

Adaptation, Hardening, and Resilience (AHR)

- EEI member companies are deploying a significant and growing amount of capital resources on adaptation, hardening, and resilience (AHR) initiatives.
- AHR is increasingly becoming an important way that electric companies fulfill their mission of supplying clean, reliable, and affordable energy to customers.
- Working with EEI member companies and the financial community, EEI developed an AHR taxonomy that aligns with the electric industry's functional CapEx categories to categorize types of AHR investments.
- EEI has surveyed member companies to quantify industry AHR investment in electric transmission and distribution (T&D) infrastructure (see slide 3).
- Examples of electric T&D AHR investments include:
 - Undergrounding power lines
 - Installing cement poles
 - Elevating or relocating transformers
- While we know a meaningful portion of generation and gas-related investments are also being driven by AHR initiatives, EEI has not surveyed member companies on these segments.

AHR CapEx Taxonomy

**Current Survey
Data Covers
Electric T&D
Segments Only**

Transmission

Hardening and Resilience

Examples:

- Elevating or relocating electric transformers in flood prone regions
- Reinforcing existing transmission structures in high-speed wind zones
- Installing higher temperature-rated transformers for extreme heat

Advanced Transmission Technology

Examples:

- Installing sensors on transmission towers and deploying Artificial Intelligence to detect and respond to system threats
- Implementing remote monitoring and control technologies
- Increasing deployment of energy storage systems associated with transmission infrastructure

Distribution

Hardening and Resilience

Examples:

- Undergrounding distribution lines
- Purchasing equipment for vegetation management
- Replacing wood electric distribution poles with cement and steel

Advanced Distribution Technology

Examples:

- Strengthening distribution networks through investments in Demand Response technologies and real time system management
- Increasing deployment of Advance Metering Infrastructure, microgrids, and energy storage within distribution networks

Generation

Hardening and Resilience

Examples:

- Altering water intakes for generating stations
- Elevating control rooms and pump stations in flood prone regions
- Building and strengthening berms, levees, floodwalls at generating stations

Advanced Generation Technology

Examples:

- Increasing deployment of energy storage at generating stations
- Developing advanced water-cooling technologies at generating stations

Gas-Related

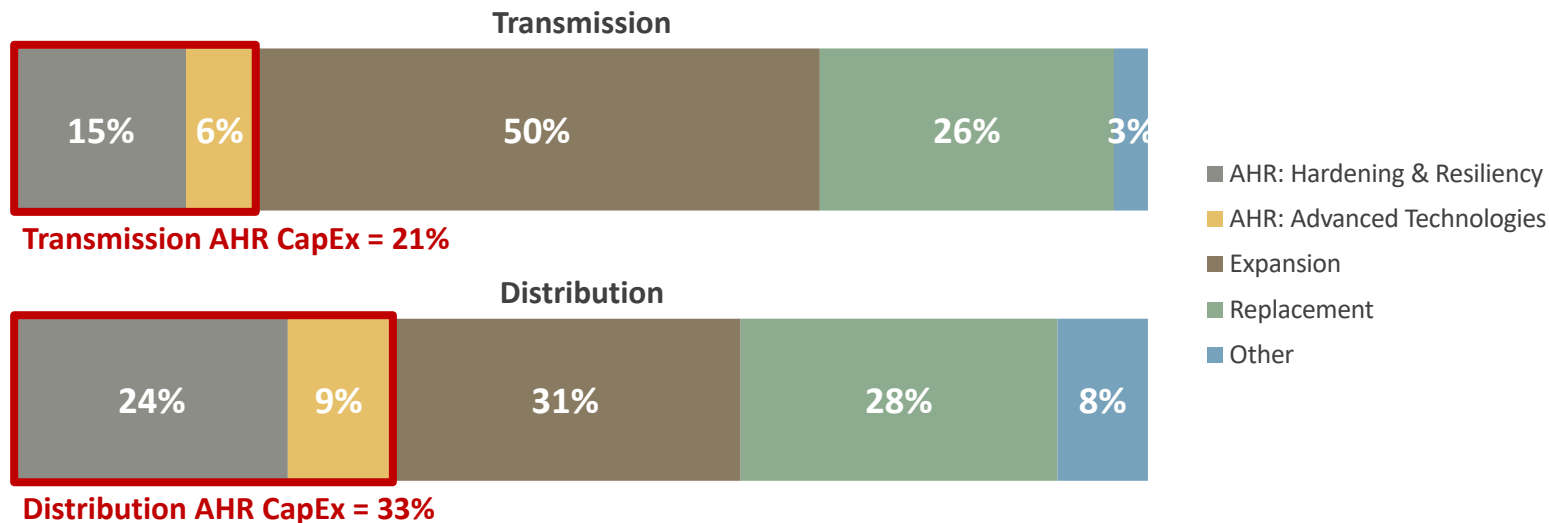
Hardening and Resilience

Examples:

- Replacing obsolete pipelines with more robust and structurally flexible materials

Note: gas-related includes investments in pipeline/delivery infrastructure; not gas-fired electric generation

AHR as a Driver of Electric T&D Investment



Note: Due to rounding, the percentages may not add to Transmission and Distribution totals shown.
Source: EEI Business Analytics, EEI member company survey (2025).