

AEP 10-06-05

From: jccookman@aep.com
Sent: Thursday, October 06, 2005 4:33 PM
To: Randy Wilson; CO-Michael Weeks
Cc: jemomme@aep.com
Subject: Re: Fw: Portsmouth Bypass

Attachments: Portsmouth relocation.pdf

Randy

I have received and reviewed the subject project plans. It appears the proposed centerline crosses AEP transmission facilities at 7 different locations. Attached you will find PDF file showing the proposed centerline superimposed on AEP's GIS system map. (See attached file: Portsmouth relocation.pdf)

Starting at the north end:

The first crossing is the Lucasville Sargents 138kv line. This is a single circuit 138kv line on multipole wood structures. At the crossing point, the plans show in excess of 96' of fill at the crossing station. This impacts a total of 4 structures.

The second crossing of AEP facilities is the Baker Don Marquis 765kv line. At the crossing location the road centerline is approximately 70' below the existing groundline. The crossing structures are located outside the limits of excavation.

The third crossing is the Oertels Corner Beaver 69kv line. Again at the crossing location the centerline is below the existing groundline. The crossing structures are located outside the limits of excavation.

The fourth crossing is the Baker Don Marquis 765kv line between structures 73 and 74. At the crossing location, plans indicate approximately 50' of fill. According to record information, the clearance for the existing line above the proposed roadway would be reduced to 65'. This is a definite concern. Per AEP TLES10 guidelines, Electrostatic Clearance required for 765kv above 2 and 3 land public roads is 66'. This clearance is based on a vehicle height of 14'.

This crossing will need a complete on site analysis. My concern is the large dump trucks used in this types of fill operation and the possibility of a truck passing under the line with the bed in the "dump position".

The fifth crossing is the Sporn Portsmouth 138kv double circuit. Again at the crossing location the centerline is below the existing groundline. The crossing structures are located outside the limits of excavation.

The sixth crossing is the South Point Portsmouth 138kv double circuit. Structure 138 is a steel lattice angle structure and is located very near centerline station 152+25. At this point the elevation of the proposed centerline is approximately 90' below the base of the structure. The width of the cut according to the cross section is approximately 400'. Two double circuit angle structures will be required. These structures will be placed on the existing AEP centerline just outside of proposed Highway Right of Way.

The seventh and final crossing is the Ironton Portsmouth 69kv line. This is a single circuit line on single wood poles. Both ends of the crossing needs to be raised and LD (light duty) steel poles will be used. Additional work will be required on adjoining structures to prevent uplift conditions.

In summary, AEP's major concern is the Baker Don Marquis 765kv line and the reduction of clearance at highway station 207+50. I do not have the electronic file so my measurements were based on scaled distances from the plans you

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provided. This area needs detailed study to insure proper clearance above the entire width of the road. The cost and time constraints for even a minor adjustment to a 765kV structure are enormous. Please consider AEP's request for additional study and centerline adjustment at this station if required.

If you have questions, comments, or would like to set up a meeting to discuss this issue, please do not hesitate to contact Jeff Momme, TLPE Manager, (614.552.1180) or myself at the numbers shown below.

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