IRA TECHNICAL MEETING

DEEP DISCUSSION- PART 1 &2

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DISCUSSION: PART 1

For review:

1. DEEP's guiding principles- Program Design & Implementation
2. Low-income market segment focus
3. Multi-family housing
4. Other customer market segments

DEEP'S GUIDING PRINCIPLES

1. Increase equitable access to electrification alternatives, energy savings, and comprehensive building energy retrofits to groups who historically have had more limited access (e.g. households with low income, renters, existing barriers, etc.).

2. Leverage existing programs, with modification if necessary, where possible.

3. Value efficiency of delivery, i.e., minimize administrative costs and maximize delivery of measures to residents.

4. Target funding to market segments where long-term market transformation is likely to be catalyzed by an infusion of federal funding.

5. Leverage other funding sources, including private capital, to maximize uptake.

6. Optimize potential for technology uptake when federal subsidies run out (education, awareness, stories, data, etc.).

7. Incorporate capacity building and workforce development where possible.

LOW TO MODERATE INCOME MARKET SEGMENT

Per the DOE requirements, for both HEAR and HER, Connecticut must allocate at least 40.8% of the funding to households with low income.

- Low income is <80% AMI per DOE
  - We can apply to use categorical eligibility to determine if a household meets low-income requirements by verifying participation in another state or Federal program (e.g., SNAP, WAP, LIHEAP, Medicaid, etc.)
- This equates to a minimum of $16,283,483 from HER funding and $16,188,989 from HEAR funding.

A greater portion of the funding *can* be allocated to households with low income if desired by states.

- For HEAR, the remaining percentage of funding would be available to homes that are at 150% AMI or below
- For HER, the remaining percentage of funding would be open to all households above 80% AMI

100% LOW INCOME- HYPOTHETICAL SCENARIO

Scenario #1: All HEAR Funding Dedicated to Households with Low Income Only	Scenario #2: All HER Funding Dedicated to Households with Low Income Only – Modeled Path
• Could serve approximately 364 single-family households per year (2,547 households over the life of HEAR 2025-2031) if total rebate amount maxed ($14,000); in combination with 40 households with low income in multifamily units per year (to meet minimum allocation) • Could serve approximately 0.4% of total households with low income in CT • Additional funding would most likely be required to cover 100% of costs for upgrades	• Max rebate permitted by HER Modeled Path for households with less than 80% AMI: $4,000 or 80% of project cost (per dwelling unit); need to achieve 20% – 34% energy savings • Could serve approximately 1,316 single-family households per year (9,218 households over the life of HER 2025-2031) if rebate amount maxed; in combination with 106 households with low income in multifamily units per year (to meet minimum allocation) • Could serve approximately 1.0% of total households with low income in CT • Additional funding would most likely be required to cover 100% of costs for upgrades
• **About 3,500 single-family households with low income are served per year currently through the Home Energy Solutions-Income-Eligible program**	

LOW INCOME Q&A

Hypothetical scenarios illustrate that ***rebate funding, on its own, is unlikely to serve a significant portion of CT residents.***

The HER program allows for a "market rate" component. That is, after meeting the low income minimum allotment, the State could choose to offer ~50% of the funding to those households above 150% of AMI. The HEAR program is limited to households that are 150% AMI and below. This means the allocations among income levels could be different between HER and HEAR.

Should CT allocate more than the minimum to households with low income? Why and how should allocations be determined?

If CT were to choose to use the funding to serve customers above 80% AMI and below 150% AMI, how would CT establish eligibility for those customers? Should efficiency of implementation be considered in determining where this limited funding should be focused?

Should the amount allocated to households with low income differ between HER and HEAR? Why?

MULTI-FAMILY

Connecticut must allocate at least 10% of the funding to households with low income in multifamily buildings for both HEAR and HER.

- This allocation is separate and additional to the 40.8% to households with low income.
- Equates to $3,986,445 for HER, and $3,963,311 for HEAR.
- Low-income multifamily buildings are a historically underserved housing segment

Larger allocations for this segment ***are permitted*** by DOE if desired by states.

MUTI-FAMILY HYPOTHETICAL

Scenario #1: All HEAR Funding Dedicated to Households with Low Income in Multifamily Buildings Only	Scenario #2: All HER Funding Dedicated to Households with Low Income in Multifamily Buildings Only – Modeled Path
• Max rebate permitted by HEAR for combination of technologies: $14,000 (per dwelling unit) • Approximately 406 multifamily units per year (2,847 units over the life of HEAR 2025-2031) if rebate amount maxed • Multifamily buildings must have at least 50% of units with incomes less than 80% AMI • Could serve approximately 0.5% of total multifamily units in CT • Additional funding would be required to cover 100% of costs for upgrades	• Max rebate permitted by HER Modeled Path for multifamily buildings with at least 50% of households with incomes less than 80% AMI: $4,000 or 80% or project cost (per dwelling unit); need to achieve 20% – 34% energy savings • Approximately 1,316 multifamily units per year (9,218 households over the life of HER 2025-2031) if rebate amount maxed • Multifamily buildings must have at least 50% of units with incomes less than 80% AMI • Could serve approximately 2% of total multifamily units in CT • Additional funding would be required to cover 100% of costs for upgrades

MULTIFAMILY Q&A

The previous **hypothetical** scenarios illustrate that ***HEAR/HER rebate funding, on its own, is unlikely to serve a significant portion of CT residents.***

Should CT allocate more than the minimum to households with low income in multifamily buildings? Why and how should allocations be determined?

Given that HEAR funding can only be offered to households at or below 150% AMI, while some amount of HER funding could be provided to any income level, should the amount allocated to households with low income in multifamily buildings differ between HER and HEAR? Why?

Should equitable distribution of this funding be considered in combination with funding from other programs? How?

Would it be more administratively efficient to focus funding for either or both programs on customers with low income and/or customers with low income in multifamily housing?

OTHER CUSTOMER SEGMENTS

The Home Energy Rebate Programs target single-family and multifamily sectors, including specific allocations to households with low- and moderate incomes.

Among these customer segments, are there particular ones or geographies that CT should focus on? For example, renters, geographic areas such as environmental justice communities, housing types, or existing fuel types?

DISCUSSION PART 2

1. Incentive Levels
2. Coordination with Other Programs
3. Technology Focus

HER MODELED SAVINGS REBATES

Single-Family		
Modeled Energy Savings	**Income Level**	**Rebate Amount**
20%-34%	Less than 80% AMI*	Lesser of $4,000 or 80% of project cost
	80% AMI and greater	Lesser of $2,000 or 50% of project cost
35% and greater	Less than 80% AMI*	Lesser of $8,000 or 80% of project cost
	80% AMI and greater	Lesser of $4,000 or 50% of project cost
Multifamily		
Modeled Energy Savings	**Income Level**	**Rebate Amount**
20%-34%	A building with at least 50% of households with incomes less than 80% AMI*	Lesser of $4,000 per dwelling unit or 80% of project cost
	A building with at least 50% of households with incomes 80% AMI and greater	$2,000 per dwelling unit up to $200,000 per building
Greater than 35%	A building with at least 50% of households with incomes less than 80% AMI *	Lesser of $8,000 per dwelling unit or 80% of project cost
	A building with at least 50% of households with incomes 80% AMI and greater	$4,000 per dwelling unit up to $400,000 per building

*States may increase the maximum amount available for low-income households upon approval from DOE.[19] See section 3.1.3 for details.

Modeled Home Efficiency Rebates is a program path requiring calibrated home energy models consistent with the BPI-2400 standard to estimate energy savings prior to the upgrades, providing rebates for homes predicted to achieve a minimum of 20% energy savings.

Connecticut's existing C&LM programs currently provide rebates for efficiency upgrades based on a modeled savings approach governed by Connecticut's Program Savings Document (PSD).

HER MEASURED SAVINGS REBATE APPROACH

Single-Family		
Measured Energy Savings	**Income Level**	**Rebate Amount**
15% or greater	Less than 80% AMI	kWh, or kWh equivalent, payment rate equal to $4,000 for a 20% reduction of energy use for the average home in the State or 80% of project cost*
	80% AMI and greater	kWh, or kWh equivalent, payment rate equal to $2,000 for a 20% reduction of energy use for the average home in the State or 50% of project cost
Multifamily		
Measured Energy Savings	**Income Level**	**Rebate Amount**
15% or greater	A building with at least 50% of households with incomes less than 80% AMI	kWh, or kWh equivalent, payment rate equal to $4,000 for a 20% reduction of energy use per dwelling for the average multifamily building in the State or 80% of project cost**
	A building with at least 50% of households with incomes 80% AMI and greater	kWh, or kWh equivalent, payment rate equal to $2,000 for a 20% reduction of energy use per dwelling for the average multifamily building in the State or 50% of project cost

* Per statute, the measured energy saving of the home or portfolio of homes must achieve 15% savings, but the calculation of the rebate is based on a 20% reduction of average home energy use of an in the state.

**States may increase the maximum amount available for low-income households upon approval from DOE.[20] See section 3.1.3 for details.

Measured Home Efficiency Rebates is a program path within Section 50121, using a DOE-approved open-source measurement and verification (M&V) methodology to measure home energy savings post-installation of the upgrades, providing rebates for homes or a portfolio of homes that achieve measured energy savings of at least 15%.

State must calculate rebates based on (1) the reported energy savings measured through a DOE-approved open-source advanced M&V software, (2) household income level, (3) total project cost reflected in the final invoice or a payment rate as defined in Table 3, and (4) DOE-define home type.

HER Q&A

Should CT conduct a Measured savings pilot with a portion of HER funds? Why?

How much funding for HER should be allocated to Measured vs Modeled savings programs? Why?

Should CT raise the rebate amount for HER to cover 100% of costs for households with low income that are <80% AMI? Or should 100% cost coverage for households with low income be achieved through cost-sharing with other programs? Why?

HEAR PRODUCT REBATES

Product Rebates		
Upgrade Type	**Qualified Product**	**Rebate Amount Not to Exceed**
Appliance	Heat Pump Water Heater	$1,750
	Heat Pump for Space Heating or Cooling	$8,000
	Electric Stove, Cooktop, Range, Oven, or Heat Pump Clothes Dryer	$840
Building Materials	Electric Load Service Center	$4,000
	Insulation, Air Sealing, and Ventilation	$1,600
	Electric Wiring	$2,500
Maximum Rebate		$14,000
Rebate Limitations		
Eligible Rebate Recipient	**Income Level**	**Rebate Amount Not to Exceed**
LMI Household or Eligible entity representative representing LMI household	Less than 80% AMI	100% of qualified project cost
	81%-150% AMI	50% of qualified project cost
Owner of multifamily building or Eligible entity representative representing owner of multifamily building	At least 50% of residents with income less than 80% AMI	100% of qualified project cost
	At least 50% of residents with income of 81%-150% AMI	50% of qualified project cost

For the purposes of calculating rebate amounts for HEAR, total project costs are costs that are invoiced to the eligible entity or the eligible entity representative for the purchase and installation of a qualified electrification project.

A given address cannot receive over $14,000 in HEAR rebates over the course of the program. Rebates must be provided at point of sale and/or as part of an invoice.

HEAR INSTALLER INCENTIVES

Qualifying Activity	Maximum Incentive
Substantial installation located within a disadvantaged community (excludes installations of electric stoves and electric heat pump dryers) per dwelling unit	$200
Installation of one or more electric heat pump water heaters	$150
Installation of one or more electric heat pumps for space heating and cooling per dwelling unit - ducted	$300
Installation of one more electric heat pumps for space heating and cooling per dwelling unit – unducted	$200
Installation of one electric stove, cooktop, range, or oven	$0
Installation of one electric heat pump clothes dryer	$0
Installation of one or more electric load service center	$150
Installation of insulation per dwelling unit	$250
Installation of air sealing and materials to improve ventilation per dwelling unit	$250
Installation of electric wiring per dwelling unit	$250

An incentive must be provided to encourage governmental, philanthropic, commercial, and nonprofit (e.g., community groups) organizations to assist households with low income and moderate income with accessing HEAR.

States may elect to reserve these incentives for projects carried out in homes and dwelling units with households with less than 80% AMI and/or for installations of equipment not commonly installed to encourage contractors to serve households with low income and learn how to install newer technologies.

HEAR Q&A

Should CT allow for the maximum installer incentive for all appliances and upgrades in HEAR, or should the installer incentive amount be less to allow more people to access the rebates?

Should CT limit installer incentives to only projects carried out in households with low income and/or for equipment not commonly installed? Why?

How should incentive payments work in concert with the C&LM and/or the Weatherization Assistance Program which already provide contractors and/or service providers with administrative cost coverage?

COORDINATION WITH OTHER PROGRAMS

Guidelines for Leveraging Other Funding Sources with Home Energy Rebates

Sources of Funding	Allowance	Requirements to Leverage Funding within Same Household	Examples
Other Federal Grants (e.g., funding from the Weatherization Assistance Program (WAP), Low Income Home Energy Assistance Program (LIHEAP))	**Can Braid** 	Must "braid" and use other federal grants to fund distinct and separable measures from the "single upgrades" or "qualified electrification projects" (QEPs) funded by a Home Energy Rebate.	Energy efficiency (EE) measures from WAP (insulation and air sealing), appliance measures from rebate (heat pump, heat pump water heater, and associated wiring)
Federal Loans or Loan Guarantees (e.g., loan from DOE Revolving Loan Fund (RLF))	**Can Co-Fund** 	Can co-fund any remaining costs for the same "single upgrade" or "QEP" above the value of the Home Energy Rebate.	Loan from a state's DOE RLF covers remaining upgrade costs after rebate has been applied
Non-Federal Funding (e.g., EE utility $, state/local $)	**Can Co-Fund** 	Can co-fund any remaining costs for the same "single upgrade" or "QEP" above the value of the Home Energy Rebate.	Utility incentive provides additional funding toward remaining upgrade costs after rebate has been applied
Tax Credits (e.g., federal/state/local tax credits, may vary based on state/local law)*	**See IRS or Tax Authority guidance**	Refer to IRS guidance on the energy efficiency home improvement tax credit, available at https://www.irs.gov/credits-deductions/home-energy-tax-credits	

U. S. DEPARTMENT OF ENERGY | OFFICE OF STATE AND COMMUNITY ENERGY PROGRAMS

**DOE does not provide tax advice; please refer to IRS guidance or relevant state guidance for relevant tax laws and requirements for tax credits.*

By leveraging existing programs through resource braiding, co-funding, and financing, State programs may support deeper and broader energy, cost, and carbon savings among participating households.

A variety of legal prohibitions prevent certain methods of combining funds from different sources. For example, federal grants can be braided with HER/HEAR, but only for distinct and separable measures.

There are several existing programs that target income-eligible households that HER and HEAR can be coordinated with to increase equitable distribution of funds (WAP, HES-IE, Solar for All, etc.).

BRAIDING AND STACKING Q&A

What programs should HEAR and HER coordinate with? (Home Energy Solutions, Home Energy Solutions-Income-Eligible, Weatherization Assistance Program, Home and Business Solutions, Residential Energy Preparation Services, Solar for All, Multifamily Initiative, loan programs), as allowed by the DOE? A list of program summaries can be found here.

How can CT optimize the impact of these rebate funds with other existing programs? (Please note that CT State Procurement rules require DEEP to conduct a competitive procurement for HER and HEAR program implementers.)

TECHNOLOGY FOCUS (HEAR)

Upgrades permitted by DOE under HEAR include:

- Heat pump water heaters
- Heat pumps for space heating and cooling
- Electric stoves, cooktops, ranges, ovens
- Heat pump clothes driers
- Electric load service center upgrades
- Insulation & air sealing
- Ventilation
- Electric wiring

TECHNOLOGY FOCUS (HER)

Available upgrades permitted by DOE under HER include:

- Any single upgrade or combination of upgrades that achieve at least ***15% reduction in building energy use for the Measured path***, or at least ***20% reduction in building energy for the Modeled path.***

Experience, including from the C&LM programs, has shown that *more than one* upgrade will be needed to achieve these levels of savings reductions.

Upgrades needed to achieve required savings will vary greatly from home to home or building to building.

TECHNOLOGY FOCUS Q&A

Should CT focus its funding on a specific technology (or subset of technologies) in HEAR by allocating more or all funding to that/those specific technology(ies), or should CT provide funding for all eligible upgrades? Why or why not?

Should funding allocations be determined with consideration of other funding sources?

Assuming that CT allows energy-efficient HVAC equipment to receive HER rebates, should eligible equipment and/or incentives be aligned with approved C&LM measures and/or incentives in order to ease implementation? Why or why not?