Electric Vehicles

Load Analysis Subcommittee

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Resource Adequacy Planning

- At October 4th LAS, presentation was given to prompt conversation on Electric Vehicles
  - We felt that our existing EV forecast was too low
  - Feedback from stakeholders
    - Some agreement
    - Some pointing to not focusing on the White House but instead focus on the states

- Slides that follow are meant to prompt additional conversation in moving towards a consensus on the EV forecast to be included in the 2022 Load Forecast

District of Columbia	25% of registrations by 2035
Illinois	1 Million EVs by 2030
Maryland	300k EVs by 2025
New Jersey	2 million EVs by 2035; 85% of sales in 2040
Virginia	8% of sales in 2024; 22% in 2025

- In states with targets, the target drives the forecast

- States without targets are pushed forward based on EIA 2021 AEO
  - Assumption of 4% of vehicle sales being EVs by 2030 and 8% by 2040

PJM Total Number of EVs

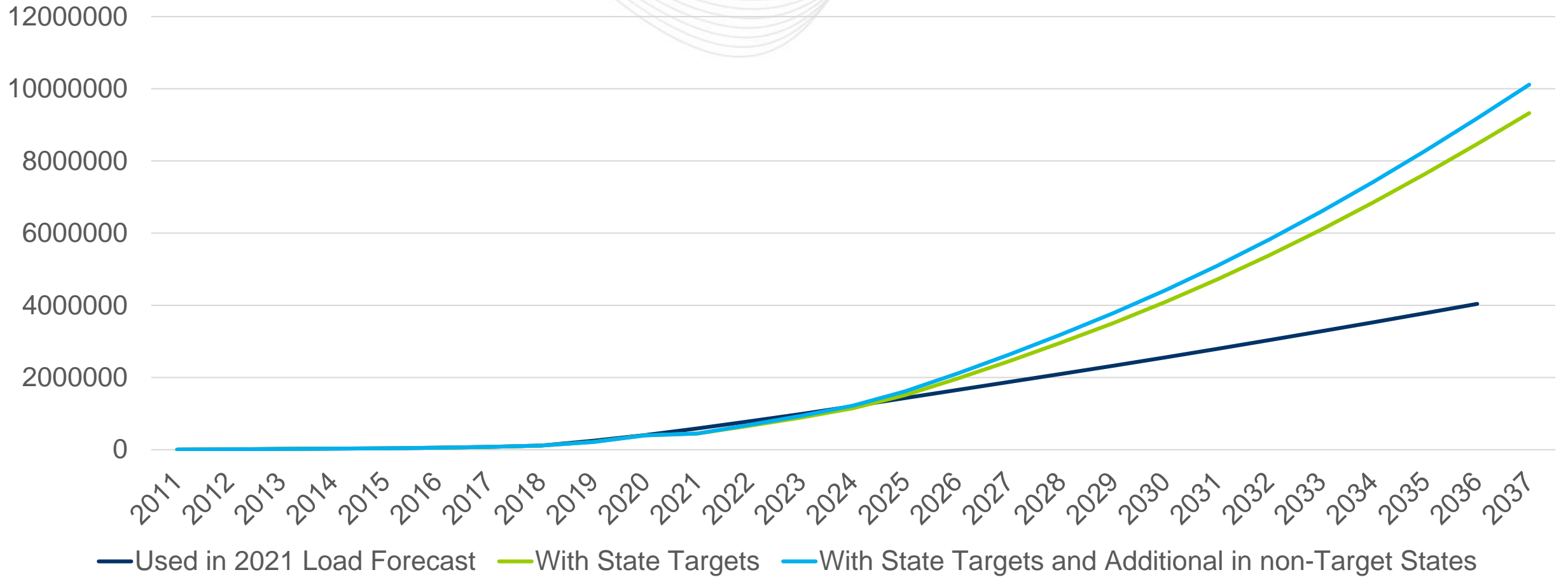Legend: Used in 2021 Load Forecast | With State Targets
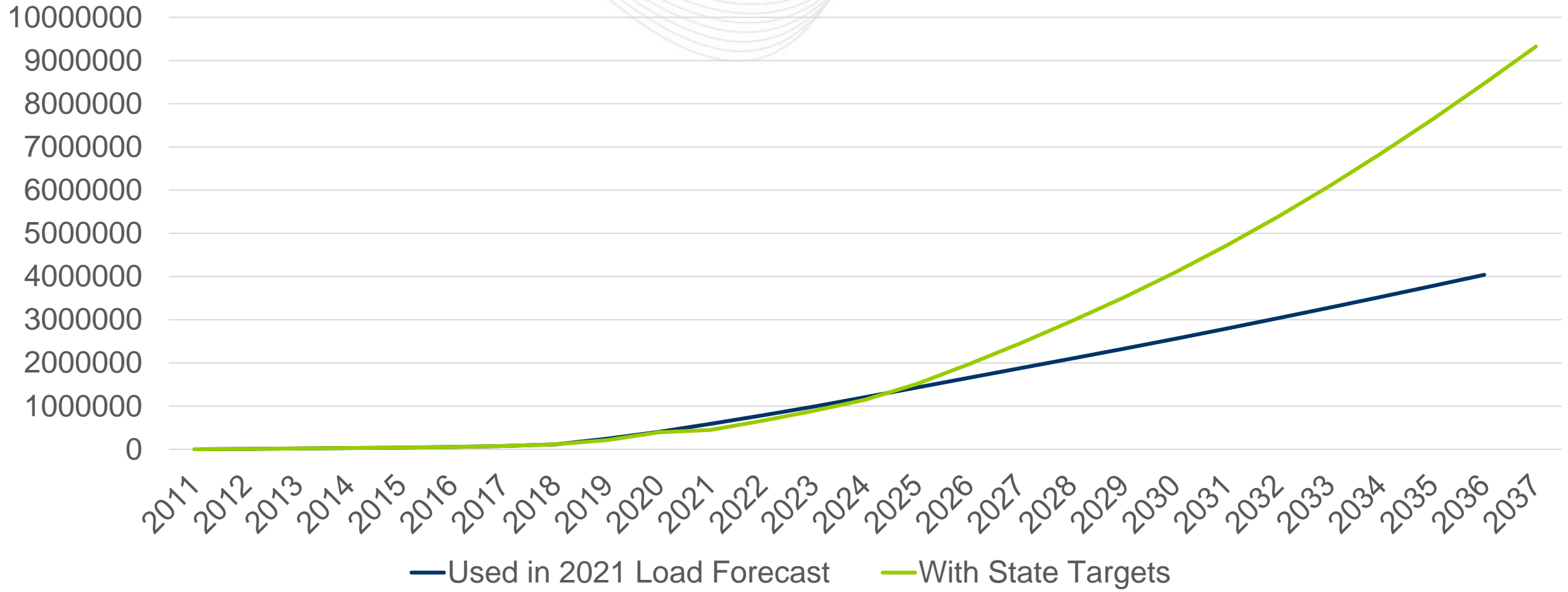
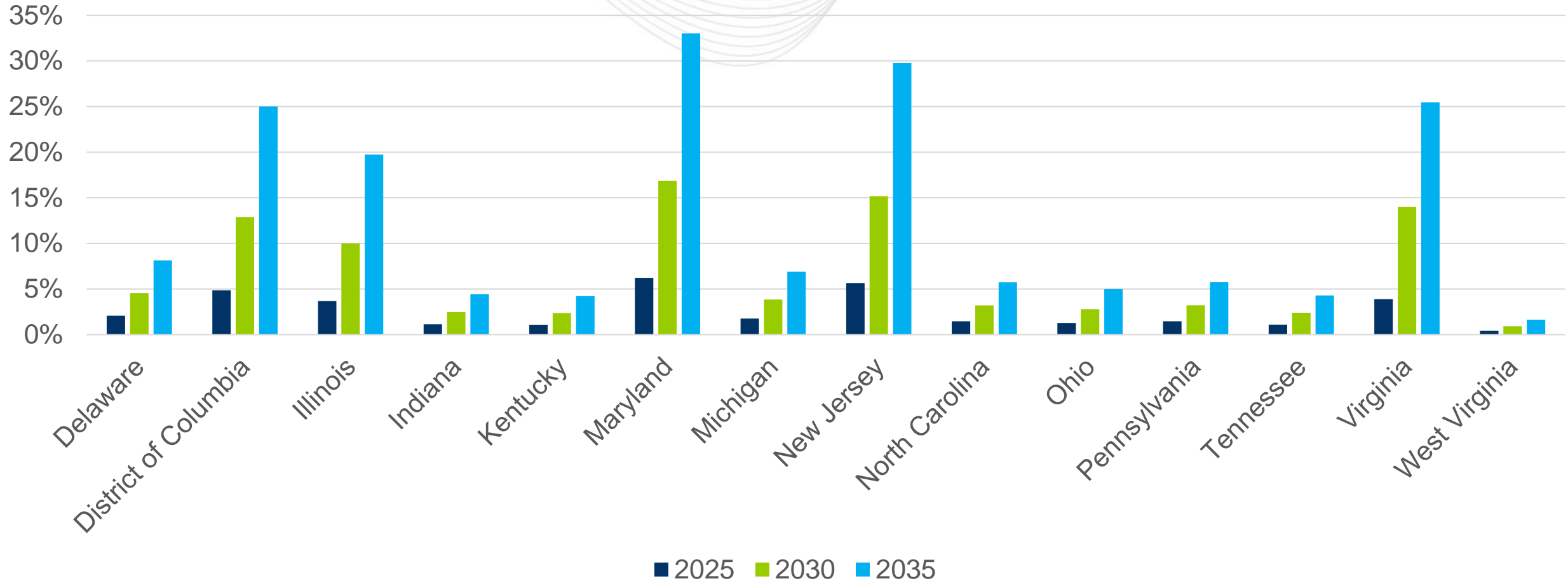Share of Total Vehicle Stock that are EVs
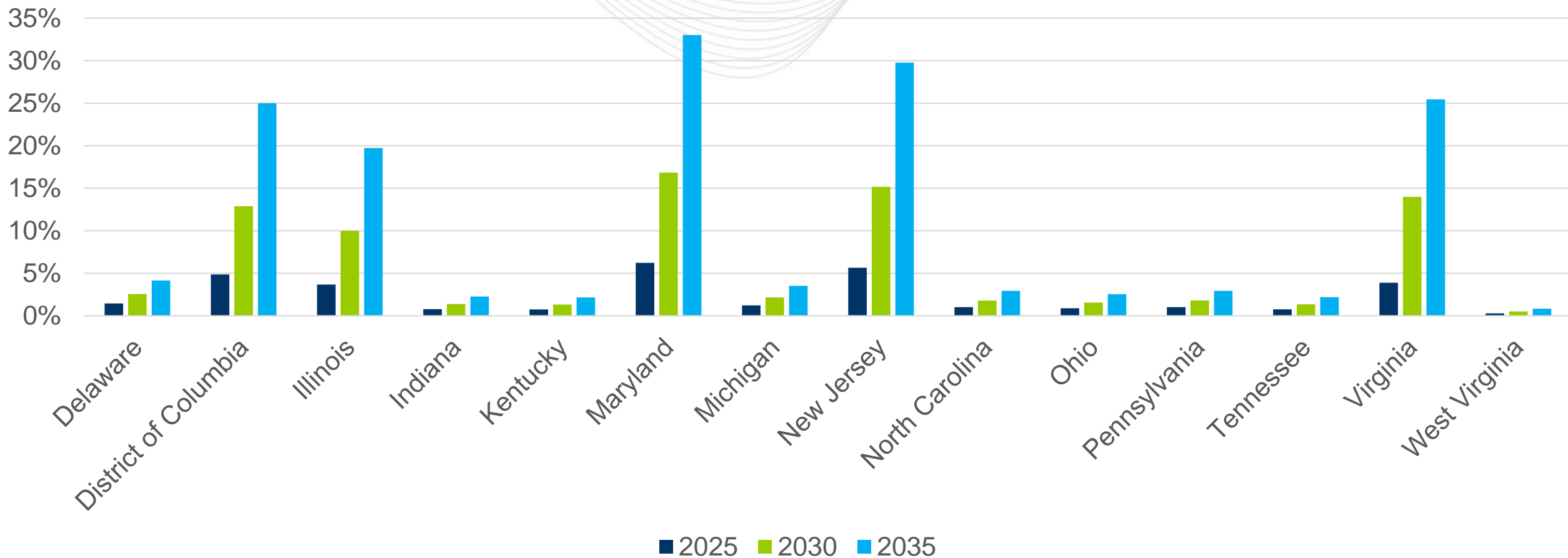
- Are the non-goal/non-target states reasonable?

- Should a more aggressive path be taken?
  - Following slides show a sensitivity if we doubled the EV share at the end of the forecast horizon for non-target states.

PJM Total Number of EVs

Legend:
- Used in 2021 Load Forecast
- With State Targets
- With State Targets and Additional in non-Target States

Share of Total Vehicle Stock that are EVs

Legend: ■ 2025 ■ 2030 ■ 2035

- Using state targets seems like a positive step in getting a more reasonable path for future EV penetration.

- Is linking with 2021 EIA AEO for non-target states reasonable or should we be more aggressive?

- PJM welcomes any feedback on the EV forecast or the charging assumptions.

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Electric Vehicles

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