



Summary of 2010-2025 Projects

The transmission facilities that we are proposing based on this Assessment are listed in Tables PR-2 through PR-22, and shown graphically by planning zone in Figures PR-1 through PR-5. Changes that have occurred since the 2009 Assessment are listed in Table PR-23. Please also refer to our Asset Renewal section for a list of our larger asset renewal projects.

In each of these tables, there is a column indicating the planned in-service year for each particular facility and a column indicating the year the facility is needed. Sometimes the year that facilities are needed precedes the planned in-service year. There are a variety of reasons for this, including:

- The preferred alternative to address a particular need may take several years to implement.
- The need had been addressed with operating procedures that are becoming less effective or ineffective, necessitating a permanent solution.
- The preferred alternative to address a particular need may need to be implemented in phases, thus delaying completion of the entire project.
- New data or information affected the nature of the need or limitation, necessitating a change in the preferred alternative and introducing a delay in implementation.
- The need for a project was based on load or generation development that was uncertain.
- Stakeholder input necessitated a change in the alternative to be implemented, introducing a delay in implementation.

Tables PR-2 through PR-12 show the facilities planned by year for 2010-2020. Table PR-13 shows provisional facilities where the in-service date is yet to be determined or beyond the 2020 timeframe.

Tables PR-14 through PR-18 show the facilities planned by planning zone.

Table PR-19 provides a list of planned transmission lines involving new right-of-way for 2010-2025. Since ATC intends to solicit public input on the identification of ultimate solutions through its public planning process, these particular projects may be modified in the future.

Table PR-20 provides a list of proposed transmission line rebuilds, line reconductoring and uprates on existing right-of-way.

Table PR-21 provides a list of proposed new substations and transformer additions (excluding transmission-to-distribution transformers).



Table PR-22 provides a list of other proposed substation equipment additions or replacements.

Need categories

Within these tables, the need for each project is identified. Need categories include the following:

- Reliability:* Facility (line, transformer, substation equipment) normal rating is exceeded under normal system conditions or emergency rating is exceeded under single or multiple contingency conditions, or bus voltage is not within 5 percent of nominal voltage under normal system conditions or is not within 10 percent of nominal voltage under single or multiple contingency conditions, or the contingency creates a cascading outage risk (see Planning criteria). Impending overload or voltage violations are noted as appropriate. NERC reliability categories depicted in the Project Tables are from Table 1 of the TPL 001-004. If the reliability need is not on the Bulk Electric System, we have utilized the terminology of the voltage level preceding the equivalent NERC reliability category.
- Operating flexibility:* Provides enhanced ability to perform maintenance or react to system changes.
- New generation:* In our generation interconnection studies and related transmission service studies, the facility has been identified as necessary to accommodate new generation.
- T-D interconnection:* Facility is required to interconnect to a new transmission-distribution substation requested by a distribution company.
- Asset renewal:* We have identified the facility as needing repair or replacement.
- Stability:* We have identified the facility as needed to ensure that our dynamic stability criteria are met (see Planning criteria), or to improve stability response of generation.
- Economics:* Preliminary and partial list of projects emerging from our economic planning studies that may be beneficial in reducing congestion, enhancing system transfer capability and producing economic benefit.



10-Year Assessment

An annual report summarizing proposed additions and expansions to the transmission system to ensure electric system reliability.

2010

September 2010 10-Year Assessment
www.atc10yearplan.com

Policy benefits: Provides enhanced ability to access renewable resources and to meet the public policy objectives of state and federal governments.