
Module on Computation of PoC Transmission Charges

National Load Despatch Centre

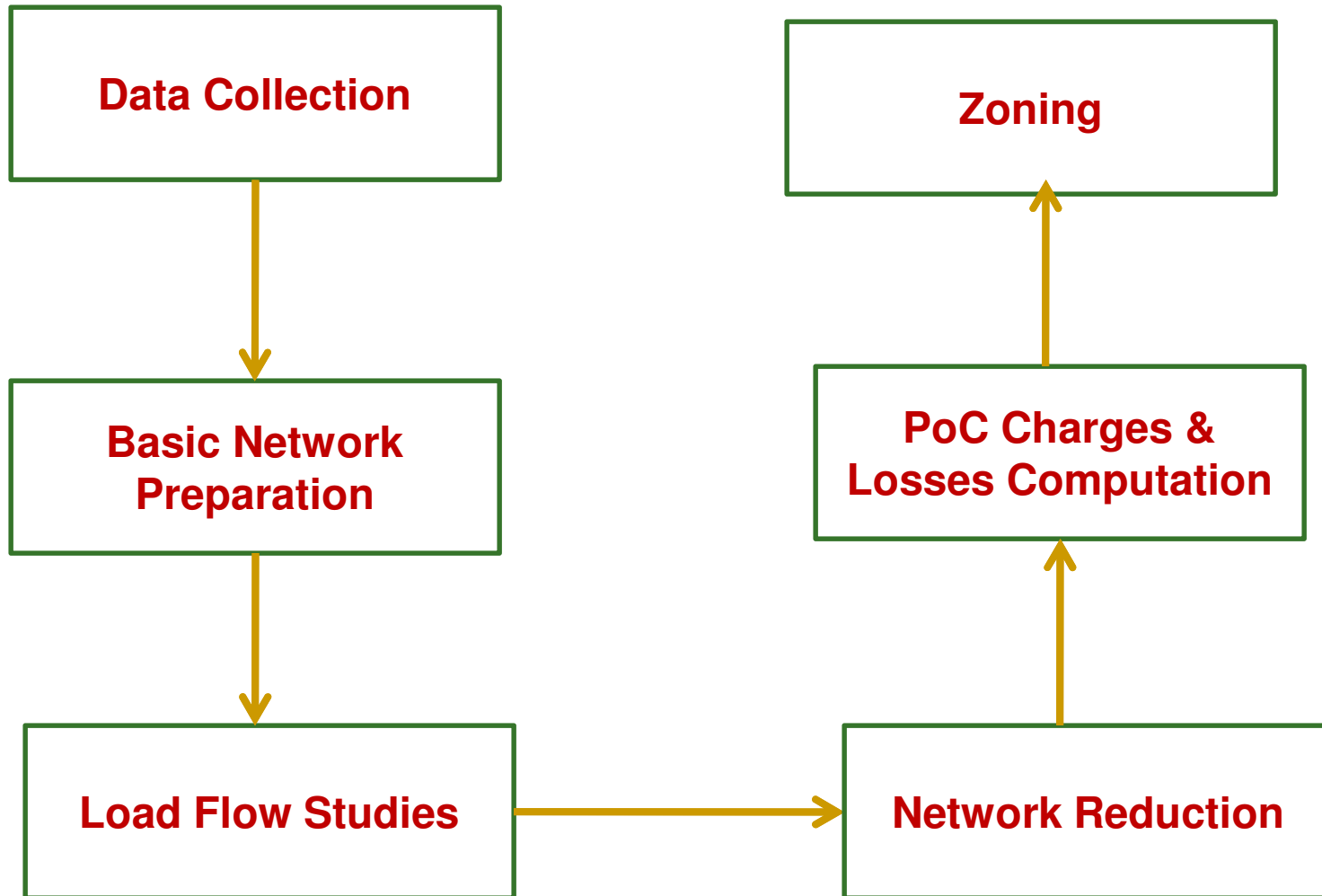
Power System Operation Corporation

Outline

- **Procedure for Computation of Transmission Charges**
 - Prepared by IA in compliance of Regulation 15(1)(b)

- **Sets out the modalities of process followed by Implementing Agency for computation of PoC transmission charges.**

Process Chart for Computation of PoC Charges



Data Collection (1)

- **As per the Regulation and Data Collection Procedure**

- **All concerned entities to submit**
 - Forecast Injection / Withdrawal
 - Generation and Load at various nodes
 - Details of Network Elements
 - Yearly Transmission Charges

- **Additional Medium Term Withdrawal / Injection**
 - By 10th of every month by every DIC

- **RPC to send list of certified non-ISTS lines to IA**
 - IA to send the lists to CERC for approval

- **YTC of Certified non-ISTS lines to be approved from appropriate commission**

Data Collection (2)

■ NLDC to specify :

- Nodes/group of nodes on which DICs would submit the forecasted injection/withdrawal. **(First week of October)**

■ IA to specify :

- Peak and other than Peak conditions for each representative blocks for the next application period. **(First week of October)**

Approved Injection/ Withdrawal

- **Approval of Forecasted Injection/Withdrawal on the basis of**
 - Long Term and Existing Medium Term Contracts
 - Database of RLDC/NLDC

- **Approved Demand/Withdrawal to be notified on the website of IA**

- **Adjustments in forecasted Injection/withdrawal to be intimated to concerned DIC.**

Computation of AC Load Flows

- **Seprately for NEW and SR Grid**

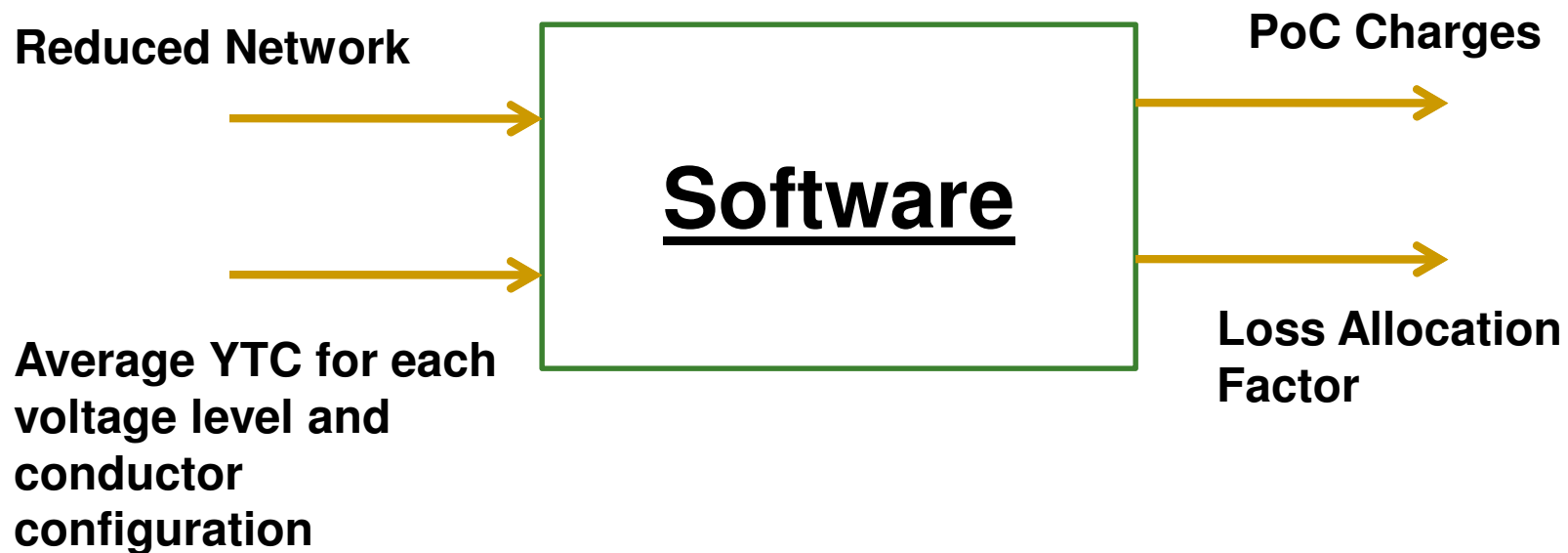
- **Adjustments for converging Load Flow**
 - If Load > Generation
 - Pro-rata scaling down of Load
 - If Generation > Load
 - Pro-rata scaling down of Generation

- **Validation committee to validate**
 - Converged Load Flow Results
 - Basic Network
 - Nodal Injection / Withdrawal

Network Reduction

- Reduction upto 400 kV (except NER where the network will be reduced to 132 kV)
- Injection from Lower Voltage : Generation
- Drawal from Lower Voltage : Demand

Software for Computation of PoC Charges and Losses



Zoning

- **As per the regulations**
- **Fixed for an application period**
- **Zonal Charges / Zonal LAF**
 - Weighted average of all nodes in the zone
- **Treatment of nodes feeding more than one zone**
 - To be used in both zones
 - Pro-rata charges in both zones based on ratio of power flow.

Computation of Charges

- Annual Average YTC to be apportioned to peak and Other than peak conditions
- Net PoC Charge = 50% PoC Charge + 50% Uniform Charge

$$UC = \text{Total ARR} / (\text{Sum of Approved Injection} + \text{Sum of Approved Withdrawal})$$

- Calculation of Uniform Charge on All India Basis
- Scaling on Pro-rata basis to adjust over or under recovery
- Treatment of Generators connected at 220 kV
 - Charged at PoC Charge of the zone

Information to RPC

- **Approved Withdrawal/Injection (MW) for peak and other than peak hours for each season**
- **Zonal Point of Connection Charge (Rs/MW/month) for Generation and Demand Zones**
- **Approved Additional Medium Term Withdrawal / Injection (MW)**
- **Details of Short Term Open Access**

As per format I and II of the Procedure

Information on Public Domain

- **Approved Basic Network Data and Assumptions, if any**
- **Zonal or nodal transmission charges for the next financial year differentiated by block of months;**
- **Zonal or nodal transmission losses data;**
- **Schedule of charges payable by each constituent for the future Application Period, after undertaking necessary true-up of costs**

Username and Password to view critical data

Format I : Approved Withdrawal/Injection (MW) & Zonal PoC Charge

	Name of the Zone	Approved Withdrawal (MW)		Zonal PoC Charge* (Rs/MW/Month)
		Peak	Other Than Peak	
Season I				
Season II				
Season III				
Season IV				
Season V				

