



2020 Benchmark GMDVA Process Update and Findings

Minnie Han
Transmission Planning Assessment

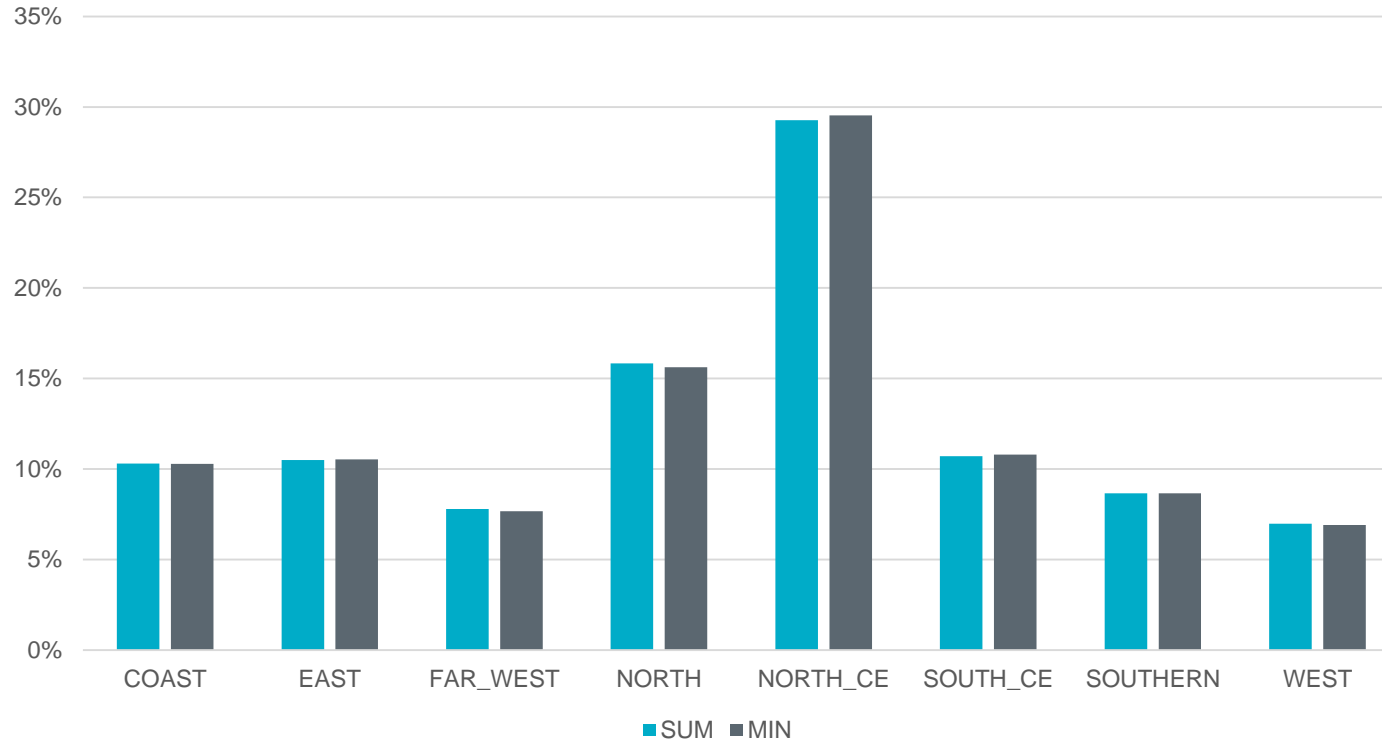
October 2020 RPG

Updates

- ERCOT presented a brief [GMD introduction](#) at the May 2020 RPG meeting and a [scope overview](#) in July 2020
- DC tie reactive losses incorporated
- Model corrections and updates made
- One low voltage violation found in the summer peak case
 - Working with TSP on tuning measures
- No potential cascading for BES

Reactive Losses

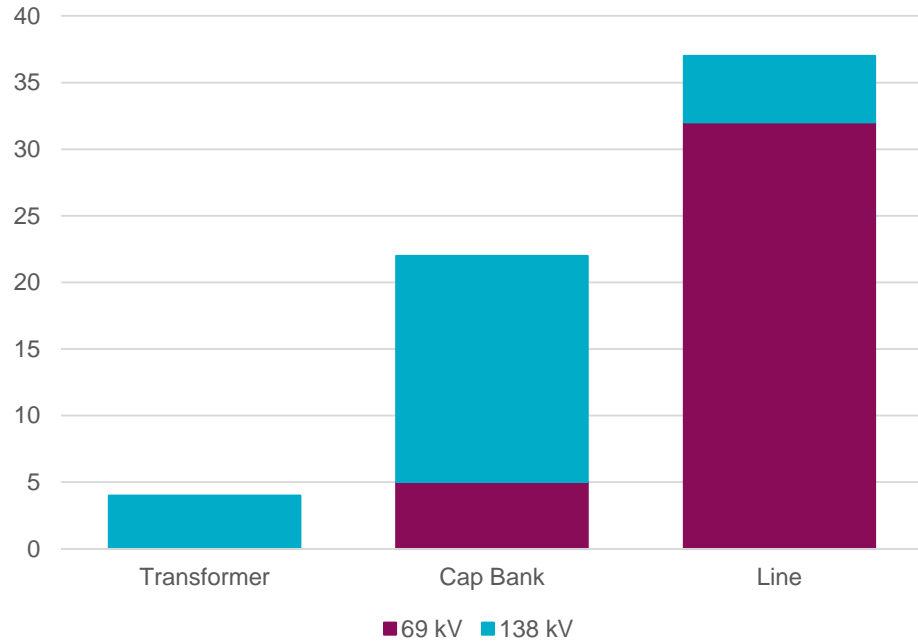
Reactive Loss Distribution Across Weather Zones



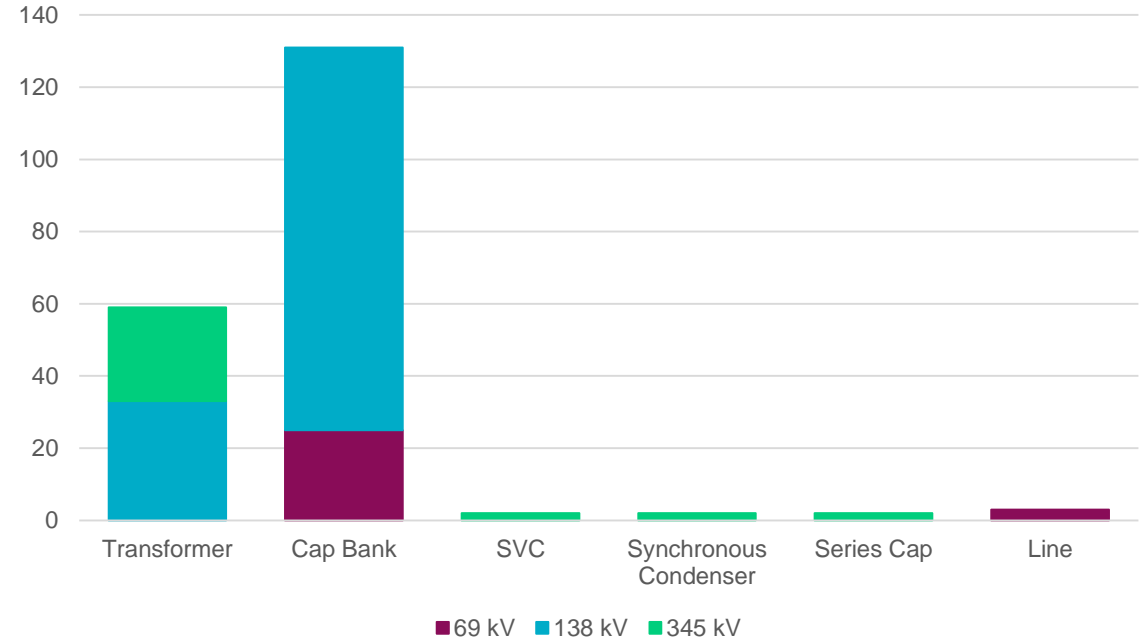
Reactive Losses Produced Across Storm Orientations	SUM	MIN
Most (MVar)	1315	1317
Least (MVar)	1208	1207

Outage Statistics: TSP

Category A: TSP



Category B: TSP



TSP Category A and B Outages	Category A	Category B
Shunt Capacity Lost (MVAR)	676	6783

*Category A outages are applied simultaneously. Category B outages are applied individually in addition to all Category A outages. Values under Category B are aggregate totals of all Category B outages.

Outage Statistics: Resource Entity

- Lost generation and shunt capacity counted instead of individual elements in Category A and B outages submitted by Resource Entities

	Category A		Category B	
Resource Entity Category A and B Outages	SUM	MIN	SUM	MIN
Generation Capacity Lost (MW)	727	87	6886	4467
Generation Reactive Capacity Lost (MVAR)	329	29	3284	1711
Shunt Capacity Lost (MVAR)	118	118	954	84

*Category A outages are applied simultaneously. Category B outages are applied individually in addition to all Category A outages. Values under Category B are aggregate totals of all Category B outages.



Questions?

Please send any questions or comments to
GMDVA@ercot.com