BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Hecate Energy Cherrydale LLC Application for Certification as an Ohio Renewable Energy Resource Generating Facility	))))	Case No. 17-2074-EL-REN

REVIEW AND RECOMMENDATION
SUBMITTED ON BEHALF OF THE STAFF OF
THE PUBLIC UTILITIES COMMISSION OF OHIO

CASE HISTORY

On October 3, 2017, Hecate Energy Cherrydale LLC (Applicant) submitted an application for certification by the Public Utilities Commission of Ohio (PUCO or Commission) of a solar generating facility as a renewable energy resource generator. The Applicant's facility is located at 7078 Cherryvale Drive, in Cape Charles, Virginia (the Facility).

According to the application, the Facility uses solar photovoltaics to generate electricity and has a nameplate capacity of the facility is 25.35 MW DC. The applicant has indicated that the Facility has a placed in-service date of October 25, 2017.

On October 31, 2017, an Attorney Examiner Entry suspended the automatic approval process for this application. On January 4, 2017, Staff requested a DFAX power flow study from PJM for another case. On January 11, 2017, Staff received the DFAX power flow study from PJM.

STAFF REVIEW

The Staff's review of an application for certification of a renewable energy resource facility consists primarily, but not exclusively, of three items: (1) the deliverability of the facility's output to the state of Ohio, (2) the resource/ technology used at the facility, and (3) the facility's placed in-service date.

1) Deliverability

The Applicant indicates that its Facility is located in Virginia, therefore the Facility needs to demonstrate that the electricity could be physically delivered to the Ohio, pursuant to Ohio Administrative Code (O.A.C.) 4901:1-40-01 (I).

This required demonstration of deliverability was addressed in the Commission's Finding and Order in Case No 09-0555-EL-REN, when the Commission endorsed the following methodology for generating facilities that are located outside of Ohio and its contiguous state:

> The Commission finds that Staff's proposed methodology and recommended definition of "significant impact" are reasonable and should be adopted. Accordingly, any applicant seeking to demonstrate the physical deliverability of energy into Ohio from a generating facility located

outside of Ohio or a contiguous state may do so with a power flow study, performed by an RTO, offering evidence of a significant impact on power flows over transmission lines located in the state of Ohio. The transmission lines must serve loads connected to distribution lines located in Ohio. If the study shows an impact on a transmission line in Ohio that is greater than five percent and greater than one megawatt, the electricity produced by the renewable generating facility would be deemed to have a significant impact, thereby satisfying the statutory criteria that the electricity is physically deliverable into Ohio.[1]

Because the Facility is not located within Ohio or a contiguous state, it is required to submit documentation with its application that demonstrates physical deliverability.

Deliverability Analysis Requirements

If a facility is not located within Ohio or a contiguous state, a power flow study must be presented which shows an impact on a transmission line in Ohio that is greater than five percent and greater than one megawatt. Impacts at these levels would establish that the electricity produced by the renewable generating facility would be deemed to have a significant impact, thereby satisfying the statutory criteria that the electricity is physically deliverable into Ohio.

Distribution Factor (DFAX) Analysis

A DFAX analysis shows a generating facility's impact on transmission buses within PJM. The DFAX analysis applicable to this facility that was provided by PJM Interconnection (PJM) assumed a 50/50 peak load forecast for the 2021 Regional Transmission Expansion Plan Summer Case. PJM, in generation queue number Z2-012 gave the Applicant approval to interconnect the Facility to the Old Dominion Electric Cooperative system as a tap of the Weirwood-Eastville 69 kV circuit.[2] In its DFAX study, PJM evaluated the impacts of power flows from the Applicant's injection of 25.35085 MW on 12 electric transmission lines in Ohio. The results of the study were reviewed by staff.

- Highest DFAX value: 3.82%
- The highest DFAX value (0.0382) occurred on AEP's Maliszewski-Vassel 765 kV Transmission Line. The value does not meet the greater than five percent transmission line impact criteria.

Ohio Dfax values for Queue position Z2-012

Name KV	Col-1	Col-2	Col-3	Col-4	Col-5	Col-6	Col-7	Col-8	Col-9	Col-10	Col-11	Col-12
Z2-012 C	-0.01044	-0.00616	-0.03582	-0.03820	0.01286	-0.00739	-0.00546	-0.00046	-0.00050	0.00707	0.00080	0.00020
Z2-012 E	-0.01044	-0.00616	-0.03582	-0.03820	0.01286	-0.00739	-0.00546	-0.00046	-0.00050	0.00707	0.00080	0.00020

Energy Delivery

Energy delivery is calculated by multiplying the facility's capacity by the DFAX value of the transmission line in question. For AEP's Maliszewski-Vassel 765 kV transmission line, the calculated energy delivery

[1] Finding 8, p. 4, of Commission's Finding and Order.

[2] PJM Generation Queue. PJM Interconnection Website http://pjm.com/planning/generation-interconnection/generation-queue-active.aspx

would be 0.968402 MW (0.0382 * 25.35085). This value does not meets the greater than 1 MW criterion.

Deliverability conclusion

The Hecate Energy Cherrydale LLC does not meet the criteria requiring the DFAX values being greater than 5% and the energy being greater than 1 MW. The energy from the Applicant's facility is not physically deliverable to Ohio. Staff recommends denial.

2) Resource/Technology

The Facility uses solar photovoltaics to generate electricity. Staff concludes that this Facility qualifies as a renewable energy resource, pursuant to Ohio Revised Code (R.C.) 4928.01(A)(37)(a)(i).

3) Placed In-Service Date

The Applicant indicated that the facility has a placed in-service date of October 25, 2017, thereby satisfying the requirement of R.C. 4928.64(A)(1), which requires a qualifying renewable energy resource to have a placed-in-service date on or after January 1, 1998.

4) Additional Considerations

The Facility must be registered with either M-RETS or PJM EIS' GATS, the two attribute tracking systems currently recognized by the Commission. The Applicant indicates that, once approved, it would register the Facility in the PJM GATS.

STAFF RECOMMENDATION

Based on the foregoing analysis, Staff recommends that the Commission deny certification of the Facility as a renewable energy resource generating facility as it does not satisfy all the applicable eligibility requirements.