

Measure 7 Data Request Instructions – Planning:

Updated Sept 7, 2016. Updates are in *blue*.

1. BAs will supply non-coincident summer peak data.
2. BAs will provide details for Generator MVAR, Static Capacitor, and Load trend.
 - a. For the current and future (power flow planning cases) years of 2016, 2017 and 2020
 - b. For the historic (EMS/real-time information) years of 2013, 2014, and 2015

General Notes:

- Peak load means the summer peak load demand expected to be served during the year.
- For the purpose of the Static Capacitor MVAR calculation, ignore the reactive contribution from shunt reactors.
- The data collected for generators are at the low-side of GSUs when available.
- If the entity wishes to define specific reactive zones of interest within the BA, additionally, please provide the data for each specific reactive zone in its own workbook.

Generator MVAR worksheets:

Rotating Dynamic, SVC, D-VAR, STATCOM & Power Electronics based Dynamic VAR

The future data can be obtained from "Machine" data from the power flow case. Add rows as appropriate for the amount of your rotating/dynamic var devices. When reporting reactive power data for variable (e.g. wind, solar) resources please ensure to report data based on expected [plant](#) output instead of installed capacity. [This would be the expected Qmax value associated with the given Pgen level. If this is not readily available, report Qgen as Qmax.](#)

- Bus Number - Load Flow Model Bus Number for the Interconnection
- Bus Name - Bus name for units in service.
- Unit Id
- Area Number
- Area Name
- Zone Number
- Zone Name
- In Service State –"1" indicates the unit is in service. "0" indicates the unit is not in service.
- QGen (MVAR) - QGen, is the MVAR output of the in service unit in the case.
- QMax (MVAR) - QMax, is the maximum MVAR capability of the in service unit at the PGen MW.

- Q Reserve - calculated by QMax minus QGen in MVAR.
- EIA 860 Plant code – if available
- EIA 860 Unit code – if available
- GADS utility and unit code – if available

SVCs from the Switched Shunt data with continuous control mode

Add rows as appropriate to report your var devices. The future data can be obtained from "Switched Shunt" data of the power flow case.

- Bus Number
- Bus Name
- Area Number
- Area Name
- Zone Number
- Zone Name
- Binit (MVAR)
- Blk 1 Steps
- Blk 1 Bstep (MVAR)
- Blk 2 Steps
- Blk 2 Bstep (MVAR)
- Total Capacitive (MVAR) - total Capacitive MVAR of each device. The inductive MVAR should not be included in this calculation.
- Cap MVAR reserve (Total – Binit) - Calculated by Total Cap MVAR - Binit

BA Total Dynamic var

- Rotating MVAR - Rotating MVAR Produced by synchronous generators.
- SVC, D-VAR, STATCOM & Power Electronics based Dynamic MVAR - sum of total Non-rotating MVAR produced by PV, WTG and SVC.
- Total Dynamic MVAR Produced
- Rotating MVAR - Rotating MVAR reserve from synchronous generators.
- SVC, D-VAR, STATCOM & Power Electronics based Dynamic MVAR
- Total Dynamic MVAR Reserve

Static Capacitor MVAR Worksheets

Add rows as appropriate to report your var devices. The future data can be obtained from "Switched Shunt" data of the power flow case. All MVAR values from the Switched Shunt data are nominal rated MVAR. Only include capacitors connected above 100 kV.

- Bus Number
- Bus Name
- Area Number
- Area Name
- Zone Number
- Zone Name
- Binit (MVAR) - Binit, is the initial MVAR in service in the power flow case.
- Blk 1 Steps
- Blk 1 Bstep (MVAR)
- Blk 2 Steps
- Blk 2 Bstep (MVAR)
- Blk 3 Steps
- Blk 3 Bstep (MVAR)
- Blk 4 Steps
- Blk 4 Bstep (MVAR)
- Blk 5 Steps
- Blk 5 Bstep (MVAR)
- Total Cap MVAR – Capacitive MVAR of each device. The inductive MVAR should not be included in this calculation.
- Cap MVAR Reserve

Load Trend Worksheets

- MW – total Load MW
- MVAR –total Load MVAR
- MVA –load calculated by Columns MW and MVAR
- PF –load power factor
- State if the data is from the “high side” or “low side” of the transmission bus