



RIGID DISCHARGE ELECTRODE RETROFIT FOR A MAJOR MISSOURI UTILITY PECO CASE HISTORY



Plant Data:

Company: Major Missouri Utility
Unit: 621 MW Unit, 6 Individual ESP's
O.E.M.: Lodge – Cottrell

Scope of Work:

The project involved designing, furnishing and installing a "tube & spike" rigid discharge electrode system to replace the first two fields of a mast electrode system. Existing upper high voltage frames were reused by designing adapter bars to hang the rigid discharge electrodes. The unique portion of this project was that since the collecting plates were not replaced, the rigid discharge electrodes had to be spliced as they were 42' in length. This requirement necessitated a PECO custom designed high voltage system. The electrodes were shipped in two 21' sections and assembled within the precipitator.

Performance Guarantees:

- 99.20% removal of all particulate entering the precipitator.
- 15% Opacity

Current Operating Conditions:

- < 4% Opacity Burning PRB Coal without SO₂ Injection.

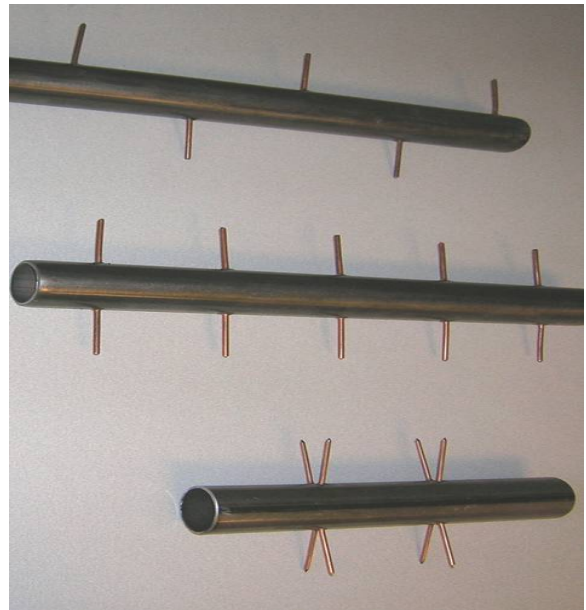
Scope of Supply:

- 3,456 PECO Rigid Discharge Electrodes
- 846 Upper High Voltage Adapter Bars
- 24 Lower High Voltage Frames
- PECO Turnkey Project Management Services

PECO delivered 3456 "tube & spike" rigid discharge electrodes to U.E., along with 846 upper high voltage adapter bars and 24 lower high voltage frames to replace the existing mast electrode system. Of the total number of electrodes, 1296 were of the 3" opposing stud design used in the first field, and 2160 were of the 6" staggered stud design used in the second field. This project was turnkey, with PECO performing both the engineering and construction portions of the job during an 8 week outage.

Additional work performed:

- Repaired Hoppers
- Replaced Side Access Doors
- Replaced High Voltage Support Springs



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