

To: The Ohio Manufacturers' Association From: John Seryak, PE and Wyatt Elbin

# Large solar facilities set to have meaningful role in Ohio's electric generation fleet despite passage of SB 52

## **Summary**

A significant number of large solar facilities are operating, approved, or pending approval at the Ohio Power Siting Board (OPSB). Once built, these facilities will produce enough electricity to meet a considerable amount of Ohio's electric demand. Large solar facility development is relatively new in Ohio, with the first major projects applying with the OPSB in 2017 and the first facility coming online in February of this year<sup>1</sup>. Since then, development has rapidly increased, with 20 projects submitting applications in 2020.

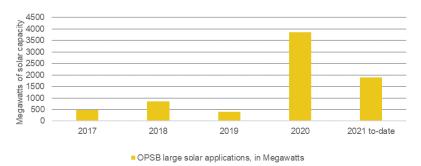


Figure 1: Megawatt capacity of large solar applications received by OPSB

Ohio recently signed Senate Bill 52 (SB 52) into law, which creates a local approval process for utility projects, including wind and solar. This local approval requirement is in addition to the existing OPSB review process. The legislation also contains a grandfather provision for certain pending solar projects<sup>2</sup>.

### **Key Points**

- There are 41
  pending or approved
  large solar facilities
  with applications at
  the Ohio Power
  Siting Board
  (OPSB).
- Senate Bill 52 (SB 52) added a local approval requirement for solar projects.
- SB 52 includes an exemption for 38 of the 41 projects at the OPSB.
- These 38 projects represent 7,000 MW of solar capacity and will be capable of meeting ~30% of Ohio's electric demand at certain times of their peak production.

Ohio Power Siting Board, Power Siting Solar Case Status map as of 7/16/2021. https://opsb.ohio.gov/wps/portal/gov/opsb/about-us/resources/solar-farm-map-and-statistics

<sup>&</sup>lt;sup>2</sup> SB 52, Section 4 as enrolled: "(A) The provisions of this act shall not apply to any application for a certificate, or material amendment to an existing certificate, from the power siting board for a large solar facility that is in the PJM interconnection and regional transmission organization, L.L.C., new services queue at the time the application is found to be in compliance with division (A) of section 4906.06 of the Revised Code by the chairperson of the power siting board or the



## Ohio's pending or approved solar projects

Ohio currently has 41 pending or approved solar projects at the OPSB. Of the 41 projects, 38 are in advanced enough stages of project development to meet SB 52's grandfather requirements. These requirements state the project must have received a completed PJM site impact study and paid the fee for a facilities study. These 38 projects represent nearly 7,000 MW of nameplate solar generation capacity. Once built, these projects are expected to produce more electricity annually than the Davis-Besse Nuclear Power Station<sup>3</sup> and will be able to meet ~30% of Ohio's electric demand at certain times of their peak hourly production<sup>4</sup>.

### **Senate Bill 52 Overview**

Created in 1972, the OPSB will continue to have jurisdiction for approving the construction of electric generation facilities in the state of Ohio. However, SB 52 added a requirement for project developers to notify county officials and receive their approval prior to beginning the OPSB's approval process<sup>5</sup>. Additionally, under the new law, county commissioners can establish zones in their county that would restrict project development<sup>6</sup>. Each project will also now have two voting members from their community during the OPSB review. To address projects already filed at the OPSB for review, the bill establishes development milestones for projects that if achieved by a specific date, would preclude the project from being subject to SB 52's new approval requirements. Finally, SB52 created a referendum process for any local zoning restriction decision that upon the collection of enough signatures, could be challenged at the ballot box.

While SB 52 provides clarity for solar projects in active development, it is uncertain what the new rules will do to future project development. Solar is increasingly financially attractive and the demand from corporate renewable energy buyers continues to increase. SB 52 does not fundamentally change solar siting requirements; it only adds additional approval steps. Time will tell if the new requirements impede solar development in the state.

chairperson's designee and is accepted by the board if, as of the effective date of this section: (1) The applicant has received a completed system impact study from PJM for the large solar facility; and (2) The applicant has paid the fee for the facilities study to PJM."

<sup>&</sup>lt;sup>3</sup>Based on annual solar production estimates from the DOE PV Watts simulation tool, the 7,000 MW of solar will produce approximately 9,000 GWh annually. This is compared to Davis-Besse Nuclear Power Station's previous three-year average, annual production of 7,482 GWh, per the International Atomic Energy Association. https://pris.iaea.org/PRIS/CountryStatistics/ReactorDetails.aspx?current=676

<sup>&</sup>lt;sup>3</sup>Based on hourly solar production estimates from DOE PV Watts simulation tool. 7,000 MW of solar in Ohio has a peak output of 5,600 MW on March 14, noon to 1 pm. According to PJM, Ohio's total power demand at this time for the ATSI, AEP Transmission, DP&L, and Duke Energy Ohio zones is 18,510 MW. 5,600 MW/18,510 MW = 30% of Ohio's power during peak solar output.

Ohio Revised Code Sec. 303.61. (A) At least ninety days, but not more than three hundred days, prior to applying for a certificate from the power siting board, or a material amendment to an existing certificate, for a utility facility, to be located in whole or in part in the unincorporated area of a county, the person intending to apply shall hold a public meeting in each county where the utility facility is to be located.

<sup>&</sup>lt;sup>6</sup> Ohio Revised Code Sec. 303.58. (A) The board of county commissioners may adopt a resolution designating all or part of the unincorporated area of a county as a restricted area, prohibiting the construction of any or all of the following: (1) An economically significant wind farm; (2) A large wind farm; (3) A large solar facility.