ENVIRONMENTAL IMPACT STATEMENT

for Potomac-Appalachian Transmission Highline (PATH) Right-of-Way Applications

Appalachian National Scenic Trail
Chesapeake & Ohio Canal National Historical Park
Harpers Ferry National Historical Park
Potomac Heritage National Scenic Trail
Monongahela National Forest
West Virginia, Virginia, and Maryland

National Park Service
U.S. Department of the Interior

U.S. Forest Service

FOREST SERVICE

U.S. Army Corps of Engineers
Baltimore District

U.S. Department of Agriculture



TRANSMISSION LINES

- Transmission lines carry electrical current substations where:
 - Voltage is increased for transmission or reduced to deliver as usable power
 - Power is then placed on distribution lines for end users
- •A 765-kV (765,000 Volt) transmission line:
 - Carries about 2,970 Megawatts enough to power about 1 million homes
 - Is efficient for long-distance bulk energy transmission, similar to a major interstate highway

RELIABILITY

- Reliability standards are federally mandated
- Utilities must report periodically to North American Electric Reliability Commission (NERC) to ensure standards are implemented and maintained
- The regional "main grid" transmission system must be able to maintain reliable operations and delivery of electricity in peak demand conditions, even when a major line is lost

STRUCTURES

• Typical 765-kV structures:

- H- Frames average 130 feet (without an underbuilt line) and 160 feet (with an underbuilt line)
- 130-foot lattice tower
- Most made of galvanized steel to support large loads
 - Wind, ice, and conductors

• Larger wires:

 Can carry larger capacity, but require larger structures





