



**Public Service Company of Colorado
Control Area and Transmission Provider**

**PSCo ATC Calculation
Methodology/Algorithms**

September 10, 2007

a. Definitions:

The three horizons used by PSCo are:

- i. **Scheduling Horizon:** At PSCo this period is defined to be the period of time beginning with the current hour and extending a total of eight hours.
- ii. **Operating Horizon:** At PSCo this period begins at end of the Scheduling Horizon and extends through the end of the last day that has been or is being prescheduled.
- iii. **Planning Horizon:** This period begins at the end of the Operating Horizon and extends approximately four years into the future.

b. Mathematical Algorithms Used to Calculate ATC

The formulas used by PSCo to calculate ATC are shown below for the Scheduling, Operating and Planning horizons and also posted on the PSCo OASIS site.

CBM is not included in the formulas to calculate ATC because PSCo does not currently reserve CBM on any of its posted paths.

i. **Scheduling Horizon**

Tagged (scheduled) quantities are used in the Scheduling Horizon ATC calculations and TRM is released as non-firm ATC.

Firm ATC = TTC - ETC - TRM - Confirmed Firm Transmission Service Reservations (TSRs) – Implemented Firm Tags.

Non-Firm ATC = TTC - ETC - TRM*B - Implemented Firm Tags – Implemented Non-Firm Tags

* Where PSCo uses B=0 to allow TRM to be made available as Non-Firm ATC.



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ii. Operating Horizon

Tagged (scheduled) quantities are used in the Operating Horizon ATC calculations and TRM is released as non-firm ATC.

Firm ATC = TTC - ETC - TRM - Confirmed Firm Transmission Service Reservations (TSRs) – Implemented Firm Tags

Non-Firm ATC = TTC- ETC - TRM*B -Implemented Firm Tags – Implemented Non-Firm Tags

* Where PSCo uses B=0 to allow TRM to be made available as Non-Firm ATC.

iii. Planning Horizon

Tagged quantities are not used in the Planning Horizon ATC calculations. Only Reserved quantities are included plus TRM and CBM. TRM is released as non-firm ATC

Firm ATC = TTC - ETC - TRM - Confirmed Firm TSRs

Non-Firm ATC = TTC - ETC -TRM*B - Confirmed Firm TSRs - Confirmed Non Firm TSRs

* Where PSCo uses B=0 to allow all TRM to be made available as Non-Firm ATC.