

## Load Forecast Adjustment Guidelines

### **Issue Identification**

PJM annually solicits information from its member Electric Distribution Companies (EDC) for large load shifts (either positive or negative) which are known to the EDC but may be unknown to PJM. PJM will send the request in mid-July with responses expected in time for any proposed adjustments to be reviewed with the Load Analysis Subcommittee in October/November.

Dominion requested a forecast adjustment to account for the growth of data centers in Northern Virginia. This was an update to a forecast adjustment that has been in place in some form since the 2014 Load Forecast Report.

### ***Issue Verification – verify that identified issue is real and significant, using the following methods:***

Determine if the load change has been publically acknowledged through the media, press release, regulatory process, etc.

Verify that requesting EDC has adjusted its own financial/planning forecast

Ascertain that the load shift is related to a single site or a limited number of related sites (not a systemic cause)

Discuss with economic forecast vendor(s) whether or not the load shift is reflected in its/their economic forecast(s). Also, determine if the requested load adjustment's load impact is consistent with its economic impact. Additionally, determine if the requested load adjustment is tied to any of the metro areas that PJM uses to define the economic variable of a zone.

Verify that any behind-the-meter generation adjustment has complied with PJM's behind-the-meter process.

Determine adjustment's significance, either by sheer magnitude or percentage of a zone's load.

PJM determined that the load shift is all related to increased numbers of data centers.

The requested load adjustment is tied to the economy of state of Virginia. PJM has determined that due to the negligible economic impact of data centers as compared to their load impact, the data center growth is not adequately reflected in the Virginia economic variables.

PJM determined that the adjustments are significant both in sheer size and as a percentage of a Dominion's load.

### ***Adjustment Estimation- for each identified and verified issue, estimate its impact on peak load using the following methods (which may be combined):***

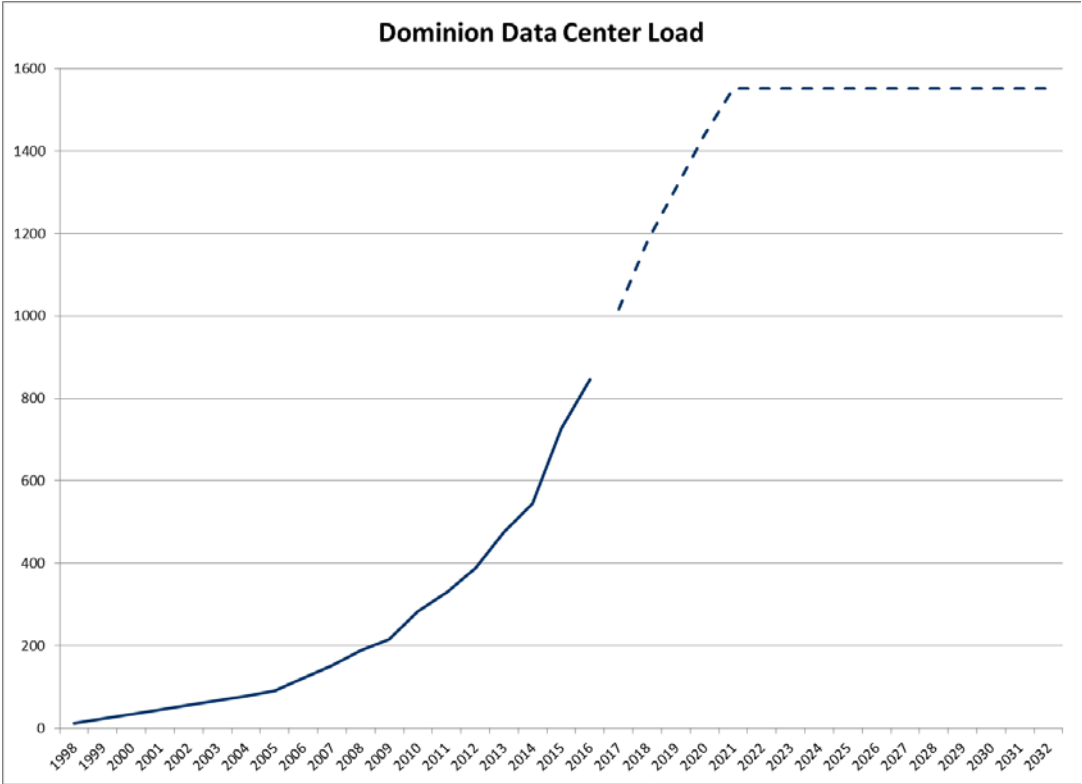
Acquire load history for the load that has/will change and produce analysis to isolate the impact (e.g., forecast runs with and without the load involved, trend analysis)

Acquire any contracted amounts of load changes

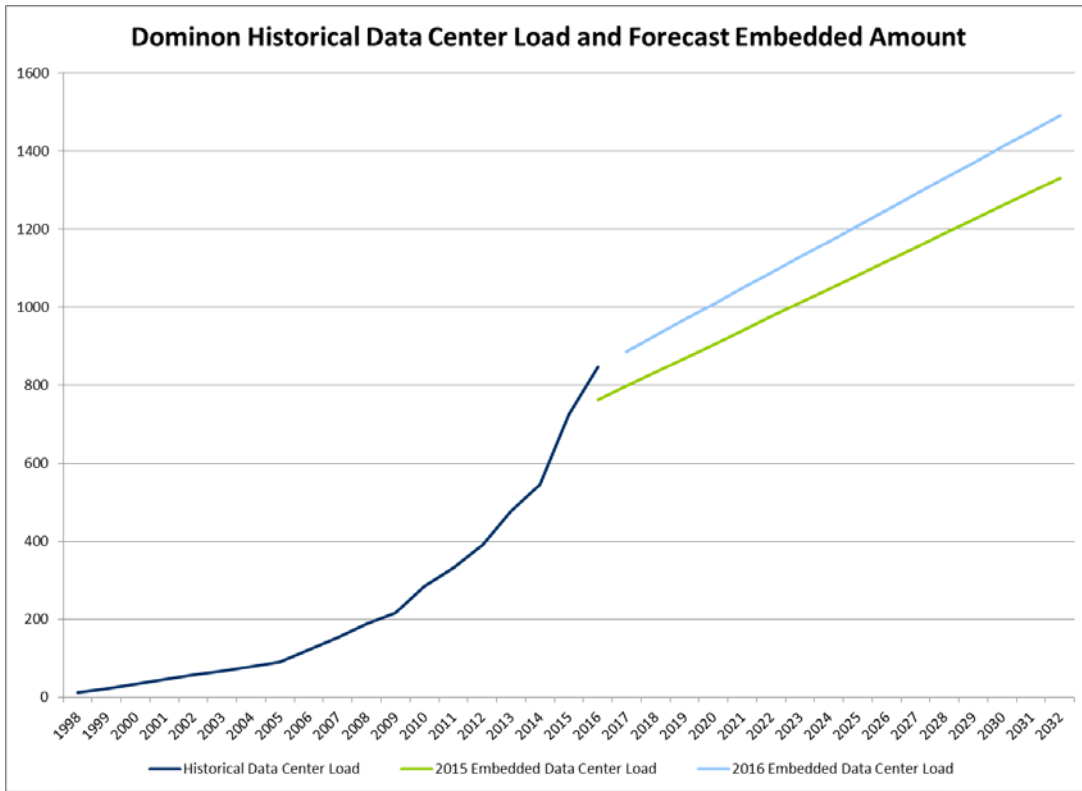
For any after-the-fact adjustments, review the zone's forecast model's residual pattern

Review any available independent analysis of the impact of the load change.

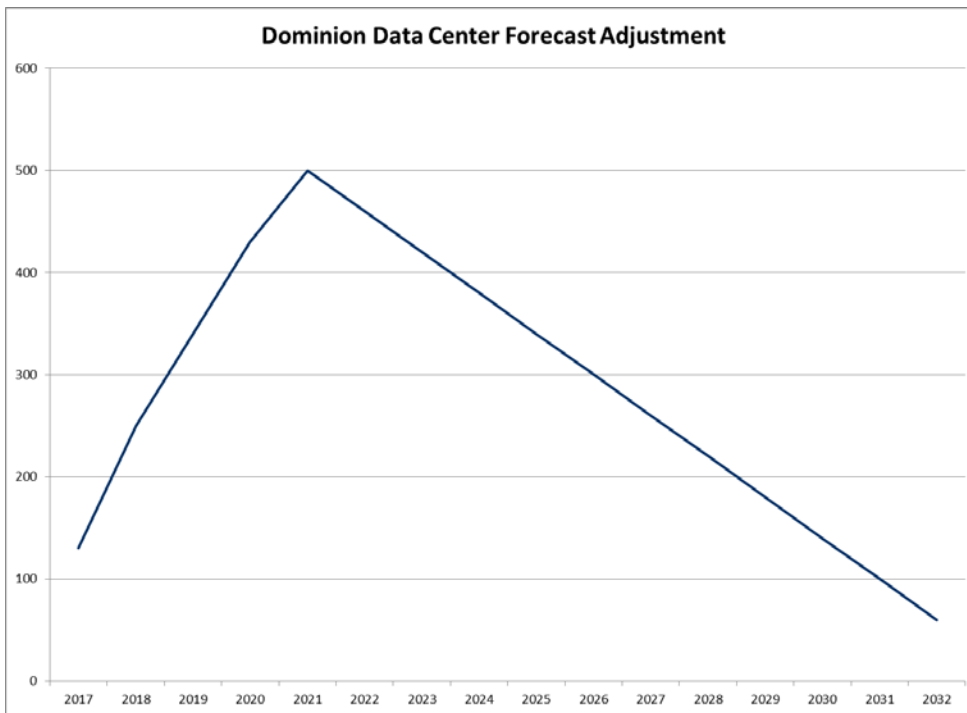
Dominion provided history of data center load and forecast amounts being used in their distribution planning out to 2021. These loads have reached over 800 MW as of 2016 and are forecast to amount to over 1500 MW by 2021. Projections are not available after 2021, so the assumption was made to keep data center load flat in the out year.



PJM then took last year's embedded amount and scaled it up to reflect that additional data center load came on in 2016.



The forecast adjustment is then determined as the difference of the forecasted amount and the embedded amount. The forecast adjustment grows to 500 MW in 2021 before gradually tapering through the forecast horizon.



***Adjustment Review – Each proposed load forecast adjustment will be reviewed with the Load Analysis Subcommittee prior to inclusion in the load forecast. The final decision on any load adjustment is made by PJM.***