

Northern Tier Transmission Group (NTTG) Transmission Use Committee (TUC)

Available Transfer Capability (ATC) Components

April 1, 2011

Listed below are definitions from the North American Electric Reliability Corporation's (NERC) Glossary of Terms in Reliability Standards¹, and from MOD-029-0.1 for Postbacks and Counterflows, that are applicable to the Transmission Service Provider (TSP) members of NTTG. Commencing April 1, 2011 all NTTG TSP Members will utilize the Rated System Path Methodology described in NERC Standard MOD—29-0.1, Rated System Path Methodology.

- Rated System Path Methodology: An ATC methodology characterized by an initial Total Transfer Capability (TTC), determined via simulation. Capacity Benefit Margin, Transmission Reliability Margin, and Existing Transmission Commitments are subtracted from TTC, and Postbacks and counterflows are added as applicable, to derive Available Transfer Capability. Under the Rated System Path Methodology, TTC results are generally reported as specific transmission path capabilities.
- Available Transfer Capability (ATC): A measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses. ATC is defined as Total Transfer Capability less Existing Transmission Commitments (including retail customer service), less a Capacity Benefit Margin, less a Transmission Reliability Margin, plus Postbacks, plus Counterflows:

ATC = TTC - ETC - CBM - TRM + Postbacks + Counterflows

- Total Transfer Capability (TTC): The amount of electric power that can be moved or transferred reliably from one area to another area of the interconnected transmission systems by way of all transmission lines (or paths) between those areas under specified system conditions.
- Transmission Reliability Margin (TRM): The amount of transmission transfer capability necessary to
 provide a reasonable assurance that the interconnected transmission network will be secure. TRM
 accounts for the inherent uncertainty in system conditions and the need for operating flexibility to
 ensure reliable system operation as system conditions change.
- Capacity Benefit Margin (CBM): The amount of firm transmission transfer capability preserved by the transmission provider for Load Serving Entities (LSEs) whose loads are located on that Transmission Service Provider's system, to enable access by the LSE's to generation from interconnected systems to meet generation reliability requirements. Preservation of CBM for a LSE allows that entity to reduce its installed generating capacity below that which may otherwise have been necessary without interconnections to meet its generation reliability requirements. The transmission transfer capability preserved as CBM is intended to be used by the LSE only in times of emergency generation deficiencies.

Adopted by the NERC Board of Trustees: March 15, 2011. Located at: http://www.nerc.com/files/Glossary_of_Terms_2011Mar15.pdf

- Existing Transmission Commitments (**ETC**): Committed uses of a Transmission Service Provider's Transmission system considered when determining ATC or AFC.
- Postbacks: Changes to Available Transfer Capability due to a change in the use of Transmission Service for that period as defined in Business Practices
- Counterflows: Adjustments to Available Transfer Capability as determined by the Transmission Service Provider and specified in their Available Transfer Capability Implementation Document