ODEC'S DATA CENTER LOAD ADJUSTMENT SUBMISSION TO PJM FOR THE DOM ZONE

Old Dominion Electric Cooperative is a member-owned, not-for-profit wholesale generation and transmission electric cooperative and supplies power for 11 not-for-profit retail distribution cooperatives in Virginia, Maryland and Delaware. ODEC serves these members under its contractual supply obligations as the wholesale load serving entity.

Below is a detailed narrative describing each step of the process used to create ODEC's data center load adjustment submission to PJM for the DOM Zone.

STEP 1: ODEC Gathers Information

A. ODEC reviews delivery point load requests monthly.
B. ODEC meets with its member distribution cooperatives to review each individual delivery point request and discuss project specifics. This review includes the following activities:
    a. Determine financial commitments made by the end-use customer.
    b. Identify contracts that are in place.
        i. Letter of Authorization (LOA)
        ii. Engineering Design & Construction (ED&C)
        iii. Long Lead Procurement (LLP)
        iv. Electric Service Agreement (ESA)
    c. Discuss other quantitative/qualitative factors to forecast the likelihood of the project.
    d. Determine if the project is currently included in the member distribution cooperative's financial plans.
    e. Identify the project status (in-service, construction, design or study)
    f. Identify the requested in-service date.
    g. Identify the capacity requested and use the client's load ramp schedule by year.
C. ODEC prepares a monthly large load forecast by assuming a smooth load ramp from the requested in-service date and between years.
D. ODEC assumes an 80% load factor when calculating the energy (MWh).

STEP 2: Assess Status of Agreements

A. PJM offered the following guidance to further adjust the client's capacity requested based on the type of agreements in place.
    a. Include the full capacity requested (100%) for any data center project with a signed LLP and/or ESA.
    b. Adjust the capacity requested by 50% for any data center project in the early stages having only a LOA or ED&C in place. This reduction will account for less certainty in the agreements.
    c. Add parts a and b to arrive at a net capacity requested value.

STEP 3: Convert to Base Line & High Demand Values

A. PJM offered the following guidance to reduce the capacity requested to a base line demand value and high demand value.
   a. Apply 70% to the net capacity requested in step 2c to arrive at the ***Base Line Demand value projection.***
   b. Using the capacity requested numbers projected in step 1, apply 70% to arrive at the ***High Demand value projection.***

Other Requested Documentation:

A. Submission request by year and type (if multiple)

ODEC STEP 1					STEP 2				STEP 3	STEP 3
ODEC's Original Submission					PJM Guidance				DEMAND BASE LINE	DEMAND HIGH
Member:	REC	NNEC	MEC	ODEC	Member:	REC	NNEC	MEC	ODEC BASE LINE	ODEC HIGH
Projects:	2	2	7	11	Projects:	2	2	7	11	11
Status	Study	Study	In-Service / Construction		PJM:	50%	50%	100%	70%	70% Original
Year	MW	MW	MW	MW	Year	MW	MW	MW	MW	MW
2025	0	0	420	420	2025	0	0	420	294	294
2026	0	15	627	642	2026	0	8	627	444	449
2027	121	314	814	1249	2027	61	157	814	722	874
2028	411	635	939	1985	2028	206	318	939	1023	1390
2029	691	917	949	2557	2029	346	459	949	1227	1790
2030	736	1189	949	2874	2030	368	595	949	1338	2012
2031	780	1411	949	3140	2031	390	706	949	1431	2198
2032	780	1483	949	3212	2032	390	742	949	1456	2248
2033	780	1483	949	3212	2033	390	742	949	1456	2248
2034	780	1483	949	3212	2034	390	742	949	1456	2248
2035	780	1483	949	3212	2035	390	742	949	1456	2248
2036	780	1483	949	3212	2036	390	742	949	1456	2248
2037	780	1483	949	3212	2037	390	742	949	1456	2248
2038	780	1483	949	3212	2038	390	742	949	1456	2248
2039	780	1483	949	3212	2039	390	742	949	1456	2248
2040	780	1483	949	3212	2040	390	742	949	1456	2248
2041	780	1483	949	3212	2041	390	742	949	1456	2248
2042	780	1483	949	3212	2042	390	742	949	1456	2248
2043	780	1483	949	3212	2043	390	742	949	1456	2248
2044	780	1483	949	3212	2044	390	742	949	1456	2248
2045	780	1483	949	3212	2045	390	742	949	1456	2248

B. Summary of expected load behavior by type (if multiple). Identify what kind of data center is being requested.
   a. Hyperscale (usually 100 MW or more, 10,000 sq. ft. of space, more than 5,000 servers, and owned by a single entity.
   b. Co-locators lease rack space to tenant companies.
   c. ODEC has both hyperscale and co-locators included in its 2025 large load forecast adjustments.

C. How the requester is treating these loads in their own financial/planning forecast
   a. Once agreements are in place and signed by the client and the respective member distribution cooperative, both parties provide the funding outlined in the agreement.

D. Summary of agreements or other supporting information that speaks to the certainty of the submission. In the case of agreements, please provide a summary of what the agreement entails

a. LOA study phase: Cost can vary depending on the transmission owner (TO) but in general is not prohibitive and is the responsibility of the distribution cooperative.
b. Design phase can cost in the millions. Cost allocation is determined in this phase. The client will pay a portion of the transmission line upgrade cost.
c. Construction agreements iron out further details on the substation and distribution upgrades needed to support the project. This will typically include any long lead time procurement of substation transformers, circuit breakers, etc.
d. ESA provides the final financial support details and schedule for project execution.

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

ODEC STEP 1 (FUTURE)	
ODEC's Potential Large Load Adjustment	
Member:	MEC
Projects:	6
Status	Study
Year	MW
2025	0
2026	68
2027	196
2028	454
2029	754
2030	1199
2031	1477
2032	1624
2033	1715
2034	1974
2035	2234
2036	2284
2037	2334
2038	2434
2039	2434
2040	2434
2041	2434
2042	2434
2043	2434
2044	2434
2045	2434

STEP 2 (FUTURE)	
PJM Guidance	
Member:	MEC
Projects:	6
PJM:	50%
Year	MW
2025	0
2026	34
2027	98
2028	227
2029	377
2030	600
2031	739
2032	812
2033	858
2034	987
2035	1117
2036	1142
2037	1167
2038	1217
2039	1217
2040	1217
2041	1217
2042	1217
2043	1217
2044	1217
2045	1217

STEP 3 (FUTURE)
DEMAND BASE LINE
ODEC BASE LINE
6
70%
MW
0
24
69
159
264
420
517
568
600
691
782
799
817
852
852
852
852
852
852
852

STEP 3 (FUTURE)
DEMAND HIGH
ODEC HIGH
6
70% Future
MW
0
48
137
318
528
839
1034
1137
1201
1382
1564
1599
1634
1704
1704
1704
1704
1704
1704
1704
1704