Why \$2 Billion is a Lower Bound on Increases in Interconnection Costs Under the PJM Proposal

Ħ

Simplfied Explanation of the \$2 Billion

Roy Shanker Ph.D.

Simple View of \$2 Billion Estimate-1 Temporal Order Before Proposal



A is the fast lane and transition cycle 1 interconnection requirements/cost

B is transition cycle 2 interconnection requirements/costs

C is 7300 MW of additional deliverability PJM is proposing for intermittent resources with an existing ISA and associated cost

Simplified Explanation -2

- PJM has never estimated costs of the proceeding slide under the status quo in terms of adding deliverability to existing wind and solar with ISAs to increase their accreditation based on entering the *backend* of the existing queue
- Instead PJM has simply proposed moving C in front of A & B
- PJM initially estimated the cost of C (7300 MW) as \$7 million, if it moved C to the front of the queue, while ignoring impact on costs to A & B
- PJM then did an additional analysis where it only estimated the increased baseline upgrade costs due to moving C between A and B—that was the \$2 billion (\$6.7-\$4.7 billion, see 6/24/22 slides) and reflects impacts due to the prior use of the headroom by C.
- PJM has never, to our knowledge estimated the interconnection cost impacts to B due to moving C to the front of the queue

Simplified Explanation-3

- Clearly the \$2 billion is a lower bound
 - It doesn't include cost increases to B of moving C to the front of the interconnection queue
 - Also at a detailed level our understanding is that PJM characterized the CIR level of intermittent resources in A in their analysis as the current status quo, e.g. 13 MW for a 100 MW wind resource, not their recommended new higher level of either 38 MW or 54 MW of CIR. This should be discussed further as a study question
 - Finally, the "who pays" issue is still open: i) for \$2 billion; ii) for cost increases for B; iii) for the higher level of CIRs for all
 - Note there are no increases for any entries in the queue subsequent to the "effective date" established for facilities in C. All are behind A-C.