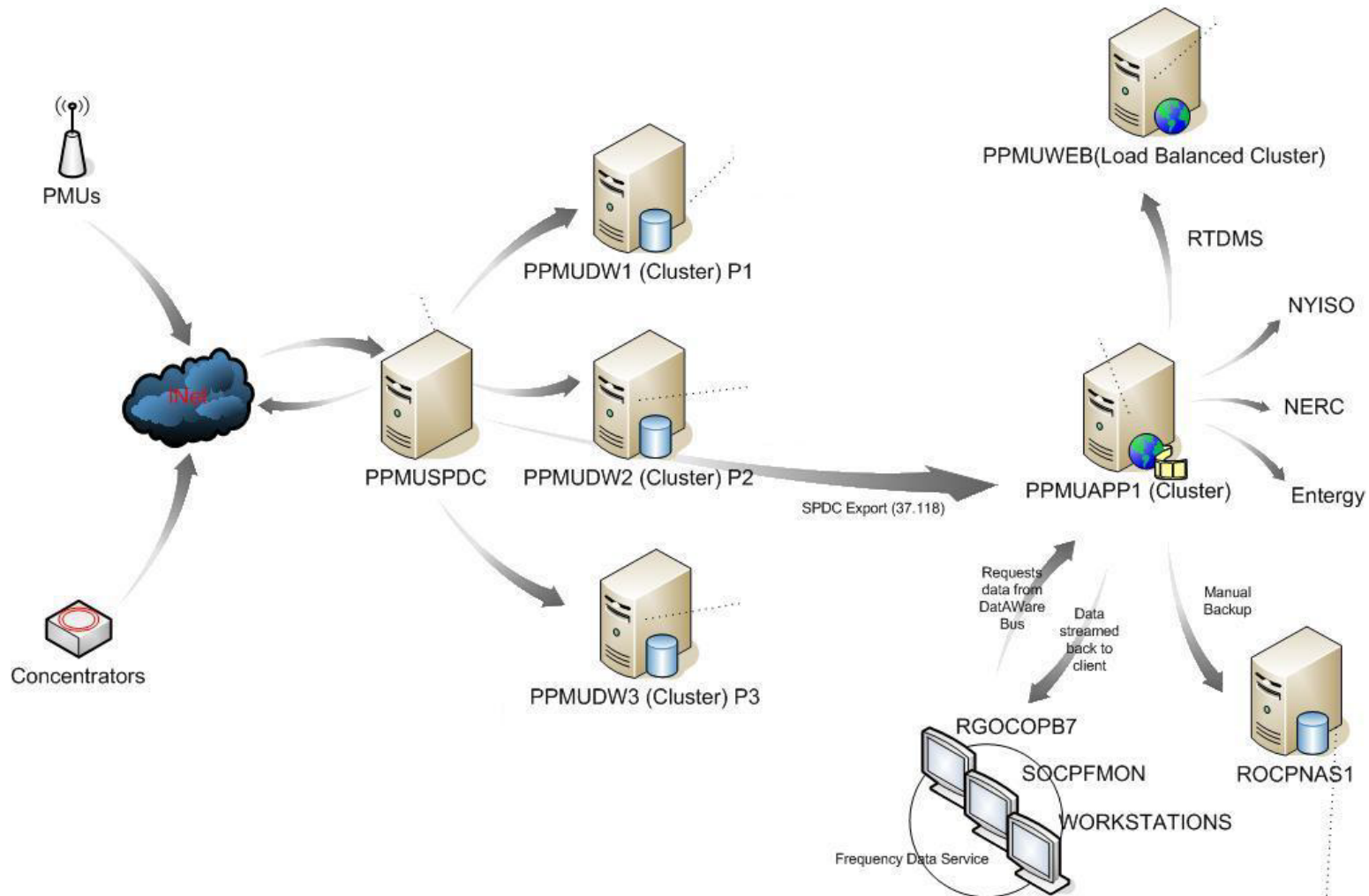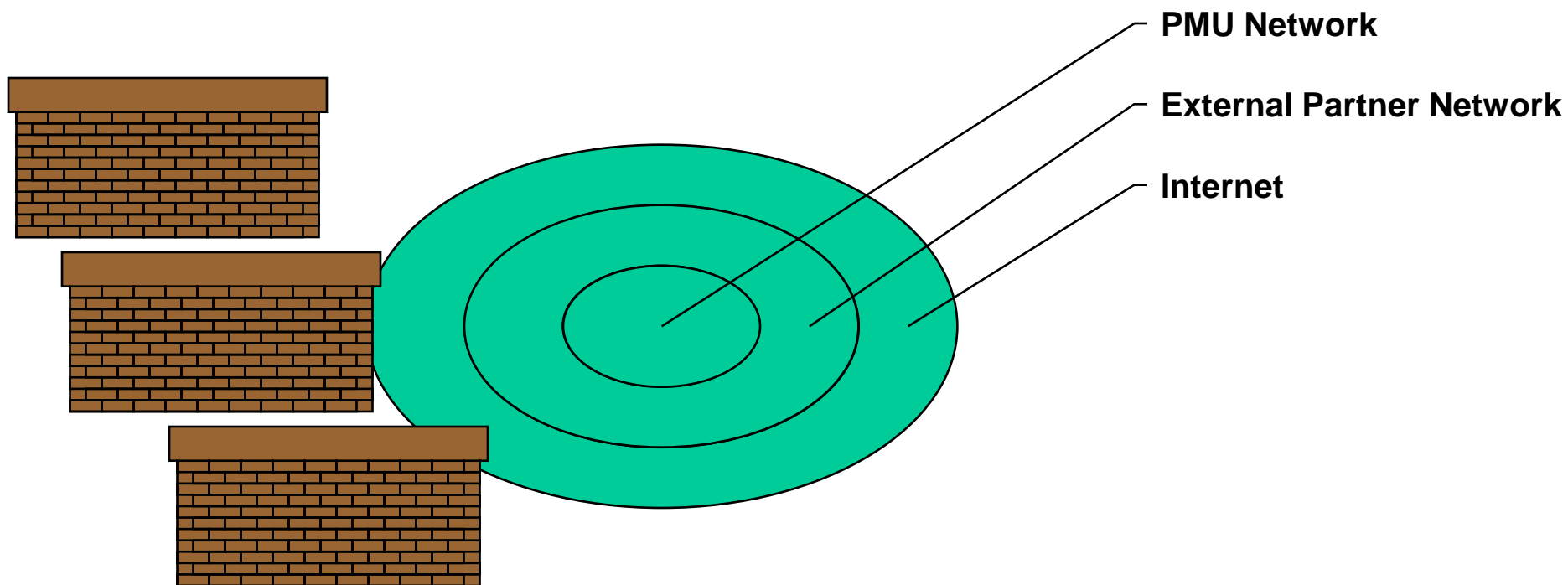# Cyber Security for Synchrophasor Implementation for TVA

NASPI

Working Group Meeting

Panel Session

February 4th, 2009
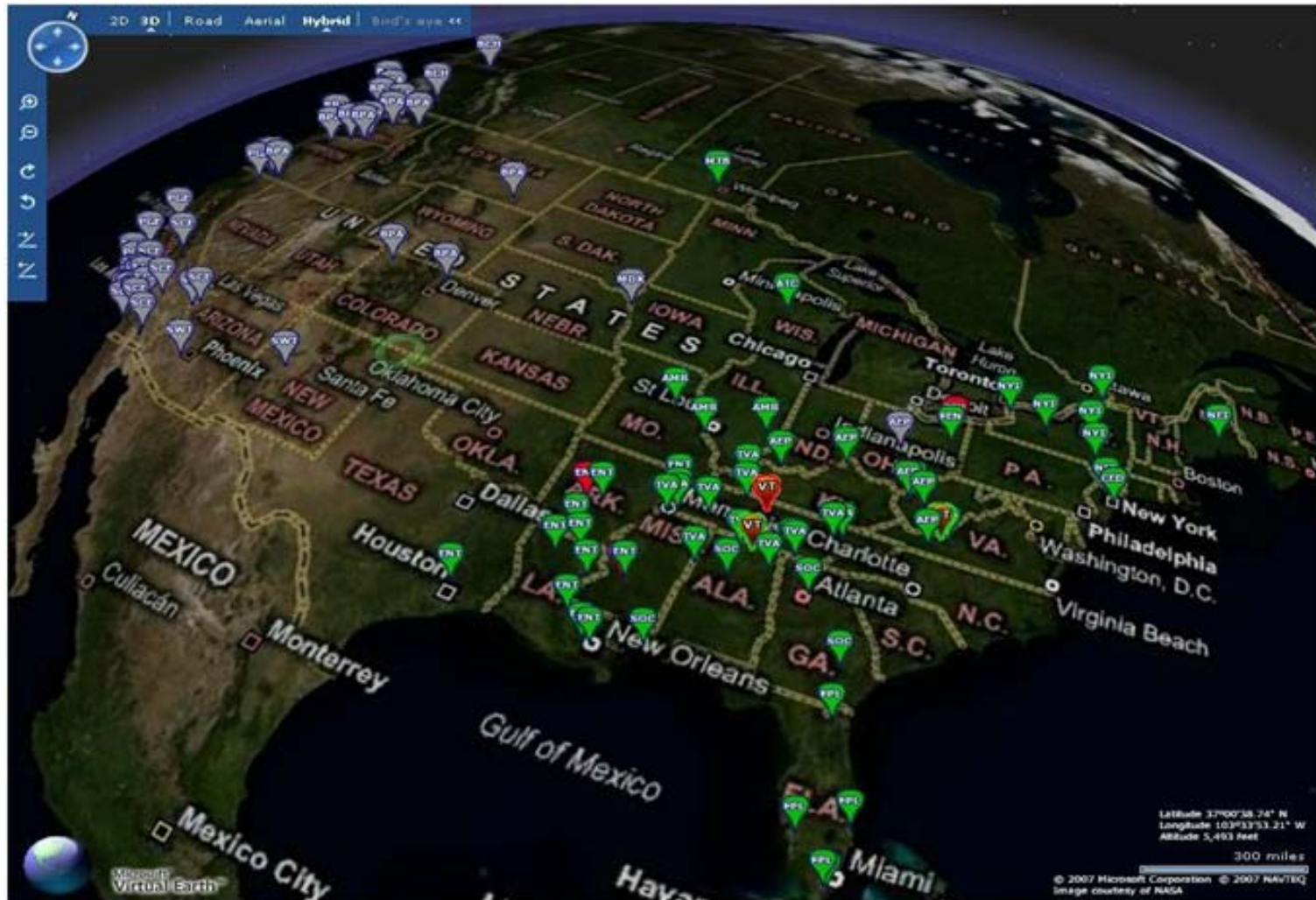
Synchrophasor Data Flows...
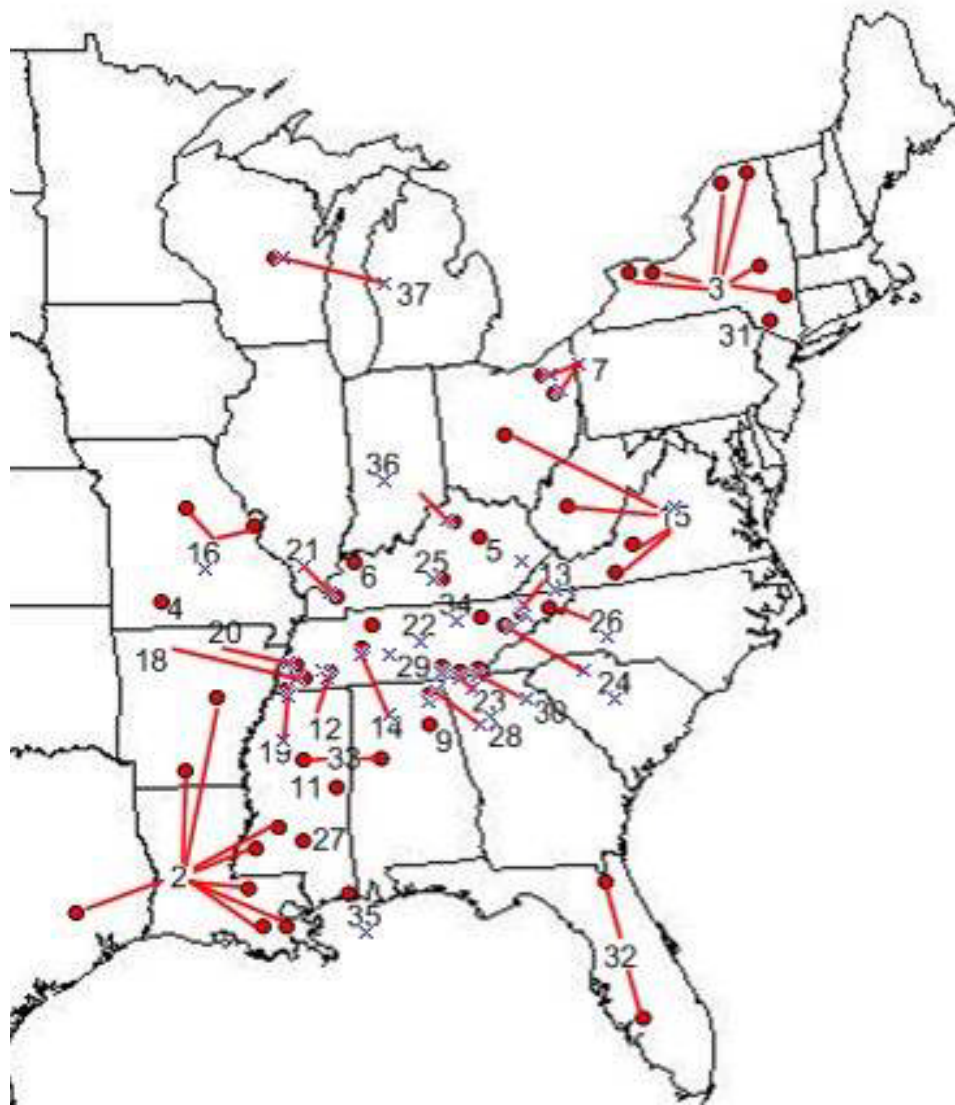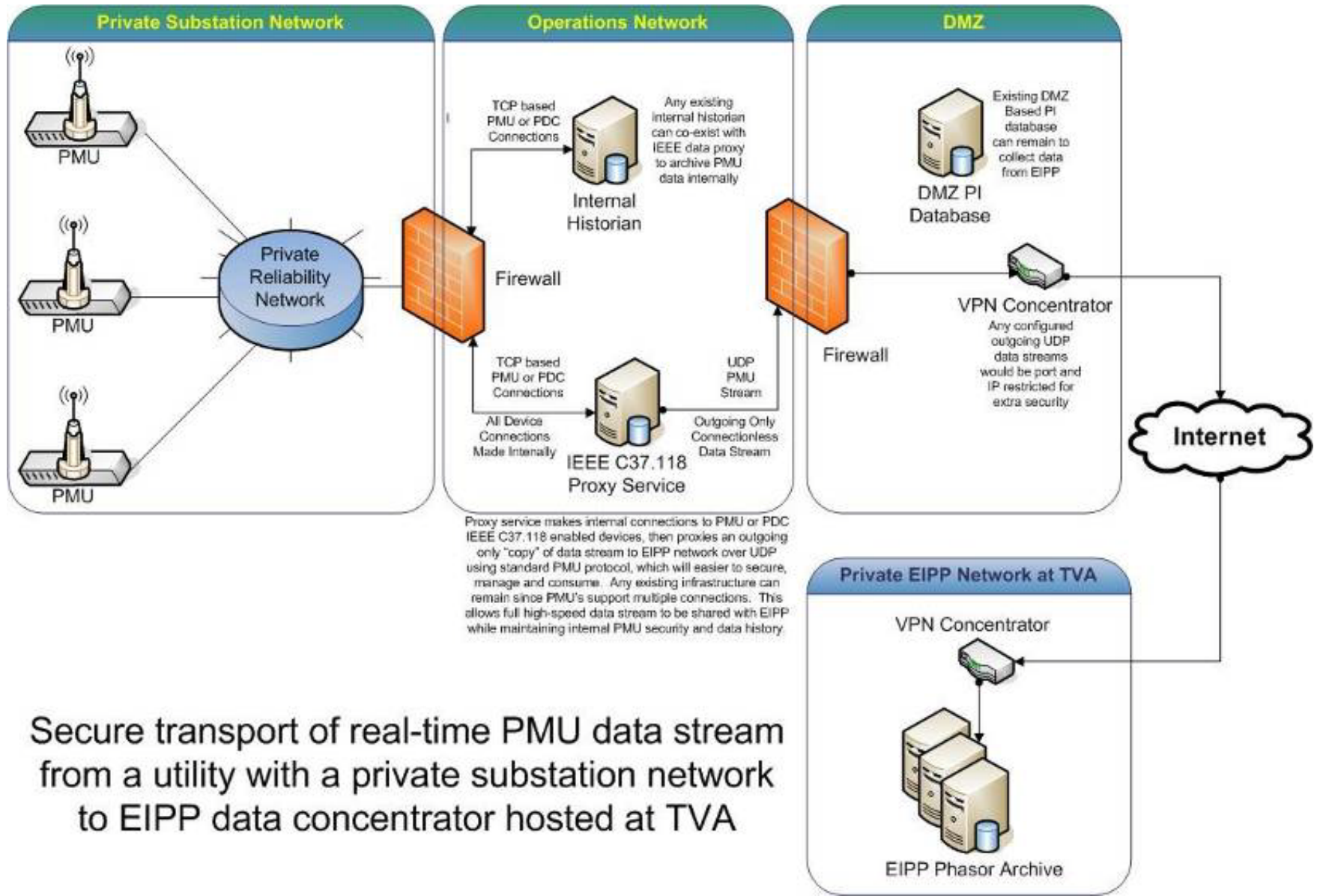
Layered Network Security

PMU Network

External Partner Network

Internet

Expanded Security Challenge...

TVA – Power System Operations
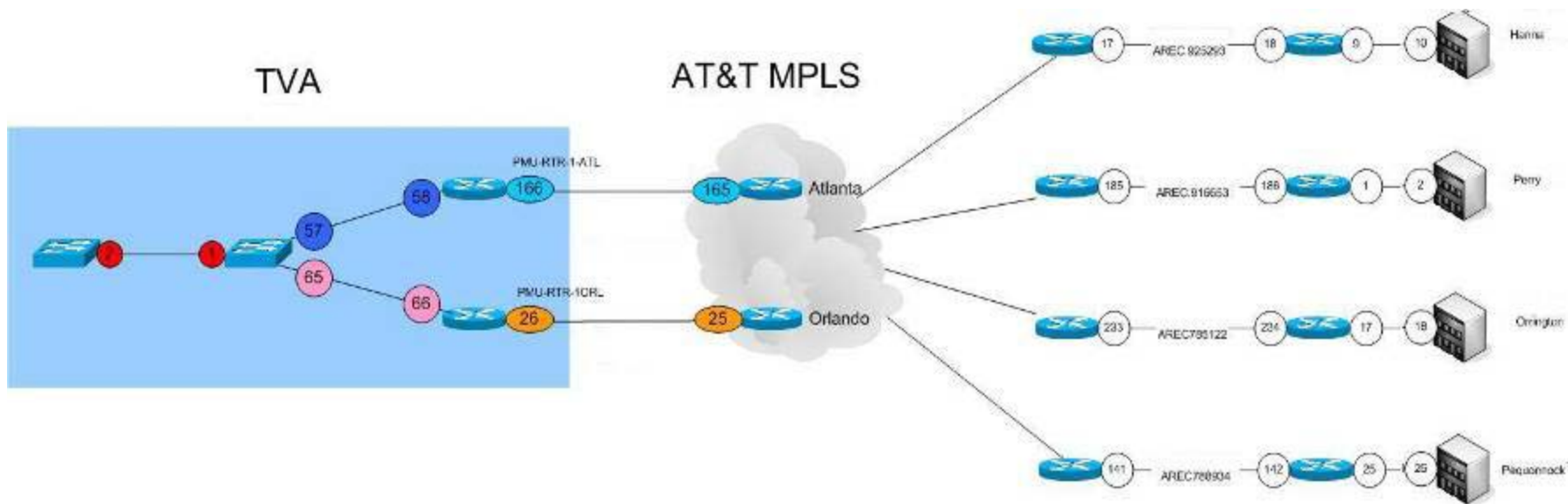
External Network Traffic

Lan-to-Lan VPN over Internet Connections

Secure transport of real-time PMU data stream from a utility with a private substation network to EIPP data concentrator hosted at TVA

MPLS "Cloud" Connections

If all else fails, there's always the "Emergency Stop Switch"…