

Long-Term Renewable Resource Procurement Plan Update

Stakeholder Workshop

Overview of the Renewable Portfolio Standard (“RPS”) and the
Long-Term Renewable Resources Procurement Plan; RPS
Budgets; Utility-Scale Procurements

June 20, 2019

Workshop Goals

- The purpose of this workshop is to take stakeholder input on the update to the Illinois Power Agency's Long-Term Renewable Resources Procurement Plan.
- The Agency will also issue a written Request for Comments after this workshop.
- **Discussion of potential approaches to the update of the Long-Term Renewable Resources Procurement Plan should be considered preliminary in nature.**
- The Agency will release a draft Plan update for comments, and file a Plan update for approval by the Illinois Commerce Commission.

Renewable Portfolio Standard

- RPS created in 2007, updated in 2009 to include Alternative Retail Electric Suppliers
 - Original RPS design had challenges related to customer switching resulting in budget uncertainty and made long-term planning and development of new resources difficult
- RPS updated in 2017 to address those issues and bring entire RPS into one portfolio
 - Managed by Illinois Power Agency
 - Long-Term Renewable Resources Procurement Plan guides implementation

RPS Key Provisions

- Focused on Renewable Energy Credits
- Annual percentage goals
- Targets for new wind and new solar
- Adjacent State public interest criteria
- Establishment of Adjustable Block Program (to be discussed on June 26) and Illinois Solar for All Program (to be discussed this afternoon)
- Phase out of separate ARES compliance requirements

Initial Long-Term Plan Development Process

- Initial Plan development started in 2017
 - Stakeholder workshops held in May, 2017
 - Draft Plan released September, 2017
 - Comments on Draft Plan received, November, 2017
 - Plan Filed with ICC, December 2017
 - Plan approved by ICC, April 2018
- Implementation
 - Utility-scale procurements in Fall 2018 and Spring 2019
 - Adjustable Block Program launched January 2019
 - Illinois Solar for All launched May 2019

Long-Term Plan Development/ Update Process

“[The Agency] shall review, and may revise, the plan at least every 2 years thereafter. To the extent practicable, the Agency shall review and propose any revisions to the long-term renewable energy resources procurement plan in conjunction with the Agency's other planning and approval processes conducted under this Section.”

(16-111.5(b)(5)(ii)(B))

Long-Term Plan Development/ Update Process, cont.

- 2020 Electricity Procurement Plan
 - Draft Plan to be released August 15
 - Comments due by September 16 (30 days)
 - Plan filed with ICC by September 30 (14 days)
 - Objections to Plan due by October 7 (5 days)
 - ICC Approval by December 30 (90 days)
- Dates adjusted to account for deadlines falling on weekends
- Proposed Long-Term Plan Update Schedule
 - Draft Plan update released August 15
 - Comments due by September 16 (30 days)
 - Plan filed with ICC by September 30 (14 days)
 - Objections to Plan due by October 15 (15 days)
 - ICC Approval by January 28, 2020 (120 days)

Long-Term Plan Development/ Update Process, cont.

- In addition to written comments, public hearings on draft Plan (and 2020 Electricity Procurement Plan) will be held in early September (expected to be in Chicago, Springfield, Moline)
- Comments on draft Plan must be:
 - “specific, supported by data or other detailed analyses, and, if objecting to all or a portion of the procurement plan, accompanied by alternative wording or proposals”
(220 ILCS 5/16-115(b)(5)(ii)(B) [emphasis added])

Synchronization With Pending Legislative Proposals

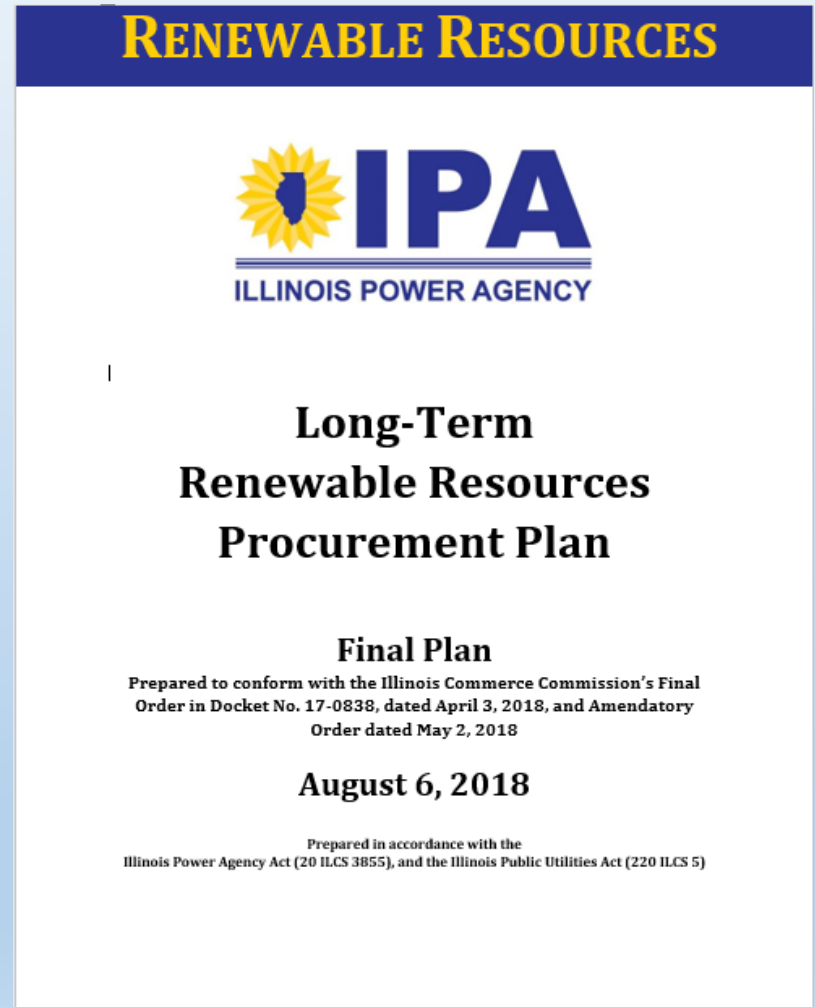
- Plan update process and content must follow current law
- Legislature meets
 - October 28-30
 - November 12-14
- Proposed process and timeline would be updated if needed per any adopted legislative changes

Lessons Learned to Date

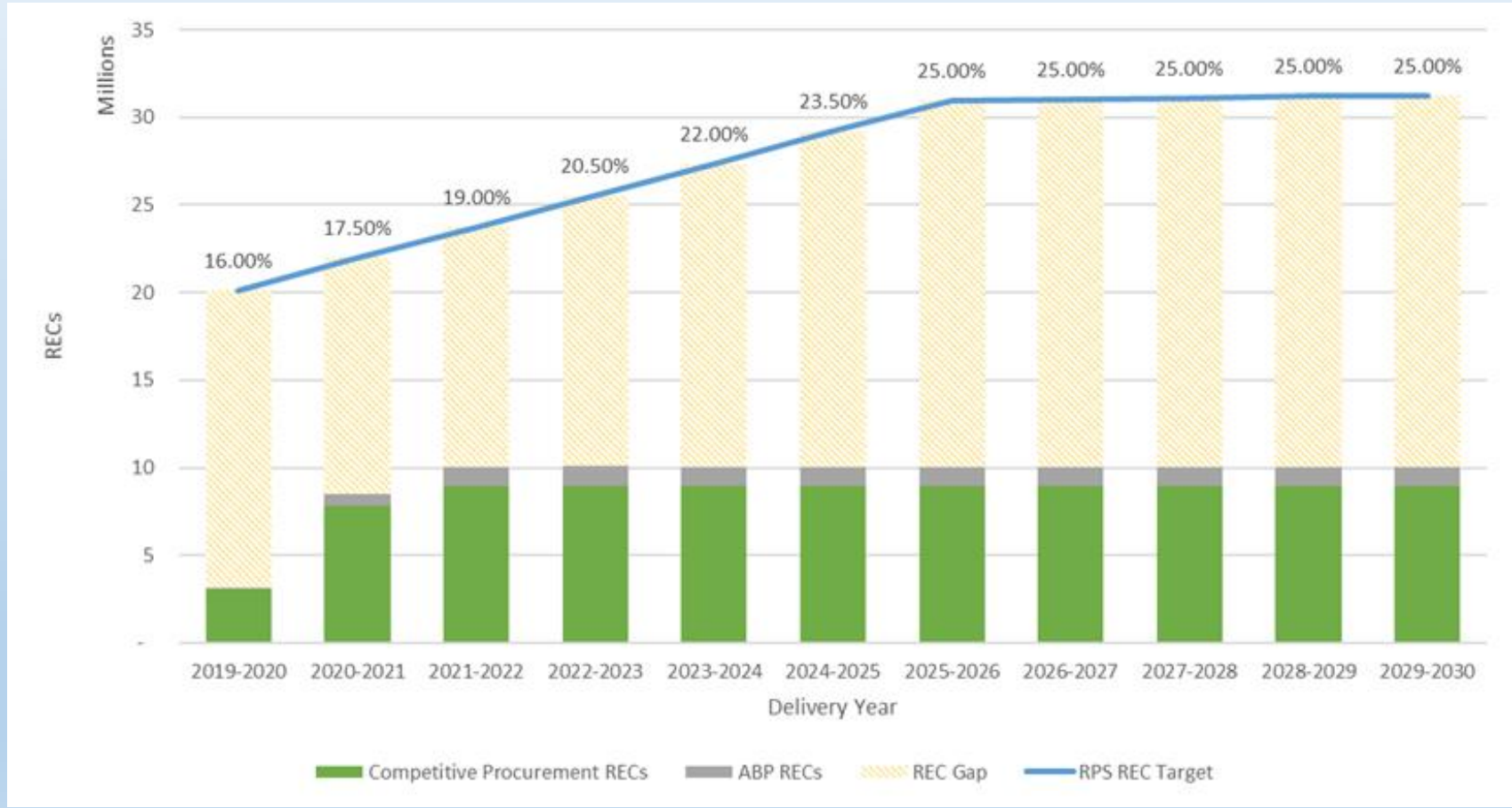
- Everything takes time
 - Hiring of Program Administrators
 - Developing program requirements
- Budget Uncertainty
 - Development timelines create a disconnect between when funds allocated to a project and when project energized and payments made
- Community Solar
 - Developer interest
 - Community solar adders created budgeting unknowns
 - Intersection with other processes (e.g., interconnection, net metering)

Plan Structure

1. Introduction
2. Legislative/Regulatory Requirements of the Plan
3. **RPS Goals, Targets, and Budgets**
4. **Renewable Energy Credit Requirements**
5. **Competitive Procurement Schedule**
6. Adjustable Block Program
7. Community Renewable Generation Projects
8. Illinois Solar for All Program



RPS Goals



REC Targets

- Targets for Plan being met
 - By end of 2020/2021 delivery year
 - Target: 2 million annual RECs from new wind
 - 3 million already procured, 1 million more expected this fall
 - Target: 2 million annual RECs from new solar
 - 3 million already procured from utility-scale projects, 1 million expected from Adjustable Block Program
 - By end of 2025/2026 delivery year
 - Target: 3 million annual RECs from new wind
 - Target: 3 million annual RECs from new solar
- Wind and Solar Forward Procurement targets for initial Plan expanded from 1 to 2 million annual RECs per ICC order approving the Plan

RPS Targets, cont.

- For new solar from the Plan
 - For the initial 2 million REC target, 50% of RECs come from Adjustable Block Program, at least 40% from utility-scale solar, at least 2% from brownfield site solar
- At least 75% of RECs from wind or solar
 - Does not appear to create constraints at this time
- Wind/Solar matching requirements
 - Projected procurement of new wind RECs can not exceed projected new solar RECs by more than 200,000 annual RECs
 - Could constrain additional new wind procurements

Current REC Portfolio (Annual Quantities)

- 2010 LTPPAs
 - 1.8 million RECs
- Initial Forward Procurements
 - 1.965 million RECs
- Forward Procurements
 - 4 million RECs
- Adjustable Block Program
 - 0.45 million RECs from Community Solar
 - 0.39 million RECs from Large DG (0.8 million to be allocated)
 - 0.03 million RECs from Small DG (0.18 million to be allocated)

RPS Funding Sources

- Utilities currently collecting approximately \$235 million per year from RPS riders
 - Funds for the 2017/18 through 2020/21 delivery years can rollover, then annual collections (unspent funds from initial period to be refunded to customers)
 - Amounts increased in initial years as ARES RPS obligations phased out
 - Will updated expected collections in Plan update
- Approximately \$95 million in Alternative Compliance Payments from ARES and hourly customers held by utilities
 - Does not include Alternative Compliance Payments collected by IPA and held in Renewable Energy Resources Fund (for use by the Illinois Solar for All Program and fulfilling prior Supplemental Photovoltaic Procurement contracts)
 - Accounts for previously committed use for 2015-2017 Utility DG Procurements

Utility-held ACPs/Rollover Period

- Commission Order approving Long-Term Plan on utility-held ACPs
 - “Commission is not convinced that the ACP funds should not be used to fund additional forward procurements”
 - “Commission finds that the best use of these funds is to provide funding for new wind and new solar”
- Appears to direct utility-held ACPs to the Forward Procurements rather than creating budget flexibility for the Adjustable Block Program
 - IPA intends to seek more flexibility in use of ACPs
- Changing the treatment of the end of the rollover period (or extending it) will require legislative changes

Annual RPS Obligations

- 2010 Long-Term Power Purchase Agreements
 - \$30.8 million in 2020/21 delivery year
 - \$24 million in 2021/22 delivery
 - \$11.4 million in 2025/26 delivery year (and continues to decline)
- Initial Forward Procurements
 - \$9.3 million
 - Delivery must start by June 2021 (passed legislation would extend to June 2022)
- Forward Procurements
 - \$25.9 million
 - Delivery to start by 2021, extensions allowed
- Illinois Solar for All
 - Greater of \$10 million or 5% of RPS collections allocated to program
 - \$10 million allocated to job training in 2021
- Adjustable Block Program
 - See following slides

Obligated amounts are preliminary and subject to revision based on actual project completion/commencement of REC deliveries

Adjustable Block Program Payment Schedules

- Community Solar
 - 18 months to energize, extensions allowed
 - 20% of REC value paid on energization, rest over four years*
 - Final amounts based on final small subscriber adders
- Large DG
 - 12 month to energize, extensions allowed
 - 20% of REC value paid on energization, rest over four years*
- Small DG
 - 12 months to energize, extensions allowed
 - REC value paid on energization
- Uncertainty in spending based on when projects are energized and for community solar, small subscriber adders

* For example, a project that gets first REC payment in June 2020 would get final payment in June 2024

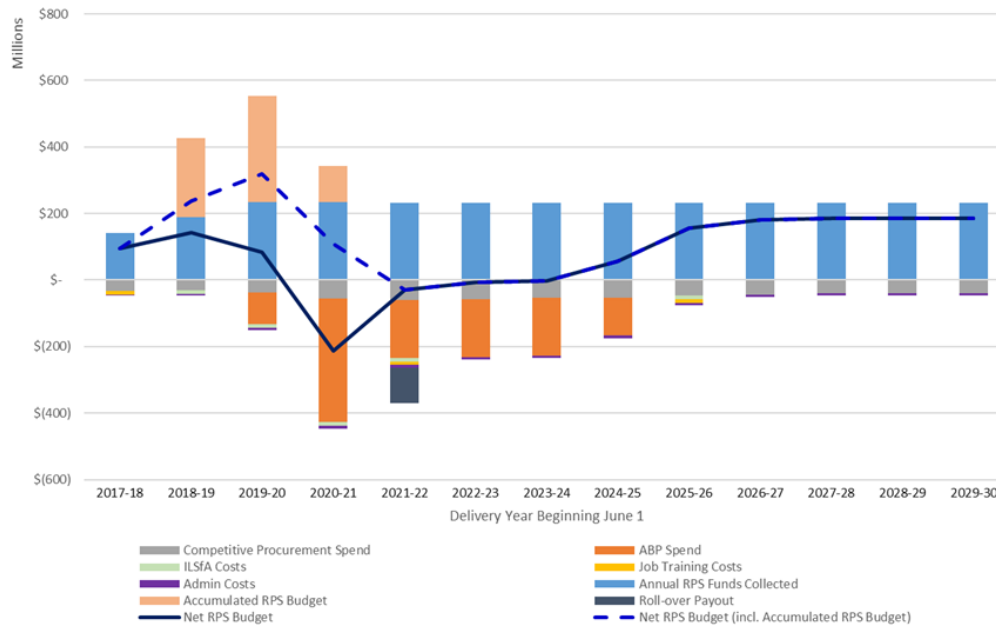
Adjustable Block Program Obligations

- Community Solar
 - \$548 million total allocated (includes full small subscriber adder)
 - 20% annually is \$110 million*
- Large Distributed Generation (over 10 kW)
 - \$269 million allocated based on projects approved
 - 20% annually is \$54 million*
 - Remaining capacity available for Large DG
 - \$40 million, \$8 million at 20% annually*
- Small Distributed Generation (up to 10 kW)
 - \$0.39 million allocated based on projects approved
 - \$204 million for capacity not yet allocated to projects

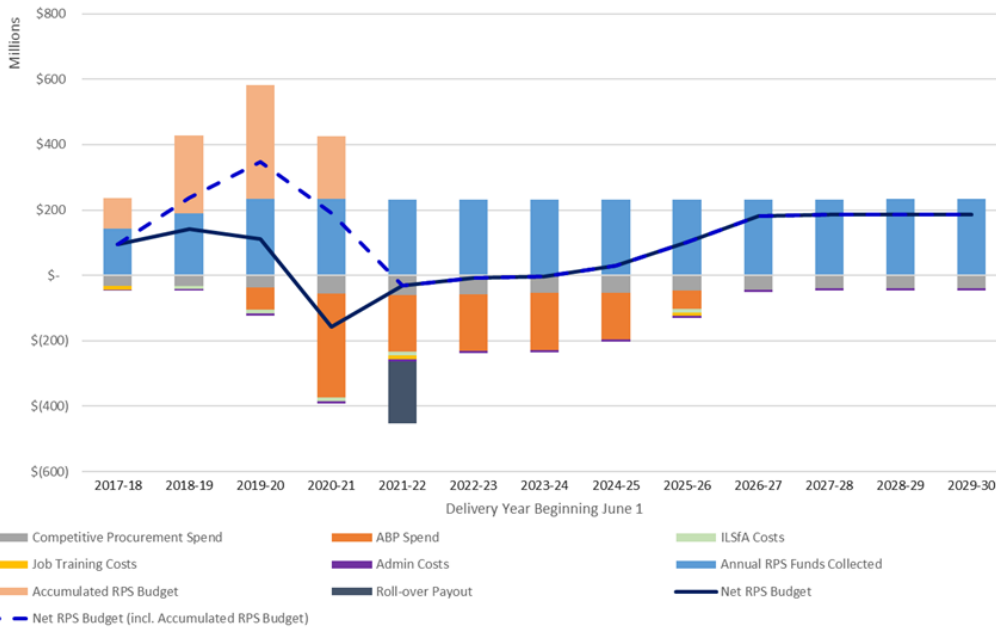
*Actual annual amount will depend on realized energization dates

Obligated amounts are preliminary and subject to revision based on actual project completion/commencement of REC deliveries

Energization Timing and use of ACPs Impacts Budget Levels



Base Case (w/o ACPs)

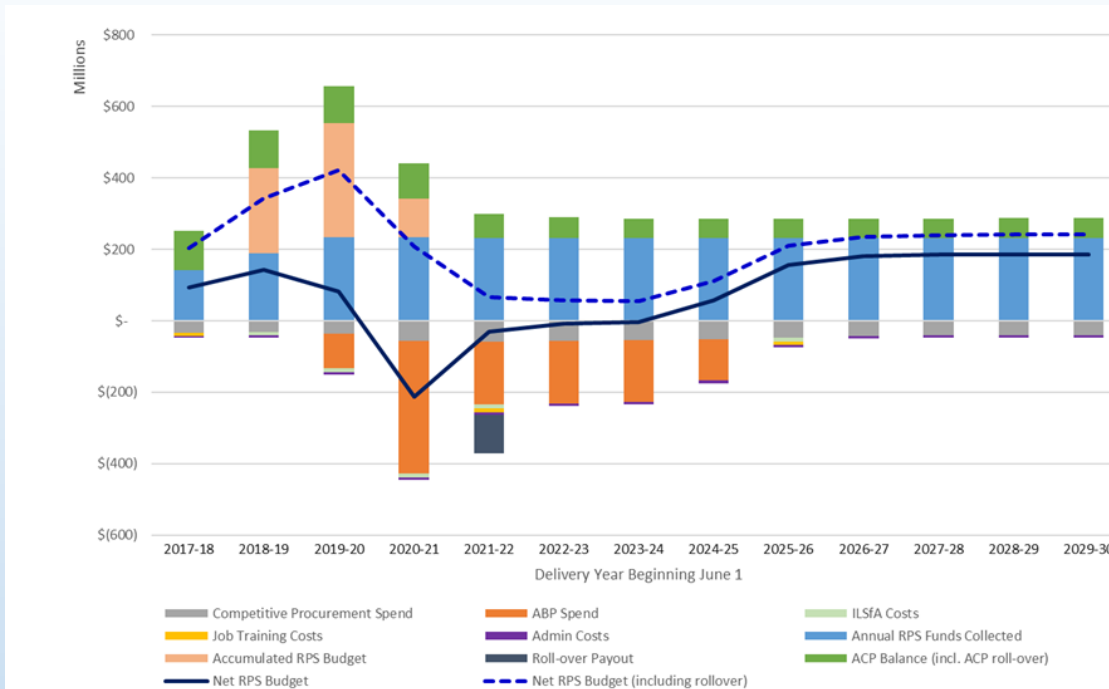


Numbers are preliminary.
IPA will refine energization
timing estimates

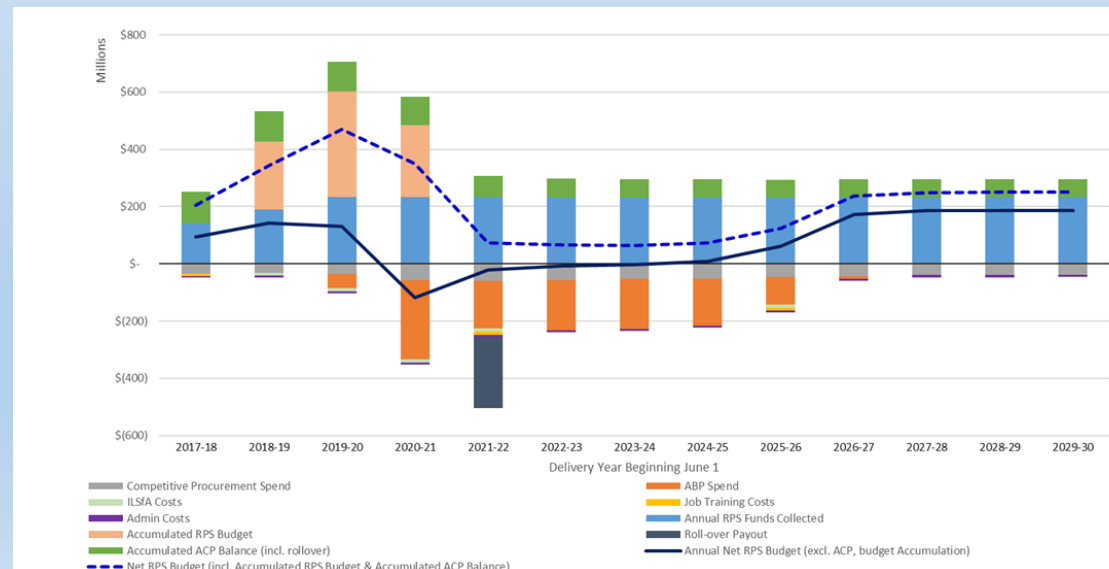
Slower DG/Community Solar Energization (w/o ACPs)

ACP Flexibility

- IPA proposal for more flexibility for use of utility-held ACPs
 - Spend utility RPS budgets first, use ACPs annually each year for smoothing
 - Will need to refine numbers based on updates to REC prices for Adjustable Block Program, and speed at which DG Blocks fill
 - Could allow opening up a Block 5 for Community Solar and Large DG but will need to weigh additional utility-scale procurements



Base Case (w/ACPs)



Slower DG/Community Solar Energization (w/ACPs)

Items for Consideration in Plan Update

- Discussion this morning to focus on
 - Public Interest Criteria for adjacent state projects
 - Other Renewables Request for Information
 - Meeting the RPS percentage goals
 - Process for contingency procurements
 - Other topics raised by stakeholders
- Illinois Solar for All will be discussed this afternoon
- Adjustable Block Program (DG and Community Solar) to be discussed on June 26
- Workshops focus on larger topics, Agency may consider other changes to the Plan not discussed at workshops

Public Interest Criteria for Adjacent States

- Adjacent State Requirements
 - RECs from projects in adjacent states eligible if they meet a public interest criteria that:
 1. Minimizing sulfur dioxide, nitrogen oxide, particulate matter and other pollution that adversely affects public health in this State
 2. Increasing fuel and resource diversity in this State
 3. Enhancing the reliability and resiliency of the electricity distribution system in this State
 4. Meeting goals to limit carbon dioxide emissions under federal or state law
 5. Contributing to a cleaner and healthier environment for the citizens of the state

Public Interest Criteria for Adjacent States, cont.

- Plan includes an approach that evaluates projects on a 100 point scale, 20 points for each of the five criteria
 - Minimizing pollution score based on SO₂ and NO_x emissions and wind durations
 - Increasing fuel/resource diversity and enhancing reliability/resiliency scores based on RTO and distance from center of Illinois
 - Meeting CO₂ limits based on CO₂ emissions compared to a new natural gas plan
 - Contributing to cleaner and healthier environment average of minimizing pollution and meeting CO₂ limit scores

Public Interest Criteria for Adjacent States, cont.

- Lack of Spot procurements has limited relevance of the criteria
- RECs from one out of state utility-scale project procured through Forward Procurements using this standard
- At this point Agency not recommending changes to Public Interest Criteria approach for adjacent state projects

Other Renewables RFI

- Plan only includes procurements/programs for wind and solar RECs
- Agency will shortly issue a Request for Information to gauge developer interest in a procurement for RECs from other renewable resources and will use responses to determine if the Plan update should include such a procurement
- Some issues for consideration
 - Scale, scope, technologies of potential projects
 - Other incentives, potential energy off-takers, etc.
 - Environmental, economic, and other potential benefits
 - Other recent procurements in the region

Meeting RPS Percentage Goals

- Forward Procurements and PV Programs have numerical REC targets for 2020/21 and 2025/26 that are being met
- Meeting those targets will not meet annual percentage goals
- Options for consideration
 - Spot procurements
 - Single-year
 - Multi-year
 - Additional forward procurements for new resources
 - Wind/Solar (if possible)
 - Other resources
 - Other approaches?

Process for Contingency Procurements

- Initial Plan did not include process if procurements did not meet targets
 - IPA successfully petitioned ICC for clarification of Plan in order to hold a second brownfield procurement (currently ongoing)
- Risks to manage in Plan update
 - Projects from previous procurements fail to be completed
 - Procurements don't meet targets
- What should be the process to hold additional procurements?
 - Stakeholder input
 - Automatic, or need ICC approval?

Forward Procurement Approach Improvements

- Options for consideration
 - Contract format
 - Current contract complex
 - Cover Sheet, Revisions to Master Agreement, Master Agreement
 - Project eligibility/maturity requirements
 - Site control
 - Interconnection
 - Energy offtaker
 - Collateral/credit requirements
 - Weighing RPS compliance and incenting successful project development
 - Development timelines/milestones
 - Next statutory goal is for 2025/26

Other Stakeholder Topics for Discussion