Adjustable Block Programs

May 17, 2017

Agenda

1:00 p.m. – 1:30 p.m.	Overview of adjustable block programs
1:30 p.m. – 2:30 p.m.	Setting number of blocks, block sizes, categories, and prices
2:30 p.m. – 3:30 p.m.	Application, review, and contracting process
3:30 p.m. – 4:30 p.m.	Consumer protections
4:30 p.m. – 5:00 p.m.	Discussion

- Tomorrow
  - Community Solar
  - Illinois Solar for All
- Next week in Springfield (Wednesday, May 24)
  - Programs for Rural Communities
    - Note new location: Abraham Lincoln Hotel, Ottawa Room

Workshop Goals

- This workshop is intended to introduce to stakeholders the Adjustable Block Program for Distributed Generation, and to describe certain initial proposed approaches under consideration by the Illinois Power Agency.
- Discussion of Community Solar and the Illinois Solar for All Program will be held at tomorrow's workshops
- The workshop is also intended to be a forum for stakeholders to provide feedback to the Agency. Additional opportunities will also be available at later dates
- Discussion of potential approaches to the development and implementation of the Adjustable Block Program should be considered preliminary in nature.
- The Agency will release a draft Plan for comments, and file a Plan for approval by the Illinois Commerce Commission

Presenting Today

- Anthony Star, Director
- Brian Granahan, Chief Legal Counsel

- Levitan and Associates, Planning Consultant
  - John Bitler
  - Edward Tsikirayi

Overview of adjustable block programs

Past DG Procurements

- Five-year REC contracts
- Supplemental Photovoltaic Procurement
  - Used funds from the Renewable Energy Resources Fund
  - Three rounds of procurement conducted in 2015 to 2016
  - Nearly 700 projects completed and delivering RECs
  - Over 500 projects under development
- Utility Distributed Generation Procurements
  - Utility funds/contracts
  - Three procurements 2015 to 2017
  - 2015 and 2016 only one winning bidder
    - Overlap with the Supplemental Photovoltaic Procurements
    - Challenges in law (e.g., 1 MW minimum bid size)
  - 2017 Two procurements
    - Spring Procurement: Six winning bidders, met target of 19,549 annual RECs
    - Fall Procurement scheduled for remaining volume of approximately 8,200 RECs

Past DG Procurements: Lessons Learned

- The interest in solar in Illinois is growing, could have done more with additional budgets, REC targets
  - Strong demand in rural areas of the state
- A variety of participants from pure aggregators to solar installers; there is a learning curve for participation
- Deadlines need tweaking to account for variations in construction schedules
- Co-ops and municipal utilities don't have the same paper trail as utilities
- Paperwork requirements could be reduced to allow for more efficiency

Key Changes From the Supplemental Photovoltaic Procurement and the Utility Distributed Generation Procurements

- Set prices rather than pay as bid RFP
- Ongoing availability rather than specific procurement dates
- 15 year contracts with upfront payments rather than 5 year contracts paid as RECs are delivered
- 10 kW breakpoint between categories rather than 25 kW (and different implications of the two categories)

Key Components of the Adjustable Block Programs

- New projects (energized after June 1, 2017)
- Transparent schedule of prices (set as a value or a formula)
- Blocks have a set size and prices that adjust between blocks
  - Agency may review and adjust blocks
- Option for different blocks, prices, and other terms for different utilities
- Goal to ensure that projects are in diverse locations and not overly concentrated

Program Categories

1. Distributed renewable energy generation devices with a nameplate capacity of no more than 10 kilowatts. (25% goal)
2. Distributed renewable energy generation devices with a nameplate capacity of more than 10 kilowatts and no more than 2,000 kilowatts. (25 % goal)
   - Option for sub-categories to account for the differences between projects for small commercial customers, large commercial customers, and public or non-profit customers.
3. *Photovoltaic community renewable generation projects. (25% goal)*

- Remaining 25% be allocated as specified by the Agency in the long-term renewable resources procurement plan.

Payment Terms

- For under 10 kW projects, paid in full at time of interconnection and energized
- For over 10 kW projects and community solar, 20% paid at time of interconnection and energized, balance paid out over 4 years
- All RECs from project go to the utility contractual counterparty during the 15-year contract period
- Clawback provision to ensure delivery of RECs during the contract

- Provisions to ensure that payments by utilities do not exceed funds collected from rate payers

Monitoring Program Progress, Program Adjustments

- Agency will monitor activity and share information with stakeholders
- Agency may make adjustments such as redistributing funds or adjusting prices
  - Changes less than 25% do not need Commission approval and can go into effect immediately.
  - Changes more than 25% require Commission approval and the Agency must notify stakeholders and consider their input

Program Administration

- Agency may hire one or more Program Administrators to help run programs
  - Standard Agency process, used for Procurement Planning Consultant and Procurement Administrator
  - Agency will issue a Request for Qualifications, then a Request for Proposals to qualified respondents
  - Expect to issue RFQ in the Fall. May not be able to finalize this until after the Long-Term Renewable Resources Procurement Plan is approved by the ICC

Setting number of blocks, block sizes, categories, and prices

Blocks: Key Issues

- Size of Blocks
  - Larger block size could mitigate rush to secure RECs, but risks if prices don't match demand
  - Smaller block size would allow for more price refinement, but could require additional criteria to manage strong demand
- Geography of Blocks
  - Division by utility to account for pricing differences
  - Should there be additional division to recognize local cost structures (e.g., labor costs, permitting)
  - What about munis and co-ops?
- Additional Division of Blocks for over 10 kW systems
  - Other states have divisions at 200 or 500 kW. Should blocks be divided by project size?
  - Are there other types of blocks that should be considered?

Blocks: Additional Issues

- Start-up versus ongoing
  - Pent-up demand at program launch may mean initial block design should be different from when the program is well established
- Should blocks close based on volume, time, or a combination of the two?

REC Prices

- *Disclaimer: Any discussion of REC prices should not be construed to imply anything related to bids for the Fall, 2017 DG procurement*

- At least two approaches could be used to set adjustable block prices
  - Build a cost-based model
  - Use market observations

- Challenges:
  - In any given block there is a single price at a single time. For any given system this price may be higher or lower than what the system developer desires/requires for successful project development
  - Depending on the number of block categories, how adjustable is the methodology to each category?
  - Is this an Art or a Science?

Cost-based Approach

- Gather data on inputs such as
  - Panel/equipment costs
  - Installation costs
  - Maintenance
  - Financing costs
  - Taxes

  - Energy/net metering revenue
  - Tax and related incentives
  - Residual REC Value after Initial Term

  - Expected return on investment
  - Life expectancy of project
  - Capacity factor

- Will values that are hardest to pin down also be those that will have most significant impact on results?

Market Observations Approach: Illustrative Examples

- New York:
  - $1/watt starting price for residential. Blocks step down by $0.10.
    - Comparable to a $53/REC for 15 years
    - $0.50/watt for Long Island
  - $0.63/watt starting price for large commercial/industrial (ConEd). Blocks step down by $0.02
    - Comparable to a $33/REC for 15 years

- Illinois
  - Average prices for under 25 kW projects in Utility DG and Supplemental Photovoltaic Procurements have ranged from $168 to $213/REC for 5 years ($56 to $71/REC equivalent for 15 years).
    - Equivalent to $1.06 to $1.34/watt
  - Average prices for systems over 25 kW in Utility DG and Supplemental Photovoltaic Procurements have ranged from $68 to $114/REC for 5 years ($23 to $38/REC equivalent for 15 years)
    - Equivalent to $0.43 to $0.72/watt

- Note, assumes the same capacity factor and no time value of money

REC Price Adders

- Can/should there be “adders” for other criteria?
  - To keep overall price down, recognize certain projects may have higher cost structures (e.g., due to local labor/land costs, or project types such as parking canopies)
- How narrowly or broadly to consider adders?
  - Challenge of having a generic price available rather than project specific prices

Application, review, and contracting process

How will this work?

- Potential Administrative Models

- Model #1
  - Each system owner has a contract with the utility. Program Administrator facilitates the interactions either individually or with aggregators/installers acting on system owners' behalf
- Model #2
  - Aggregators contract with the utility for batches of individual systems. Aggregator submits batches to Program Administrator
- Model #3
  - Program Administrator has contract with utility and then contracts with system owners and/or aggregators, in effect a meta-aggregator
- Other models?

IPA Proposal: Participant Qualification

- In order to apply for adjustable block program, program participants must be approved by the IPA
  - Public list of aggregators/installers for public confidence in the program
  - Ability to ensure that consumer protections, marketing conduct, and installation quality expectations are adhered to
  - Training for participants to ensure consistency and quality of application materials
  - But could limit program participation

Reserving RECs

- What is a reasonable time between application/contract approval and when a system must be energized and thus receive REC payment(s)?
  - Seasonality of applications
  - Accommodation for delays in permitting, interconnection, etc.
  - What type of extensions would be allowed, what additional requirements for extensions?
- What information about a system should be required?
  - Site control
  - Local permitting
  - Interconnection status
- What deposit/credit requirements in addition to any program fees?
- What happens to RECs that are reserved but system is not completed in time?
  - Should there be intermediate project milestones?
- How should standards vary between smaller and larger projects?

Managing Demand

- How to manage if demand is larger than block size
  - First come, first serve probably not advisable
  - What criteria should be used to prioritize projects within a block?
  - Desire to avoid bubbles

Other Issues

- Metering standards
  - For Supplemental Photovoltaic Procurement inverter readings allowed for systems below 10 kW, revenue grade meter for larger systems. How should these standards be updated?
- Equipment Standards
- Co-location
  - How many systems can be allowed on one site
    - Goal is to avoid situations like many 9.9 kW systems on one site to get the faster payment schedule for systems under 10 kW
- Expansion of systems
  - Can systems energized prior to June 1, 2017 be expanded, or would a new system have to be co-located and separately metered?
- Can systems participate more than once in a program or procurement?
  - Can DG or SPV systems energized after June 1, 2017 participate once their initial DG or SPV contract is over?
  - Can Adjustable Block systems participate again after 15 years?

Clawback Provisions

- Upfront payment for RECs could create a variety of challenges
  - Poorly installed or maintained systems that do not generate intended amount of RECs (or energy)
  - Potential for system owners to seek other revenues for RECs
- GATS and M-RETS should both be able to allow for automatic assignment of RECs with assent of both parties to end assignment
  - But what is the incentive for system owner/manager to ensure that generation data is entered for the next 15 years?
  - How will this impact ability to sell home/business?
- Are there reasonable circumstances to waive clawback provisions?
  - Damage to system (e.g., fires, tornados)
- How should provisions vary between system sizes?

Consumer protections

What is consumer protection?

- IPA created to produce better outcomes for ratepayers, ultimately
- Serve as guardians of ratepayer-contributed funds
  - True of RERF in context of Solar for All
  - Also true of funds collected by utilities for which the IPA organizes procurements and facilitate contract execution
- Seek to ensure that if ratepayers pay into fund, also have opportunity to benefit from that investment
- Seek equitable participation
  - Preference against geographic concentration of projects
  - Focus on low-income programs in statute
  - Focus on ensuring that job training opportunities are available

Issues from other contexts/jurisdictions

- Issues specifically with solar marketing and customer interactions in other jurisdictions
- Issues with marketing of long-term energy (gas and electric) supply offers in Illinois
  - Long-term contracts have generally produced very bad outcomes for consumers
  - Market share has sometimes followed from marketing aggression
- Issues with marketing of "green" product offerings in Illinois
- Targeting of low-income neighborhoods and vulnerable populations
- Other challenges?

In adjustable block context?

- Specific concerns vary by product/project type
  - Large commercial and industrial customers
  - Community solar projects
  - Small rooftop installations
  - Low-income solar and, especially, low-income community solar projects

Mechanisms in existing law

- IL Consumer Fraud and Deceptive Businesses Practices Act
- Other statutes specific to certain marketing channels (phone, email, etc.) and lending
- Breach of contract claims
- Have these proven to be sufficient?
- When do these issues arise to matters requiring enforcement?
  - And even then, is enforcement sufficiently prohibitive?
- What other tools might are available to the IPA?

Adjustable Block Program Participant Qualification Standards?

- Concept that the IPA has previously used in competitive procurements
- Likely that that there will at least be some basic standards – but what about enhanced standards?
- Requirements based on demonstrated ability?
- Review of marketing materials, contracts with end-users, etc?
- Requirement to use disclosure forms?

Commission Approval of RPS Contracts?

- For traditional competitive procurements, Commission approves selection of winning bids, and contracts are executed thereafter.
  - Contracts drafted by procurement administrator, who consults with select parties
  - Contracts are standard form and not subject to post-bid negotiation
- For LTRRP/adjustable block program, Plan must "identify the process whereby the Agency will submit to the Commission for review and approval the proposed contracts to implement the programs required by such plan." (220 ILCS 16-111.5(b)(5)(ii)(B)(cc))
- "The Commission shall also approve the process for the submission, review, and approval of the proposed contracts to procure renewable energy credits or implement the programs authorized by the Commission pursuant to a long-term renewable resources procurement plan approved under this Section." (220 ILCS 5/16-111.5(b)(5)(ii)(D))
- Opportunity to use this process to address potential bad actors or bad business practices? May depend on what the IPA proposes as part of the Plan.

Administrative Rules?

- General authority for Commission or IPA to promulgate rules to implement long-term renewable resources plan plan (See, e.g., 220 ILCS 5/16-111.5(b)(5)(v)).
- Potential Example: Title 83, Part 451 – ARES Certification Requirements
  - Provides an annual process where an ARES must be certified before being authorized to sell electricity in Illinois
- Potential Example: Title 83, Part 412 – Obligations of ARES
  - Addresses topics like door-to-door sales, telemarketing, etc. (for those marketing to residential and small commercial customers)
  - Some provisions are more effective than others
- Don’t want to create unnecessary burdens, however

Softer approach – leveraging information

- Thinking of PlugInIllinois.org example
- Provide more transparency around offers
- Provide platform for greater competition
- Provide limited accountability around complaints received
- Help link interested customers to solar suppliers

Key issues and challenges

- How to best balance growing a market quickly with growing a market efficiently and intelligently?
- How to leverage a third-party program administrator to ensure good market behavior?
- How to guard against problems with downstream behavior (i.e., non-contractual counterparties)?
- How to use some of the more basic tools available through the law to create a tailored approach? (Assuming sufficient statutory authority)
- How to best leverage lessons learned from jurisdictions that grew solar markets similarly quickly?

Discussion