

LIPA REV Committee

July 26, 2017

Results of Feed-In Tariff III & IV and 2015 Renewable RFP

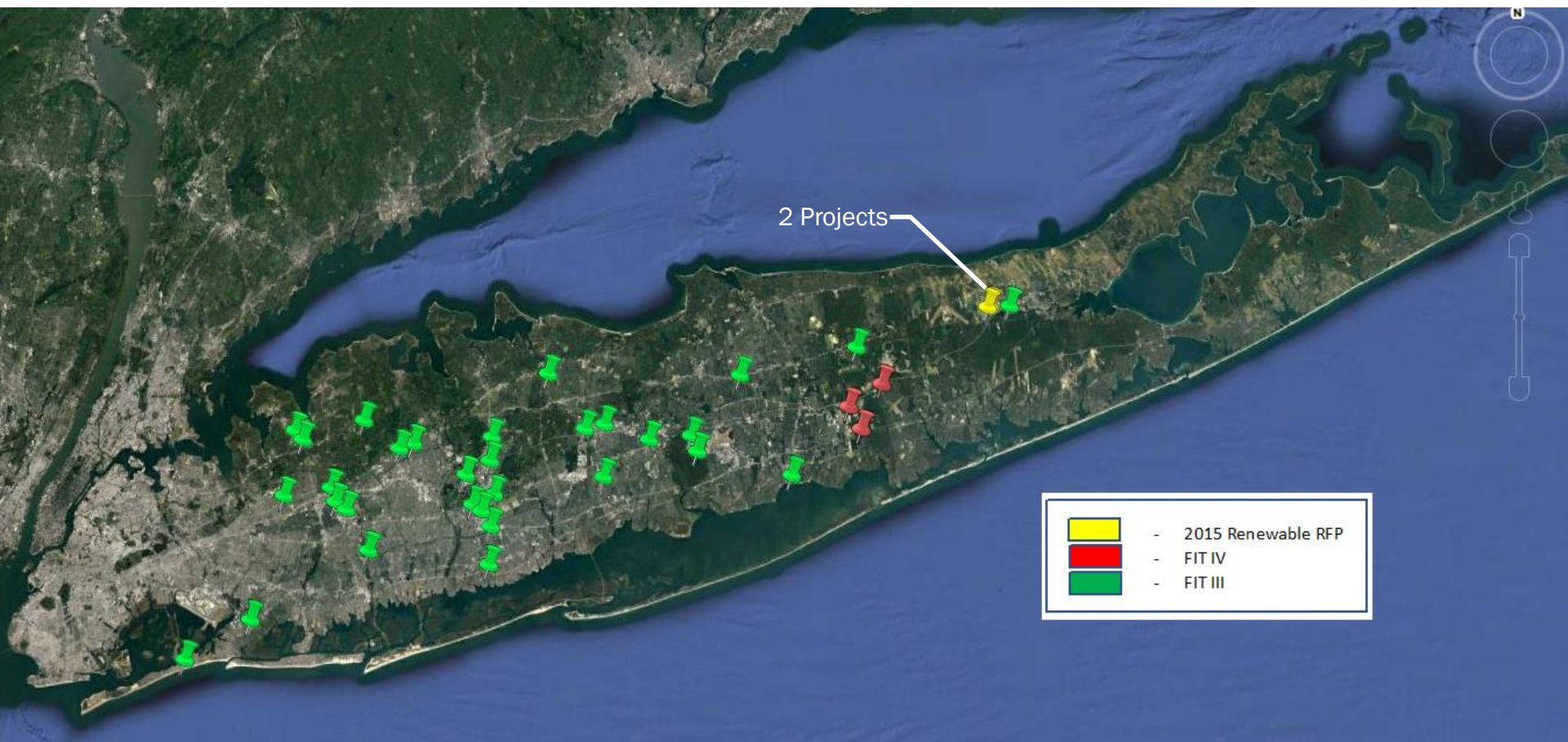
Procurement Background

At the direction of LIPA, three procurement initiatives were implemented to help meet LIPA's renewable goals. Responses to all three procurements were evaluated concurrently

- ❑ **Part 1 - 2015 Renewable RFP** - Open to any renewable resource delivering 1 MW energy or more to Long Island using one point of interconnection and offering a fixed price
- ❑ **Part 2 - Fuel Cell Feed-in Tariff** - Solicitation was for up to 40 MWs of fuel cells located in areas that would provide the opportunity to defer the need for transmission upgrades
- ❑ **Part 3 - Commercial Solar Feed-in Tariff** - Solicitation is targeted for rooftop solar and carport solar projects greater than 200 kw but less than 1 MW in size. Up to 20 MW of projects may be selected

Timeline of Procurements			
2015 Renewable RFP		Feed In Tariffs	
RFP Issued	December 22, 2015	Tariff Approved	September 21, 2016
Responses Received	June 22, 2016	Initial Enrollment Period	Oct. 2016 to Jan. 2017
Proposal Evaluation	June 2016 – July 2017	Bids Evaluation	Feb. 2017 to July 2017
Selection	July 2017	Selection	July 2017

Fit III, FIT IV, 2015 Renewable RFP Project Locations



Feed-in Tariffs III and IV Program Design

Program Design and Eligibility		
	Commercial Solar PV FIT (FIT III)	Fuel Cell FIT (FIT IV)
Size	200 kW to <1 MW	1 MW to 20 MW
Locational Requirements	Solar photovoltaic on non-residential customer's rooftop or carport	Beneficial locations that defer future system upgrade costs
Bid Format	Fixed price (\$/kWh)	Rate Formula (Fixed & Variable Fuel components)
Evaluation Bid Price	Fixed Price bid	As-bid rate formula evaluated with forecasted gas price
Evaluation Criteria for bids received by 1/31/2017	<ol style="list-style-type: none"> 1) Evaluation Bid Price 2) Proposed project size; 3) Submittal timestamp 	<ol style="list-style-type: none"> 1) Evaluation Bid Price 2) T & D deferral value 3) Proposed project size; 4) Submittal timestamp
FIT Program Caps	20 MW	40 MW
Payment rate to accepted projects	Clearing price (highest accepted bid)	As-bid rate formula using actual daily gas index price

FIT III: Commercial Rooftop & Carport Solar

- ❑ Potential to reach 20 MW if additional bids come in during open application period which runs until January 31st, 2019
- ❑ Estimated average monthly residential bill impact for an average customer is 12 cents/month
- ❑ Residential bill impact if full 20 MW is reached would be 14 cents/month

FIT III Applications	# bids	kW
Initial enrollment bids – Selected	18	11,704
Initial enrollment bids – Wait List (above Clearing Price)	3	1,663
Post-initial enrollment period Wait List applications	11	5,024
Total, Applications offered PPA	32	18,391
Wait List application withdrawn after announcement of Clearing Price	(1)	(233)
Total, Active Applications with PPA Offers	31	18,158

FIT IV: Fuel Cells

- ❑ Bids received for 376 MW of fuel cell resources
 - 4 projects totaling 61.5 MW were rejected for lack of T&D deferral value
- ❑ Based on the LIPA tariff rules, three projects totaling 39.8 MW selected
 - Net cost of renewable attributes (bid price, less avoided power and T&D costs) is competitive with other clean energy standard alternatives
- ❑ The projects all propose to interconnect in Yaphank area:
 - Avoids need to issue Yaphank Load Pocket RFP
 - Defers four planned transmission projects with a total estimated capital cost of \$76 million for 9 to 22 years (depending on project)
 - Demonstration of REV Concept
 - Similar to the South Fork plan, this application of REV worked because of a combination of T&D deferrals, capacity and energy value, and reduction of the need to purchase Renewable Energy Credits (RECs).
 - Estimated average monthly residential bill impact for an average customer is \$1.13
 - The rate impact of FIT IV is larger since it is projected to provide about 12 times as much energy as FIT III

2015 Renewable RFP Evaluation Process

Phase 1	Categorize Summarize Check proposal contents against mandatory requirements
Phase II	Initial qualitative screening Initial quantitative screening
Phase III	Detailed qualitative and quantitative portfolio evaluation Portfolio ranking

Categories of Qualitative criteria:

- Site control and characteristics
- Development and schedule risk
- Financial plan and qualifications
- Environmental impacts
- Experience with technology
- Community acceptance and impacts
- Ability to permit project
- Conformance with technical requirements
- Management team experience

Quantitative criteria:

- Project cost
 - PPA Energy charges
 - System upgrade charges
- Project benefits
 - Avoided energy cost
 - Avoided capacity cost
 - Avoided transmission cost
- Net cost

Renewable RFP: Projects Bid Summary

- ❑ Resource size ranged from 3 to 500 MW
- ❑ Many proposals offered multiple capacity options that were mutually exclusive
- ❑ Some proposals offered optional battery storage along with renewable capacity
- ❑ HVDC + Wind & Solar proposals
 - Connected to Long Island via a DC tie from NJ
 - Mutually exclusive proposals
- ❑ At least one proposal from each technology group was evaluated in Phase III

RESPONSE DISTRIBUTION				
Technology	Submitted		Phase III Eval.	
	Count	MW	Count	MW
Offshore Wind	1	210	1	210
Solar	9	198	3	131
HVDC + Wind & Solar	3	1,275	2	1,000
Max Potential Award	9	888	5	841

Note: Max potential award is less than the sum of the individual proposals due to mutually-exclusive proposals.

Summary of Top-Ranked Projects

RIVERHEAD SOLAR 2

- ❑ 36 MW fixed tilt solar PV
- ❑ Proposed by sPower, a portfolio company of Fir Tree Partners
- ❑ Located in the Hamlet of Calverton in the Town of Riverhead
- ❑ COD: 12/31/2020

LIS CALVERTON

- ❑ 22.9 MW fixed tilt solar PV
- ❑ Proposed by Long Island Solar Generation, LLC, jointly owned by NextEra and National Grid
- ❑ Located in the Hamlet of Calverton in the Town of Riverhead
- ❑ COD: 12/31/2020

Combined 2023 estimated average monthly residential bill impact for an average customer is 40 cents/month

2015 Renewable RFP Top-Ranked Projects



Next Steps

❑ FIT III and IV

- Commence interconnection studies
- Local permitting
- Sign standard offer contracts

❑ 2015 Renewable RFP

- Commence contract negotiations
- Local permitting
- After SEQR approval, submit successfully negotiated contracts to the Board for approval