



STATE OF RHODE ISLAND

**ENERGY EFFICIENCY &
RESOURCE MANAGEMENT COUNCIL**

CONSULTANT TEAM

Least Cost Procurement Standards & Market Potential Study Update

Presented By: EERMC Consultant Team

Date: December 12, 2019



LCP Standards for EE & SRP

- The Least Cost Procurement (LCP) Standards guide utility planning, cost-effectiveness assessment, program design, and implementation strategy for 3-year and related annual plans.
- EERMC last proposed modifications on December 8, 2016 to the PUC, along with proposed targets for 2018-2020



Updates to LCP Standards for 2018-2020

- Primary changes to the EE standards:
 - Added a definitions section
 - Proposed use and principles for the RI Test to replace TRC test
 - Adjustment to definition and application of “Less than the cost of supply”
 - Clarified that EE plans should be designed where possible to complement the objectives of RI’s clean energy policies and other energy programs
- SRP standards were significantly revamped to facilitate more potential uses of NWAs instead of more expensive infrastructure projects, and proactively deploy NWAs to avoid potential future grid problems.



Upcoming process for updating LCP Standards

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- Stakeholder engagement via Technical Working Group meetings and 1-1 meetings with stakeholders
 - C-Team Coordination with OER, the Division and National Grid on initial redlining in January
 - Council discussions at EERMC meetings and during 1-1 meetings with individual members, OER and the C-Team
 - Vote on final version no later than March meeting



Potential updates to EE Standards to start discussion

- Ensure that the definition of Energy Efficiency supports demand response for at least gas and electric, heating electrification, and energy savings measures for all fuels
- Clearly allow the energy efficiency programs to deliver location-specific energy efficiency where/as appropriate
- Require on-going review of the RI Test used by the Energy Efficiency Programs
- Provide more details on reporting requirements and accounting practices
- Ensure that the programs are comprehensive (both short and long-term savings measures), space (state-wide and location-specific offerings) and participation (equitable access for all types of customers)

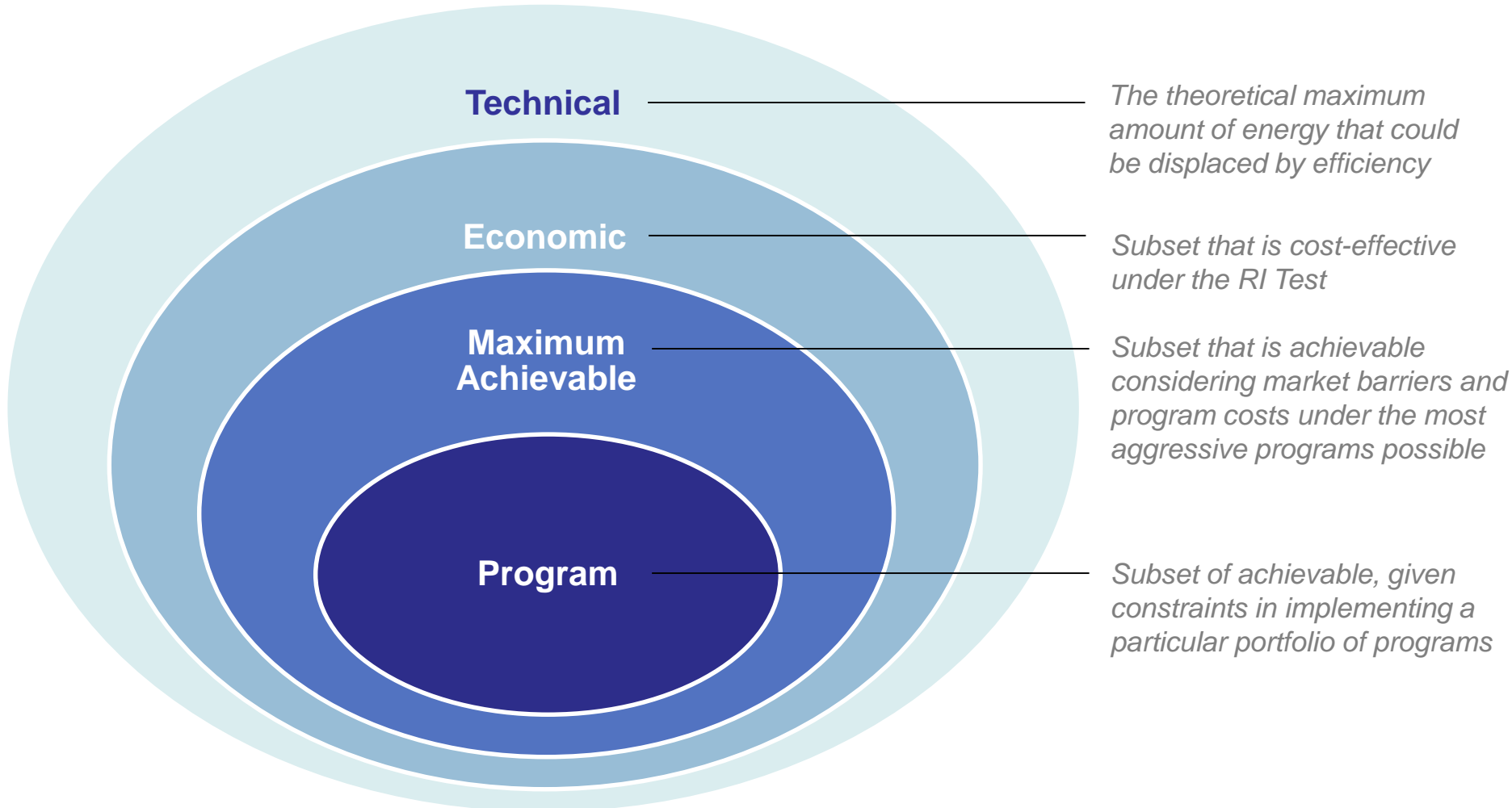


Potential updates to SRP Standards to start discussion

- Clarify the Council's role in reviewing SRP Plans – the EE portion of the standards clearly lists all the EERMC's role
- Change the timing so that SRP Plans can be filed in December with Infrastructure, Safety and Reliability (ISR) Plans
- Explicitly include natural gas in SRP
- Ensure that SRP includes focus on creating a comprehensive map of systems planning and management



RI Market Potential Study





Potential Study content

- A comprehensive analysis of the technical, economic & achievable savings potential in RI for the period of 2021-2026, covering:
 - Electric
 - Natural gas
 - Delivered fuels (oil & propane)
 - Demand response
 - Combined heat & power
 - Behind-the-meter renewables





Applying Potential Study Results

Key Future Questions

Savings Timeframe: Lifetime or annual?

Savings Units: kWh/therms or MMBtus?

Savings Targets: Balancing program and max achievable? Factoring in “prudent & reliable”?



Savings Timeframe: Lifetime or annual?

Savings Timeframe: Lifetime *and/or* annual?

- Historically, targets have been set for annual electric (MWh) and natural gas (therms) savings
 - Lifetime values were calculated, but not binding
- Lifetime metric more supportive of deeper saving measures with longer lifetime values
- Annual supports cheaper and easier savings with more limited lifetimes, such as behavioral programs



Savings Units: kWh/therms or MMBtus?

Savings Units: kWh/therms or MMBtus?

- kWh and therms are easily calculated in MMBtus. This would also allow an easier way to include delivered fuel savings
- If MMBtus are the metric, options could include:
 - A single MMBtu metric for the estimated sum across all fuels
 - A metric for each fuel that must be met, adding up to a total MMBtu for portfolio
 - This mitigates efforts in one fuel or another becoming the primary driver to reach the aggregate amount



Savings Targets: Balancing program and max achievable

Savings Targets: Balancing program/max achievable

– Program Achievable

- Constrained by historical program savings
- Implicitly constrained by historical budget levels

– Maximum Achievable

- Significantly higher savings than Program Achievable
- Still subject to realistic modeling constraints
- May take time to ramp programs toward this level



Potential Study -- WHEN

Progress to Date



Gather
Data
Sources



Develop
Baseline
Scenario



Build
Measure
List

	2019										2020				
	August	September	October	November	December	January	February	March	April	May+					
	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Check-in meetings (twice/month)															
Task 1- Identify data sources and collect input data	Task 1														
Kick-Off Meeting with MPS Management Team		M													
Data Requests to Utilities, OER, EERMC	D		D												
Workplan updated for Review				D											
Compile Market Baseline Data															
Task 2- Estimate net effects of factors affecting baselines	Task 2														
Prepare Sales Baselines							D								
Identify applicable Codes and Standards Changes in Study Period															
Memo outlining baselines and exogenous factors				D											
Task 3- Build measure list and gather data	Task 3														
Provide Measure List to MPR Management Team		D													
Gather Input Studies and RI TRM															
Characterize measures (EE, DR, Fuel Switching)															
Task 4- Estimate potential savings	Task 4														
Characterize Programs for Model							D								
Finalize EE/HE Scenarios for Achievable Potential							D								
Finalize DR Scenarios for Achievable Potential					D					D					
Adapt Model for RI															
Prepare Utility Load Curve Analysis (DR Constraints)															
Load Model with Inputs and perform QA/QC:															
Calculate Technical, Economic and Max + Prog. Ach. Potentials															
Prepare Interim (Draft) Results															
Task 5- Estimate CHP potential	Task 5														
Characterize CHP measures and finalize scenarios							D								
Model CHP potential															D
Task 6- Estimate potential for BTM, RE & DG technologies	Task 6														
Gather Solar and DG data															
Finalize DG scenarios and sensitivities										D					
Characterize Markets and Measures														D	
Reporting	Reporting														
Draft results Presentation + Excel Tables (in-person)												D/M			
Incorporate MPS Management Team and Stakeholder feedback															
Prepare Final Results (ppt)															
Prepare Final Report															
Provide Model Inputs and Data															D
Graphical Executive Summary															D

D = Deliverable **M** = Meeting



Potential Study -- WHEN

Key Future Dates

Deliverables and milestones	Responsible	Target Delivery date
REPORTING		
Draft results (ppt)	Dunsky	January 31, 2020*
Consolidated feedback on draft results (10 bus. days)	MPSMT	February 14, 2020
Final Results (ppt)	Dunsky	March 13, 2020
Consolidated feedback on final results (8 bus. days)	MPSMT	March 25, 2020
Draft Report (doc)	Dunsky	April 17, 2020*
Consolidated feedback on draft report (10 bus. days)	MSPMT	May 1, 2020
Final Report (doc)	Dunsky	May 15, 2020*
Draft and Final Graphical Executive Summary	Dunsky	TBD

January Council Meeting

- Finalize dates for remaining study period
- Provide update on specific information expected as part of draft results

February Council Meeting

- Review of draft results, incl. preliminary MPS Management Team comments

March Council Meeting

- Vote on 3-year plan targets
- Final results expected 1-2 weeks prior to Council Meeting



QUESTIONS?

