



September 2011 10-Year Assessment www.atc10yearplan.com

Summary of 2011-2026 Projects

The transmission facilities that we are proposing based on this Assessment are listed in <u>Tables PR-2 through PR-22</u>, and shown graphically by planning zone in <u>Figures PR-1</u> through PR-5. Changes that have occurred since the 2010 Assessment are listed in <u>Table PR-23</u>. Please also refer to our <u>Asset Renewal</u> section for a list of our larger asset renewal projects.

An annual report summarizing proposed additions and expansions

to ensure electric system reliability.

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.

<u>Tables PR-2 through PR-12</u> show the facilities planned by year for 2011-2021. <u>Table PR-13</u> shows provisional facilities where the in-service date is yet to be determined or beyond the 2021 timeframe.

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

<u>Table PR-19</u> provides a list of planned transmission lines involving new right-of-way for 2011-2026. 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.

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



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

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<u>Table PR-22</u> 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 <u>Planning criteria</u>). 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 <u>Planning Criteria</u>), or to improve stability response of generation.







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