

DVP Comments

LAS Subcommittee

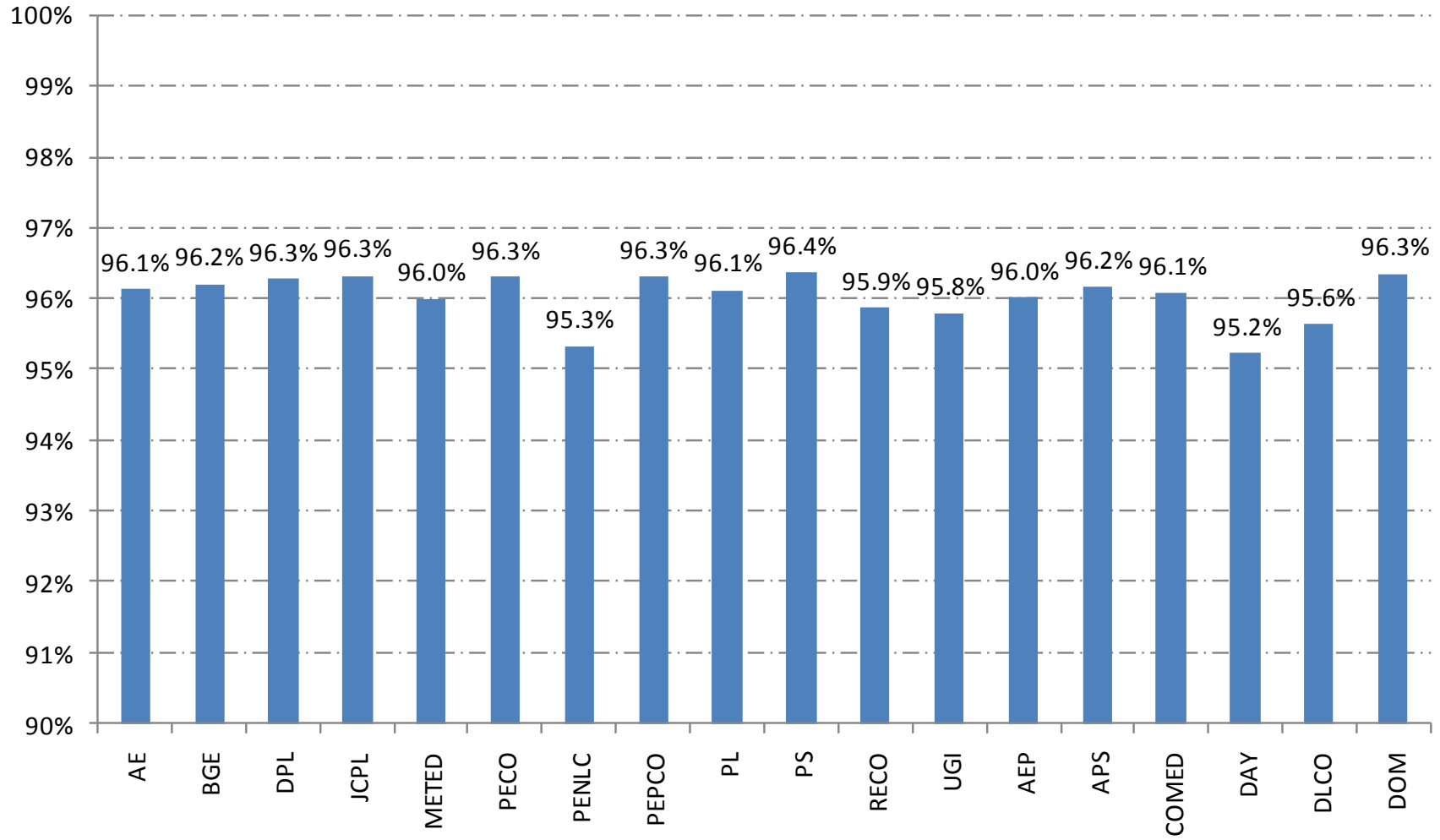
October 26, 2010

Treatment of Diversity in PJM

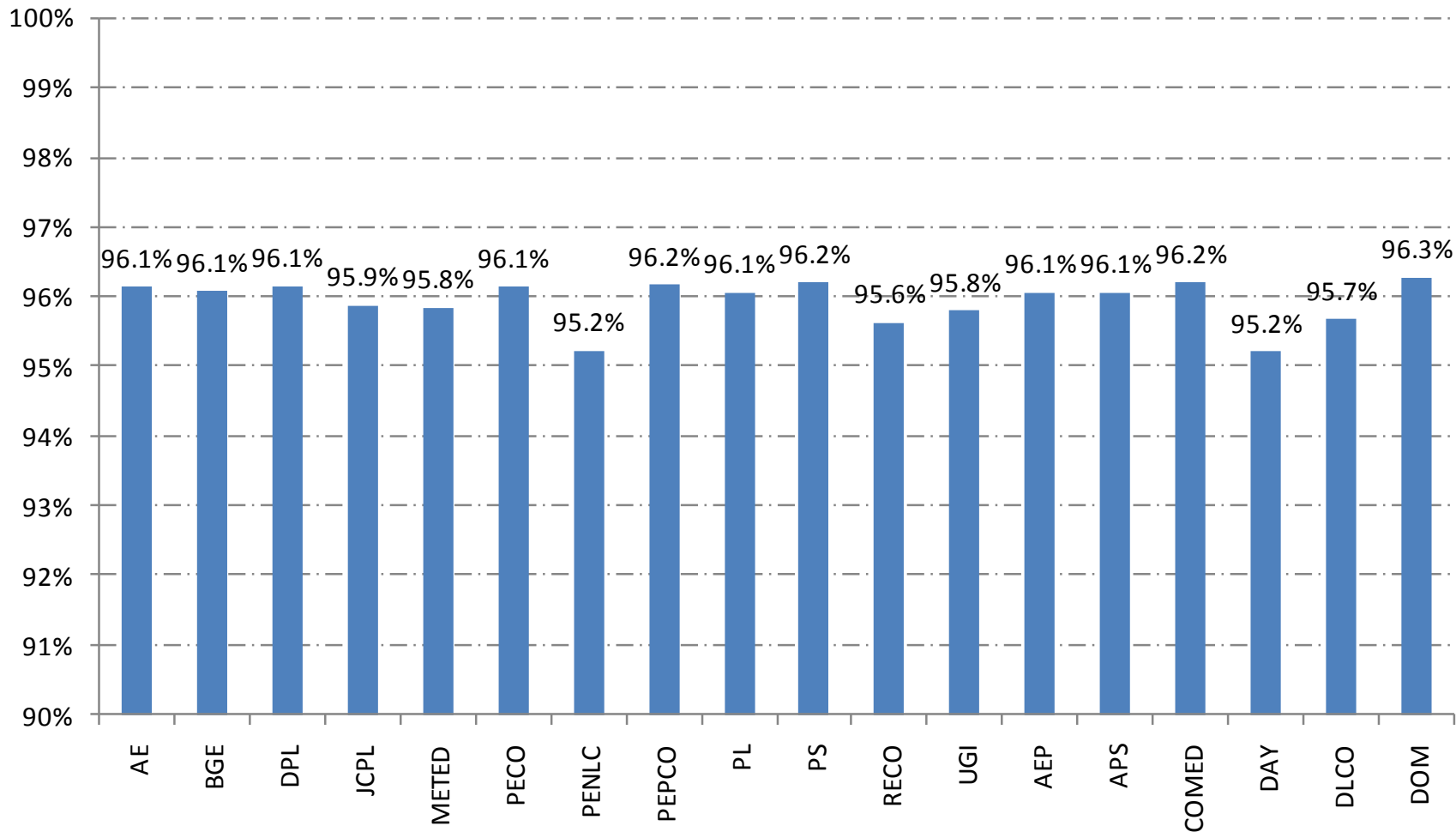
- Currently diversity allocation is not explicit in PJM model. It is mainly a result of a step in post processing of CP Forecast.
- Current allocation of RTO CP to zones is based on maximum daily CP of each zone.
- This approximately works out as if applying diversity based on NCP (although technically it is done differently*).
- As a result each zonal CP/NCP ratio is around 96%. (see following charts) i.e. diversity is shared almost equally across zones.

*In reality PJM is applying diversity to zones in 2 steps. PJM accounts for time of day diversity in the daily CP model. This is a small part of RTO diversity. The bigger portion of diversity is applied in post processing where diversity across days is applied. It is the second portion that is currently socialized across all zones. This 2-step process explains why NCP to CP ratio is not exactly the same across zones.

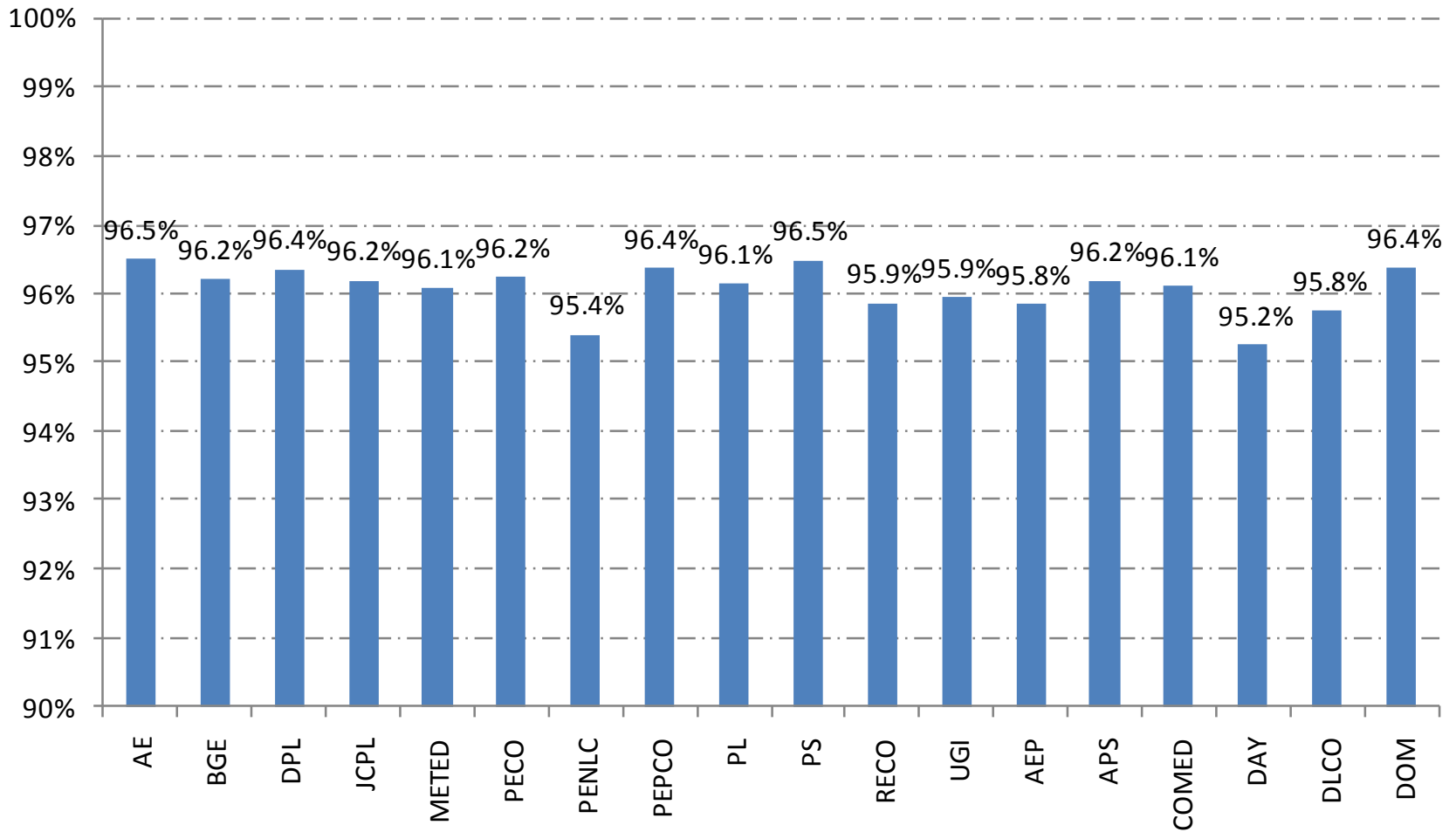
PJM 2010 Forecast CP/NCP Ratio for 2010



PJM 2009 Forecast CP/NCP Ratio for 2009



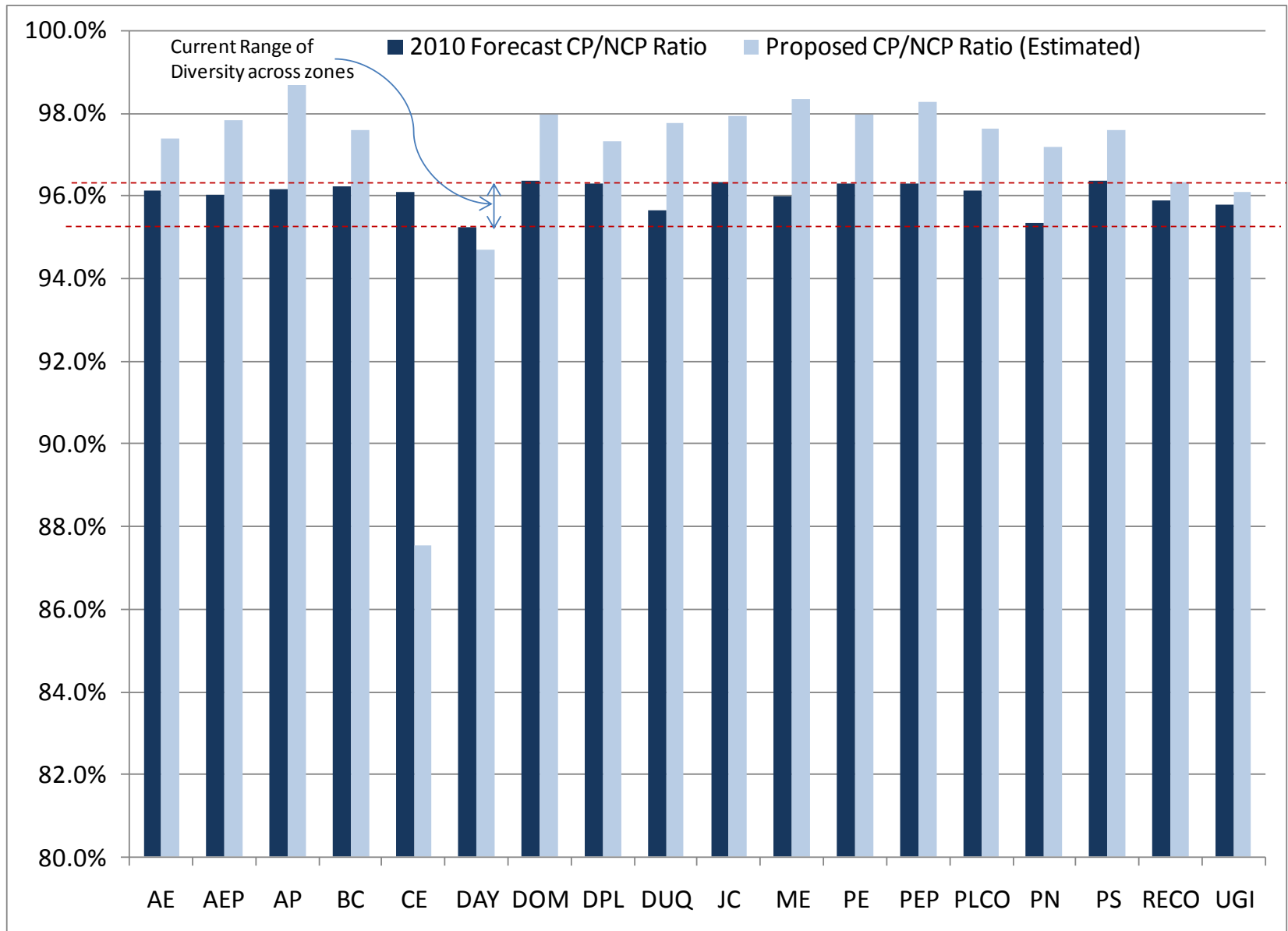
PJM 2008 Forecast CP/NCP Ratio for 2008



Itron Recommendation #7 Impact

- Itron's Proposal is to allocate RTO CP based on the forecast contribution of each zone to RTO peak. The forecast contributions will effectively depend on historic weather on annual peak days.
- As a result geographically distant zones not coincident with RTO will get a much lower CP forecast and capacity obligation.
 - Note that this change will not affect capacity market clearing prices in constrained LDAs as the VRR curve for constrained LDAs is based on NCP forecast.
- If the only goal of the forecast is to predict precise zonal peaks at the time of RTO peak, this change could improve the zonal CP forecast.
- However if the purpose is to produce forecast that determines capacity obligation of each zone, this is not the appropriate mechanism.

Illustration of Recommendation #7 Impact



Conclusion

- Currently capacity obligation allocation is essentially based on shared diversity.
 - This has the effect of reserve sharing across the pool.
- Recommendation # 7 drastically changes diversity allocation and therefore capacity obligation.
 - Approximate Impact of 100 MW in DY 2011-2012 = \$4.35 million
- It's not clear why proposed method is a better or justifiable way to share capacity obligation.
- Current capacity obligation allocation should be retained.