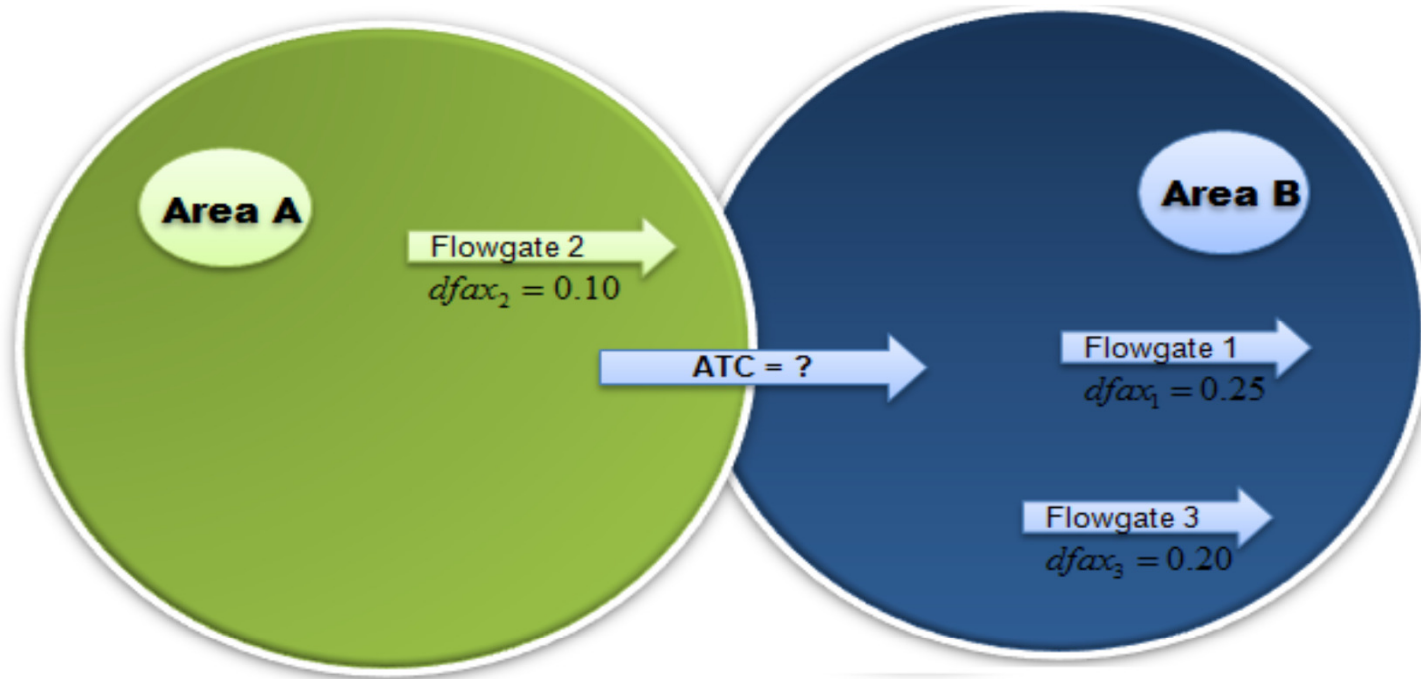




# Capacity Benefit Margin

- 1. CBM represents the ability to import emergency capacity over tie lines to serve native load at peak conditions**
- 2. Benefit to members by lowering the Installed Reserve Margin (by approximately 2% or 3,200 MW)**
- 3. Value is set to 3,500 MW in PJM RAA (Reliability Assurance Agreement)**
  - PJM's total import capability has significantly increased beyond 3,500 MW since expansion but the increase is provided to the market as an increase in firm ATC, rather than as an increase in CBM
- 4. PJM planning performs analysis to verify PJM's ability to import 3,500 MW each year**
- 5. CBM is allocated to PJM flowgates under the ATC process**

CBM is allocated over all PJM flowgates for use in the ATC calculation consistent with NERC standard MOD-004 Requirement 5. Power flow simulation used to determine impact of 3,500 MW on PJM flowgates.



$$AFC_{final} = RATING - FLOW - CBM - TRM - RESERVATIONS$$

$$ATC = AFC_{final} / dfax$$

$$\text{Flowgate 1: } AFC_1 = 1000 - 800 - 30 - 20 - 50 = 100 \text{ MW}$$

$$ATC_1 = 100 / 0.25 = 400 \text{ MW}$$

$$\text{Flowgate 3: } AFC_3 = 800 - 500 - 24 - 16 - 135 = 125 \text{ MW}$$

$$ATC_3 = 125 / 0.20 = 625 \text{ MW}$$