

# Net Energy Injections at Load Busses Quarterly Report

Market Implementation Committee August 5, 2020

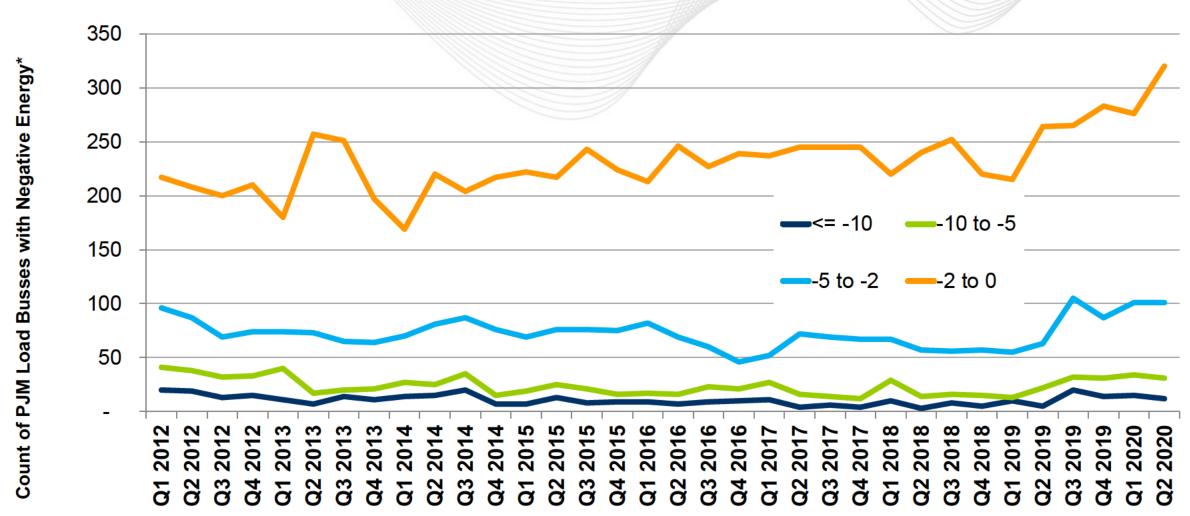
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- Follow up effort to the Net Energy Metering Senior Task Force (NEMSTF) recommendation
  - PJM will implement a quarterly review to track and trend overall incidents of net energy injections at load busses
- PJM Manual 28 Requirement
  - PJM will assess and trend quarterly the degree of net energy injections at load busses modeled in the PJM network system model (i.e., reverse power flows) in order to detect and correct any modeling issues and to identify any generation in excess of load that appears at a load bus.



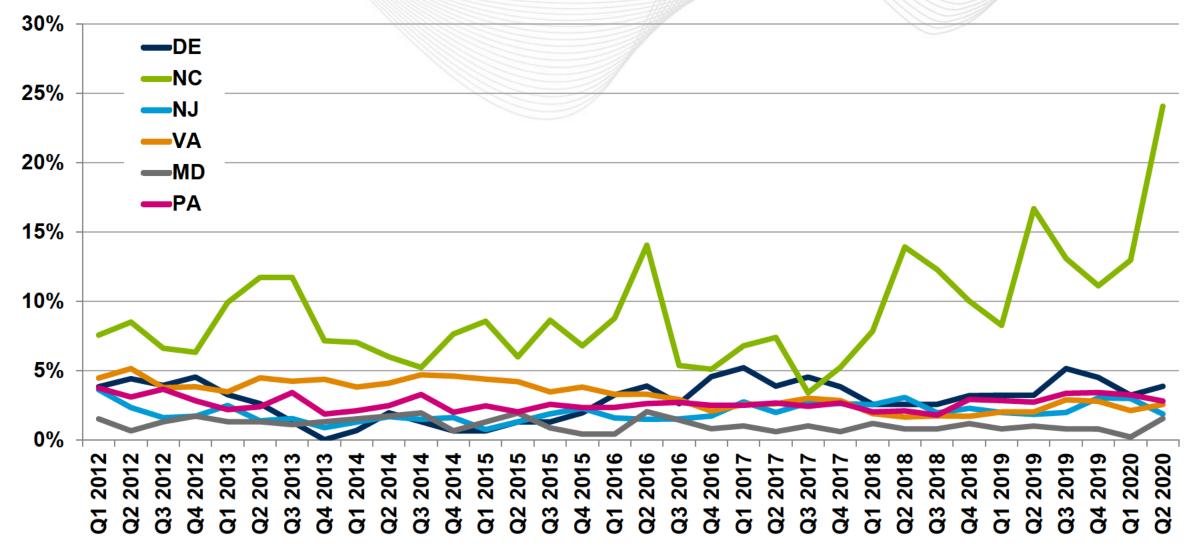
## PJM Load Busses with Negative Energy on Average



<sup>\*</sup> The total number of PJM load busses is 10,189 as of the most recent model build.

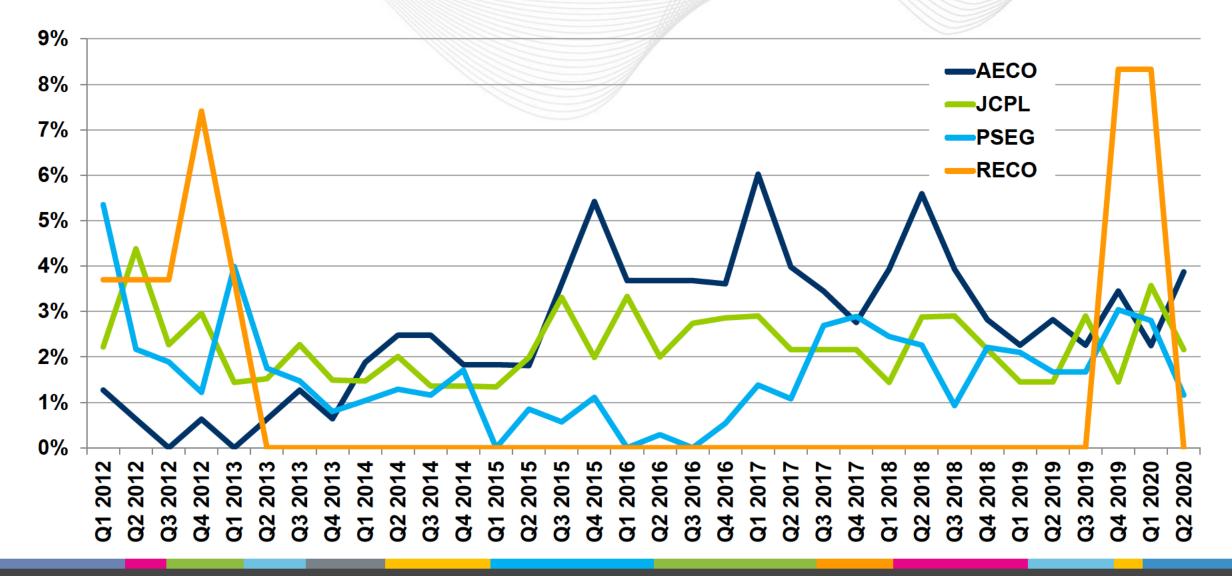


# Mid-Atlantic State Load Busses with Negative Energy on Average





## New Jersey Load Busses with Negative Energy on Average





- There has been a large increase (174) in the total number of load pnodes solving negative on average since Q1 2019 (slide 3). 70% of the increase is attributable to pnodes in OH, IN, and KY. Over the past year and a half PJM has had many requests to improve modeling of lower voltage areas, especially in Ohio. While PJM tries to make sure enough telemetry is available we still encounter issues. PJM will continue to tune the model in this area.
- NC had an increase in the number of negative load busses in Q2. This is attributable to
  utility-scale solar facilities that are not participating in the PJM Market. NC counts typically
  increase and Q1 and Q2 then decrease in Q3 and Q4 (slide 4).
- The seemingly large increase in the number of negative load busses in the RECO zone in Q4 2019 was actually just two pnodes at one station solving at a small negative value (slide 5). Metering coming into the EMS was inverted, which has since been corrected.
- PJM continues to track this data to improve its EMS Network Model. To date, trends have not been indicative of an underlying Net Energy Metering issue.



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**Net Energy Injections at Load Busses** 



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