

# Assumptions for the Long-Term Distributed Solar Generation Forecast

Load Analysis Subcommittee  
July 17, 2017



- Increase transparency of long-term distributed solar forecast
- Foster open dialogue in the stakeholder process regarding the major assumptions in the long-term distributed solar forecast
- Any federal or state policy assumptions discussed herein are based on currently mandated and funded policies

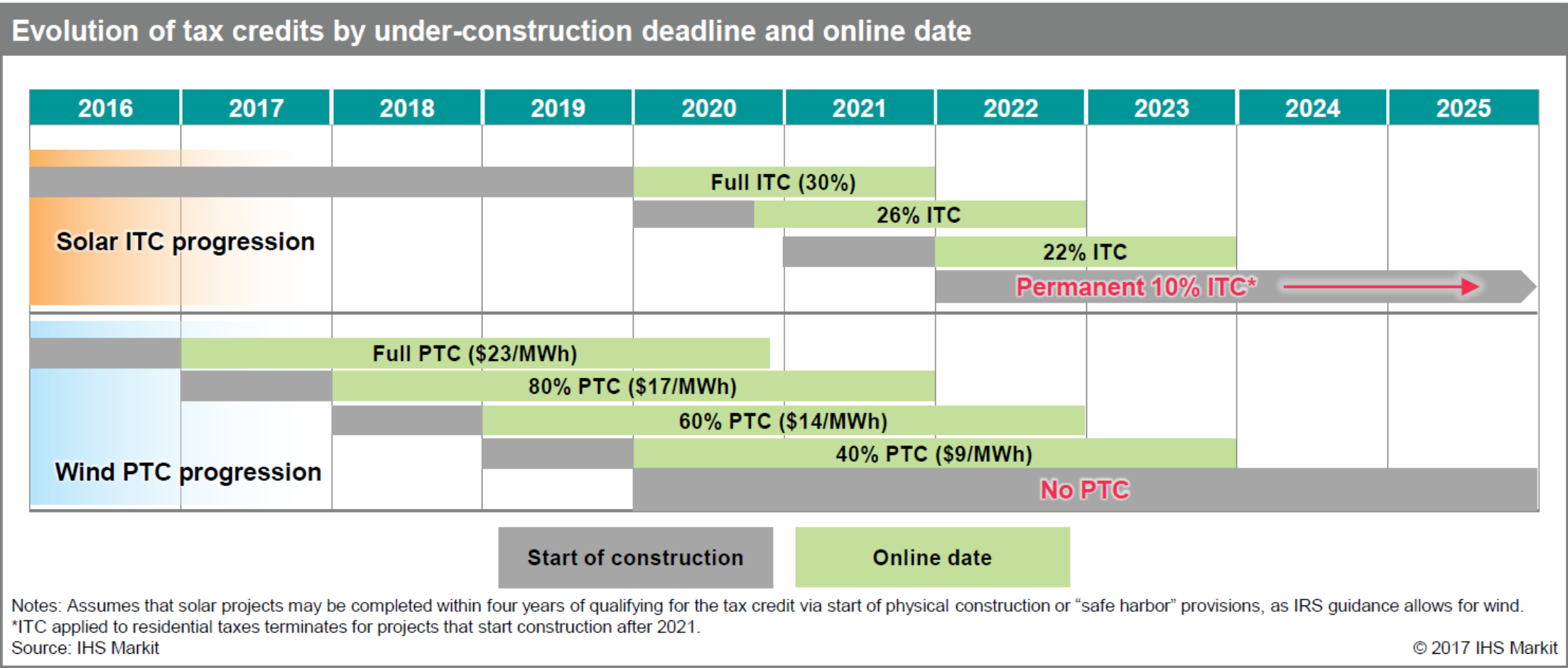
# PJM Solar Forecast 2017: Key Assumptions

Solar forecast scenario overview	
Assumptions	Scenario 1: "NEM continuity"
Federal policy support	Current ITC schedule (see slide 4)
Net energy metering (NEM) policies and retail rate structures	Current retail rate structures are maintained, and NEM continues to be offered at full retail rates; existing NEM caps are consistently increased (as they have been in a number of states to date).
Solar costs (\$/kW)	Solar costs decline by 18-23% in nominal terms from 2017-2033 (see slide 6)
State policy support	Current RPS policies and state-level incentives maintained (see slide 5)

Note: NEM = Net energy metering  
 Source: IHS Markit

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# Current Investment Tax Credit (ITC) schedule





# RPS and NEM Policy Assumptions by State

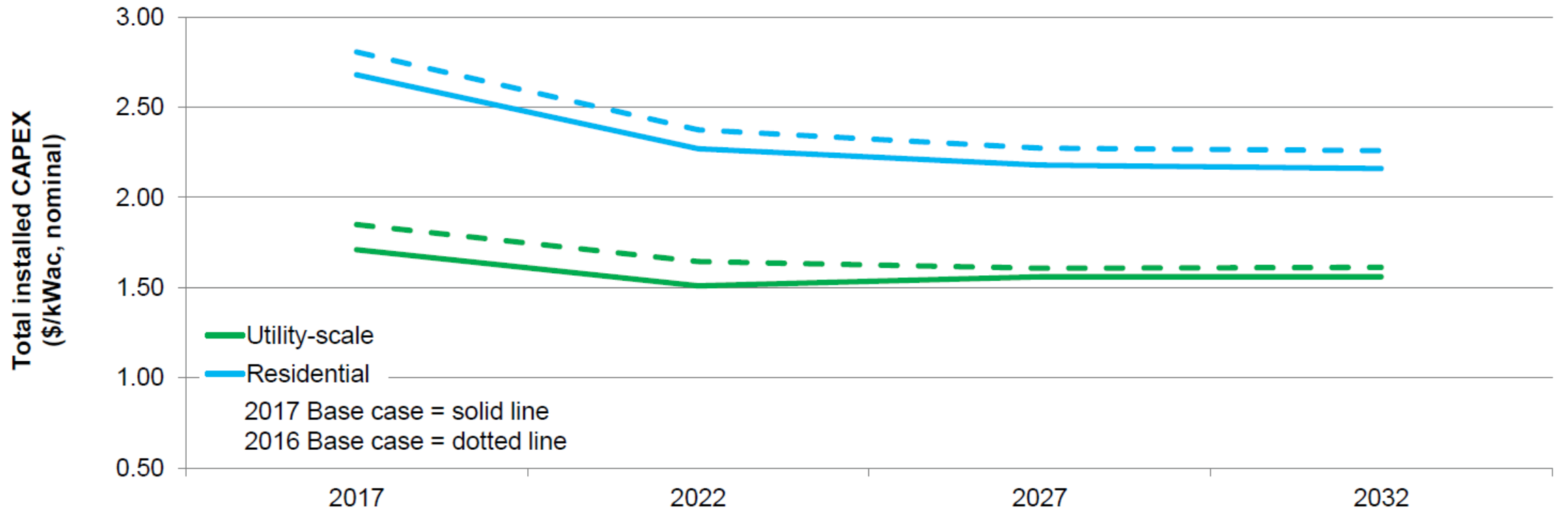
## Current RPS and NEM policy by state

State	RPS target (% of retail sales)*	Solar carve-out (% of retail sales)	NEM Cap (% or capacity)	NEM System Size Limits by Segment (MW)	NEM Remuneration	NEG Remuneration
DE	24% by 2026	3.5% by 2026	5% of aggregated customer peak demand	Residential: 0.025 MW Non-residential (Delmarva): 2 MW, Non-residential: (DEC): 0.5 MW	Full retail rate	Full retail rate
DC	50% by 2032	5% by 2032	N/A	1.00	Full retail rate	Full retail rate
MD	25% by 2020	2.5% by 2020	1500 MW	2.00	Full retail rate	Full retail rate
NJ	22% by 2028; state Senate has passed an increase to 83% by 2050	4.1% by 2028	2.9% of retail sales	100% of customer load	Full retail rate	Full retail rate
OH	13% by 2026	0.5% by 2026	N/A	Not specified, must be sized to fit customer load	Full retail rate	Less than retail
PA	8% by 2021	0.5% by 2021	N/A	Residential: .050 MW Non-Residential: 3 MW	Full retail rate	Full retail rate
WV	-	-	3% of peak demand during previous year	Residential: 0.025 MW, Industrial (for large IOUs): 2 MW Commercial (for large IOUs): 0.5 MW, C&I (for small IOUs): 0.5 MW	Full retail rate	Full retail rate
IN	-	-	1% of utility's summer peak load	1.00	Less than retail after 2022	Full retail rate
IL	25% by 2026	1.5% by 2026	5% of utility's peak load in prior year	2.00	Full retail rate	Full retail rate
KY	-	-	1% of utility peak load in prior year	0.03	Full retail rate	Full retail rate
MI	10% by 2015	-	0.75% of prior year peak load	0.15	Full retail rate	Full retail rate
NC	12% by 2021	0.2% by 2020	N/A	1.00	Full retail rate	Full retail rate
VA	15% by 2025 (voluntary target)	-	1% of state's peak load for prior year	Residential: .020 MW Non-residential: 1 MW	Full retail rate	Full retail rate
TN	-	-	N/A	N/A	N/A	N/A

Source: IHS Markit

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## Solar costs in PJM



Notes: Utility-scale cost represents a project with single-axis tracking technology larger than 5 MW  
 Source: IHS Markit

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- Feedback on the assumptions is requested. Please provide by **Monday, August 21, 2017** to [Load\\_Analysis\\_Team@pjm.com](mailto:Load_Analysis_Team@pjm.com).
- Additional questions and comments are welcome and can be submitted to the Load Analysis Team via this email address: [Load\\_Analysis\\_Team@pjm.com](mailto:Load_Analysis_Team@pjm.com)