Excess Behind the Meter Production: Issue Paper

Stakeholder Web Conference
July 10, 2018
1 p.m. – 3 p.m. (PDT)

Gabe Murtaugh
Senior Infrastructure and Regulatory Policy Developer

Agenda

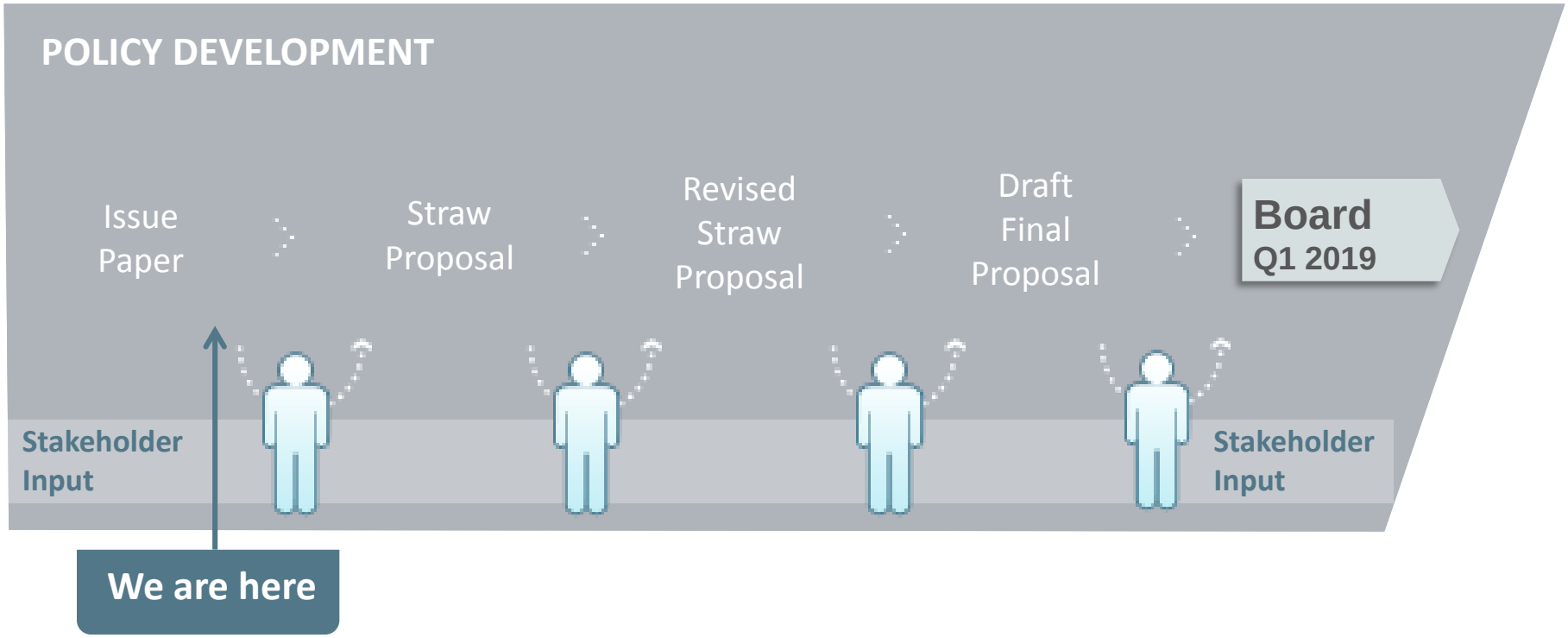
- Introduce policy and timeline
- Background
- Goals for the initiative
  - Clarify tariff langue around BTM treatment
  - Identify a reporting standard for excess BTM production
  - Identify potential impacts to scheduling coordinators
- Excess BTM production example
- Outline potential treatment options
- Questions and next steps

INTRODUCTION AND STAKEHOLDER PROCESS

Jimmy Bishara

Senior Stakeholder Engagement & Policy Specialist

Stakeholder Process



The ISO is targeting a proposal to the Board in the first quarter of 2019.

Stage	Date	Milestone
Issue Paper	June 28	Post issue paper
	July 10	Stakeholder call on issue paper
	July 24	Written comments due for issue paper
Straw proposal	October, 2018	Post straw proposal
	October, 2018	Stakeholder call on straw proposal
	November, 2018	Written comments due for straw proposal
Draft final proposal	January, 2019	Post draft final proposal
	January, 2019	Hold stakeholder meeting
	February, 2019	Final comments due
Final proposal	Q1 2019	Present proposal to Board of Governors

List of acronyms/abbreviations used in this presentation.

BTM	Behind the Meter
TAC	Transmission Access Charge
UDC	Utility Distribution Company
UFE	Unaccounted for Energy

ISSUE PAPER FOR EXCESS BTM PRODUCTION

Gabe Murtaugh

Senior Infrastructure & Regulatory Policy Developer

Background information on excess BTM production.

- Excess behind the meter production is when behind the meter generation exceeds a consumer's host load
- Non-utility scale solar (behind the meter solar) production is rapidly growing in California
- As growth continues, accounting for excess behind the meter production will become more important
- Excess BTM production treatment can impact outcomes for TAC, UFE and other charge codes

There are three primary goals for this initiative.

1. Create working, straightforward definition of Gross Load, where treatment of excess BTM production is expressly addressed

2. Develop a standard reporting practice and determine appropriate market mechanism to account for excess behind the meter production

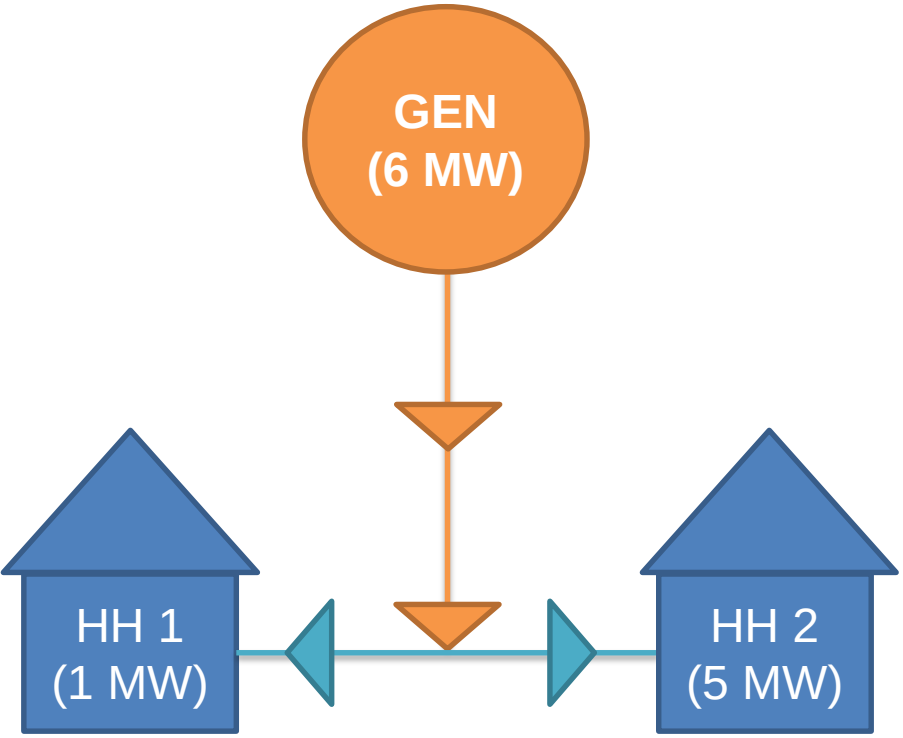
3. Explore potential impacts to scheduling coordinators

A simplified example for illustration with total production and total load at 6 MW.

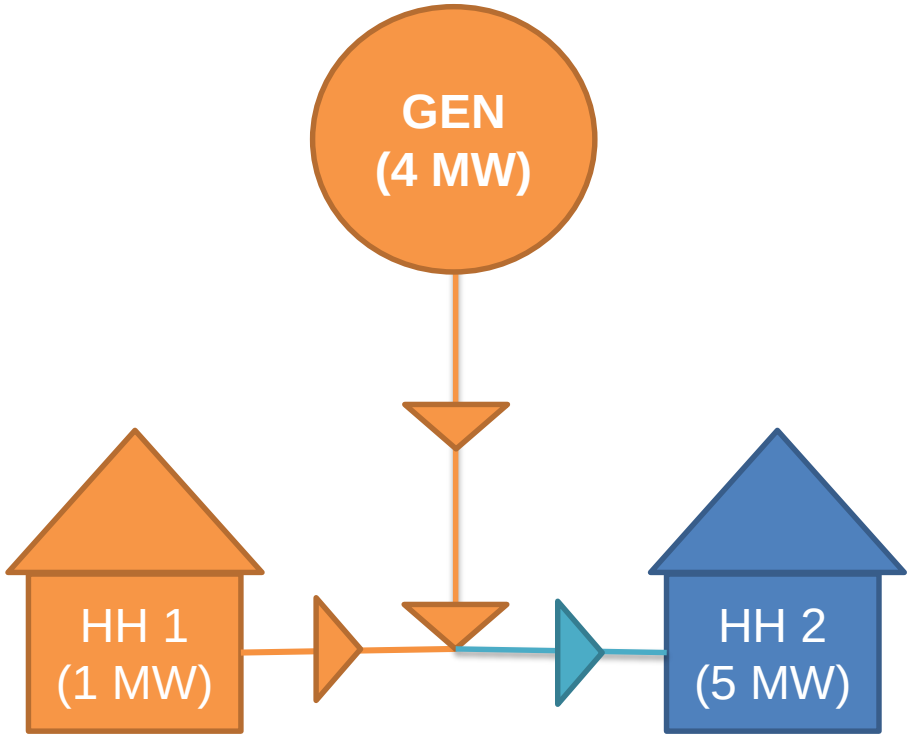
	Reported Values (MWs)	
	Household 1	**Household 2**
Load	1 MW	5 MW
Rooftop Solar Output	2 MW	0 MW
Meter Read (Load Channel)	0 MW	5 MW
Meter Read (Export Channel)	1 MW	0 MW

A simplified example for illustration with a household with a 1 MW load and 2 MW of solar production.

Without Rooftop Solar



With Rooftop Solar



Within this example Gross Load could be calculated by either “netting” or not netting excess BTM production.

- “Netting” excess BTM production results in a total Gross Load of 4 MW, or the sum of all load, less solar output
- “Not Netting” excess BTM production results in a Gross Load of 5 MW, or the sum of the metered load channels
- If values are reported either way, the ISO settlement process cannot determine excess BTM production
- If this value is reported differently by two different UDCs it has implications for TAC, UFE and other settlement charges

Goal 1: Updating the definition for Gross Load in the tariff.

- The ISO proposes to clarify the tariff definition of Gross Load to state that excess BTM production should not be netted from Gross Load

- Updating this definition and subsequent reporting practices will remove potential settlement differences that arise from differing reporting methods across UDCs and increased reliability support and better capacity services requirements

Goal 2: Develop a reporting standard for excess BTM production.

- The ISO would like to solicit stakeholder feedback on this goal particularly
- Once the Gross Load definition is clarified there may be additional need to clarify language around how values for excess BTM production should be treated
- Two potential market mechanisms to apply to excess BTM production:
  - Treatment as Supply (Pseudo Generation)
  - Treatment as Demand (Negative Load)

Initial analysis of the two potential mechanisms

	PROS	CONS
1. Treatment as generation	• Would be possible to model at 5-minute level in the future	• Data granularity beyond 5-minute market may not be available • Gross load values may be inflated because of accounting approach • Additional market changes may need to be implemented to account for this approach
2. Treatment as negative load	• Gross loads would be accurately reported • Minimizes impacts to settlements • Generation could be modeled on an hourly basis	

QUESTIONS AND NEXT STEPS

Jimmy Bishara

Senior Stakeholder Engagement & Policy Specialist