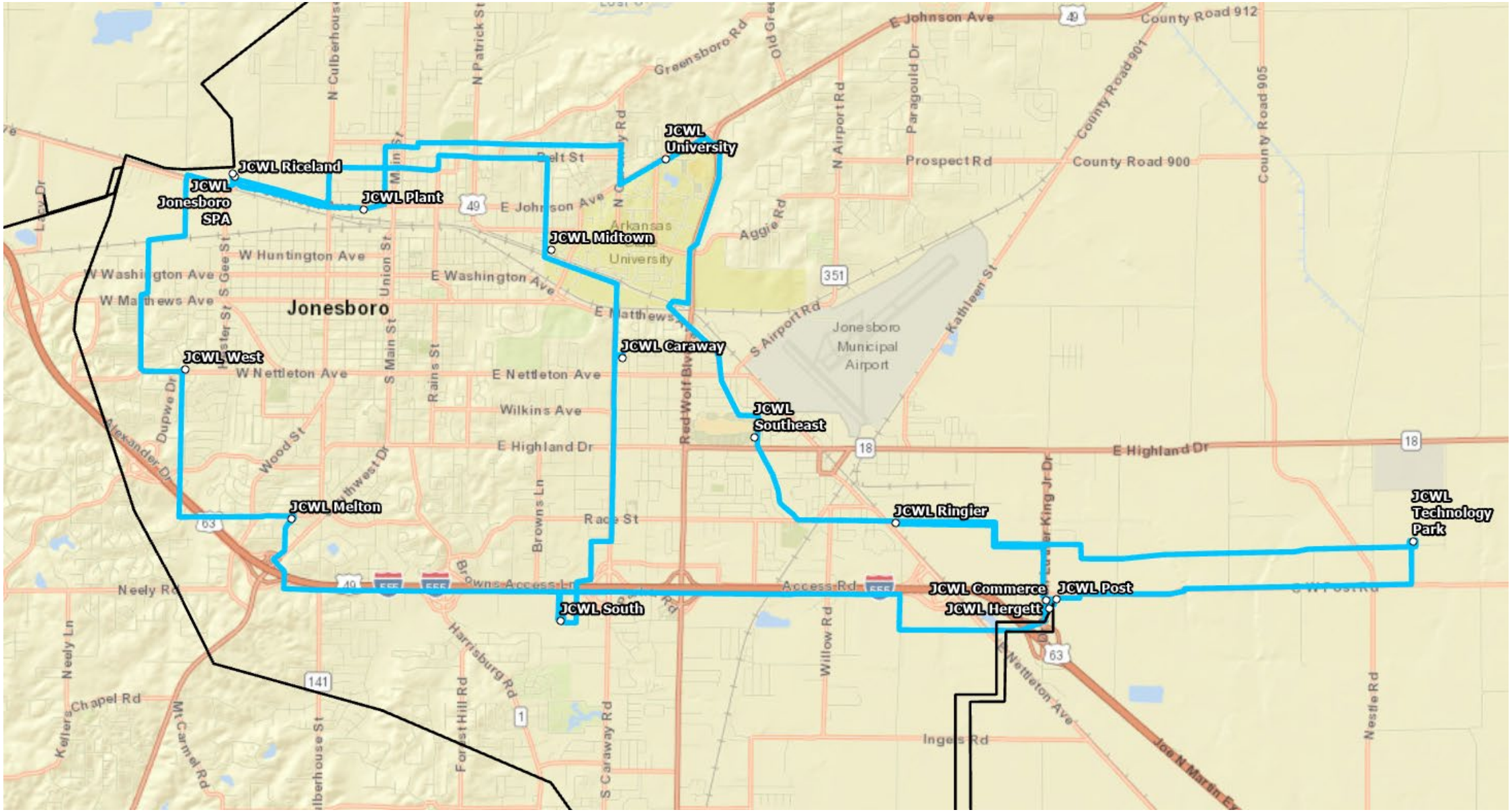

Blue lines are the 69kV lines under determination for Jonesboro CWL