

2025-2044 System & Resource Outlook Update

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Electric System Planning Working Group (ESPWG)

Thursday, December 18, 2025

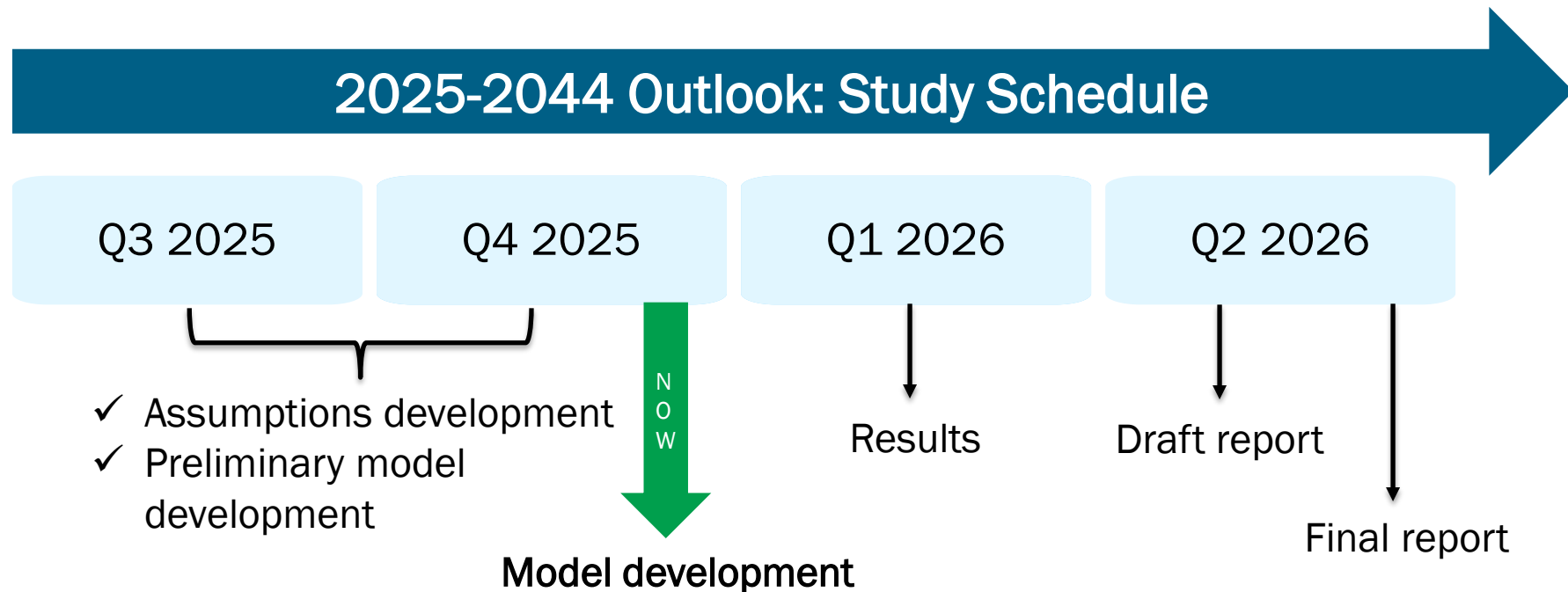
Agenda

- **Review with stakeholders:**

1. Study Schedule
2. Recent Progress
3. Next Steps

Study Schedule

Study Schedule



Recent Progress

Recent Progress

- **Locked down policy case assumptions 10/31/25**
- **Developed model for the Outlook Base Case**
- **Prepared model inputs for the Outlook Contract Case**
- **Prepared model inputs for the Outlook Policy Case capacity expansion scenarios**

Detailed Assumptions

- **Comprehensive assumptions for the Outlook scenarios are posted with the 10/20/25 ESPWG materials**
 - Draft Production Cost Model Assumptions Matrix ([PDF](#))
 - Draft Capacity Expansion Model Assumptions Matrix ([PDF](#))
 - Input assumptions and forecasts ([excel](#))
- **In consideration of stakeholder feedback, the following capacity expansion model assumptions were adopted since the 10/20/25 ESPWG:**
 - Candidate nuclear allowed to build in Zones A-F (originally Zones A-H)
 - First available build year for candidate nuclear is 2038 (originally 2035)
 - First available build year for fossil repowering is assumed to be 4 years after a unit's retirement (originally 2 years)
 - The energy storage policy target for Policy Case Scenario C is 6 GW ESR by 2035 (originally 2030)

Base Case Update

- **Development of the Outlook Base Case production cost model, including but not limited to:**
 - Extend forecasts to 20-year horizon
 - Model applicable generator additions and retirements
 - Update hourly renewable profiles
 - Update powerflow, transfer limits, and transmission & distribution representation
 - Update demand forecasts and generators modeled in external regions
- **NYISO anticipates sharing preliminary results in Q1 2026**

Contract Case Update

- **Prepare model inputs for the Outlook Contract Case production cost model:**
 - Generator additions to include generation projects contracted under the 2024 Tier 1 REC and OREC solicitations as of the lockdown date
 - Assumed generator retirements align with accelerated deactivations from the 2025-2034 CRP
 - Additional details on the methodology in the appendix
- **NYISO anticipates sharing preliminary results in Q1 2026**

Policy Case Update

- **Prepare model inputs for the Outlook Policy Case capacity expansion model scenarios**
 - As discussed at 10/20/25 ESPWG, NYISO proposes to simulate ~12 scenarios in its capacity expansion model
 - These scenarios will contain differences in the generation fleet at various levels of policy achievement towards decarbonization of the electric sector at multiple load levels
- **For each scenario, NYISO will:**
 - Update 20-year forecasts for the study horizon (2025-2044)
 - Update representative days methodology
 - Model applicable generator additions and retirements
 - Model candidate generators and associated properties
 - Update pipe-and-bubble transfer limits
 - Update demand forecasts and generators in pipe-and-bubble equivalent model for external regions
 - Calculate marginal ELCC curves for relevant generators
 - Model applicable policy constraints

Next Steps

Next Steps

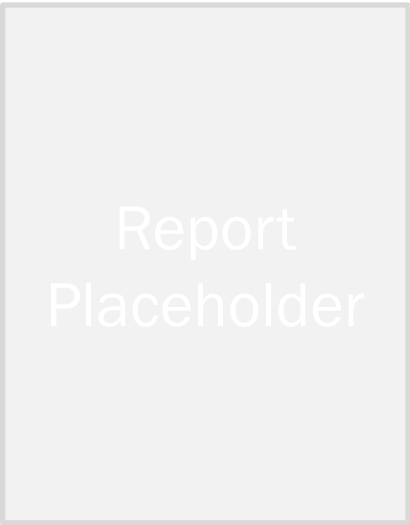
- **Finalize production cost model development for the Outlook base & contract cases**
- **Develop the policy case's capacity expansion model scenarios**
- **Continue discussions with stakeholders in 2026**

Questions, Comments, & Feedback?

Email additional feedback related to the
2025-2044 System & Resource Outlook to:
stakeholder_services@nyiso.com with the subject line
“System & Resource Outlook”

2025-2044 System & Resource Outlook Data Catalog

Report



Report Appendices

- [Draft Appendix: Production Cost Model Benchmark](#)
- [Draft Appendix: Production Cost Model Assumptions Matrix](#)
- [Draft Appendix: Capacity Expansion Model Assumptions Matrix](#)

Study Summary



Data Documents

- [Draft: Forecast Assumptions Data Document](#)

Stakeholder Presentations

- December 3, 2024**
 - [2023-2042 Outlook Lessons Learned](#)
- May 21, 2025**
 - [2025-2044 Outlook Kickoff](#)
- July 23, 2025**
 - [2025-2044 Outlook: Base & Contract Case Preliminary Assumptions](#)
- August 21, 2025**
 - [2025-2044 Outlook: Base & Contract Case Assumptions](#)
- September 4, 2025**
 - [2025-2044 Outlook: Policy Case Preliminary Assumptions](#)
- September 25, 2025**
 - [2025-2044 Outlook: Policy Case Preliminary Assumptions & Final Benchmark Results](#)
- October 20, 2025**
 - [2025-2044 Outlook: Policy Case Assumptions](#)



[2023-2042 System & Resource Outlook Data Catalog](#)
[2021-2040 System & Resource Outlook Data Catalog](#)

Appendix

Generator Retirement Assumptions

- Accelerated generator deactivations identified in the NYISO's 2025-2034 Comprehensive Reliability Plan (CRP) are assumed in the 2025-2044 Outlook Contract and Policy Cases
- For the 2025-2044 Outlook:
 - Discrete units were retired to approximate yearly zonal MW targets provided from the CRP scenario analysis
 - The retirement order for units was based on the highest probability first,¹ continuing until the target was exceeded for each zone and year
 - Retirements were shifted forward by one year to align with the NYCA total retirement curve

1. See Figure 15 of the 2025-2034 CRP for additional information on aging generation risk projection