Rappahannock Electric Cooperative Virginia

Retail Service Territory

Load Adjustment Request Detail

Submission request by year and type (if multiple).

See page 3 for the forecast by year.

Summary of expected load behavior by type (if multiple).

The metered load is expected to grow as forecast.

How the requester is treating these loads in their own financial/planning forecast.

Rappahannock Electric Cooperative (REC) uses this same forecast to prepare both its resource and financial plans.

Summary of agreements or other supporting information that speaks to the certainty of the submission.

REC does not prepare its forecast using signed contracts. Rather it uses contracts to validate its forecast. REC asked Dominion Energy to assist in the development of the forecast. See page 5 for a description of the Dominion Energy forecasting process.

REC uses two different signed firm contracts to validate its forecast.

- Construction Letter of Authorization (either Construction Development Agreement (CDA) or Material Purchase/Sale Agreement (MPA/MSA)) – This is a contract that authorizes REC to construct transmission and distribution facilities to serve a customer request. This contract obligates the customer to: 1) pay all estimated construction costs required for REC to interconnect the customer to the transmission system prior to work beginning (typically a 230/34.5kV substation), 2) reimburse REC for any/all investments made if the project is canceled, and 3) execute an Electric Service Agreement within a fixed period of time before the facilities are in place.
- Electric Service Agreement – This is a contract for electric service. It is required prior to meter set and outlines how REC will serve the customer. The guiding terms are outlined in REC's Terms & Conditions and the appropriate electric tariff.

In the case of agreements, please provide summary of what the agreement entails.

See the response above and page 4 for a comparison of the demand forecast to the signed firm contracts.

Description/summary of any methods, screening, or scoring criteria that was used in developing the submission.

See page 5 for both a description and a graphic highlighting Dominion Energy's forecasting process. The foundation of this process is over ten years of monthly metered information. Dominion Energy used its approach to model REC's demand forecast.

Narrative on pipeline of future projects (e.g. projects that were not submitted, inquiries, etc.).

See page 4. This graph shows how the firm contracts grow into the demand forecast over time. REC has contractual support for its forecast through 2045. REC continuously executes new contracts, both Construction Letters of Authorization and Electric Service Agreements and expects to continue to do so in support of future demand.

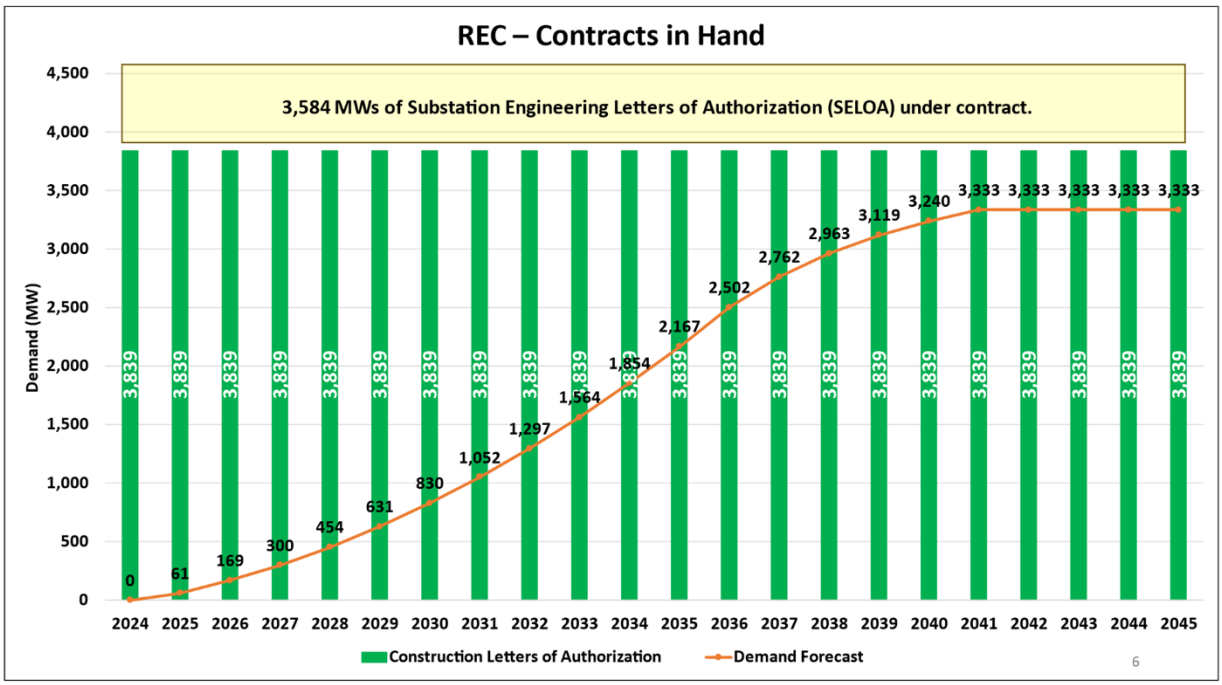
Rappahannock Electric Cooperative

Retail Service Territory

Data Center Industry

Coincident Peak (MW)

Year	MW
2025	54
2026	149
2027	265
2028	401
2029	557
2030	733
2031	929
2032	1,145
2033	1,382
2034	1,638
2035	1,914
2036	2,211
2037	2,440
2038	2,618
2039	2,755
2040	2,862
2041	2,945
2042	2,945
2043	2,945
2044	2,945
2045	2,945


REC – Contracts in Hand
3,584 MWs of Substation Engineering Letters of Authorization (SELOA) under contract.
Demand (MW)
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045
0 61 169 300 454 631 830 1,052 1,297 1,564 1,854 2,167 2,502 2,762 2,963 3,119 3,240 3,333 3,333 3,333 3,333 3,333
3,839
Construction Letters of Authorization
Demand Forecast
6

Dominion Energy Forecasting Process

Used to prepare REC forecast

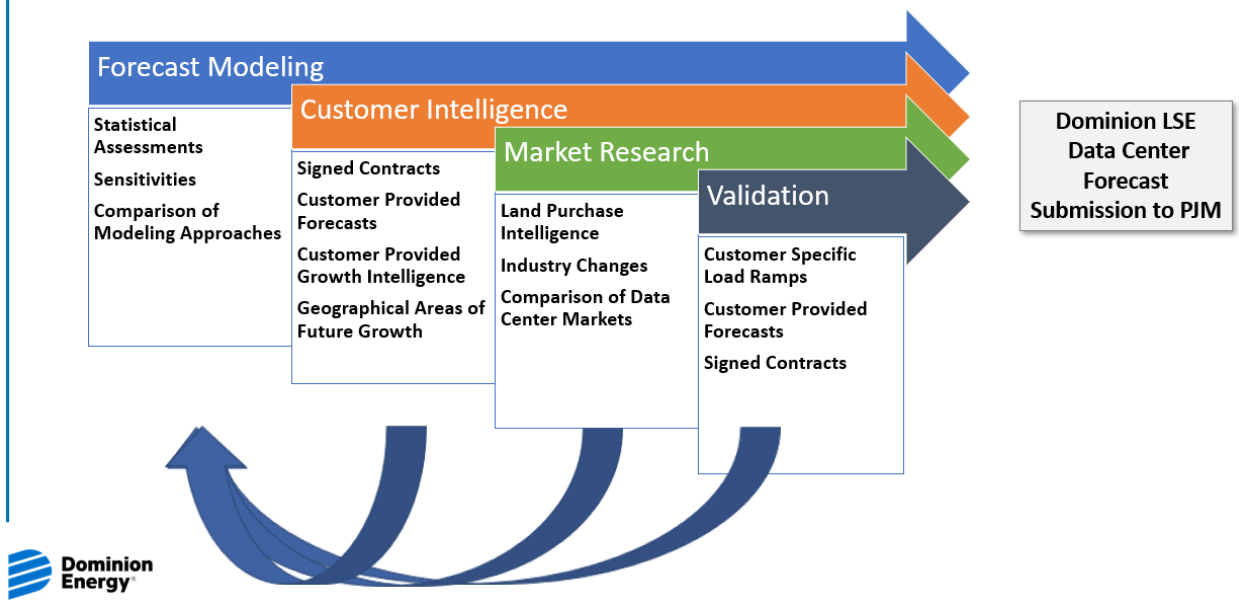
Modeling Process

Forecast is based on 10+ years of metered data center customer information

1. Statistically modeled 7 largest or fastest growing customers and an 8th model of all remaining customers combined into one segment
2. Statistically model high billing demand forecast three ways for each customer segment (24 models)
   a) Approach 1: linear regression of billing demand
   b) Approach 2: polynomial regression of billing demand
   c) Approach 3: custom fit based on market/customer information
   Note: One of these three approaches is selected for each of the 8 customer segments
3. Validate/adjust statistical forecasts based on customer provided long-term forecasts (4 cloud customers)
4. Develop low billing demand forecast using industry aggregate statistical models (4 models)
5. Average high and low forecasts to derive the official billing demand forecast
6. Use load factor to model MWH sales based on high, official, and low forecast scenarios
7. Based on historical ratios, calculate coincident demand forecast from billing demand forecast

Dominion Energy

Modeling Methodology



Dominion Energy