Con Edison Clean Heat Relaunch
In-Person Training Session

January 2023

Introductions – Clean Heat Program Management

Company	Residential	Multifamily	SMB	C&I
Con Edison	Steven Pak, Program Manager	Kimberly Lewis, Program Manager	Maggie Tishman, Program Manager	Alyki Malliaros, Section Manager
Implementation Contractor	ICF Tamara Lowe, Portfolio Manager Kenneth Latal, Sr. Program Manager Emmelyn Leung, Program Manager	Willdan Isha Savjani, Program Manager Kiara Roman, Deputy Program Manager	Willdan Ryan Faulk Program Manager Mel Williams Project Manager	

Today's Speakers – Morning

Toby Hyde	Section Manager, Strategic Engagement
Daniel Krupa	Senior Specialist, Strategic Engagement
Steven Pak – Con Edison	Residential Program Manager, Energy Efficiency
Kimberly Lewis – Con Edison	Multifamily Program Manager, Energy Efficiency
Maggie Tishman – Con Edison	Section Manager, Mass Market (SMB & Residential)
Kenneth Latal - ICF	Senior Program Manager, Con Edison Clean Heat

Agenda

Morning – The Con Edison Clean Heat Program

- Relaunch Status
- Budget and Sectoral Allocations
- Residential Program
- Non-Residential Program
- Con Edison Program Documentation
- Becoming a Participating Contractor

Afternoon – How to Apply for Incentives

- Application Process
  - Residential – ICF (including OIT)
    - 12:30-1:30
  - Multifamily & Small Business – Willdan (including SMART)
    - 1:45-3:00
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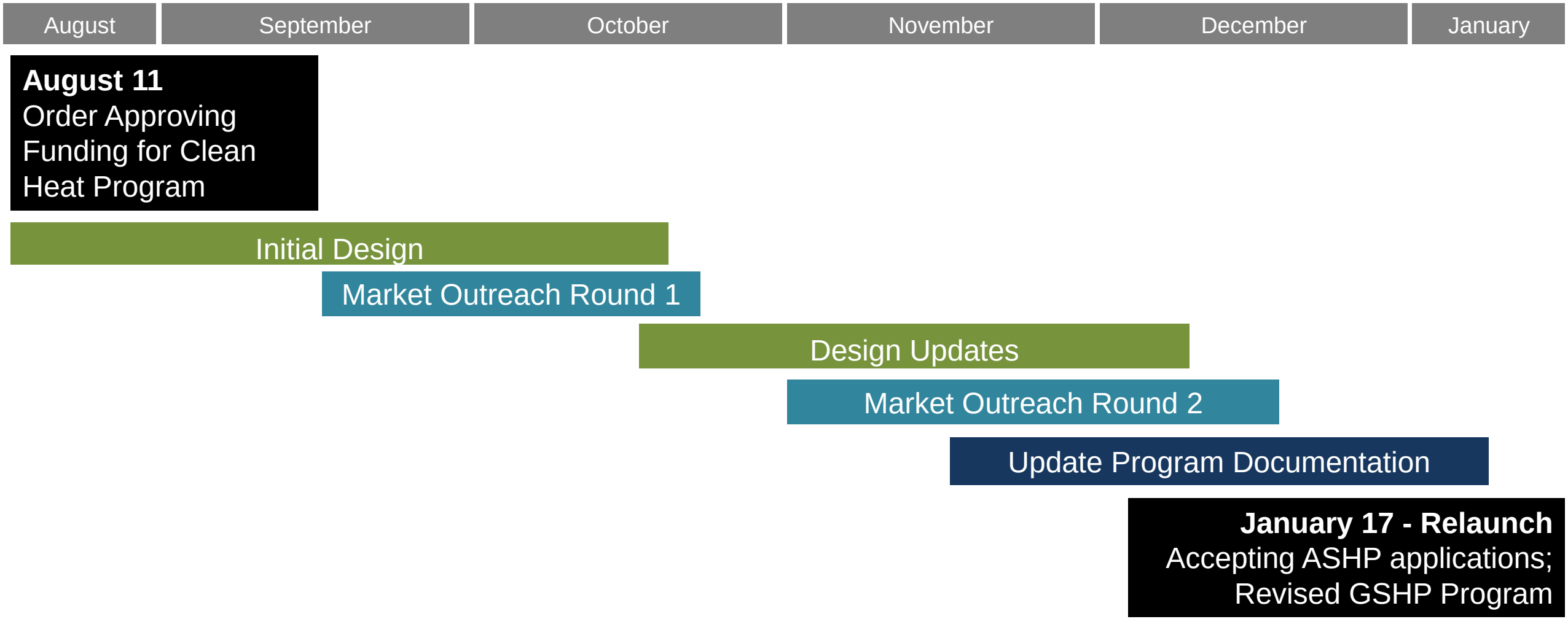
The journey to the January 17 Relaunch



Con Edison performed extensive market outreach

30+ Meetings with Market Participants in Fall 2022

Virtual and In-Person

Small Group Sessions, 1-1 Discussions, and Large-Scale Webinars

Met with contractors of varying sizes across all sectors, trade organizations, and other entities including government agencies

Extensive and Thorough Market Feedback

150+ Participants

Feedback covered incentive levels, allocations, Con Edison's timelines, etc.

Con Edison used feedback to guide programmatic updates

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Principles Behind the Con Edison Program Update

Until further notice, the Con Edison Clean Heat Program will operate with a monthly budget of $10 million across all sectors.

IMPROVED BUDGET MANAGEMENT

SIMPLER AND PREDICTABLE INCENTIVES FOR MARKET PARTICIPANTS

PROGRAM VISIBILITY AND MARKET COMMUNICATION

We will use sectoral allocations to manage our budget

- We will create sectoral allocations to manage our budget and guide Program achievement
- We will use five buckets of funding by incentives and a sixth for non-incentive costs
- We plan to adjust the sectoral allocations quarterly

Customer Segment	Allocation ($)
Residential GSHP	$1.25M
Non-Residential GSHP and Custom Water Heaters	$0.9M
Non-Residential ASHP and Custom Water Heaters	$3.15M
Residential ASHP	$3.6M
Midstream HPWH	$0.1M
Program Administration	$1.0M
Total	**$10M**

Let’s pause for questions

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Residential ASHP & GSHP incentives post January 2023

Residential incentives for buildings with 1-4 dwelling units, or for projects electrifying 1-4 units in multifamily (5+ units) buildings

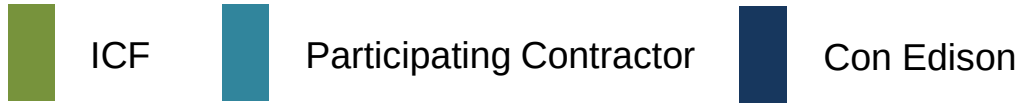
Category	Single Family Home/Whole Building Rate	Per unit in 2-4 dwelling unit projects
ASHP + Decommissioning	$8,000 / dwelling unit	$3,000 / dwelling unit
ASHP + Integrated Controls	$2,500 / dwelling unit	$1,000 / dwelling unit
GSHP + Decommissioning	$20,000 / building	
Midstream HPWH Incentive	$1,000 / tank to customer $50 / tank to PC $50 / tank to distributor or retailer	

- ASHP incentives will only be available to existing buildings, including gut rehab
- Across all categories in the residential sector, incentives will be capped at the lower of the calculated incentive or **50% of total project cost**

Residential contractor allocation plan

Proposed Approach	Explanation
Monthly allocations in dollars refreshed quarterly	- Quarterly refresh allows sufficient time to request, analyze, and establish allocations - Allocations provide clarity to each contractor about incentives available to their business
ASHP allocations for projects applications	- Applications submitted after projects are completed - Submitted applications draw down allocation
GSHP allocations for signed customer agreements	- Customer agreements – submitted prior to project installation – draw down allocation - Longer lead time justifies removing uncertainty related to project completion date
Allocations are fixed per month within quarter	Effective budget management does not allow contractors to roll unused amounts forward without Con Edison approval

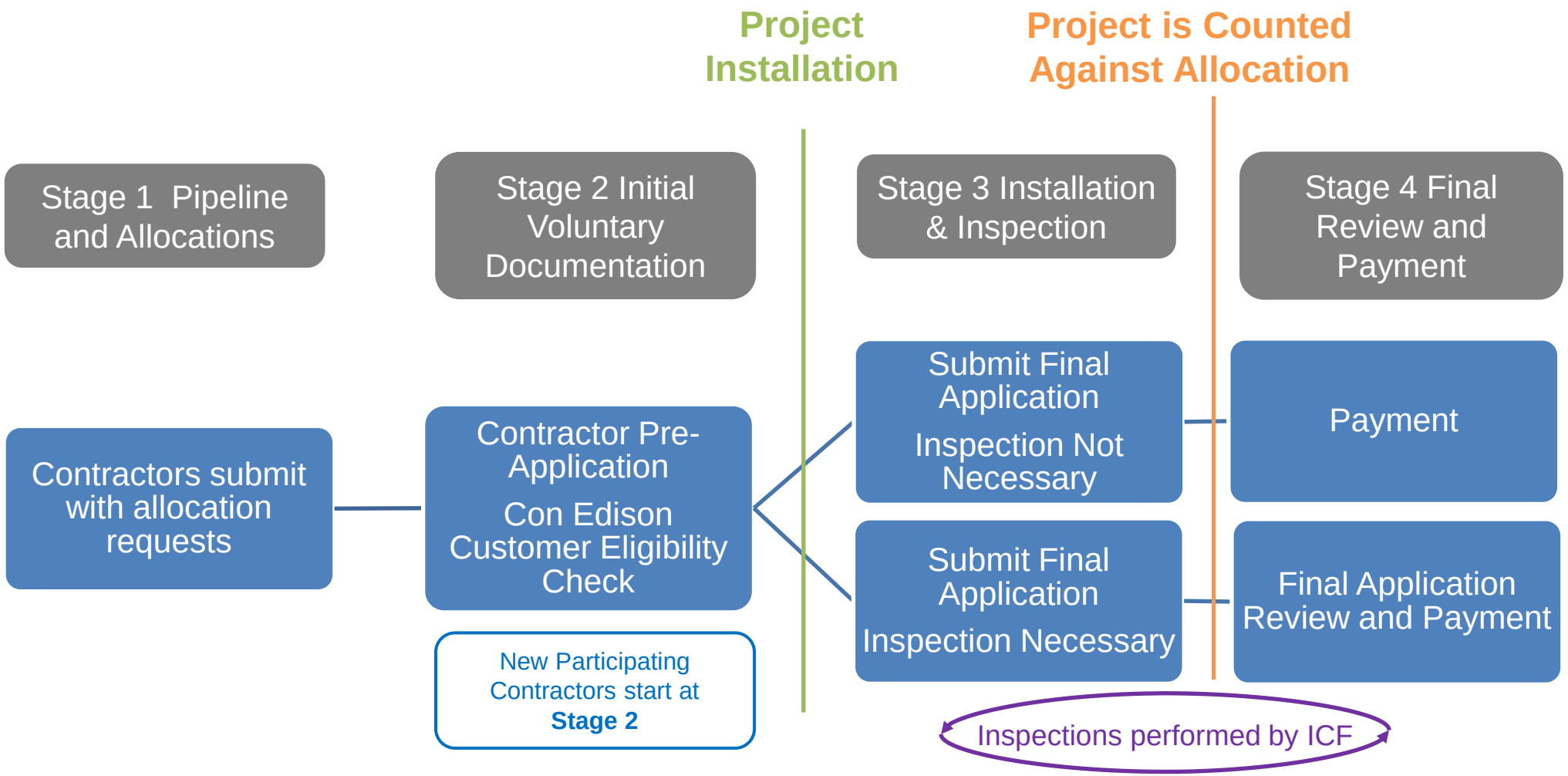
Quarterly timeline for residential contractor allocations



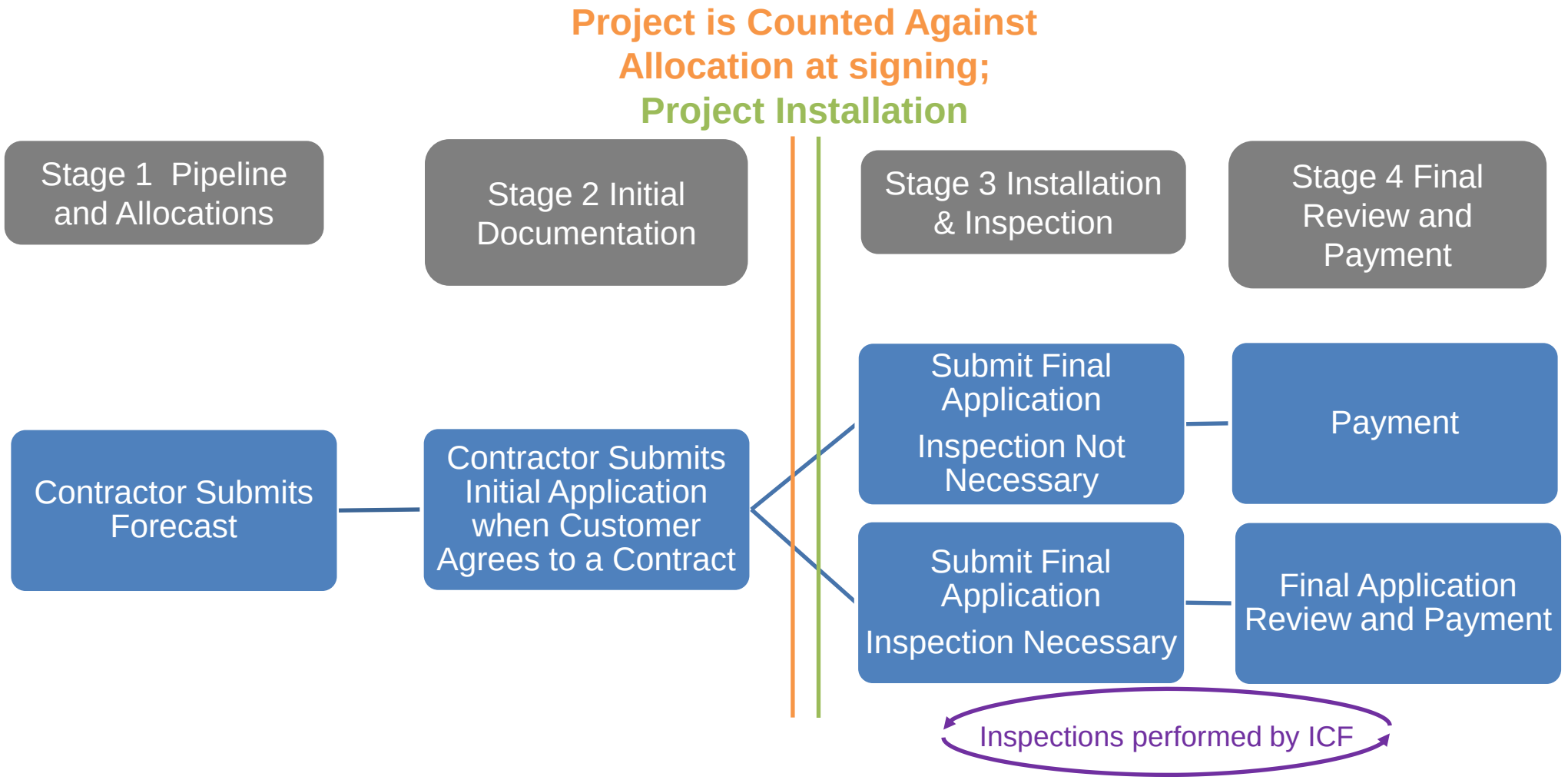
	Month (x-1)	Month x	Month x+1	Month x+2
Con Edison Allocation Request				
Contractor Submits Allocation Request				
Analyze allocation request against historical rate				
Allocate $ per contractor				
Communicate approved $ allocation to contractors				
Analyze previous months allocation				

- Allocations are set monthly and reset quarterly
- Con Edison plans to reallocate budget across sectors on a quarterly basis

Air Source Heat Pump Application Process



Ground Source Heat Pump Application Process



Residential Programmatic Inspections Precede Payment

- We have set a target of 10% of all applications for each contractor selected for inspection
- Applications not selected for inspection will be passed through for payment
- Inspections will be completed after application is submitted and before payment
- Programmatic inspections to focus on major risks
  - Residential ASHP programmatic inspections will be on a sample of projects using a checklist (sample on next slide)
  - Other Clean Heat programs will follow a similar approach to programmatic inspections
- Contractors must correct failed inspections prior to payment of application

Residential ASHP Programmatic Inspection Checklist

Objective / Task Description		
All Projects	C1	Verify installed equipment is as proposed on application, quantity, make and model
	C5	Verify site conditions are consistent with Load Sizing Analysis or a revised energy analysis has been completed. Review of ACCA (Manual J, S, and D) or other approved heating and cooling calculation methodologies, with observed site conditions
	C15B	Verify that units are above snow depth level according to ACCA Weather Station data as provided by the NYS Clean Heat program
	C17	Observe functional testing of equipment in either cooling or heating mode as conducted by contractor or operator, if conditions allow.
	C18	Verify that electrical disconnect is installed in an accessible location for service.
Integrated Controls Only	IC1	Confirm integrated control system has been installed and is operational. Contractor documentation must specify the controls settings on-site, referencing set points and control type.
	IC2	Confirm integrated control system matches that of the application.
Decommis-sioning Only	DE2	Confirm the contractor-completed Decommissioning Guidance Checklist matches conditions on site.
	DE3	Verify fossil fuel space heating appliance has been removed from site or fuel lines to appliance have been cut and capped.
	DE4	(if applicable) Verify fossil fuel domestic hot water appliance has been removed from site or fuel lines to appliance have been cut and capped

Examples of Residential Market Feedback and Subsequent Programmatic Changes

Market Feedback	Programmatic Adjustments
Budget availability	Contractor allocations
Ability to grow business	Allocations refreshed quarterly
Allow for new contractors	Budget reserved for new contractors
Project eligibility	Real-time eligibility check

Let’s pause for questions

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- **Non-Residential Program**
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Non-residential Program Basics

- Decommissioning will be required for all projects except for select C&I part-load projects
  - For multifamily decommissioning will be a requirement **over the scope** of the project
- All incentives will be capped at 50% of total project cost, or a sector specific dollar cap, whichever is lower
  - Sector-specific caps:
    - SMB: $100,000
    - Multifamily and C&I: $1M
- Projects in existing buildings, including gut rehabs, are eligible for ASHP and GSHP incentives
- Non-residential new construction is only eligible to receive Clean Heat incentives for GSHP installations
- Non-residential includes Multifamily, C&I, and Small-Medium Business

Multifamily space heating prescriptive incentive: switch from capacity to $/dwelling unit

Eligibility

- Existing buildings with 5- 50 dwelling units installing ASHPs will be incentivized under a $/dwelling unit (apartments) structure at **$4,000** per apartment
- Custom pathway also available for custom projects (e.g. central systems or VRF)
- Common-area-only projects will not be eligible

Rationale

- Simplifies incentive calculations for contractors and customers
- Consistency with residential program by removing capacity-based incentives
- Improves alignment with LMI program
- Improves ability to manage and forecast budget
- Streamlines project review

Non-GSHP Multifamily incentives post January 2023

Buildings with 5+ units qualify for Multifamily incentives

Category	Category Description	Status on Relaunch	Incentives on Relaunch
2C	Full-load ASHP	Available to buildings with 50 and fewer dwelling units	$4,000 / dwelling unit
4	Custom	Existing buildings only	$200 / MMBtu
4a	Custom ASHP + Envelope	Existing buildings only	Tier 1 - $200 / MMBtu Tier 2 - $225 / MMBtu
5	Heat pump water heater	Shift to midstream program	$1,000 / equipment unit
6	Custom HPWH	Offer split HPWH technologies at custom rate	$200 / MMBtu

- Decommissioning will be required for all ASHP projects
- Incentives will be capped at $1M or 50% of total project cost, whichever is lower
- Incentives are for projects in existing buildings only
- These incentives cover all eligible non-GSHP technologies, including ASHP, VRF, HPWH

Non-residential GSHP Incentive Post January 2023

Category Number	Description	GSHP	
		New Construction ($/MMBtu)	Existing Buildings incl. Gut Rehab ($/MMBtu)
4	Custom Full Load Space Heating Applications	$125	$200
4a	Custom Full Load Space Heating Applications + Envelope - Tier 1	$125	$200
	Custom Full Load Space Heating Applications + Envelope - Tier 2	$150	$225
6	Custom Hot Water Heating Applications	$125	$200
10	Custom Partial Load Space Heating Applications	N/A	$100

Notes

- Non-residential new construction is eligible to receive Clean Heat incentives for GSHP installations
- Incentives will be capped at $1M or 50% of total project cost, whichever is lower

Non-GSHP SMB & C&I incentives post January 2023

Category	Status on Relaunch	SMB	C&I
2D	SMB only	$2,500 / project (<1,000 SF) $5,000 / project (1,001-2,500 SF)	N/A
4	Existing buildings only	$150 / MMBtu	$120 / MMBtu
4a	SMB: one rate C&I: two rates	Tier 1 - $150 / MMBtu Tier 2 – N/A	Tier 1 – $120 / MMBtu Tier 2 – $150 / MMBtu
5	Shift to midstream program	$1,000 / unit	$1,000 / unit
6	Offer split HPWH technologies at custom rate	$200 / MMBtu	$200 / MMBtu
10	Offer new incentive category for part-load projects	N/A	$70 / MMBtu

- These incentives are only available to existing buildings
- These incentives cover all eligible non-GSHP technologies, including ASHP, VRF, HPWH

SMB Prescriptive ASHP Incentives: Two Offerings

SMB Prescriptive Incentives

Floor area (sf)	Incentive per project	Share of '21-22 sectoral project count
≤ 1,000	$2,500	9%
1,001 - 2,500	$5,000	30%

*based on projects acquired from 2021 and 2022

- Projects above 2,500 sf follow custom path at $150 / MMBtu
- Requires decommissioning
- New construction not eligible
- Incentives capped at 50% of project costs
- Incentives cover all eligible non-GSHP technologies, including ASHP and VRF

Non-residential ASHP and GSHP program controls and QAQC processes

Programmatic Inspections

- All Non-Residential projects in existing buildings are subject to a pre-installation and post-installation inspection
- Pre-Pause C&I and MF Clean Heat projects underwent programmatic pre-installation and post-installation inspections
- Upon relaunch, these programmatic controls will continue, and be adopted for SMB Clean Heat
- Payment will not be issued until programmatic inspections are complete and onsite issues are remediated

QAQC Inspections

- Program-specific QAQC inspection criteria will be developed with input from existing core programmatic QAQC activities
- These QAQC inspections will be conducted pre project payment and will also be used to monitor IC performance, identify trends, and inform continuous improvement

Disciplinary process across all segments

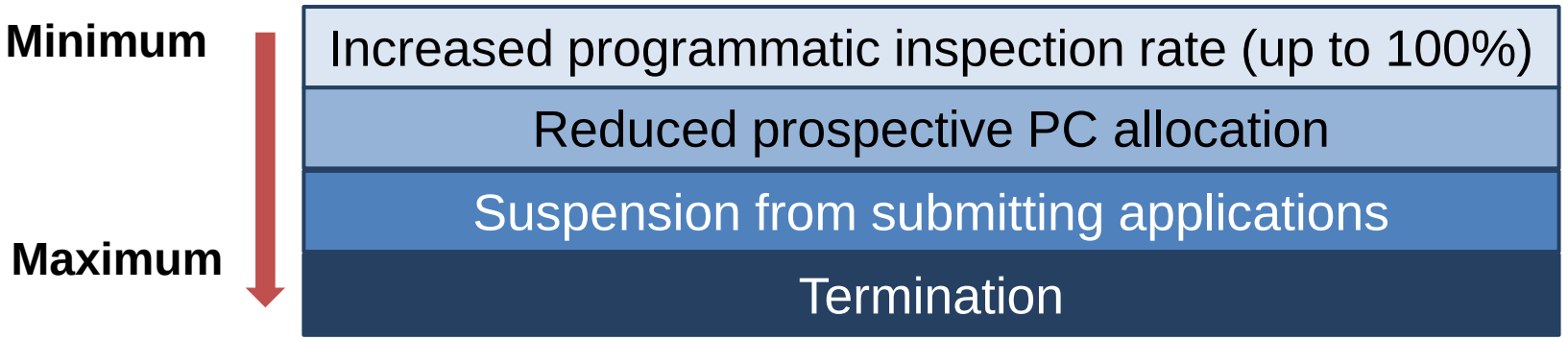
Results of programmatic inspections within a rolling 6-month timeline:

1st Fail: Required coaching/reinforcement training

2nd Fail: Warning letter

3rd Fail: Disciplinary escalation based on severity of identified issues

Illustrative Disciplinary Actions



QAQC inspections supplement programmatic inspections

- In addition to Programmatic Inspections, which occur before payment, Con Edison will conduct QAQC inspections
- The rates of QAQC inspections may vary by sector
- The QAQC inspections monitor program processes and performance and inform continuous improvement
- Some projects, and many large projects will receive two inspections, a Programmatic Inspection and a QAQC Inspection

Examples of Non-Residential Market Feedback and Subsequent Programmatic Changes

Market Feedback	Programmatic Adjustments
Decommissioning requirements	Updated non-residential decommissioning checklist
Mixed use building eligibility	Dominant sector
Facilitate sales	Prescriptive incentives for MF and SMB

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Con Edison is releasing a full suite of documentation to support Clean Heat

- Con Edison Program Manual
- Updated Con Edison Participation Agreement
- Updated Statewide calculator tool
- Updated residential decommissioning checklist
- Non-residential decommissioning checklist

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Becoming a 2023 Participating Contractor

All contractors must submit an updated Con Edison Participating Contractor Agreement with Attestation Form.

New Participating Contractors must also submit:

- NYS Participating Contractor Application
- IRS Form W-9
- Certificate of Insurance Policy (minimum $1 million)
- Sector-specific documentation (see tables on the following slides)

For additional information on the NYS Clean Heat Program Contractor enrollment, visit Become a Participating Contractor: NYS Clean Heat webpage

Participating Contractor Requirements by Sector: ASHP, Weatherization, All Residential, MF, and SMB

Sector	Required Documentation
All Residential Contractors	Contractor Verification Attestation Form*
	Participating Contractors must have two staff attend one of Con Edison's in-person Clean Heat Program training sessions or complete a 10-question assessment with a passing grade of 70%*
ASHP installer	US Environmental Protection Agency Section 608 Technician Certification
	ASHP Manufacturer-sponsored Installation Training Certificate (or comparable)
	ASHP Manufacturer-sponsored Cold Climate Air Source Heat Pump Sizing and Design Training
ASHP Designer	An active NYS Professional Engineering license OR active NYS Registered Architect license
Weatherization Contractors	Home Improvement License (where applicable)
Multi-family & SMB Contractors	Required to attend a sector-specific training

* Required for all Participating Contractors

Participating Contractor Requirements by Sector: GSHP

Sector	Required Documentation
GSHP Contractor	A copy of a current (and in good standing) International Ground-Source Heat Pump Association (“IGSHPA”) accredited installer certificate
GSHP Designer (Category 3)	A current (and in good standing) IGSHPA accredited installer certificate OR an active Certified GeoExchange Designer (“CGD”) certificate from the Association of Energy Engineers (“AEE”)/IGSHPA
GSHP Designer (Category 4)	A current CGD certificate from AEE/IGSHPA OR An active NYS Professional Engineering license OR active NYS Registered Architect license
GSHP Driller (Vertical Loop Field)	Active registration (in good standing) and certification for open-loop geothermal well drilling by the NYS Department of Environmental Conservation OR
	National Ground Water Association Certified Vertical Closed-Loop Driller (CVCLD) certificate
GSHP Driller (Direct Exchange “DX”)	Training certificate from a DX Ground Source Heat Pump manufacturer

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FOR DISCUSSION

BREAK FOR LUNCH

UP NEXT: Presentations by ICF and Willdan

Today's Speakers – Afternoon

Emmelyn Leung - ICF	Program Manager, Con Edison Clean Heat
Rudy Escobar - ICF	Senior Account Manager, Con Edison Clean Heat
Kiara Roman-Bruno - Willdan	Deputy Program Manager
Leon DeSouza - Willdan	Project Manager for Clean Heat
Rebecca Biros - Willdan	Outreach Lead
Jovan Lewis - Willdan	Contractor Manager
Ryan Faulk – Willdan	Program Manager

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Con Edison Clean Heat Program Relaunch: Residential 1-4 Family

January 2023

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- Introductions
  - Con Edison and ICF teams
- Key Residential Program Updates
- 2023 Residential Incentives
- Residential Measure Categories
- Becoming a 2023 Con Edison Participating Contractor
- Contractor Allocations
- Application Process in OIT
- Programmatic Inspections
- Submission Process
- Q&A

Con Edison Clean Heat 2023 Program

Introduction:

- The Con Edison Clean Heat training guide will be used to provide contractors Con Edison Clean Heat program updates for the 2023 Con Edison Clean Heat Program as well as how to submit project applications into the Online Intake Tool (OIT) platform.

- The following slides will illustrate the use of the OIT for single project/application entries.

- The Con Edison 2023 Clean Heat Program Manual can be found in the following link: https://cleanheat.ny.gov/contractors/

Con Edison Residential Portfolio Team - ICF

- Portfolio Manager – Con Edison Residential
  - Tamara Lowe – Tamara.Lowe@icf.com
- Senior Program Manager – Con Edison Clean Heat
  - Kenneth Latal – Kenn.Latal@icf.com
- Program Manager – Con Edison Clean Heat
  - Emmelyn Leung – Emmelyn.Leung@icf.com
- Account Management Team
  - Rudy Escobar – Rudy@conedisonresidential.com
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  - Brian Reilly – Brian@conedisonresidential.com
  - Ed Smith – Ed@conedisonresidential.com
  - Bhaumik Chanchpara – Bhaumik@conedisonresidential.com
  - Akheem Billy – Akheem@conedisonresidential.com

Key Residential Program Updates

- Program relaunch effective Tuesday, January 17, 2023
- 3 Categories available for incentives:
  - 2A (Full Load ASHP Install + Integrated Controls)
  - 2B (Full Load ASHP Install + Decommissioning)
  - 3 (GSHP + Decommissioning)
- System capacity of decommissioning projects must meet or exceed 100% of building heating load (BHL).
- Heat Pump Water Heater (HPWH) Incentives will be available through the Midstream platform.
- Incentives are provided as **Instant Discount to homeowners <u>only</u>**
- ICF to provide an ‘Eligibility Check’
  - Service on the Online Intake Tool to show if the address and account number are Active customers. To allow an application to be submitted
  - Ineligible for incentives "All applications will be reviewed once the initial submittal" hits the system" We expected this to take no more than 48 hours"
    - Past Clean Heat participants
    - Electric to electric projects

2023 Residential Program Incentives

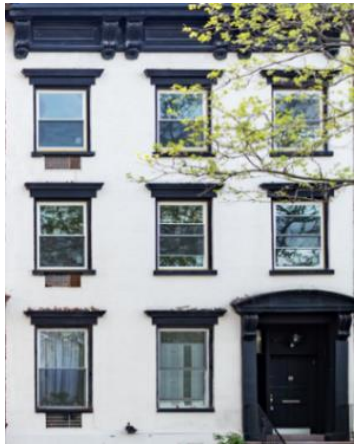
Category	Technology Description	Single Family Home/Whole Building Rate	Per unit in 2-4 Family Home and Apartment
2A	ccASHP: Full Load Heating + Integrated Controls	Max: $2,500/ Dwelling Unit	Max: $1,000/ Dwelling Unit
2B	ccASHP: Full Load Heating + Decommissioning (Fossil Fuel)	Max: $8,000/ Dwelling Unit	Max: $3,000/ Dwelling Unit‡
3	GSHP Full Load Heating + Decommissioning (Fossil Fuel)	$20,000/Building	
Midstream*	Air-Source HPWH (Less Than Or Equal to 120 gal)	$1000/Homeowner $100 Per Tank For Contractor $100 Per Tank to Distributor or Retailer	

* Midstream HPWH projects must be submitted through the Midstream HPWH program
‡ Max: $8,000/2-family home when both dwelling units are completed together

Residential building types: single-family homes

Building Type	Description	Example Building
Single family detached	A building with one Dwelling Unit that does not share any walls with other conditioned residential buildings. Decommissioning rate: $8,000	
Single family attached	A building with one Dwelling Unit that shares at least one wall with another residential building. Decommissioning rate: $8,000	

Residential building types: two-unit buildings

Building Type	Description	Example Building
Two Dwelling-Unit Building	A building with two Dwelling Units separated. A project which installs heat pumps and decommissions existing heating systems in both Dwelling Units is eligible for the Whole Building Rate. Decommissioning rate: $8,000	
Two-unit building – One Dwelling Unit	In two Dwelling Unit buildings where one of two units is electrified, it is eligible for the per Dwelling Unit rate. Decommissioning rate: $3,000	

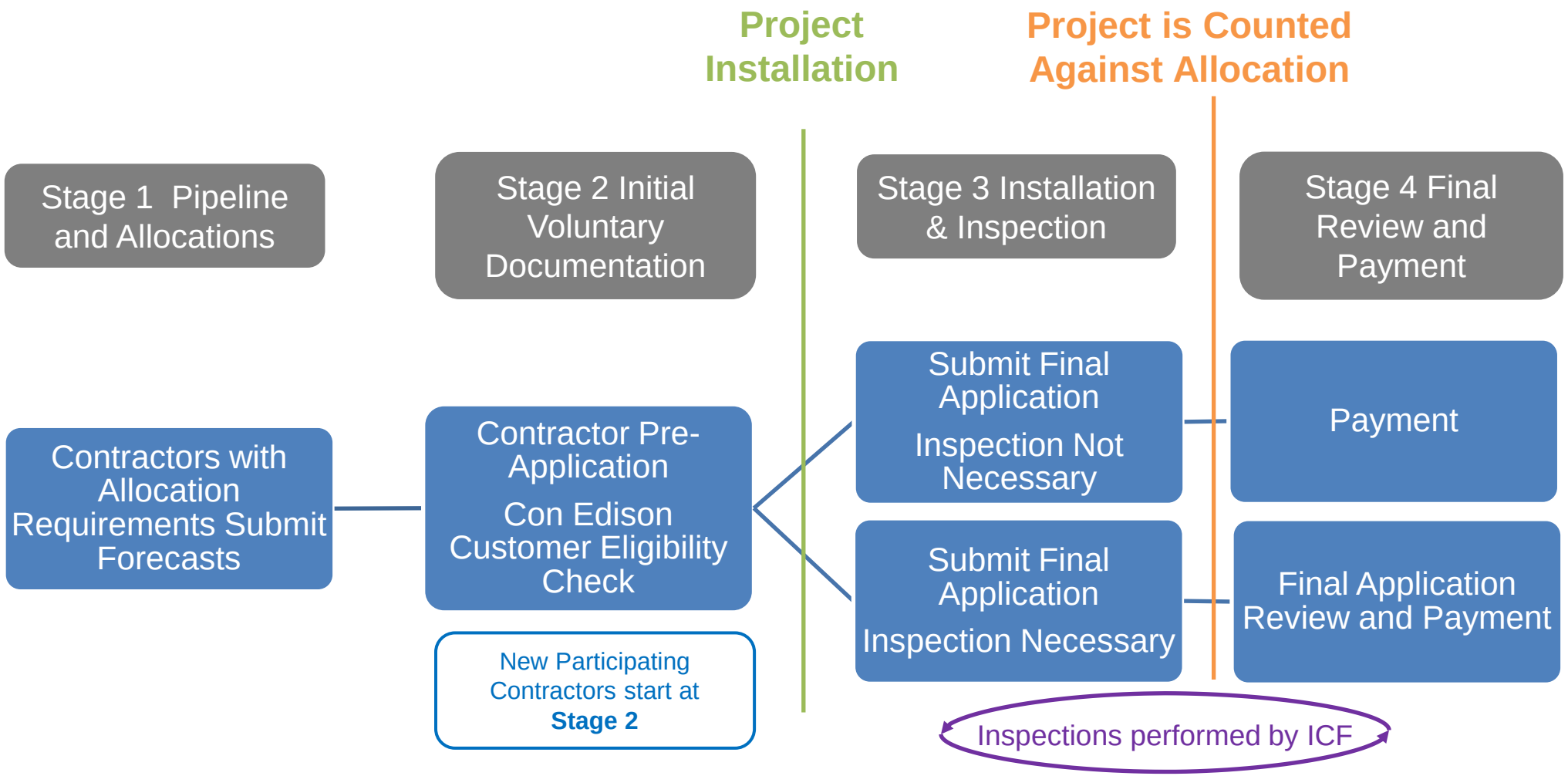
Residential building types: more than three units

Building Type	Description	Example Building
Buildings with 3+ Dwelling Units	Projects which electrify between 1-4 Dwelling Units in a multi-family building (5+ unit building) are eligible for the *residential* per Dwelling Unit rate. Decommissioning rate: $3,000 per apartment	

Residential Measure Categories

Category	Technology Description	Details
2A	Installation of a full load ccASHP system along with **integrated controls**	Refer to the Integrated Controls Qualified Product List to view if your Integrated Control System qualifies. For any inquiries to qualify your Integrated control systems please review the Clean Heat Integrated Controls Eligibility Guidelines.
2B	Installation of a full load ccASHP system along with **decommissioning of prior heating equipment (Fossil Fuel)**	Refer to the Con Edison Clean Heat Con Edison Decommissioning Checklist.
3	Installation of a full load GSHP system along with **decommissioning of prior heating equipment (Fossil Fuel)**	Refer to the Con Edison Clean Heat Con Edison Decommissioning Checklist.

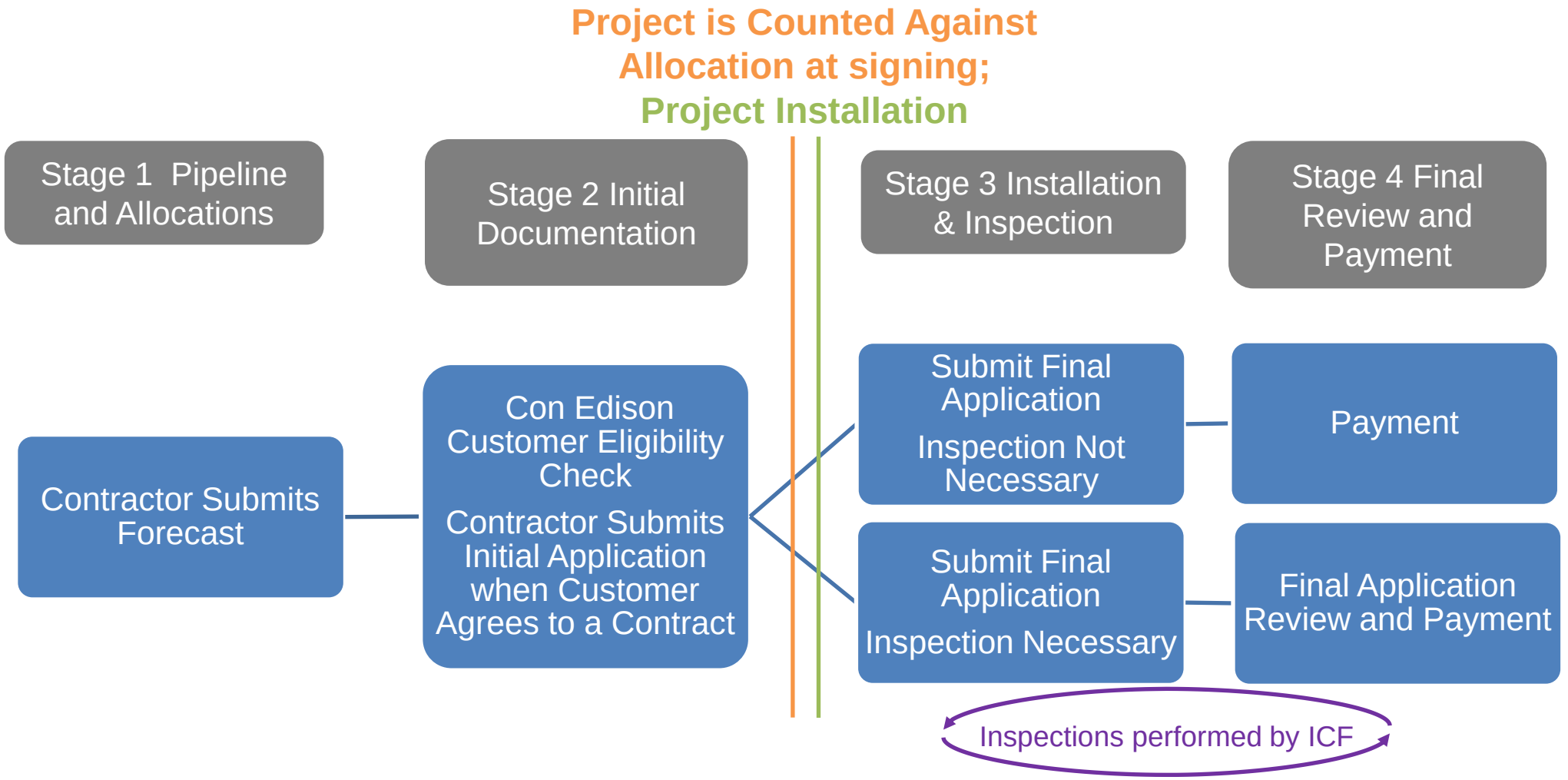
Air Source Heat Pump Application Process



ASHP and GSHP Eligibility Check – Stage 2

- Enter the following data points in the Eligibility tool:
  - Premise address
  - Account number
  - Meter ID
- Eligibility tool will provide an eligibility key confirming active account

Ground Source Heat Pump Application Process



GSHP Initial Application Documentation – Stage 2

- Con Edison Customer Participation Acknowledgement Form
- Cutsheets for System Capacity – Specific model(s) and product ratings being used in the project must be reflected on the cutsheets (may be NEEP, AHRI or manufacturers specification sheets)
- Invoice or Contract Between Contractor and Con Edison Account Holder –
- Installation cost for the projects must show labor and material costs presented separately
  - Costs shall be limited to the equipment cost and labor cost
- **Manual J:** Entire Building Floor-by-Floor Load Calculations for BHL and BCL

GSHP Initial Application Data Fields – Stage 2

- Data Fields
  - Project Name
  - Eligibility Key
  - Premise Address
  - Building Type
  - Multifamily Building (Y/N)
  - No. of Dwelling Units
  - Measure Type
    - GSHP with decommissioning
  - Estimated Total Project Cost
  - Planned Installation Date
  - Signed customer agreement (for GSHP projects)

Final Application Document Checklist – ccASHP and GSHP

- Con Edison Customer Participation Acknowledgement Form
- Cutsheets for System Capacity – Specific model(s) and product ratings being used in the project must be reflected on the cutsheets (may be NEEP, AHRI or manufacturers specification sheets)
- Invoice or Contract Between Contractor and Con Edison Account Holder –
  - Installation cost for the projects must show labor and material costs presented separately
  - Costs shall be limited to the equipment cost and labor cost
- **Manual J: Entire Building** Floor-by-Floor Load Calculations for BHL and BCL
- Photos
  - Entire Nameplate Photos
  - System Installation Photos- Longshot photos of Condenser (Decommissioned Equipment Before and After), Mounted Integrated Control with Set Point Temperature (If Applicable)
- Decommissioning Checklist (If applicable)

Final Application Project Data Fields – ccASHP and GSHP

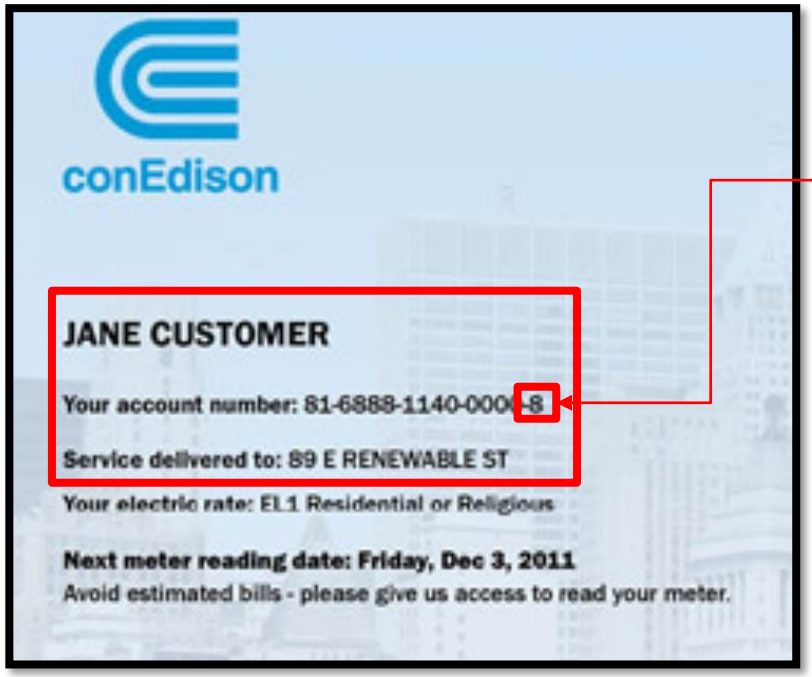
Project Details	
Project Name*	Total System Heating Capacity at design temp
Eligibility Key*	Total Project Costs (Labor + Equipment – excluding tax)
Customer Name	System Cost for Equipment (as a percentage)
Premise Address*	Status of Existing Equipment (decommissioned or removed)
Account Number*	Status of Existing Equipment (decommissioned or removed)
Building Type*	Was Clean Heat financing used on this project?
Installation Date	Total building square footage
Year built	Manual J conditioned square footage
Building Cooling Load (BCL) at design temp	Replaced Heating fuel of system
Total System Cooling Capacity at design temp	Replaced Electric Heating System (if applicable)
Building Heating Load (BHL) at design temp	Replaced Fossil Fuel Heating System (if applicable)

* Data fields marked with asterisk (*) are pre-populated from Stage 2

Final Application Equipment Data Fields – ccASHP and GSHP

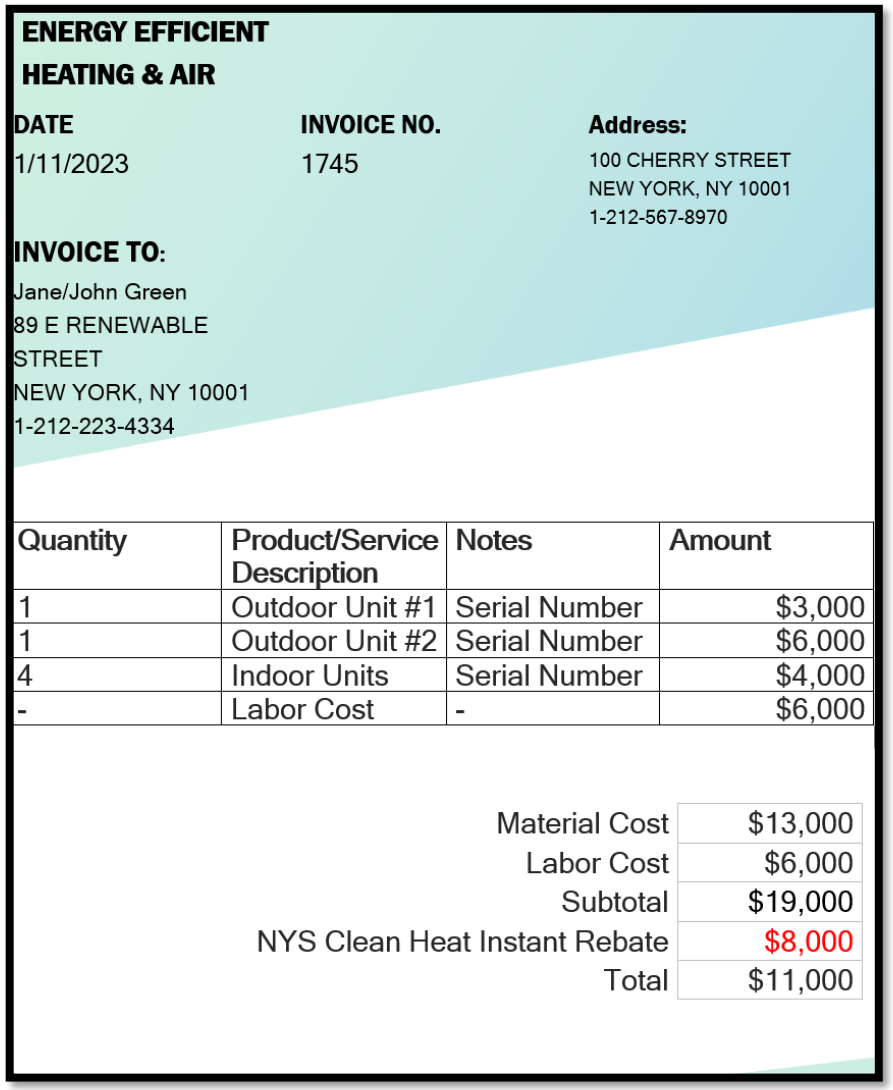
Equipment Details
Manufacturer
AHRI Number
Equipment Heating Capacity (BTU) at Design Temp
Outdoor Model #
Outdoor Serial #
Indoor Model #

Identifying Account Information



- A Con Edison Clean Heat application requires an active Con Edison Electric account number.
- When submitting the Con Edison account number please remove the final digit. (Instead of 816888114000008 it will be 81688811400000)
- The invoice submitted in the application MUST show the Con Edison account holder name and exact address of the project.
- If a landlord requests the Clean Heat incentive, then the names of both landlord and account holder must be on the customer invoice.
- The account holder of the Con Edison Account must also be the one who signs the Customer Acknowledgement form.

Sample Invoice



ENERGY EFFICIENT
HEATING & AIR

DATE
1/11/2023

INVOICE NO.
1745

Address:
100 CHERRY STREET
NEW YORK, NY 10001
1-212-567-8970

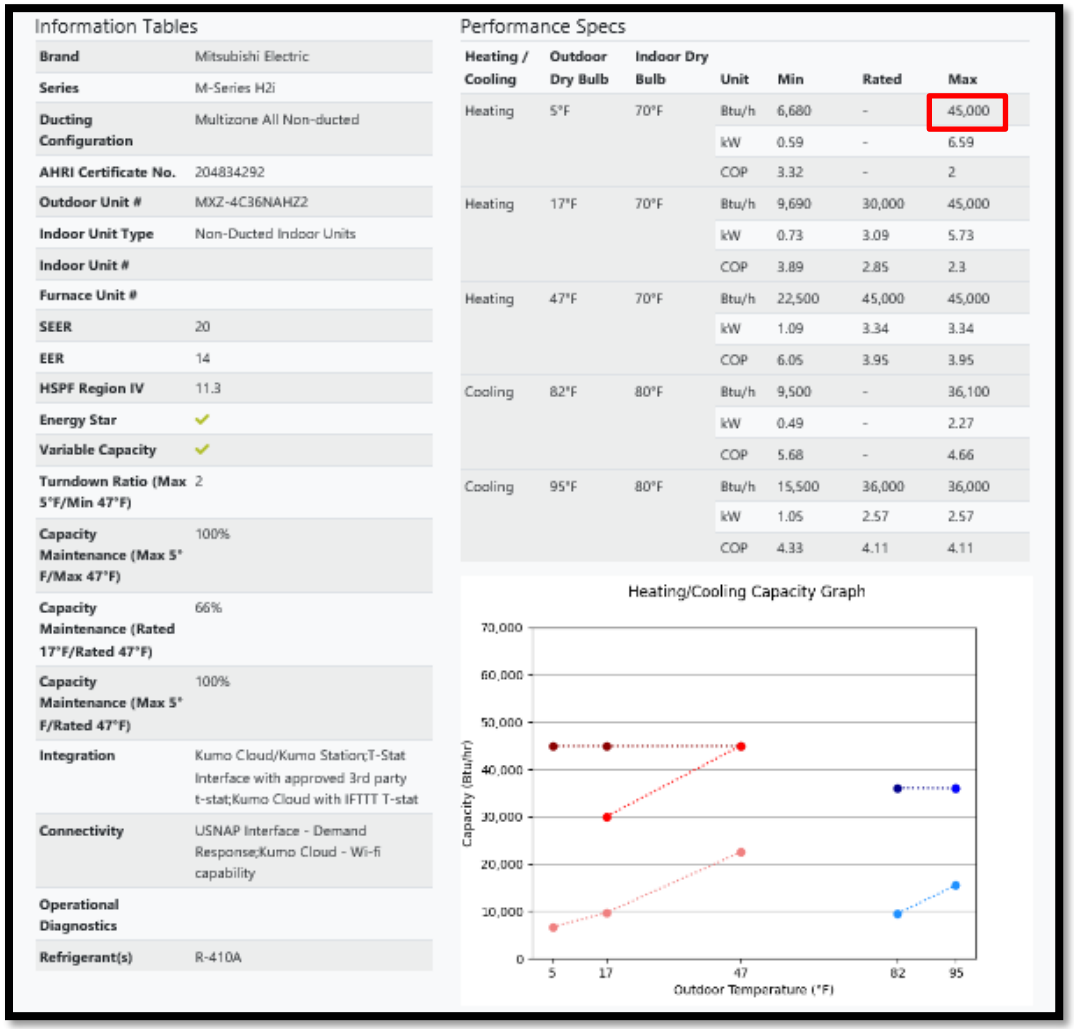
INVOICE TO:
Jane/John Green
89 E RENEWABLE
STREET
NEW YORK, NY 10001
1-212-223-4334

Quantity	Product/Service Description	Notes	Amount
1	Outdoor Unit #1	Serial Number	$3,000
1	Outdoor Unit #2	Serial Number	$6,000
4	Indoor Units	Serial Number	$4,000
-	Labor Cost	-	$6,000

Material Cost	$13,000
Labor Cost	$6,000
Subtotal	$19,000
NYS Clean Heat Instant Rebate	$8,000
Total	$11,000

- Contractor invoices are required to have premise information, total cost of services before the Con Edison Clean Heat Rebate, and a line item showing the Con Edison Clean Heat Rebate discounted at the point of sale.
  - Installation cost for the projects must show labor and material costs presented separately
  - Costs shall be limited to the equipment cost and labor cost
- Premise information must match the account holder of the Con Edison account.
- Address must be accurate and include apt/unit numbers.

NEEP or AHRI Documentation required for each outdoor unit



Information Tables

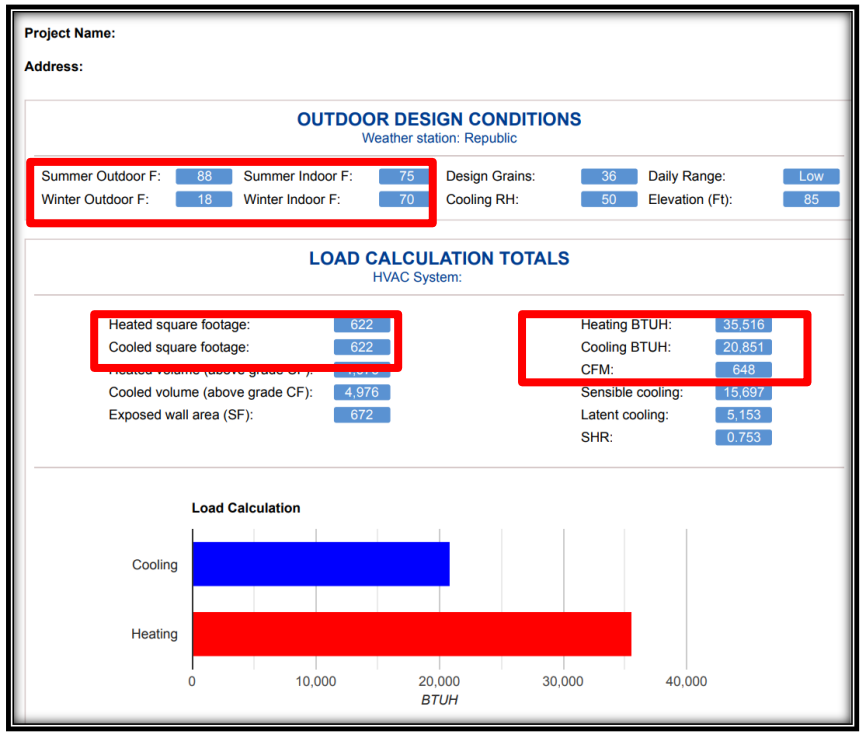
Brand	Mitsubishi Electric
Series	M-Series H2i
Ducting Configuration	Multizone All Non-ducted
AHRI Certificate No.	204834292
Outdoor Unit #	MXZ-4C36NAHZ2
Indoor Unit Type	Non-Ducted Indoor Units
Indoor Unit #	
Furnace Unit #	
SEER	20
EER	14
HSPF Region IV	11.3
Energy Star	✓
Variable Capacity	✓
Turndown Ratio (Max 5°F/Min 47°F)	2
Capacity Maintenance (Max 5° F/Max 47°F)	100%
Capacity Maintenance (Rated 17°F/Rated 47°F)	66%
Capacity Maintenance (Max 5° F/Rated 47°F)	100%
Integration	Kumo Cloud/Kumo Station;T-Stat Interface with approved 3rd party t-stat;Kumo Cloud with IFTTT T-stat
Connectivity	USNAP Interface - Demand Response;Kumo Cloud - Wi-fi capability
Operational Diagnostics	
Refrigerant(s)	R-410A

Performance Specs

Heating / Cooling	Outdoor Dry Bulb	Indoor Dry Bulb	Unit	Min	Rated	Max
Heating	5°F	70°F	Btu/h	6,680	-	45,000
			kW	0.59	-	6.59
			COP	3.32	-	2
Heating	17°F	70°F	Btu/h	9,690	30,000	45,000
			kW	0.73	3.09	5.73
			COP	3.89	2.85	2.3
Heating	47°F	70°F	Btu/h	22,500	45,000	45,000
			kW	1.09	3.34	3.34
			COP	6.05	3.95	3.95
Cooling	82°F	80°F	Btu/h	9,500	-	36,100
			kW	0.49	-	2.27
			COP	5.68	-	4.66
Cooling	95°F	80°F	Btu/h	15,500	36,000	36,000
			kW	1.05	2.57	2.57
			COP	4.33	4.11	4.11

Heating/Cooling Capacity Graph

Manual J & ASHRAE Design



City Name	2017 ASHRAE	
	99% Heating Dry Bulb (deg F)	1% Cooling Dry Bulb (deg F)
New York City - Central Park	17.5	88.0
New York City - JFK	18.0	86.6
New York City - LaGuardia	18.4	89.6
White Plains	13.5	86.4

Load calculations performed at dry bulb temperatures different from those stated above will be accepted if the temperatures are within +/- 5 degrees F.

- Manual J must show entire premise address.
- Manual J should use ASHRAE outdoor and indoor dry bulb design temperatures.
- Manual J must be conducted floor-by-floor.
- Design temperatures must be +/- 5 degrees from the ASHRAE City temperatures.

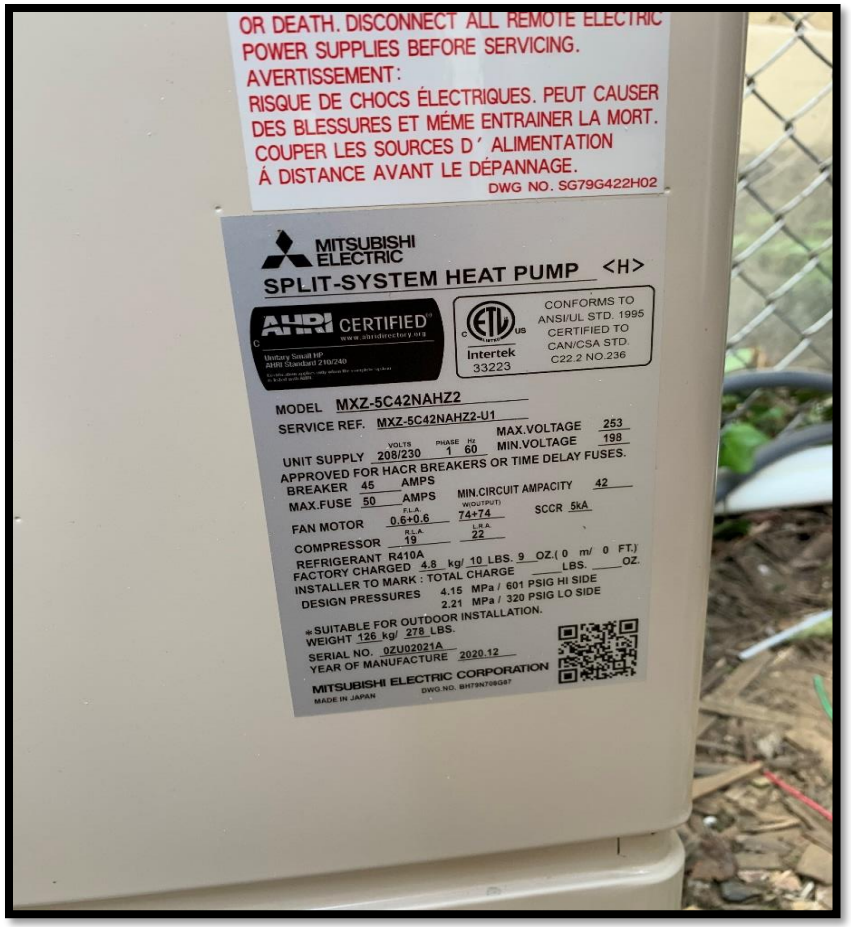
Recommended Building Heating Load per Square Foot (BHL/SF) Range

- Projects outside the recommended BHL/SF for the building will be subject to additional technical review

Year Built	Minimum BHL/SF	Maximum BHL/SF
Pre-1945; uninsulated Brick	30	45
Pre-1945 Insulated	25	45
Pre-1979	20	35
1979-2006	15	30
2007 or later	15	25

Installation Nameplate and Long Shot Photos

Nameplate photo example

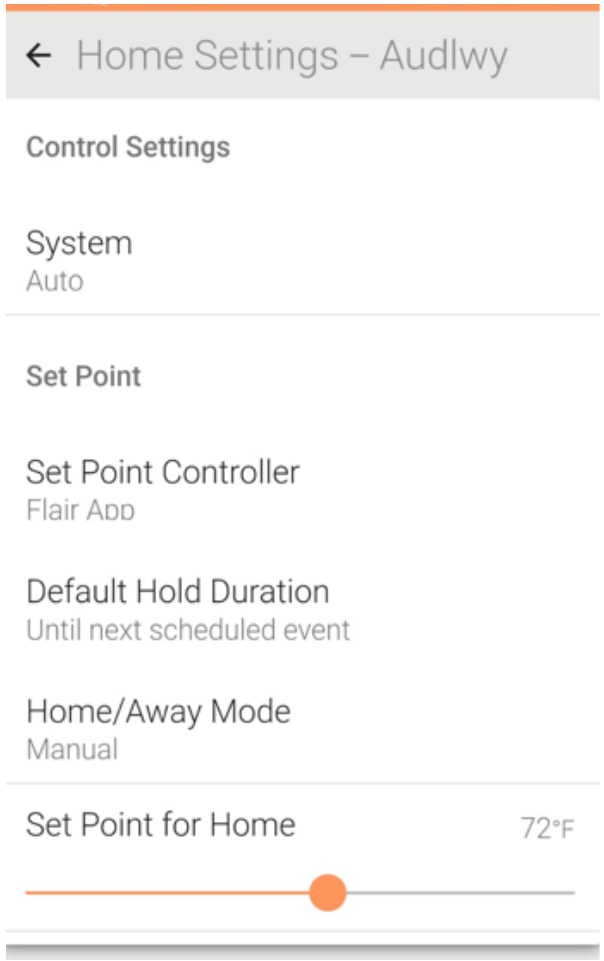


- Provide a close-up nameplate photo for each outdoor unit to verify model and serial numbers.
- Provide installation/long shot photos to verify installation at the premise address.
- Failure to provide clear and visible pictures may delay application processing or cause an application to be cancelled.

Longshot photo example

Category 2A Photo Requirements and Examples

- Provide a close-up photo of an installed integrated control unit and nameplate photos with serial numbers
- Provide a photo displaying the set point temperature of the unit.



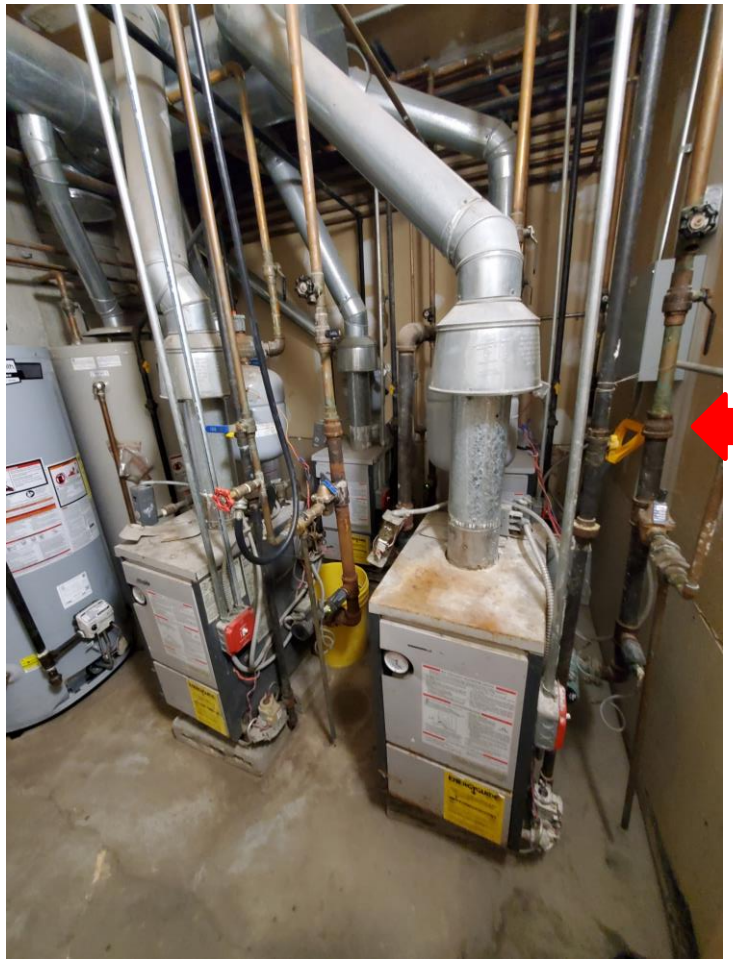
Long shot photo of thermostat/IC

Screenshot of units active on the App

Categories 2B and 3 Photo Requirements and Examples

- Provide a photo of a decommissioned heating unit.
  - Examples:
    - Before and after heating equipment photos
    - Photos of heating equipment removed (outside)
- If there are multiple units and the furnace must stay in place for the other tenants, please provide photographic proof that the heating line is closed off for the premise location.

Categories 2B and 3 Photo Examples



Before and After Photos

Capped lines

Categories 2B and 3 Decommissioning Checklist

- Per Con Edison Clean Heat Guidelines, it is **system capacity must meet or exceed 100% of the building heating load (BHL) at design temperature,** as well as to follow checklist requirements of the following scenarios:
  - Decommissioning of Existing Natural Gas of Liquified Petroleum Gas (Propane) Heating System and DHW System
  - Decommissioning of Existing Natural Gas of Liquified Petroleum Gas (Propane) Heating System While Leaving Natural Gas or Propane DHW System in Operation
  - Decommissioning of Existing Heating/Fuel Oil System and DHW System
  - Decommissioning of Existing Heating/Fuel Oil Heating System While Leaving Heating/Fuel Oil DHW System in Operation
  - Partial Decommissioning of Existing Boilers in 2-4 Family Buildings
- Decommissioning checklist must be signed by the contractor and the active Con Edison account holder.
  - Decommissioning checklist is found in the Con Edison Clean Heat website resources section:

    Con Edison Clean Heat Con Edison Decommissioning Checklist

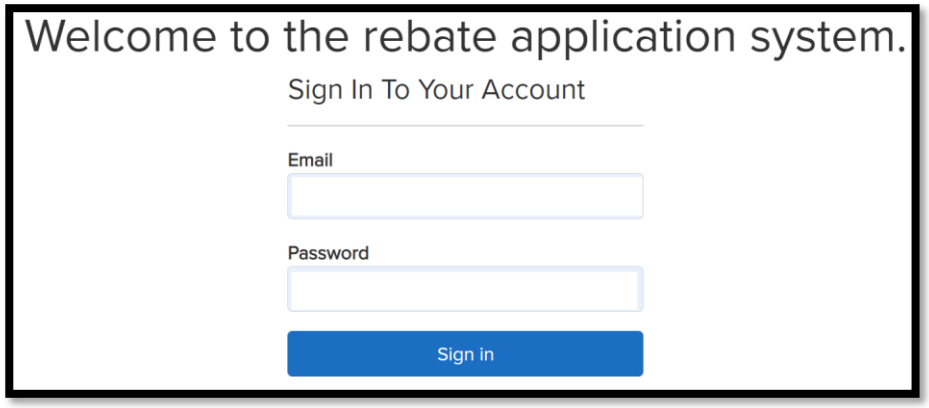
Customer Acknowledgement Form

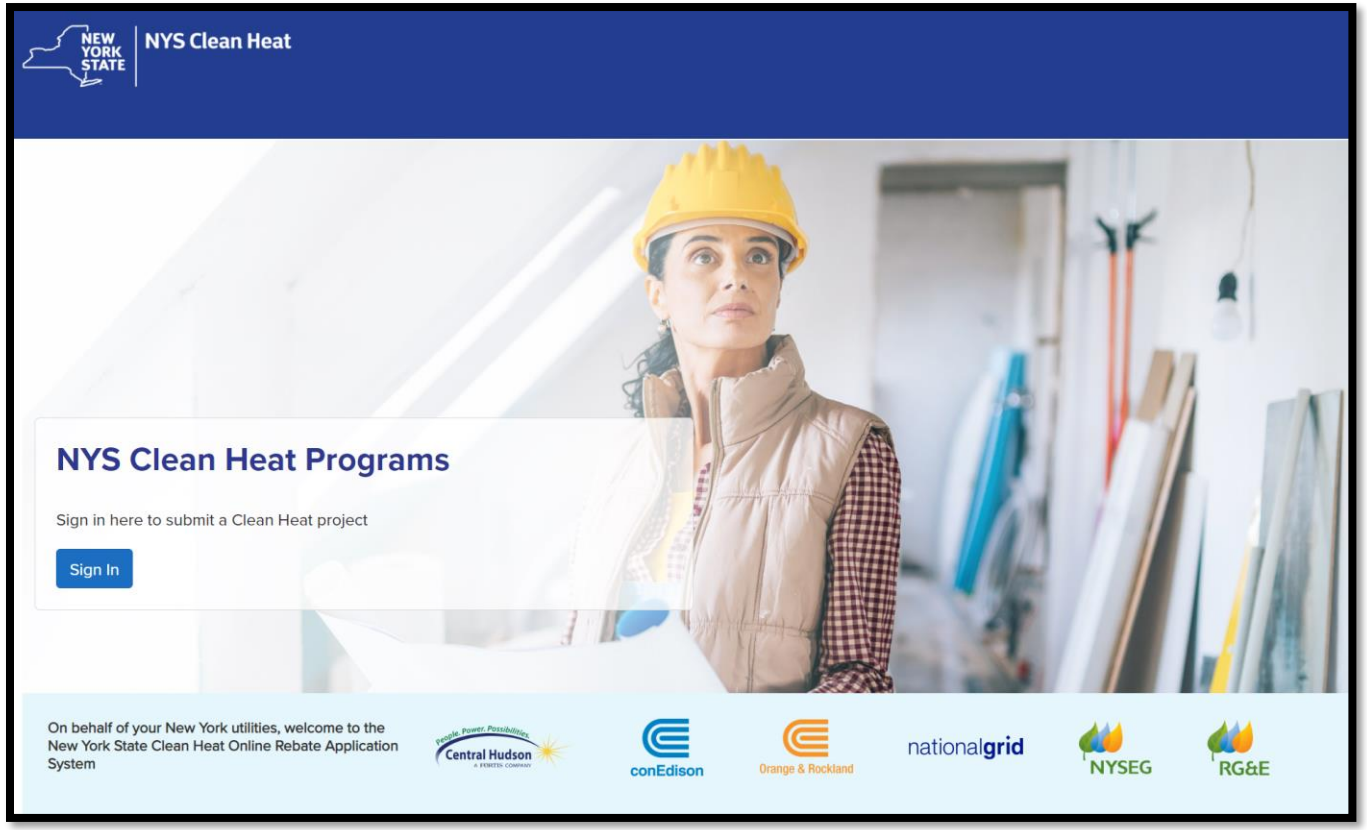
- A signed Customer Acknowledgement form is required to be eligible for incentives.
- All rebates will be an Instant Discount.
- Failure to fill out **all required fields** will delay processing.

Let’s pause for questions

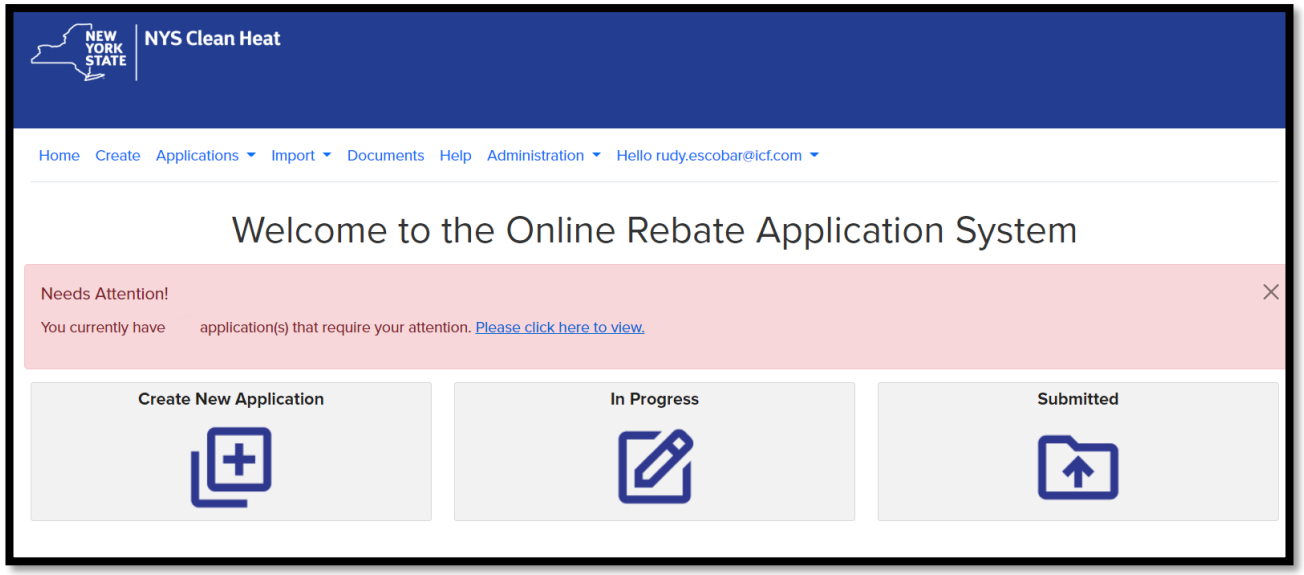
Beginning Your Submission

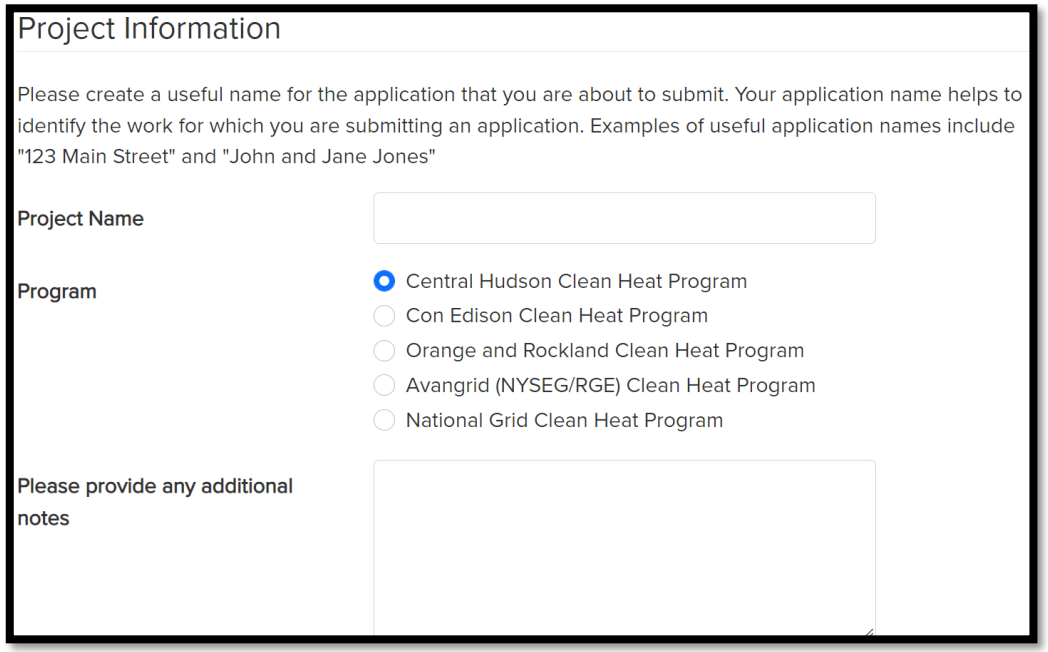
- Become a Participating Contractor by signing up here: https://cleanheat.ny.gov/contractors/
- To submit 2023 Con Edison Clean Heat projects, we have created a new platform accessed at https://nyscleanheatrebates.com/
- If you are submitting for a Heat Pump Water Heater Midstream rebate applications, follow the link: https://conedisonmidstream.com/





OIT Access - Welcome Page





- Once you have entered your credentials to your OIT account. Click the ‘Create New Application’ hyperlink or ‘Create’ Tab. You also have access to review any submitted projects and/or view in progress projects that have not been submitted.

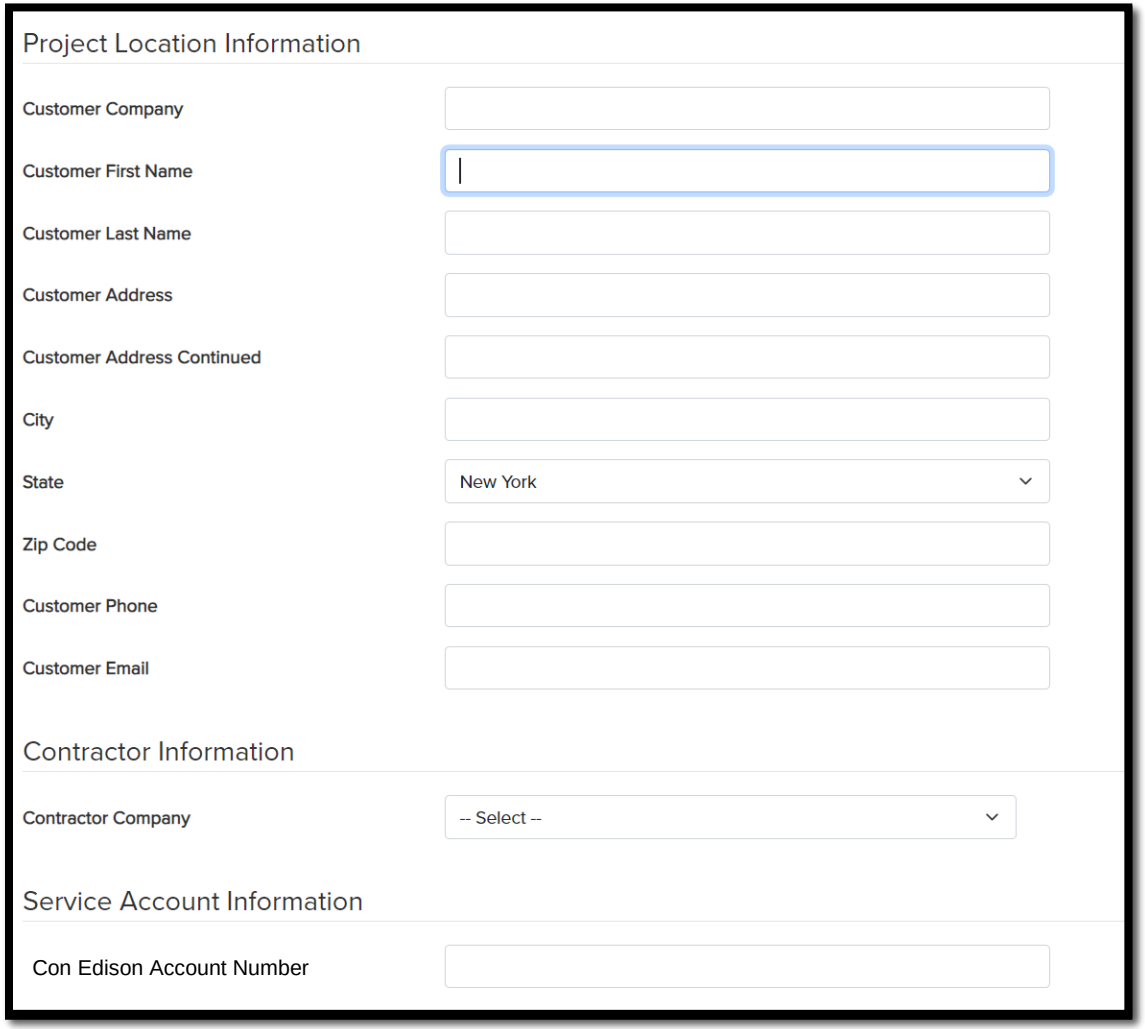
- The OIT Platform provides an opportunity for contractors who participate in multiple utilities to select from different programs. Please select the correct program to avoid processing delays.

Four application steps in OIT

- 1. Project Info
- 2. Improvements
- 3. Supporting Documents
- 4. Summary

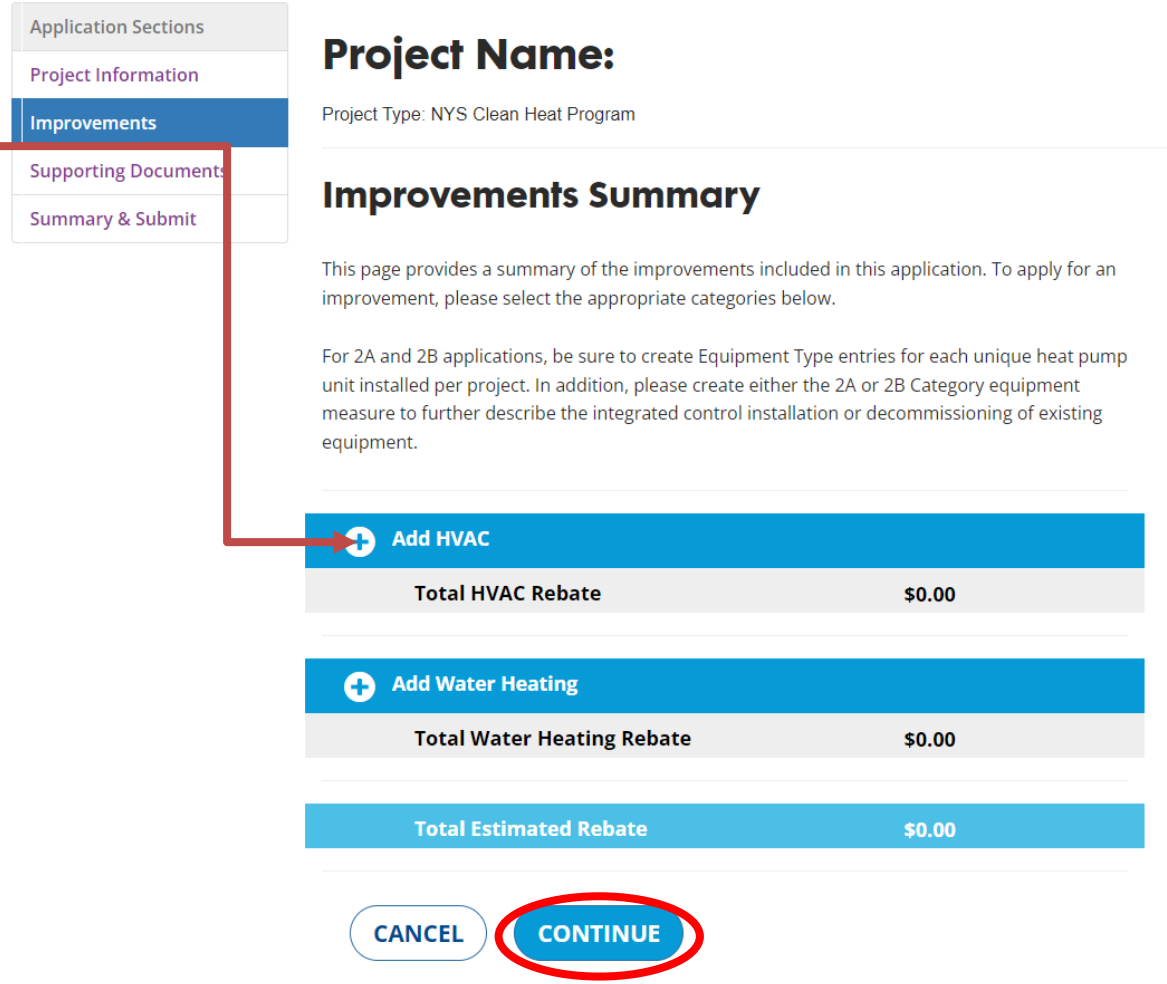
Step 1. Creating an Application Project Info

- All fields are required to be filled to proceed.
- When referring to distributor, select ‘none’.
- Please refer to your NEEP, or AHRI document & Manual J upon reaching questions regarding heating and cooling capacities.



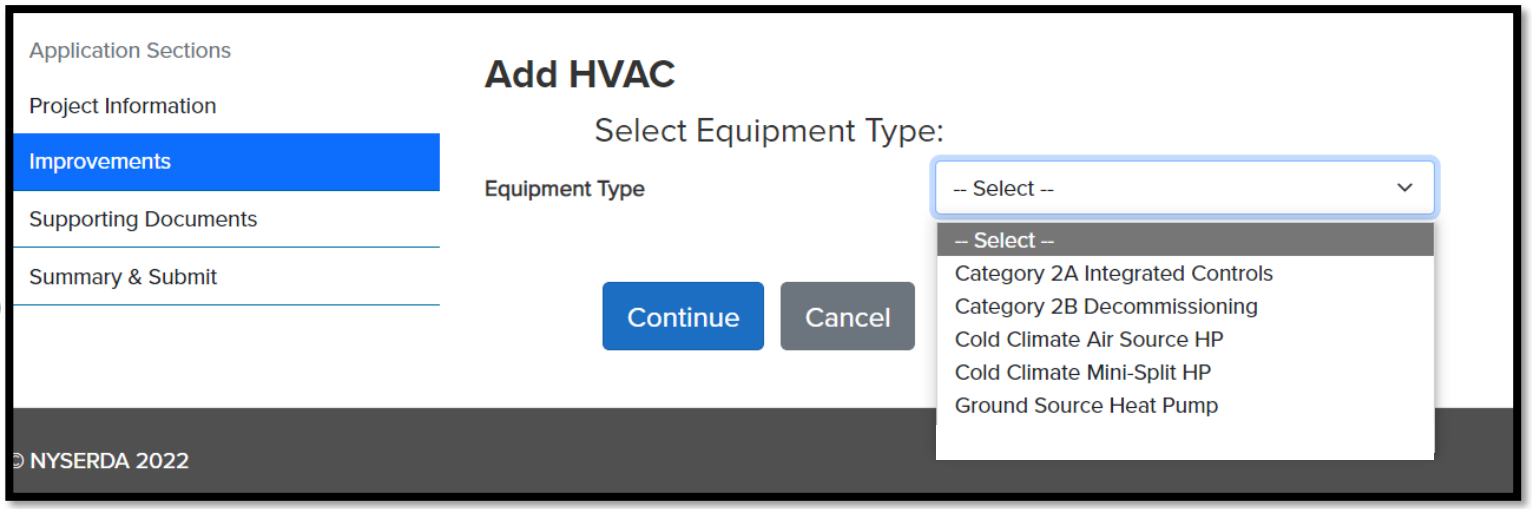
Step 2. Adding HVAC Improvements HVAC (Measures)

- Upon entry of all the necessary project information, proceed to ‘Add HVAC’ in the ‘Improvements Summary’ section.
- Select the equipment you are installing, along with completing the mandatory fields in the following slides.
- If you have MULTIPLE units in the same premise once you have uploaded the first equipment, continue to the “Add HVAC” tab and select the additional equipment.
- Proceed to the ‘Continue’ tab.



Step 2. Selecting Equipment Type

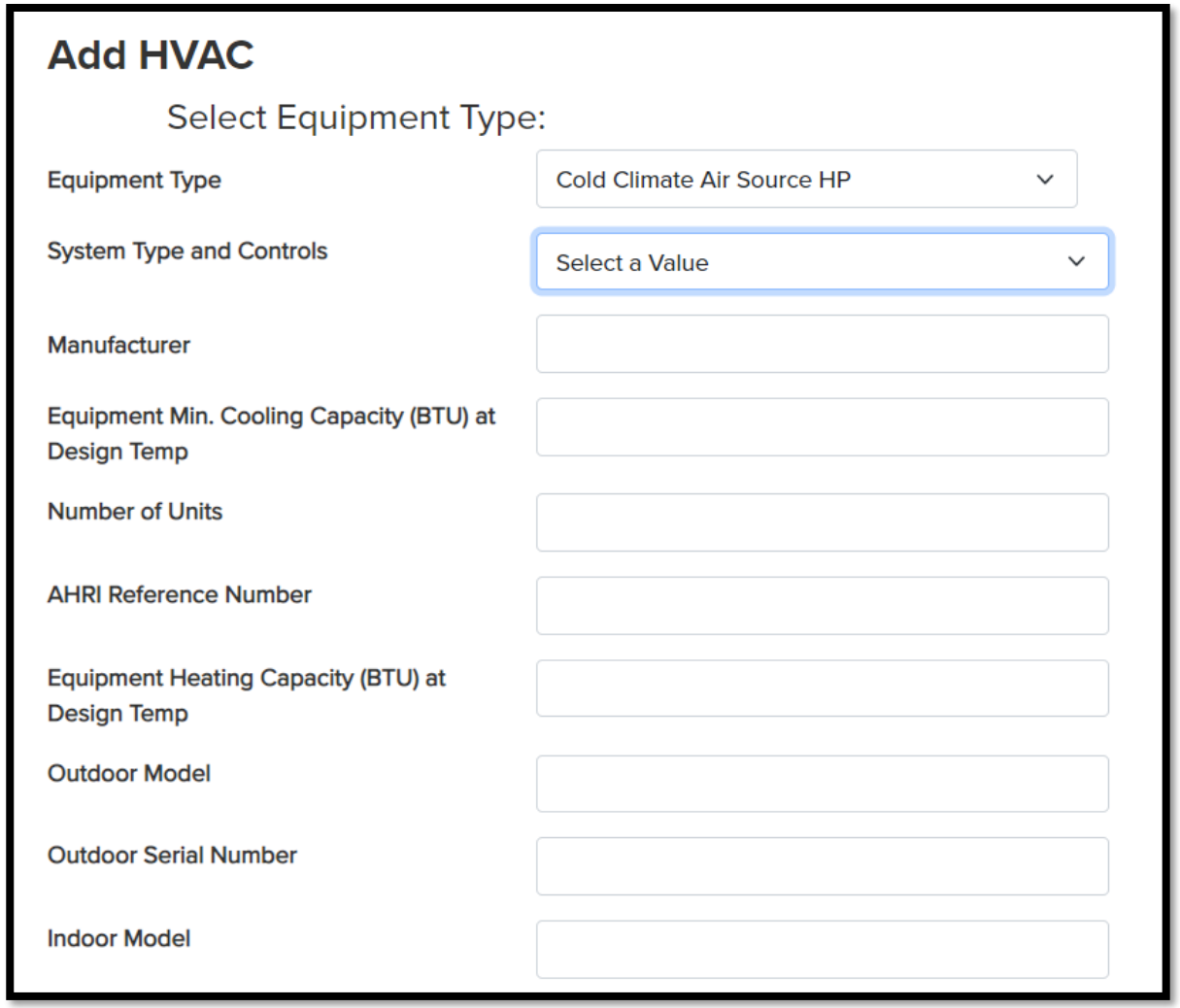
- You must enter separate Equipment Types for every Mini-Split condenser, Central Air-Source unit, Ground Source Heat Pump or Category 2A Integrated Control installed on a project
- You only enter one Category 2B & 3 Decommissioning “Equipment Type” per project
- Example: Contractor applies for a rebate installing three Mini-Splits and decommissioning for a residential home
  - Total Improvements (measures):
    - Resi Mini-Split HP (#1)
    - Resi Mini-Split HP (#2)
    - Resi Mini-Split HP (#3)
    - Category 2B Decommissioning (1)



- Submitting incorrect number of measures will lead to delay in processing.

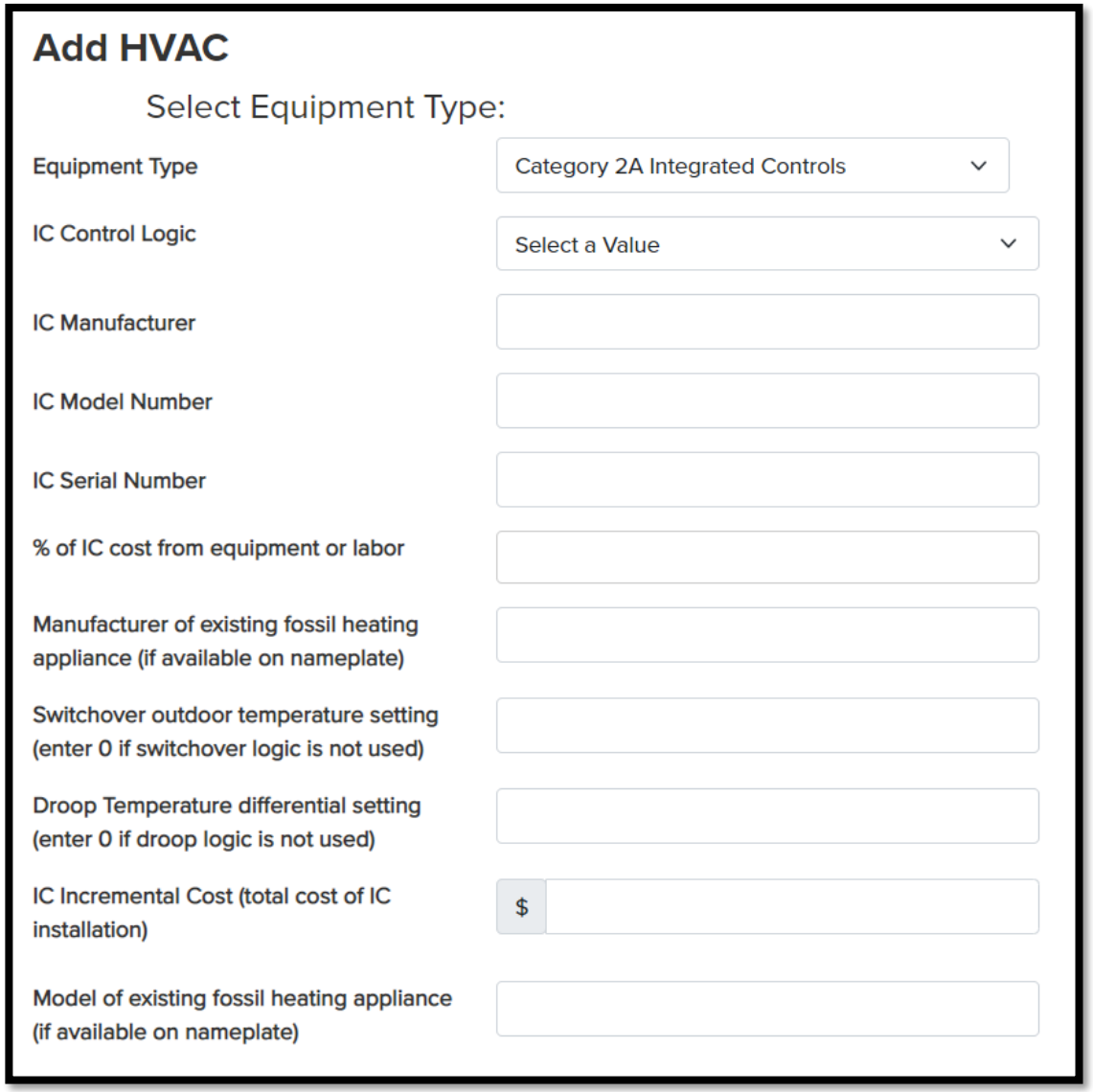
Step 2. Entering Space Heating Equipment Type Data

- **Equipment Min. Cooling Capacity (BTU) at Design Temp –** Value comes directly from NEEP (95ºF Min), AHRI or Manufacturer Sheet (if exact temp/capacity configuration available)
- **Equipment Heating Capacity (BTU) at Design Temp** - Value comes directly from NEEP, AHRI or Manufacturer Sheet (if exact temp/capacity configuration available)
- **System Type and Control –** Only select "integrated" if advanced controls were installed that control both existing fossil fuel system and newly installed heat pump systems

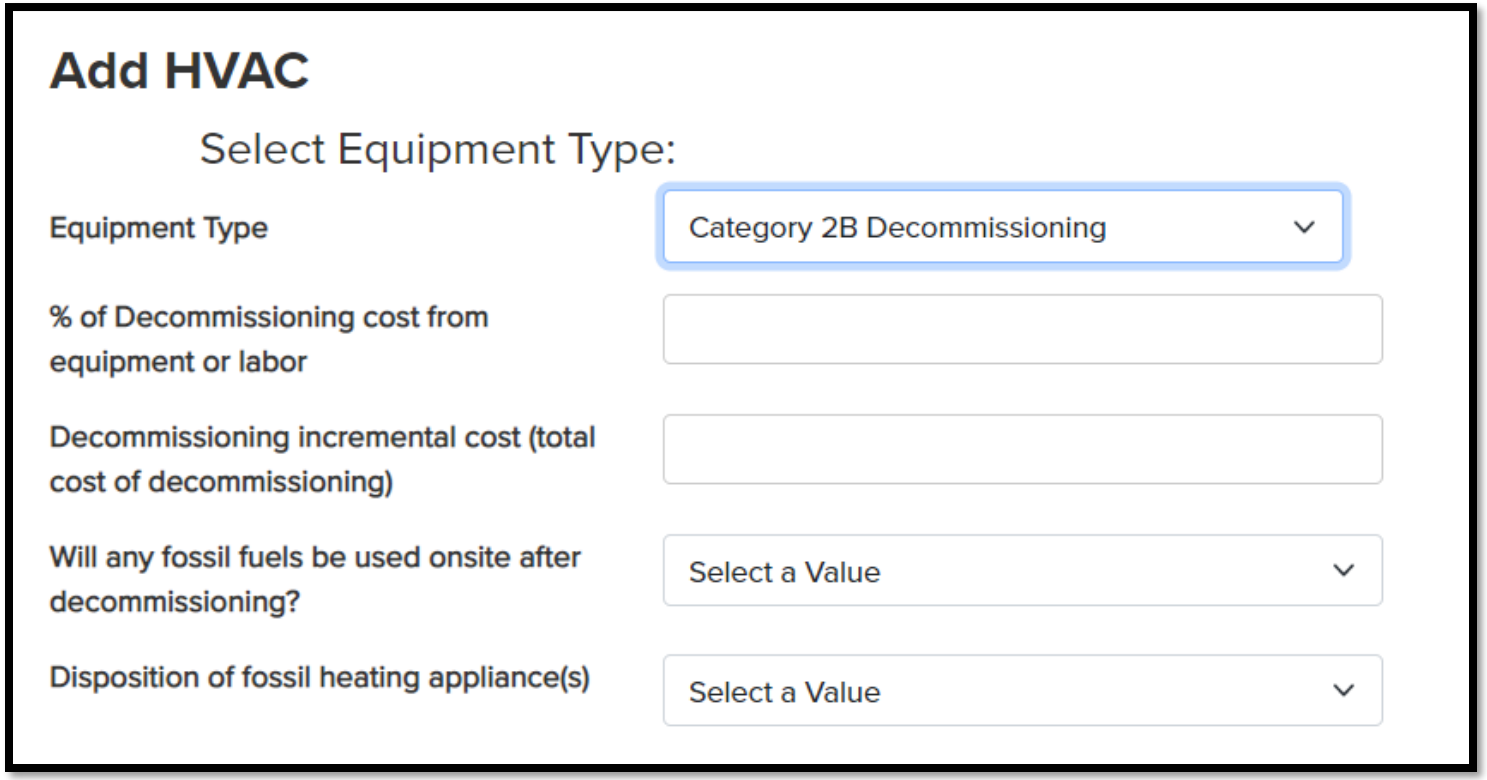


Step 2. Entering Integrated Controls Equipment Type Data

- **Category 2A Switchover Control Logic** – This is a designed outdoor temperature at which the main heating source switches from the Heat Pump system to the fossil fuel system.
- **Category 2A Droop Control Logic** – This is when they choose a set indoor temperature differential for the fossil fuel system to turn on. Example: Droop is set to 4º. The heat pump is in heat mode but cannot keep the indoor air temperature above 4º below the thermostat setpoint the back up fossil fuel system kicks in.

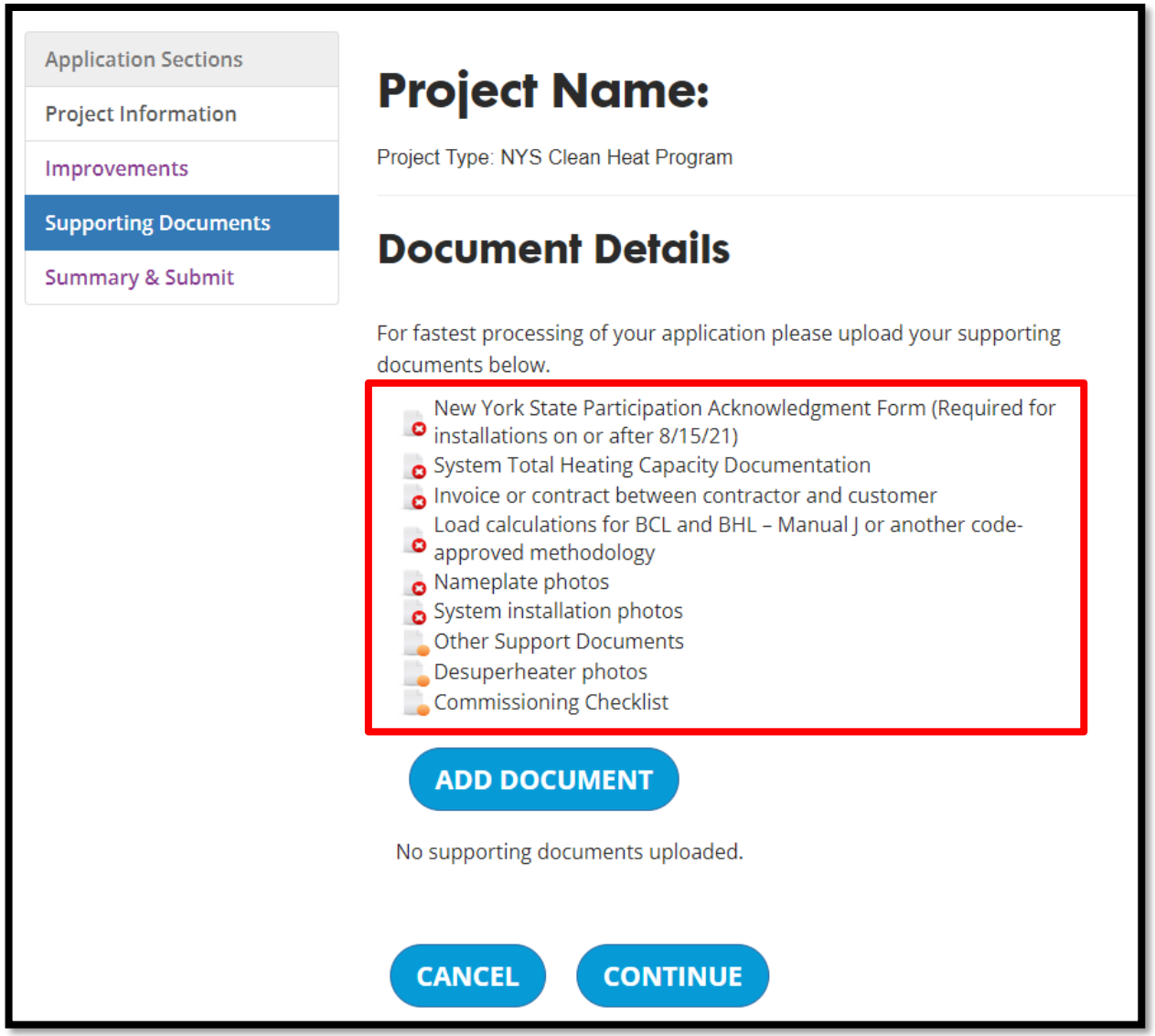


Step 2. Entering Decommissioning Equipment Type Data



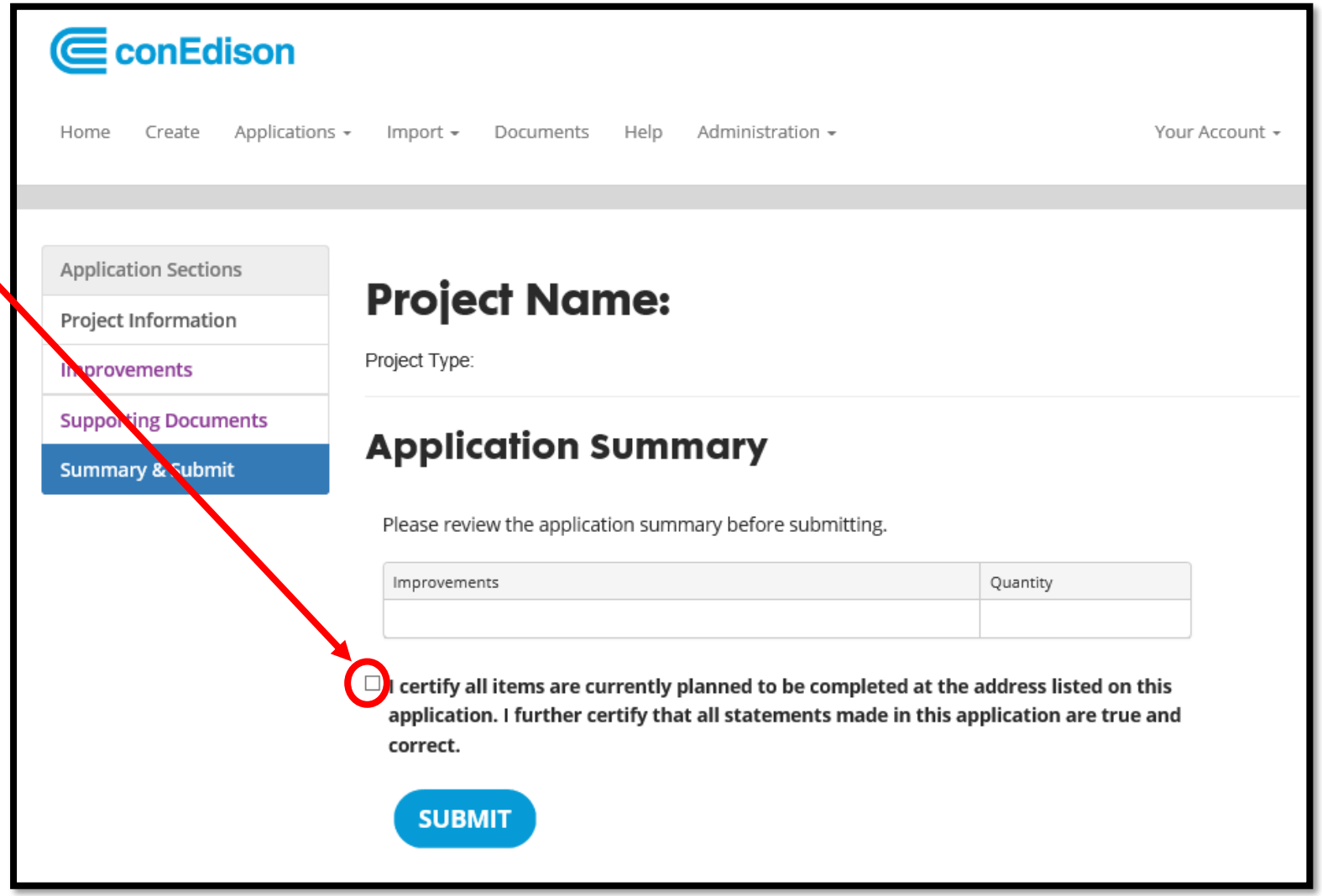
Step 3. Uploading Application Documents

- All applicable documents listed in red in the “Supporting Documents” section of the project are mandatory.
- Documents listed in orange are considered optional.
- When uploading documentation, please categorize the document with the correct content category
- Failure to upload these documents will not allow you to submit your project.



Step 4. Submitting Application

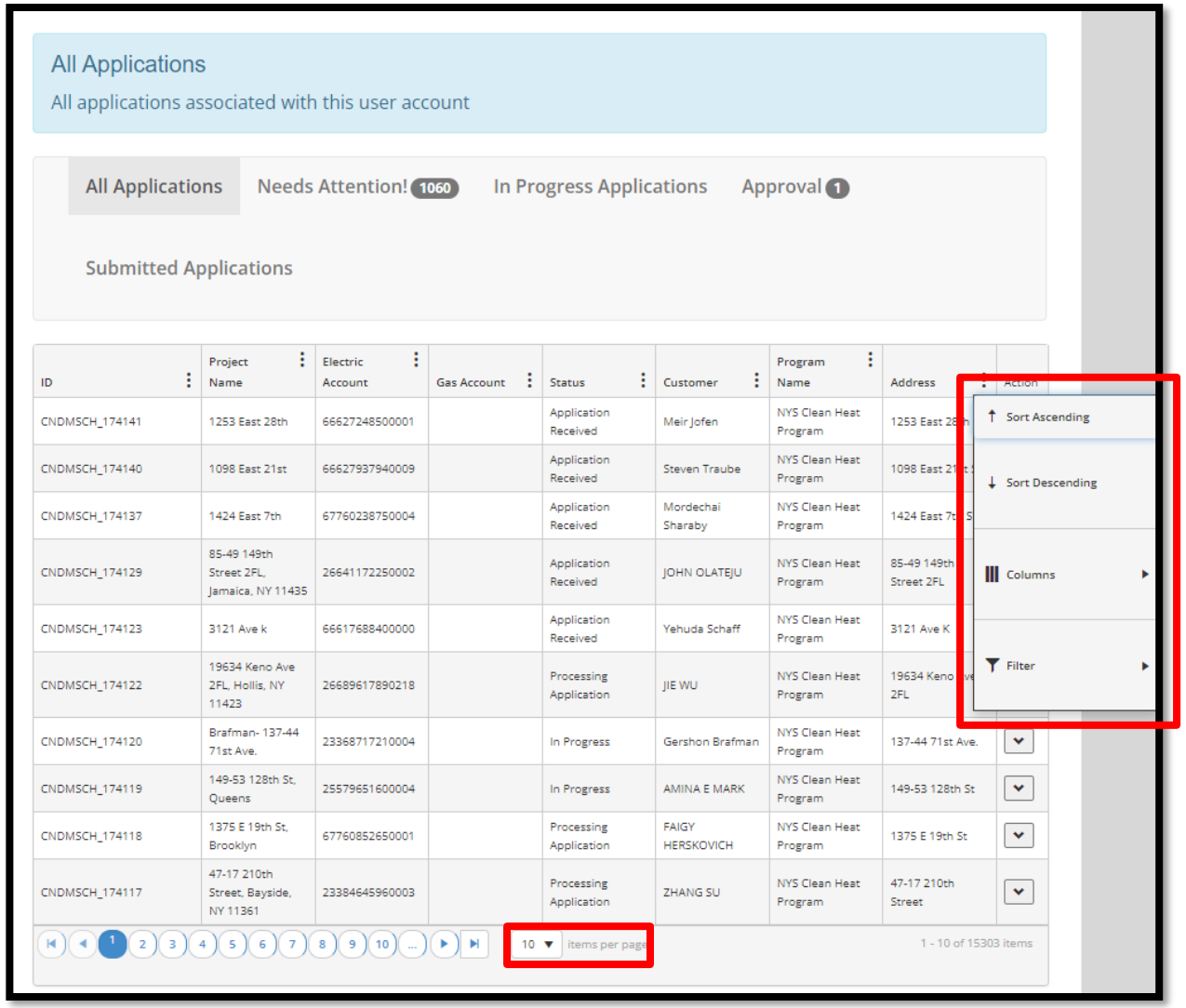
- When you have completed entry of your project and equipment information, you will be able to submit your application.
- Within 24 hours you will receive a project ID (Ex. CNDMSCH_123456) that will be your reference point for this application



Managing Projects in OIT

- OIT allows contractors to sort, filter or search by “key names/words”

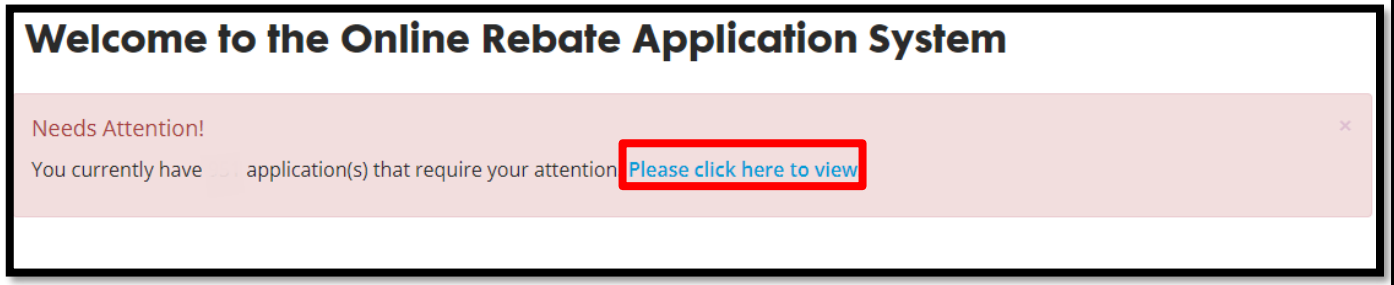
- OIT default is 10 projects per page. The dropdown will allow for up to 50 projects per page. If you want to see more than this, you can manually change the quantity in the browser bar.



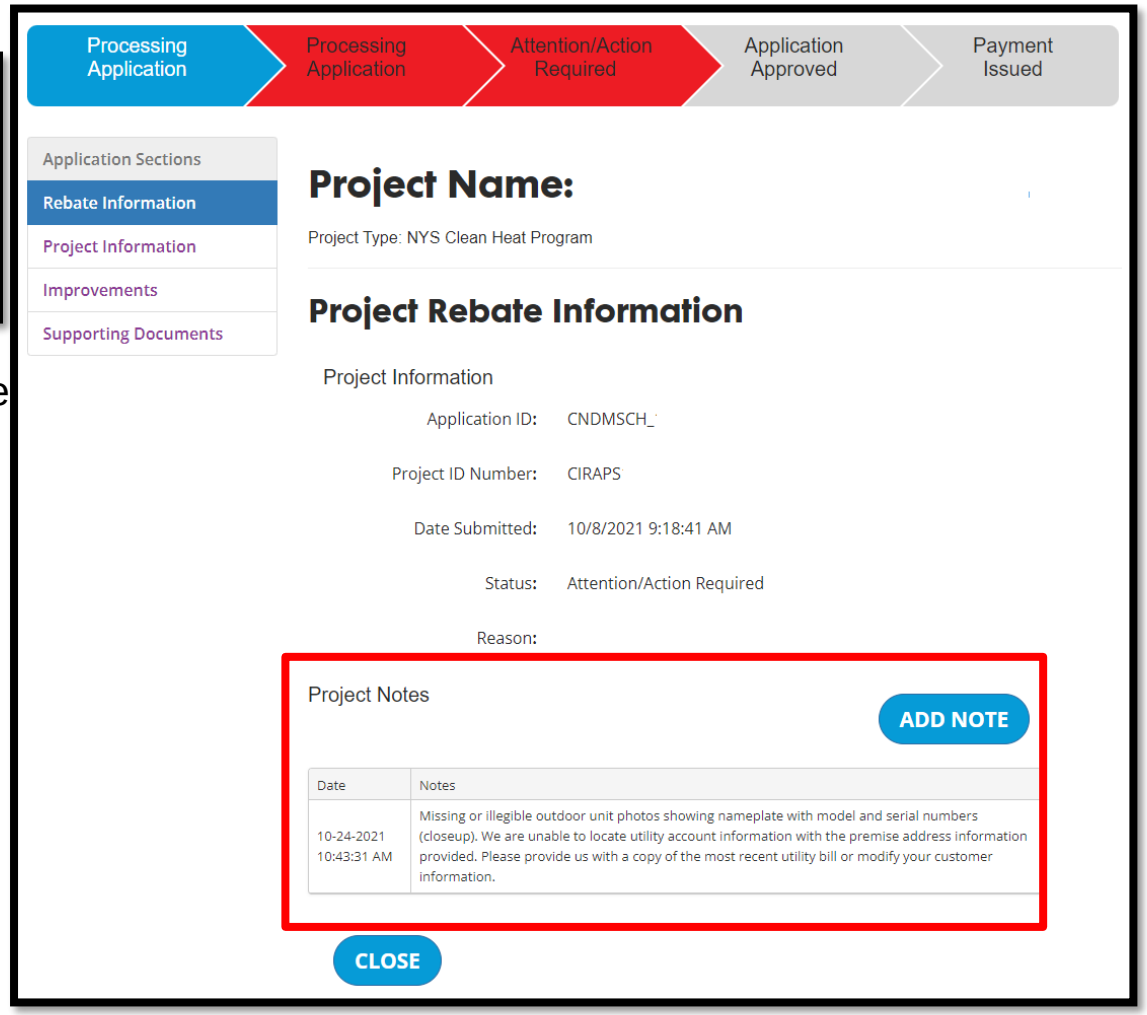
Online Intake Tool Status Glossary

- **Application Received** - Project has been submitted and will be reviewed shortly.
- **Application Update Received** - The applicant has responded to a nonconformance and has uploaded additional documentation or information. Project is ready for further review.
- **Processing Application** - Project is being reviewed by processing agents to ensure all qualifications for rebate payment have been met.
- **Application Rejected** - The application does not meet qualifications of the program and an email has been sent to the applicant with rejection reason.
- **Attention/Action Required** - The application is missing important information that hinders processing and an email has gone out requesting the missing information.
- **Final Review** - The application has been processed and is ready for utility payment approval.
- **Eligibility Under Review** - The application has failed validation checks and must be re-reviewed.
- **Account Verification** - Customer account number verification in process.
- **Application Cancelled** - Application has been cancelled.
- **Payment Issued** - Application approved by client and check(s) sent out.
- **Potential Program Transfer** – Specific to Con Edison for sectors ICF does not handle.
- **Transferred Program** – Specific to Con Edison for sectors ICF does not handle.

Applications Requiring Attention

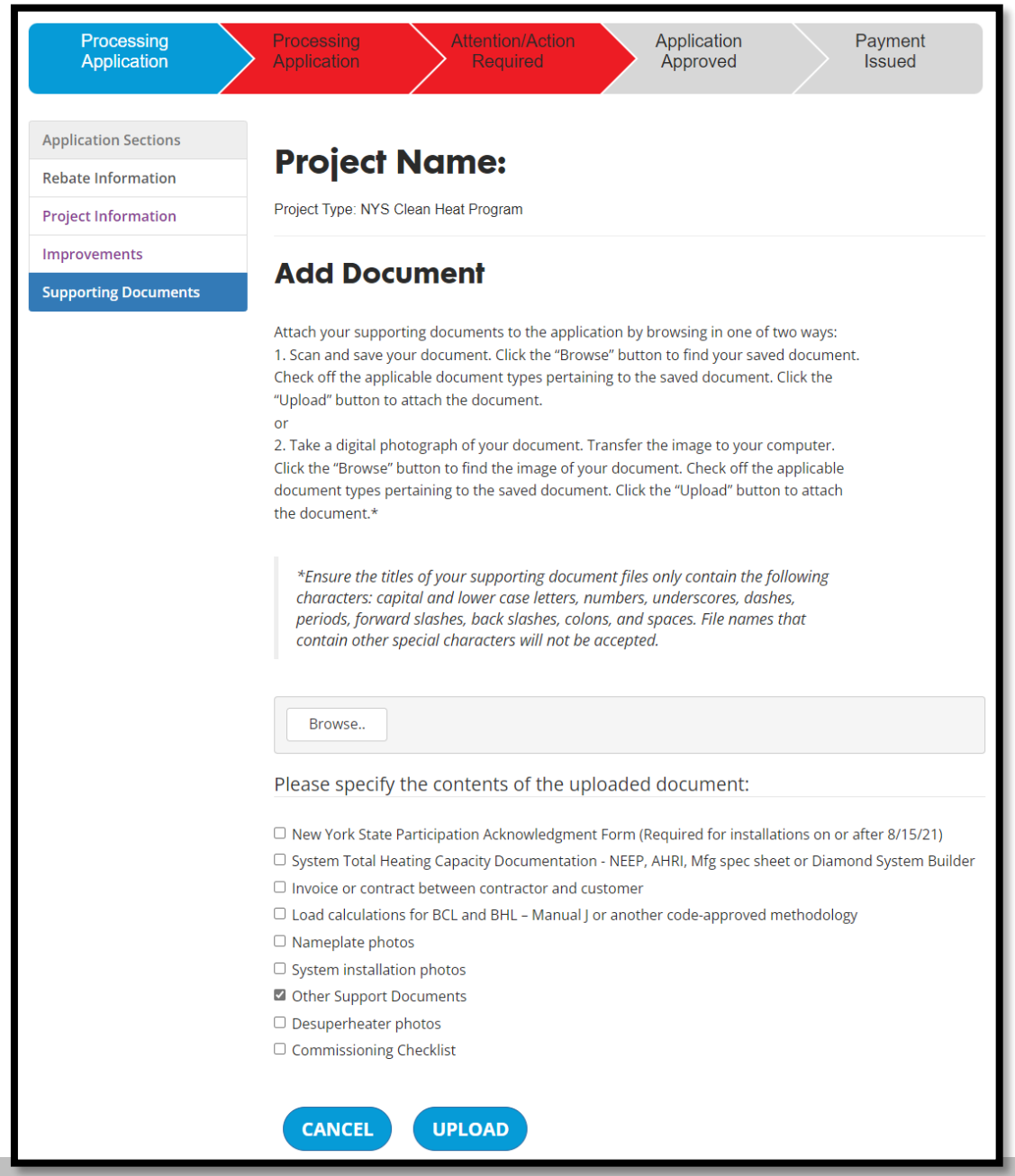


- After review by ICF of your Con Edison Clean Heat project, you will receive an automated email if project needs attention.
- If so, you will see a pink ribbon with a ‘Needs Attention’ ribbon (shown above) on your welcome screen.
- Continue to view your projects that need attention by clicking the blue hyperlink.
- On the project notes section, it will advise you on what the issue is. If it requires documentation, then you can upload documents here. If this project requires more in-depth corrections and assistance, please reach out to the ICF Account Management team.



Resolving Application Errors

- To address any “Attention/Action Required” projects that require additional or corrected documentation, access the Online Intake Tool “Supporting Documents” section
- Upload any documents necessary through the Online Intake tool and tag the document correctly (If we need a new invoice, tag it as invoice)
- Contact the Account Management team if there are errors that require more in-depth information.



Common Errors & How to Avoid Them

STOP Missing or Incorrect Rebate Amount Listed on Customer Acknowledgment Form	GO Confirm the corresponding incentive with the building type and get that signature!
STOP Invoice information does not match Utility Account Holder Information	GO If a utility bill can be shared, that's always best. In any case, take a few extra minutes to confirm this info with your customer. It's worth it for everyone involved.
STOP Unclear or Missing Photographs	GO Talk to your installation staff about this step! Your photos are only as credible as the folks capturing them.
STOP Manual J Design Temps not within 5 Degrees of Weather Station Temp	GO Use the prescriptive calculator! Input the project zip code and the recommended design temps are shown immediately.
STOP HP Output Capacity at Design Temp is incorrect	GO If it's not an even 5 degrees from the NEEP certificate or AHRI sheet, obtain manufacturer data.
STOP Missing Serial Numbers	GO Serial numbers for all HP's should be captured in photos and listing them on invoices is an added step that helps avoid any question

FAQ's

- Q: Can ICF accept applications in mixed-use buildings?
- A: Yes, we will accept applications for up to 4-dwelling units (apartments, condos, etc.) in a single mixed-use building where the first floor is a commercial space.
- Q: What are the appropriate rebates for decommissioning for one-dwelling unit in a four-family building (Basically cutting one fossil fuel line)?
- A: This would fall under the $3,000/dwelling unit category.
- Q: What rebates can we apply for if we have a two-family home with two separate gas units both getting decommissioned?
- A: If the jobs are done together, they would fall under the $8,000/home in incentives. If the jobs are installed at different dates, they are treated as separate projects and would receive the $3,000/dwelling unit rebates.
- Q: Are Gut Rehab projects eligible?
- A: Gut Rehab is eligible for incentives.

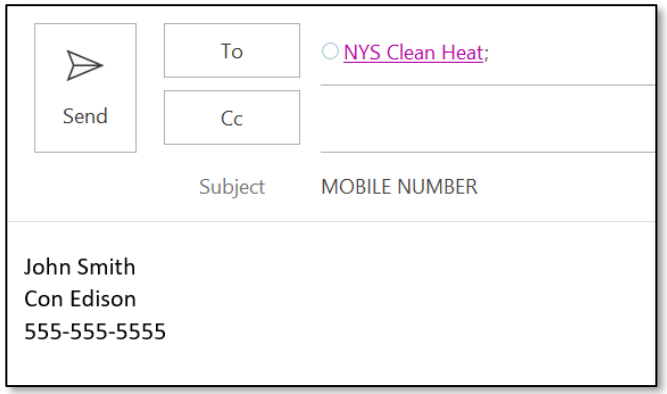
Mobile Option

Want to receive critical program information sent straight to your device?

Sign up for text message updates by emailing NYSCleanHeat@icf.com with **"MOBILE NUMBER" in the subject line** and the following in the body of your email:

- **Your cell phone number**
- The **name of the utility** whose service territory you perform work in

Scan code to start your email.



Q & A

Thank You!

Agenda

Morning – The Con Edison Clean Heat Program

- Relaunch Status
- Budget and Sectoral Allocations
- Residential Program
- Non-Residential Program
- Con Edison Program Documentation
- Becoming a Participating Contractor

Afternoon – How to Apply for Incentives

- **Application Process**
  - Residential – ICF (including OIT)
    - 12:30-1:30
  - **Multifamily & Small Business – Willdan (including SMART)**
    - 1:45-3:00
- Next Steps

conEdison

FOR DISCUSSION

Con Edison's 2023 Multifamily Clean Heat Program Orientation

January 2023

Agenda

1) 2023 Incentive Changes
2) Measure Categories & Technology Descriptions
3) Project Application Walkthrough
4) Eligibility: Site & Technology
5) Project Submission Stages & Deliverables
6) Pending
    a) Sold & Pre-Inspected
    b) Engineering Desk Reviewed & Committed
    c) Installed & Completed
    d) Programmatic Post-Inspection & Approved
    e) QA/QC Inspection & Acquired
7) SMART Overview
8) SMART Excel Based Tool vs. Statewide Clean Heat Calculator
9) Q&A

2023 Incentive Changes

- Incentives will be capped at $1 million per project or 50% of project cost (whichever is lower)
- Category 2C is known as prescriptive, all other categories are custom

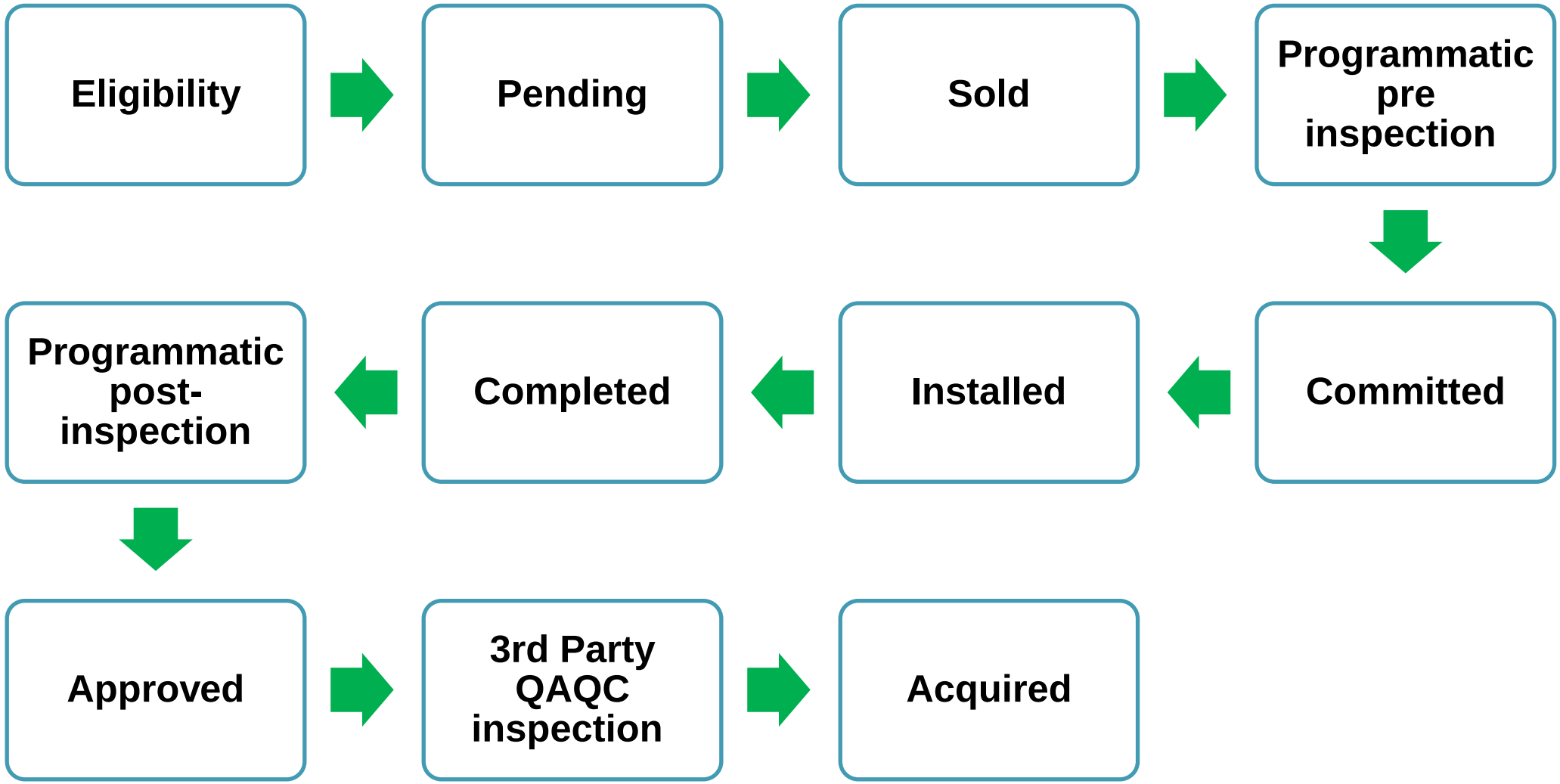
Category Number	Description	New Construction (GSHP Only)	Existing Buildings
2C	Full-load ASHP (buildings under 50 dwelling units)	N/A	$4,000/Dwelling unit (Apartment)
4	Custom	$125/MMBtu	$200/MMBtu
4A	Tier 1 (dominant load reduction of 5% to 30%)	$125/MMBtu	$200/MMBtu
	Tier 2 (dominant load reduction greater than 30%)	$150/MMBtu	$225/MMBtu
6	Custom Domestic Hot Water (“DHW”)	$125/MMBtu	$200/MMBtu

Measure Categories & Technology Descriptions

Service	Category	Technology Description
SPACE HEATING	2C	Cold Climate Air-Source Heat Pump (ccASHP) - Full Load Heating
	4	Custom Space Heating (Technologies beyond those listed in the program)
	4A	Category 4 HP + Envelope (Window Replacements, Window Film, Wall Insulation, Continuous Insulation, Window Walls, Curtain Walls, Exterior Façade, Air Leakage Sealing, Air Barrier Continuity Roof Insulation)
WATER HEATING	6	Custom Domestic Hot Water (“DHW”) (Air Source HPWH with tank capacity larger than 120 gallons, Ground Source Desuperheaters and Dedicated DHW Water to Water Heat Pumps)

Project Application Walkthrough

Flow Chart of the Project Stage



Eligibility

Site

- Five (5) or more dwelling units
- Must have active Con-Edison Electric Utility Account
- Air/Water sourced Heat Pump projects are Existing buildings only
- Site's existing fossil fuel heating source must be decommissioned
- No Common Area only projects
- Gut Renovation projects are accepted*

***On a case-by-case basis**

Eligibility

Technology

- Mini-Split Heat Pumps
- Central Cold Climate Air Source Heat Pumps
- Commercial Unitary Heat Pumps
- Air Sourced Variable Refrigerant Flow
- Cold Climate Packaged Terminal Heat Pumps
- Cold Climate Standing Vertical Heat Pumps
- Custom Air/Water sourced Heat Pumps*
- Ground Source Heat Pumps

***On a case-by-case basis**

Project Submission Stage: Pending

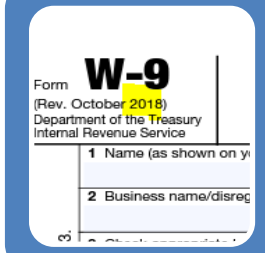
Pending: Work Order has been created by uploading SMART Tool, waiting for submission of deliverables from Participating Contractor

Clean Heat Project Application

- On SMART known as Owner's Agreement
- All sections must be filled and signed
- Must be the latest version

Specification sheets

- "Cut sheets" for proposed equipment
- Include PDFs from Air-Conditioning, Heating, and Refrigeration Institute (AHRI) and Northeast Energy Efficiency Partnership (NEEP) (if applicable)

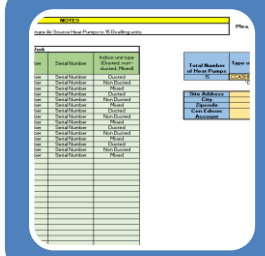


W9 Tax document

- Completed and Signed W9 for the Payee
- Make sure key sections are filled in
- Must be the latest revision form

Load calculations

- Floor by Floor Manual J space load calculations
- Load and sizing calculations may be certified by a NYS Professional Engineer



Project Scope of Work (SOW)

- Detailed SOW includes model numbers, quantity of condensers, indoor unit duct type, areas served, and estimated cost proposal.
- What is being done to the building which you are requesting incentives for?

Energy savings calculations

Includes:

- NYS Excel based Calculator
- Custom calculations
- Energy Model

Project Submission Stage: Sold & Pre-Inspected

Sold

Definition: All documentation has been submitted for review for Program Team

Deliverables needed for next stage:

- Work with Willdan Team to schedule Pre-Inspection

Pre-Inspected

Definition: Programmatic pre-inspection performed, and the project is currently scheduled to undergo technical review

Deliverables needed for next stage:

- Passed or cured status
- Failed inspections need to be cured by Participating Contractor or approved by Con Edison before moving to the next stage

Project Submission Stage: Engineering Desk Reviewed & Committed

Engineering Desk Reviewed

Definition: The technical review ended; a Pre-Incentive offer letter (PIOL) was sent.

Deliverables needed for next stage:

- Return the signed PIOL to the Willdan Team

Committed

Definition: The PIOL was signed and returned to the Willdan team; project may proceed

Deliverables needed for next stage:

- Provide the Willdan Team with date of installation

Project Submission Stage: Installed & Completed

Installed

Definition: Participating Contractor informed the Willdan Team installation is complete

Deliverables needed for next stage:

- Most recent DOB approved drawings/documents
- Itemized Final Invoice

Completed

Definition: Close out documents have been submitted

Deliverables needed for next stage:

- Work with Willdan Team to schedule Programmatic Post-Inspection

Project Submission Stage: Programmatic Post-Inspection & Approved

Programmatic Post Inspection

Definition: post-inspection was completed

Deliverables needed for next stage:

- Passed or cured post-inspection status
- Failed inspections need to be cured by Participating Contractor and Willdan Team before moving to the next stage

Approved

Definition: all project documentation has been reviewed following a passed or cured programmatic post-inspection

Deliverables needed for next stage:

- Sign & return "Customer Acknowledgement Form" to Willdan Team

Project Submission Stage: QA/QC Inspection & Acquired

QA/QC Inspection

Definition: On-site third-party review

Deliverables needed for next stage:

- Passed or cured status
- Failed inspections need to be cured by Participating Contractor before moving to the next stage

Acquired

Definition: Project has completed all other stages and incentives are scheduled to be dispersed

Deliverables needed for next stage:

- None

Calculations Required by Project & Number of Units

Equipment Type	≤30 Dwelling Units	>30 - ≤50 Dwelling Units	>50 Dwelling Units
Cold Climate Air-to-Air Mini-Split Heat Pumps			
Cold Climate Air-to-Air Single Packaged Heat Pumps			
Air-to-Air Large Commercial Unitary Heat Pumps (Single-packaged or split-system)			
Air-Source Variable Refrigerant Flow Heat Pumps			
Packaged Terminal Heat Pumps			
Single Package Vertical Heat Pumps			
ERV's and HRV's with Eligible Heat Pumps			
Heat Pumps and Building Envelope			
Custom Technology			
Air-to-Water HPWH's			

Prescriptive (Manual J Only)		Custom (Energy Model, Custom Excel)	
Prescriptive (NYS Tool v2.2)		Custom (NYS Tool v2.2, Energy Model, Custom Excel)	

Sub-Contractor Management and Reporting Tool (SMART) Sign Up for Login Credentials

Required from Participating Contractor (PC)

- ICF Confirmation Letter or Email
- W9 Form signed in 2023
- Electronic Fund Transfer (EFT) Form and Void Check
- MWBE/DBE certification if applicable

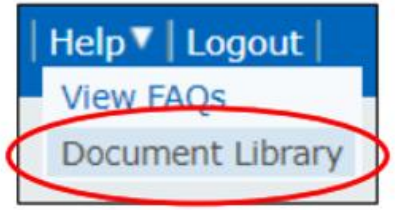
*SMART login credentials would be provided, and training is available upon request.

Willdan's SMART Tool

SMART Tool:

Definition: An excel based tool that establishes a Work Order in the online database

- All Multifamily projects must submit a SMART Tool
- To find the SMART tool
  - Log-in to SMART
  - scroll over "Help"
  - click on Document Library
  - download "MF CHP 400.10.xlsm"



Clean Heat Statewide Calculator

The Clean Heat Statewide Calculator

Definition: An Excel based tool developed to calculate energy savings and incentives

- The Statewide Calculator is not required for buildings with 30 dwelling units or less
- Participating Contractors may use the Statewide Calculator for projects with 30+ dwelling units or:
  - Envelope plus heat pumps
  - Energy Recovery Ventilator (ERV)/ Heat Recovery Ventilator (HRV)

https://cleanheat.ny.gov/contractor-resources/

MF 2023 Clean Heat Program Webinar

To start off the new program year, Willdan will be hosting a virtual **2023 Multifamily Clean Heat Program Orientation on Wednesday, January 18th from 10:00 a.m. to 11:30 a.m.**

Deep dive into project submission
featuring a SMART demo

Please contact ConEdMultiFamilyCHP@willdan.com or LDeSouza@willdan.com with any questions.

tinyurl.com/MFCHWebinar

Q&A

Thank you & we look forward to continuing working with you!

Willdan Energy Solutions

Program Implementation Contractors

ConEdMultifamilyCHP@willdan.com

(844) 316-4288

Con Edison's 2023 Small-Medium Business Clean Heat Program Orientation

January 2023

CHP - SMB Agenda

1. Introduction
2. 2023 Incentive Offerings
3. Eligibility Requirements
4. Application Review Process
5. Documentation Requirements
6. Documentation Submission (SMART)
7. Closing Remarks
8. Q&A

Introduction

CHP – SMB Incentive Offerings (ASHPs)

1. Incentives will be capped at $100,000 per project or 50% of project costs, whichever is lower.

Incentive Path	Site Square Footage	Incentive Amount
Prescriptive (Cat 2d)	< 1000	$2,500 per project
Prescriptive (Cat 2d)	1001 - 2500	$5,000 per project
Custom (Cat 4, 4a)	> 2500	$150 per MMBTU
Custom (Cat 6)	> 2500	$200 per MMBTU

2. As mentioned, all eligibility criteria must be met in order to be approved for incentives.

CHP - SMB Eligibility Requirements

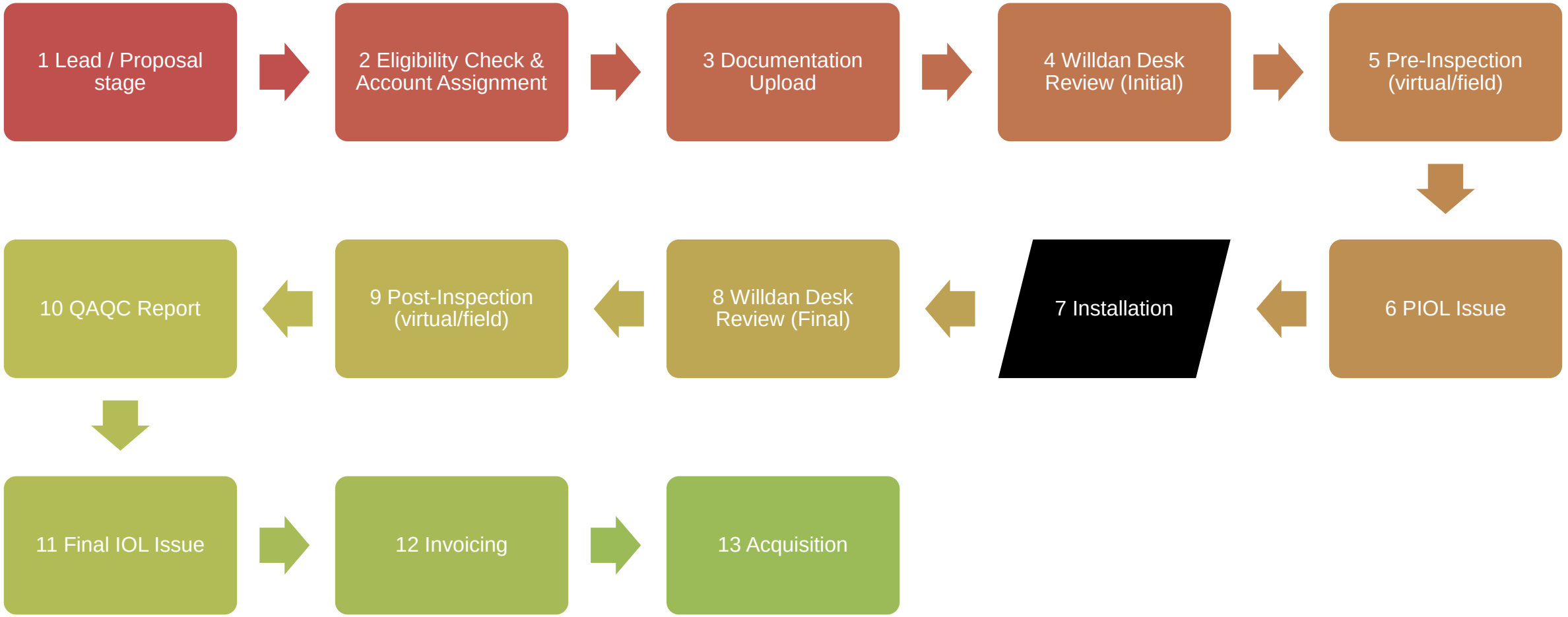
1. **Contractors** - must be registered and fully onboarded with *active COI, valid W-9, CHP Contractor Application* and signed *Participation Agreements*.
2. **Customers*** - must be eligible SMB account/customer:

SMB
•Small-Medium Businesses customer •Average monthly peak demand is 300 kW or less •Active Con Edison electric account •Electric rate: EL2, EL9

*Eligibility may change based on certain situations (i.e. *Account closed; New account created; Demand exceeds 300 kW))*

3. **Heat Pump Systems** – must satisfy required specifications designated in the program manual

CHP – SMB Application Review Process



CHP – SMB Documentation Requirements

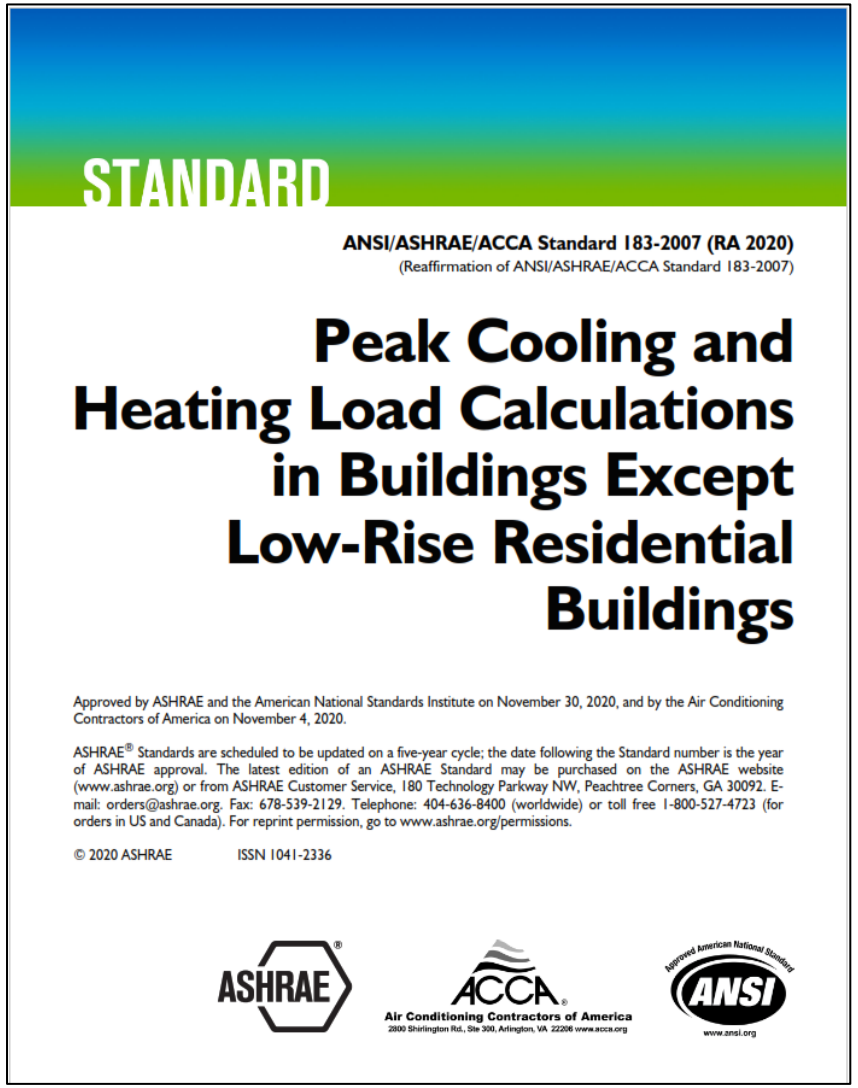
	Pre-Install Documentation		Post-Install Documentation	
	Prescriptive	Custom	Prescriptive	Custom
Program Application	Required	Required		
W-9	Required	Required		
Scope of Work	Required	Required	Required**	Required**
Contract	Optional	Required		
Cutsheets	Required	Required	Required**	Required**
AHRI/NEEP Certificates	Required	Required	Required**	Required**
Cost Estimate	Required	Required		
Floor Plans	Required	Required		
Mechanical Drawings	Optional	Required	Required**	Required**
Permits	Optional	Required		
Project Timeline	Optional	Required		
Load Calculation Report	Required	Required*		
Energy Savings Analysis Tool	Required	Required		
Photo Submission	Required	Required	Required**	Required**

*Submitted by a Registered Design Professional - completed, stamped, signed. Must be the same Professional as on the permit documentation (if applicable).
**Documentation required if scope of work changes from pre-install stage to post-install stage.

CHP – SMB Load Calculations

1. ASHRAE Standard 183/ACCA Manual N
   - No formal list of approved software; Willdan will accept as long as ASHRAE 183 compliant
   - Examples: TRACE® 3D Plus, Trane Trace® 700, WrightSoft, Carrier HAP

2. What Willdan will look for:
   a) Entire building Heating & Cooling loads
   b) Individual zone's heating and cooling loads
   c) Input Summary (construction details, etc.)


STANDARD

ANSI/ASHRAE/ACCA Standard 183-2007 (RA 2020)
(Reaffirmation of ANSI/ASHRAE/ACCA Standard 183-2007)

Peak Cooling and Heating Load Calculations in Buildings Except Low-Rise Residential Buildings

Approved by ASHRAE and the American National Standards Institute on November 30, 2020, and by the Air Conditioning Contractors of America on November 4, 2020.

ASHRAE® Standards are scheduled to be updated on a five-year cycle; the date following the Standard number is the year of ASHRAE approval. The latest edition of an ASHRAE Standard may be purchased on the ASHRAE website (www.ashrae.org) or from ASHRAE Customer Service, 180 Technology Parkway NW, Peachtree Corners, GA 30092. E-mail: orders@ashrae.org. Fax: 678-539-2129. Telephone: 404-636-8400 (worldwide) or toll free 1-800-527-4723 (for orders in US and Canada). For reprint permission, go to www.ashrae.org/permissions.

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CHP – SMB Load Calculations

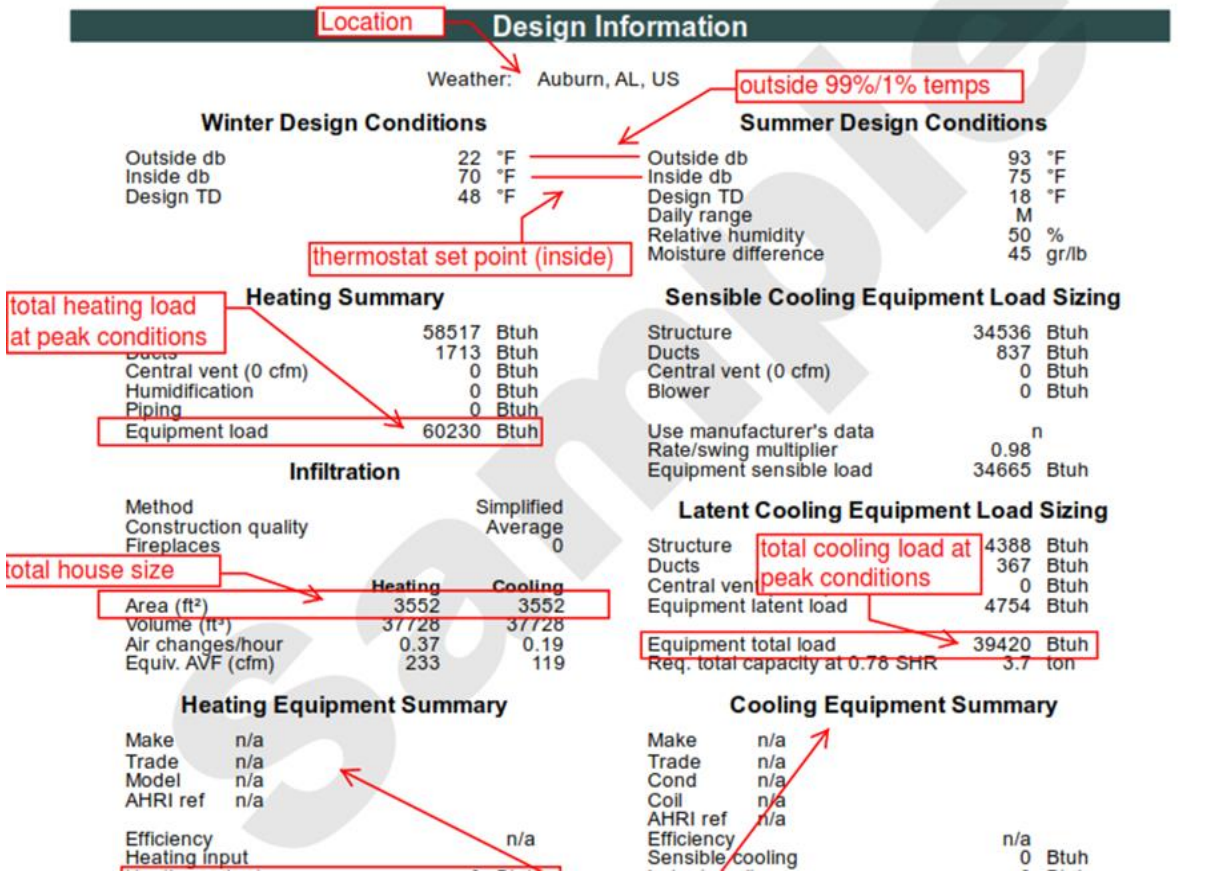
What Willdan will look for (cont'd):

d) The heating and cooling design temperature inputs are based on the closest ASHRAE Weather station

e) Name of the weather station must be shown (otherwise it will default to LGA in the NYS Custom Calculator)

f) Deviance of +/- 5 dF of the design temperature is acceptable

g) Total sq ft must be shown (floor by floor/space-by-space)



CHP– SMB Drawing requirements

1. Mechanical Drawings:
   a) Detail Floor Plan
   b) Mechanical Schedule
      - Include model number
      - Energy Recovery Ventilator
      - Dedicated Outdoor Air System
   c) DOB NOW Job # (can be submitted during installation)
      - Professional Engineer's stamp

** For Category 4A, an Architectural Drawing is required **

NEW SPLIT SYSTEM CONDENSING UNIT SCHEDULE

TAG	LOCATION	UNIT					FAN			COMPRESSOR		OPERATE. TEMP.	VOLTS/PH/HZ	MCA	MFG'R	MODEL NO.
		QTY.	NOM. TON	EFFICIENCY	COOLING CAP.	HEATING CAP.	QTY.	OUTPUT	FLOW RATE	QTY.	OUTPUT					
EXT AC1	ROOF	1		11.3 EER, 16.5 SEER, 11.0 HSPF	48,000 BTU	54,000 BTU						23-115° F(COOLING) -13-59° F(HEATING)	208/230V, 1-PHASE, 60 HZ		MITSUBISHI	PUMY-HP48NKMU1
EXT AC2	ROOF	1		11.3 EER, 16.5 SEER, 11.0 HSPF	48,000 BTU	54,000 BTU						23-115° F(COOLING) -13-59° F(HEATING)	208/230V, 1-PHASE, 60 HZ		MITSUBISHI	PUMY-HP48NKMU1
EXT AC3	ROOF	1		11.3 EER, 16.5 SEER, 11.0 HSPF	48,000 BTU	54,000 BTU						23-115° F(COOLING) -13-59° F(HEATING)	208/230V, 1-PHASE, 60 HZ		MITSUBISHI	PUMY-HP48NKMU1
INT AC1	1ST FL. LOBBY	1			30,000 BTU	34,000 BTU							208/230V, 1-PHASE, 60 HZ		MITSUBISHI	PEFY-P30NMAU-E3
INT AC2	1ST FL. NURS	1			4,000 BTU	4,500 BTU							208/230V, 1-PHASE, 60 HZ		MITSUBISHI	PKFY-P04NLMU-E
INT AC3	1ST FL. SANCTUARY	1			24,000 BTU	27,000 BTU							208/230V, 1-PHASE, 60 HZ		MITSUBISHI	PCFY-P24NKMU-ER1.TH
INT AC4	1ST FL. SANCTUARY	1			24,000 BTU	27,000 BTU							208/230V, 1-PHASE, 60 HZ		MITSUBISHI	PCFY-P24NKMU-ER1.TH
INT AC5	1ST FL. PULPIT	1			30,000 BTU	34,000 BTU							208/230V, 1-PHASE, 60 HZ		MITSUBISHI	PKFY-P30NKMU-E2.TH
INT AC6	2ND FL. MEETING ROOM-1	1			15,000 BTU	17,000 BTU							208/230V, 1-PHASE, 60 HZ		MITSUBISHI	PLFY-P15NFMU-E
INT AC7	2ND FL. OFFICE-1	1			5,000 BTU	5,600 BTU							208/230V, 1-PHASE, 60 HZ		MITSUBISHI	PLFY-P05NFMU-E
INT AC8	2ND FL. HALLWAY	1			8,000 BTU	9,000 BTU							208/230V, 1-PHASE, 60 HZ		MITSUBISHI	PEFY-P08NMAU-E3
INT AC9	2ND FL. OFFICE-2	1			8,000 BTU	9,000 BTU							208/230V, 1-PHASE, 60 HZ		MITSUBISHI	PLFY-P08NFMU-E
INT AC10	2ND FL. MEETING ROOM-2	1			8,000 BTU	9,000 BTU							208/230V, 1-PHASE, 60 HZ		MITSUBISHI	PLFY-P08NFMU-E
INT AC11	2ND FL. MEETING ROOM-2	1			8,000 BTU	9,000 BTU							208/230V, 1-PHASE, 60 HZ		MITSUBISHI	PLFY-P08NFMU-E

CHP – Qualifying an SMB Customer

1. SMB contractors may approach any customers in the eligible Con Edison territories – NYC (5 boroughs) and Westchester.
2. Contact SMB to verify customer eligibility. Details required for account verification includes:
   a) *Business name – this is the service name with Con Edison (not the name on the business sign)*
   b) *Service address – the service address from the customer's Con Edison bill (not the mailing address)*
   c) *Service telephone – the Customer telephone number on file with Con Edison*
3. If the customer's account is not found in SMART, their account number can be submitted to Willdan via Box for further verification. NEVER share Customer account numbers via email.

CHP – SMB SMART Interface

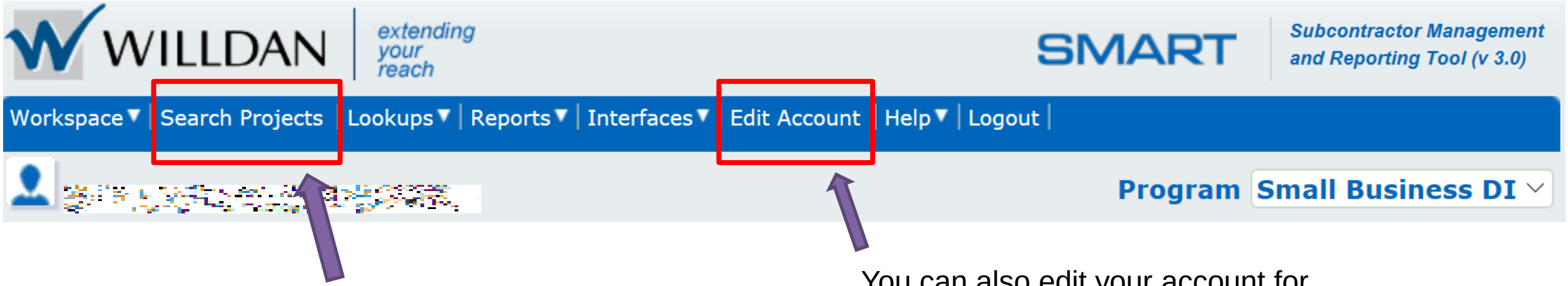
SMART is Willdan's Subcontractor Management and Reporting Tool, where all onboarded PCs can:

1. Search for customer account/profile
2. View accounts assigned
3. Upload project documentation
4. Track project application updates and commentary from Willdan
5. View inspection reports
6. View work order status
7. View incentives and savings summary
8. View invoice number and date – track via weekly email

CHP – SMB SMART Access

1. All PCs will be using *Willdan's Subcontractor Management & Reporting Tool (SMART)*.
2. URL: https://sbdi.smart-willdan.com
3. The Multifamily and SMB segments of CHP utilize two different databases in SMART. If you need SMB SMART access, send an email to: ConEd-SMBProgram@willdan.com
4. Upon program onboarding, login credentials will be provided to you by your contractor manager.
5. You can update company information or change password through "Edit Account" from the taskbar.
6. SMART is used for all of Willdan's ConEd Programs; Note which program you are logged into on top right.

CHP – SMB SMART Account Search



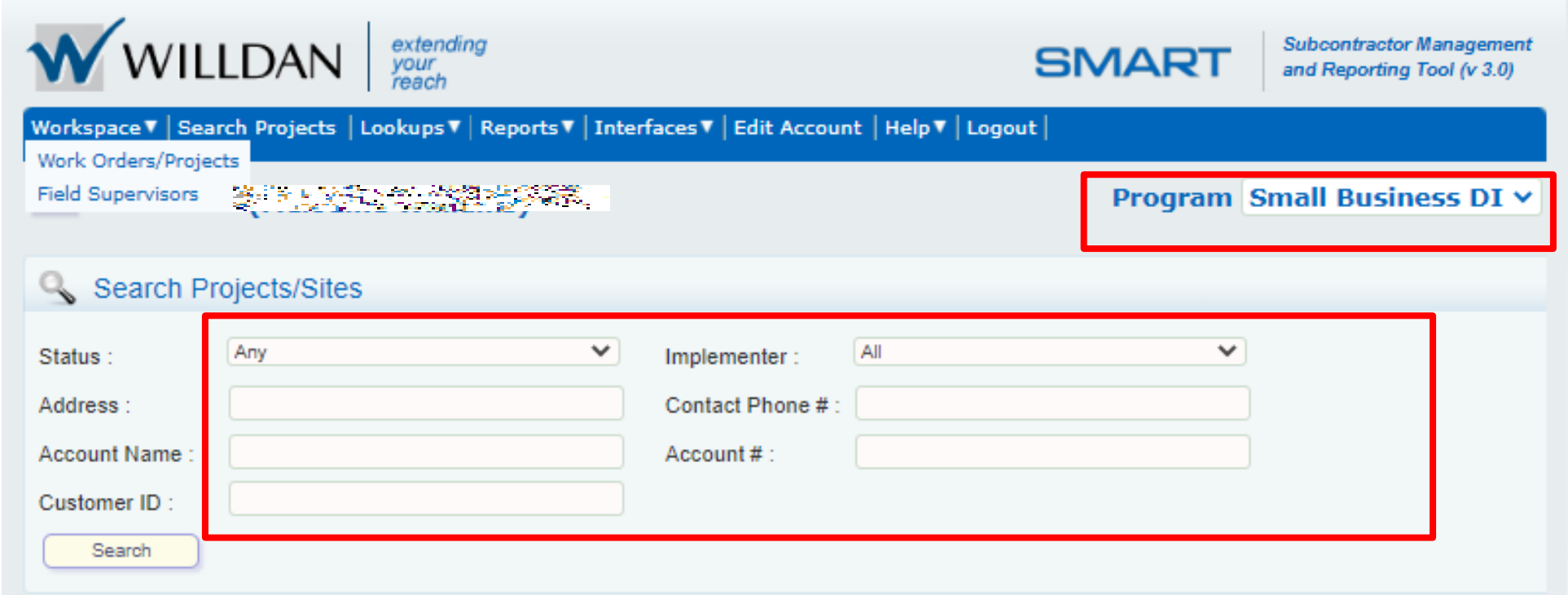
- Once an account is assigned to your company you can use the Search Projects interface to find that account and start working on it.
- Click “Search Projects” to Search by Address, Phone Number, Account Name, Customer ID, or 14-Digit Acct Number (no dashes)

You can also edit your account for creating a password outside of what Willdan provides for you upon entry to the SMB Program

CHP – SMB SMART Account Search

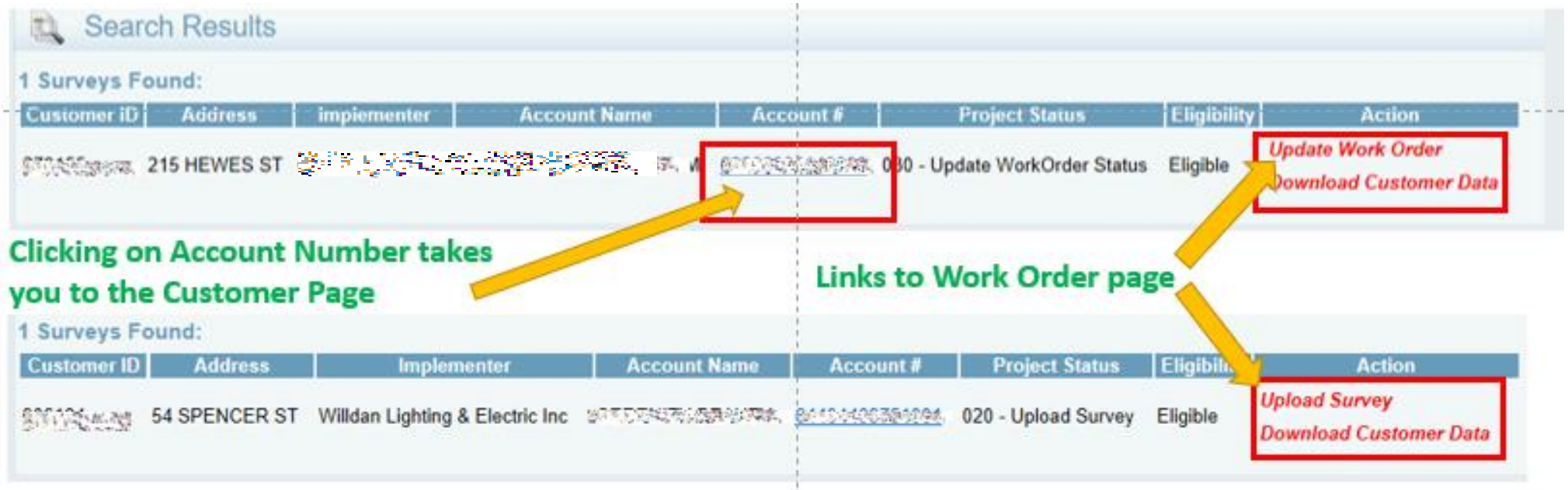
Search by Address, phone #, Acct Name, Customer ID, or 14-Digit Acct #

***No dashes or spaces between numerical digits**



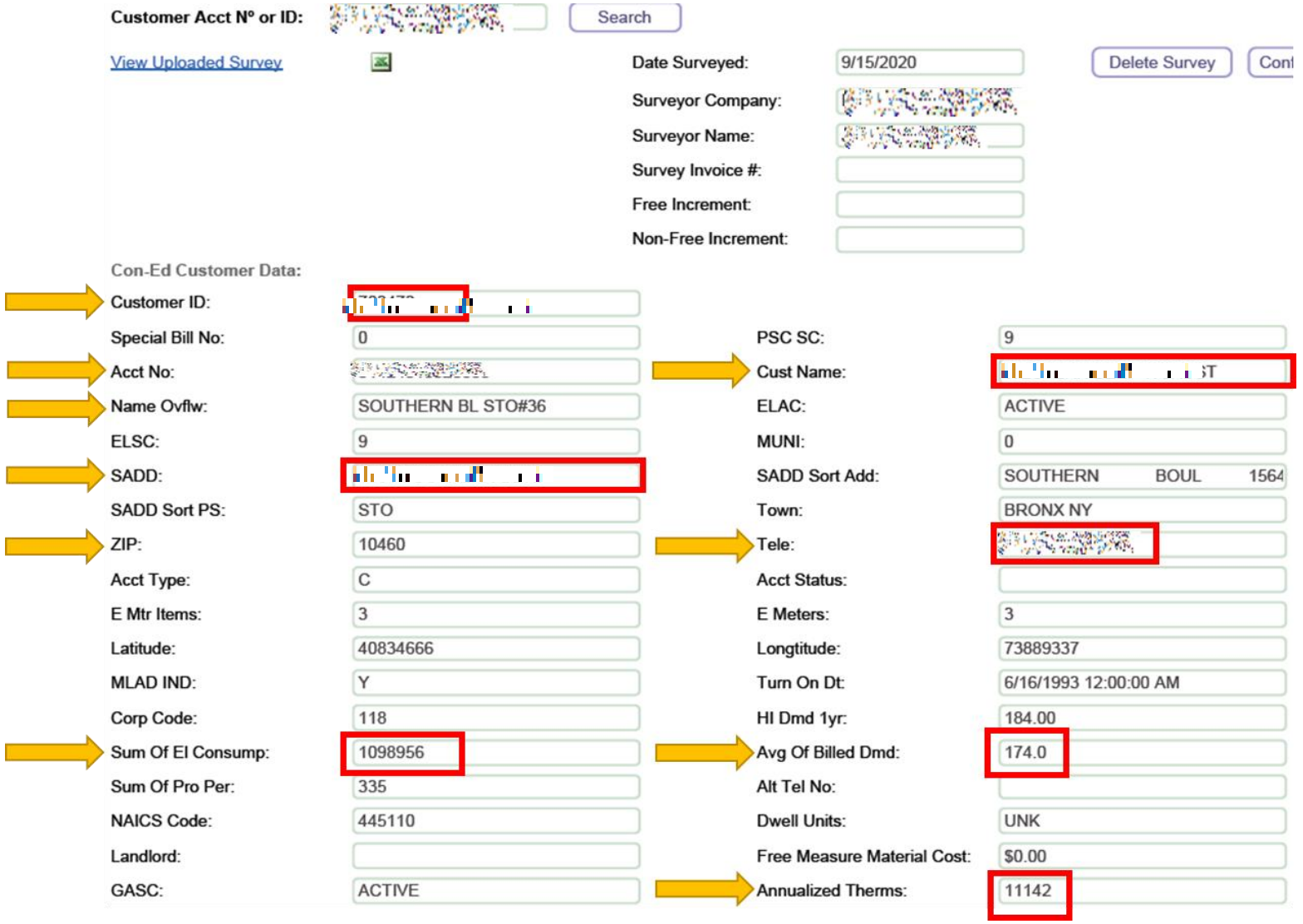
CHP – SMB SMART Account Search (cont'd)

1. *Search Results* highlight important account details *(i.e. account eligibility, assigned Contractor/Implementer)*
2. Clicking *Upload Survey* and *Update Work Order* will take you to the *Work Order* page, where you can upload a Tool and view details about the project.



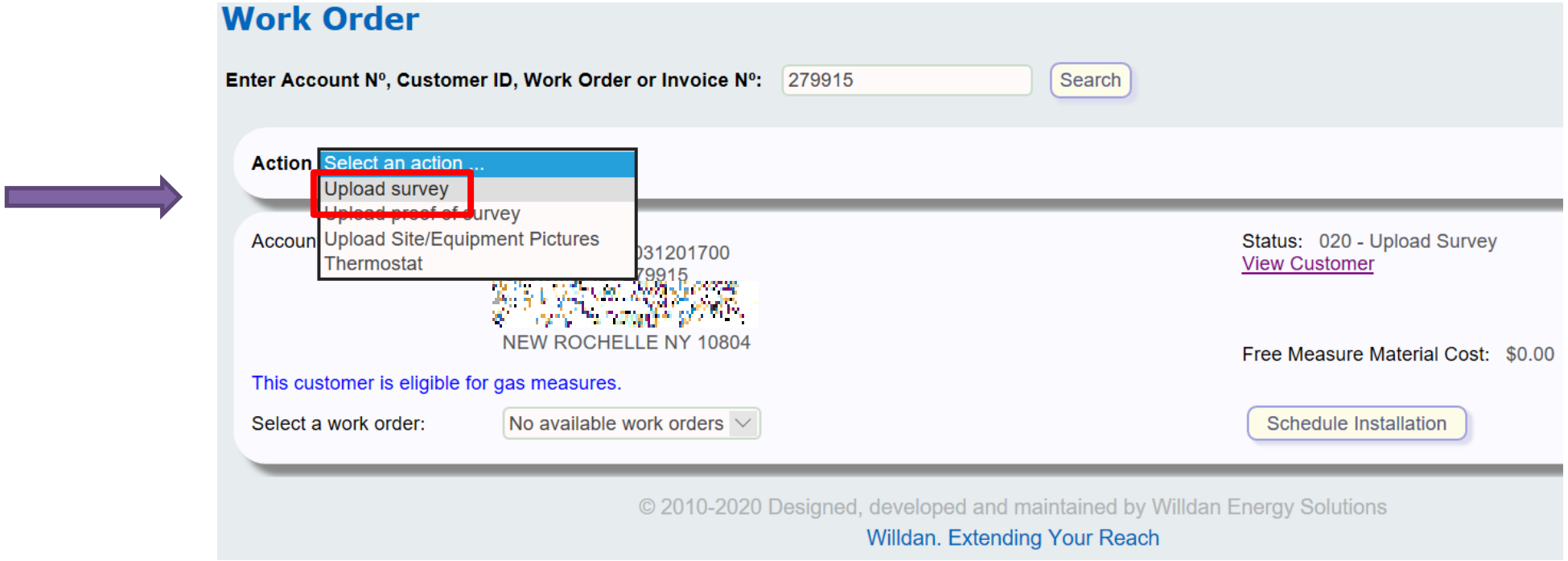
CHP – SMB Customer Page

1. Shows all data you need to fill out the Customer Information Page in the Excel Tool.
2. Displays customer's annualized therms usage. You will only see therms usage if the customer has a Con Edison Gas account.
3. Remember: Customers must have an Avg of Billed Demand < 300 kW in order to qualify for SMB Incentives.



CHP – SMB Work Order Page

1. All work proposed for a customer is uploaded to the Work Order page
2. If no previous work was done at the site, you'll see the option to Upload Survey



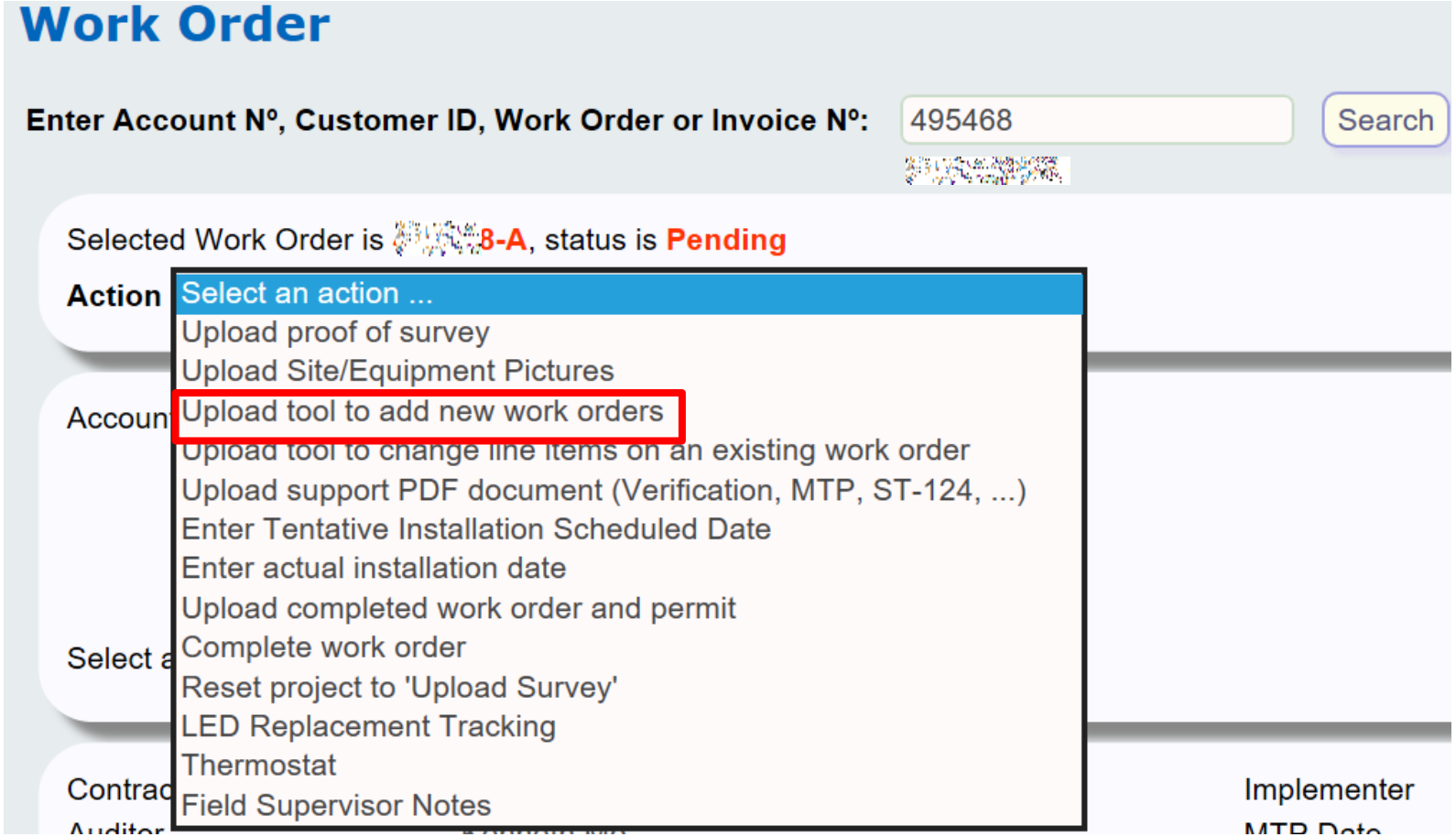
CHP – SMB Work Order Page

1. If work has previously been added to an account, then you'll see "*Upload tool to add new work orders*"

2. SMART is a historical database and keeps track of the work submitted through the different years of the program.

3. Previous work orders can be viewed by either typing in the search field at the top of the page or selecting the work order letter from the "*Select a work order*" dropdown.

You may be presented with this option, even if you don't have work pending, but work in general was completed at the location in the past.



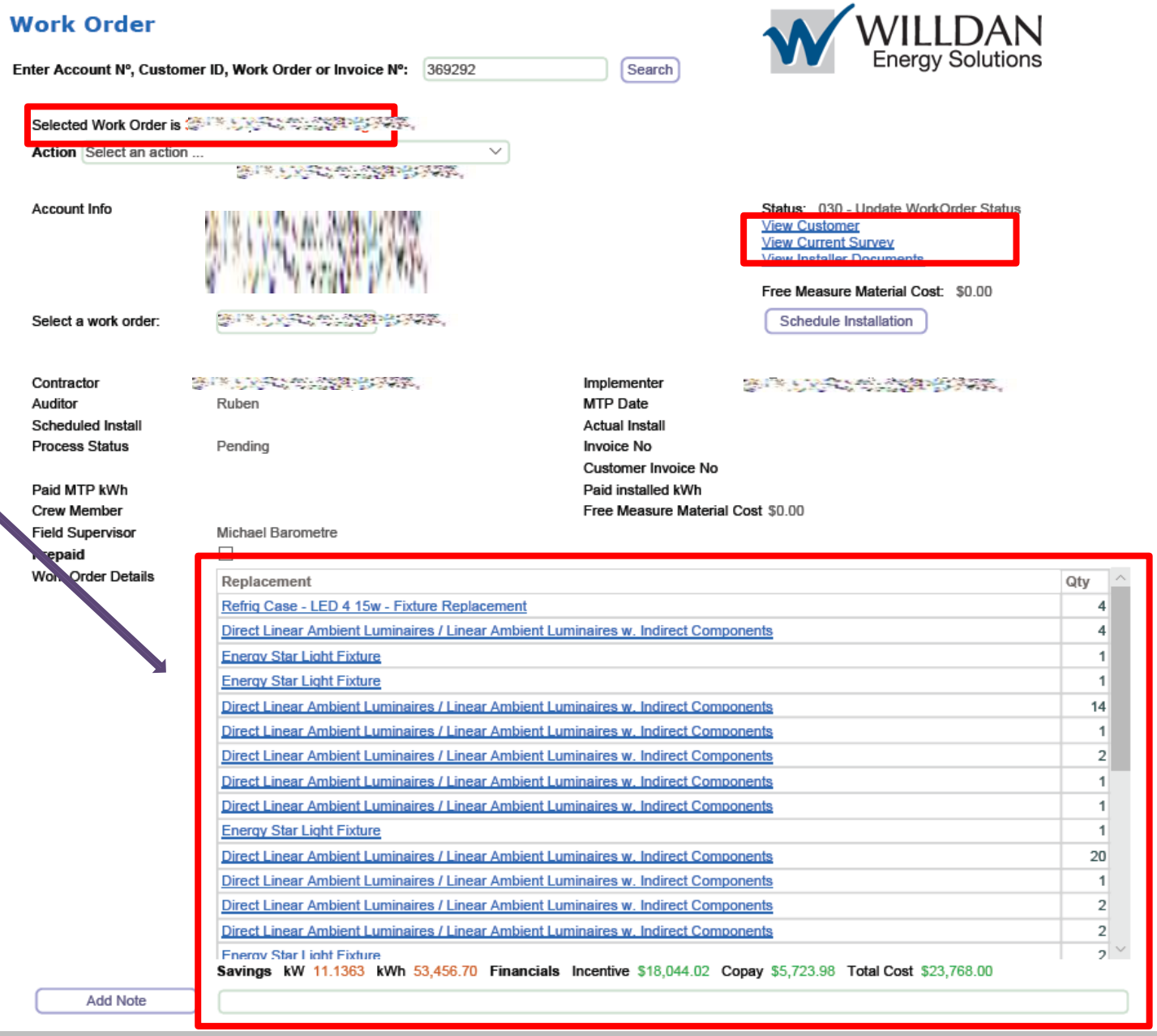
CHP – SMB Work Order

1. Once a Work Order is uploaded, the page will look as shown on right.

   a) Project status (*Top*)
   b) Scope (*Work Order Details*)
   c) Savings and financials (*Bottom*)

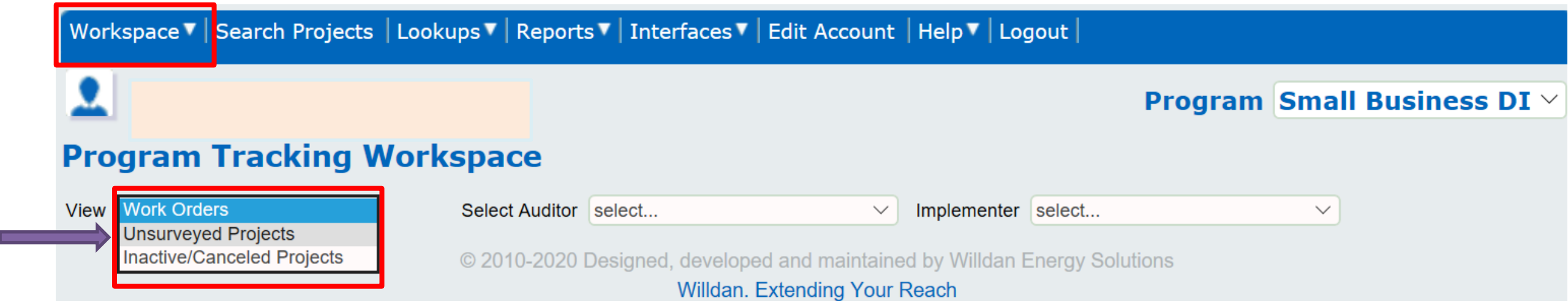
2. You can always download the most recently uploaded Tool for a given work order by clicking "*View Current Survey*"

3. Notes can also be added to the bottom of the Work Order page.



CHP – SMB Workspace

- This is the “Home base” for all project tracking
  - Access pre/post inspection, QAQC inspections and invoice tracking
- View un-surveyed account assignments as well as active, inactive or canceled work-orders



Can filter by project stage

CHP – SMB Workspace Overview

Customer ID	Company Name	Work Order	Address

Zip	Stage	Stage Date	WO Status	Pre-insp	Pre-insp Age	Pre-follow-up	Post-insp	Post-follow-up
All	All			All		All	All	All
11205	Approved	12/13/2022	Active	Pass	223	-none-	Pass	-none-
10301	Post-inspected	12/13/2022	Active	Pass	26	-none-	Pass	-none-

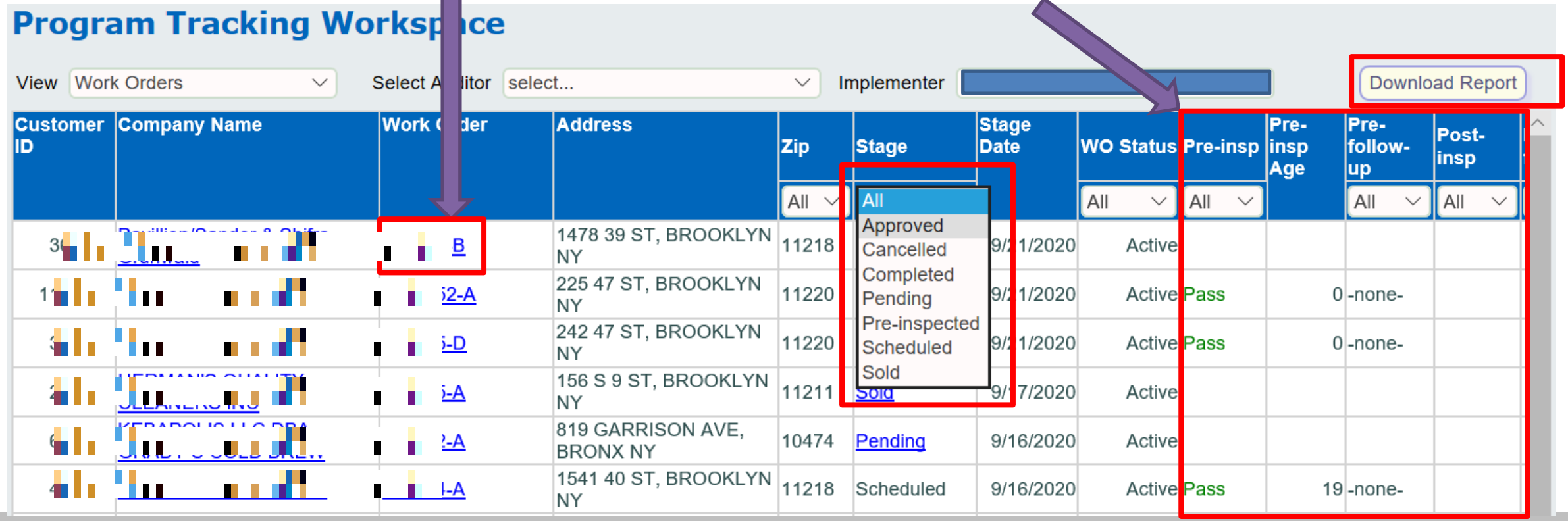
QA/QC Selected	QA/QC Pre-Insp	QA/QC Pre Follow-up	QA/QC Post-Insp	QA/QC Post Follow-up	QA/QC Invoice Review	Tool Version	kWh	Incentive	Project Status	Bill N°	Bill Date	Days Since MTP
			All	All		All				All	All	
No			Pass	-none-		325.990	-230,731.13	244,123.88	Update Work Order	021BK67786	12/15/2022	0
No						325.991	-13,926.72	57,185.99	Update Work Order			157

CHP – SMB Workspace

Links to Work Order Page directly

Workspace is especially useful for tracking pre/post-inspection status and follow-up and Project Stage

Download workspace into excel spreadsheet



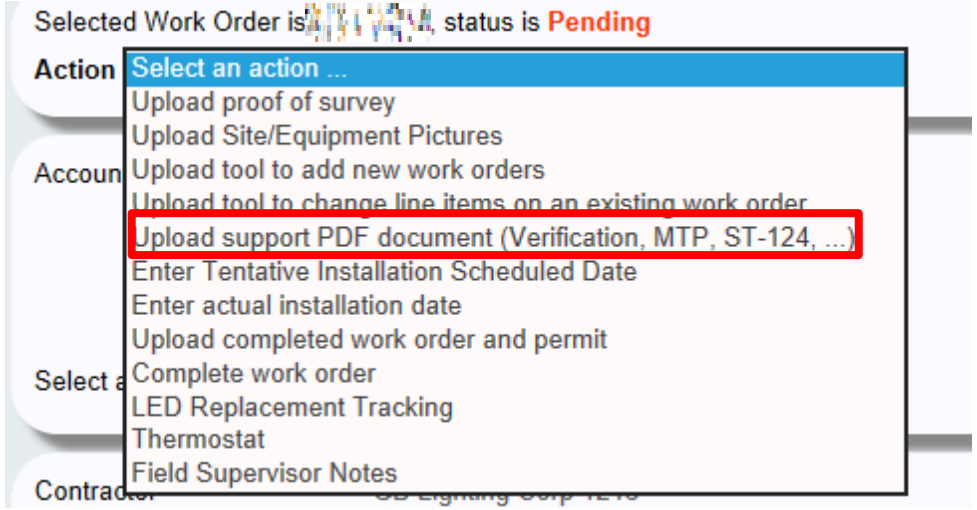
CHP – SMB Work Order Status

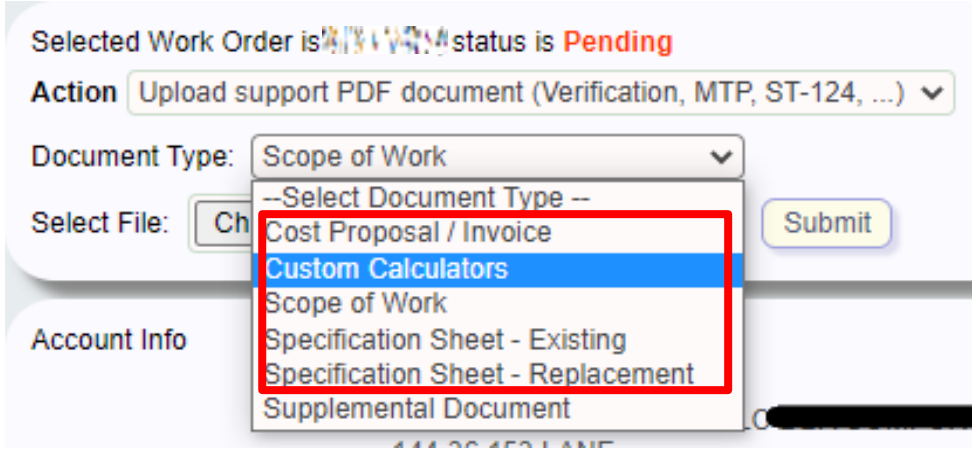
Workspace will display which stage a project is in based on its Work Order status:

WO Page Status	Workspace Status	Description
Pending	**Pending**	Tool (Calculator) completed and uploaded in SMART
Pending	**Sold**	Application and all required pre-inspection documents uploaded in SMART
Pending	**Pre-inspected**	Signed PIOL uploaded & Pre-inspection Passed
Completed	**Completed**	Statement of Completion uploaded in SMART
Completed	**Post-inspected**	Signed Customer Acknowledgment uploaded & Post-inspection Passed
Approved	**Approved**	Final document QAQC approved. Project is ready to be invoiced to Con Edison
Pending	Inactive	PIOL not signed within 60 days of survey date
Cancelled	Cancelled	Project canceled by program or auto-cancelled after 6 months without installation

CHP - Uploading SMB Files to SMART

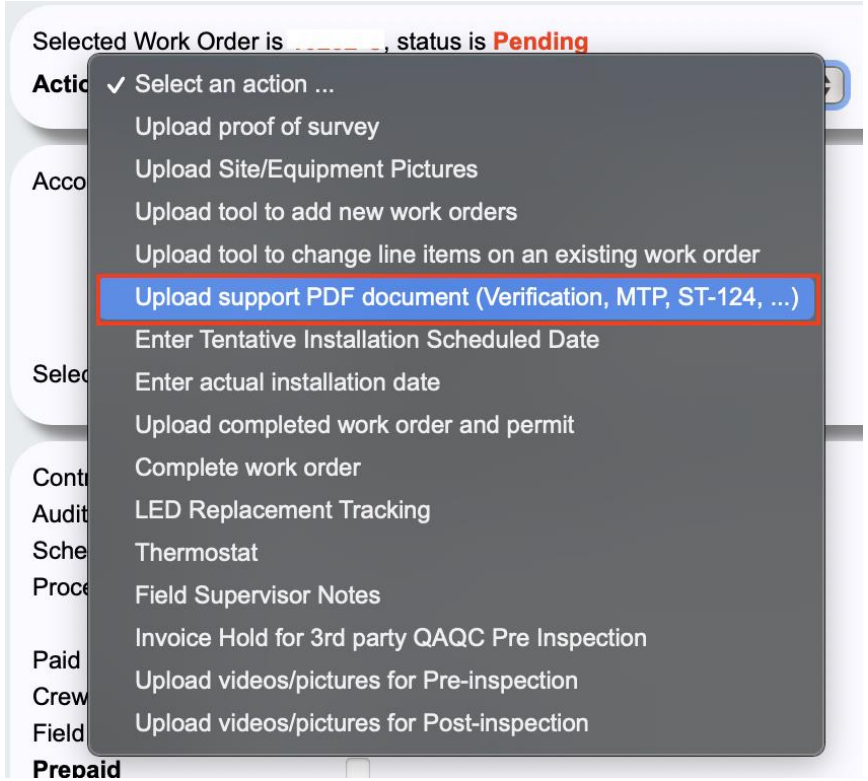
1. Once you are assigned as Implementer for an account, you will need to upload all required documents for the Customer's project, including:
    a) Detailed Scope of Work / Proposal
    b) Load Calculations
    c) Drawings
    d) NYS CHP Calculator or Excel Tool
    e) Existing and Replacement Spec Sheets (i.e. AHRI, NEEP Certificates).
    f) Photos
2. You will be prompted to upload after selecting the "Upload Support PDF document" option from the "Action" drop-down menu.
3. After all supporting documents are uploaded, notify your SMB Project Manager or Coordinator who will follow up with you as needed for next steps.





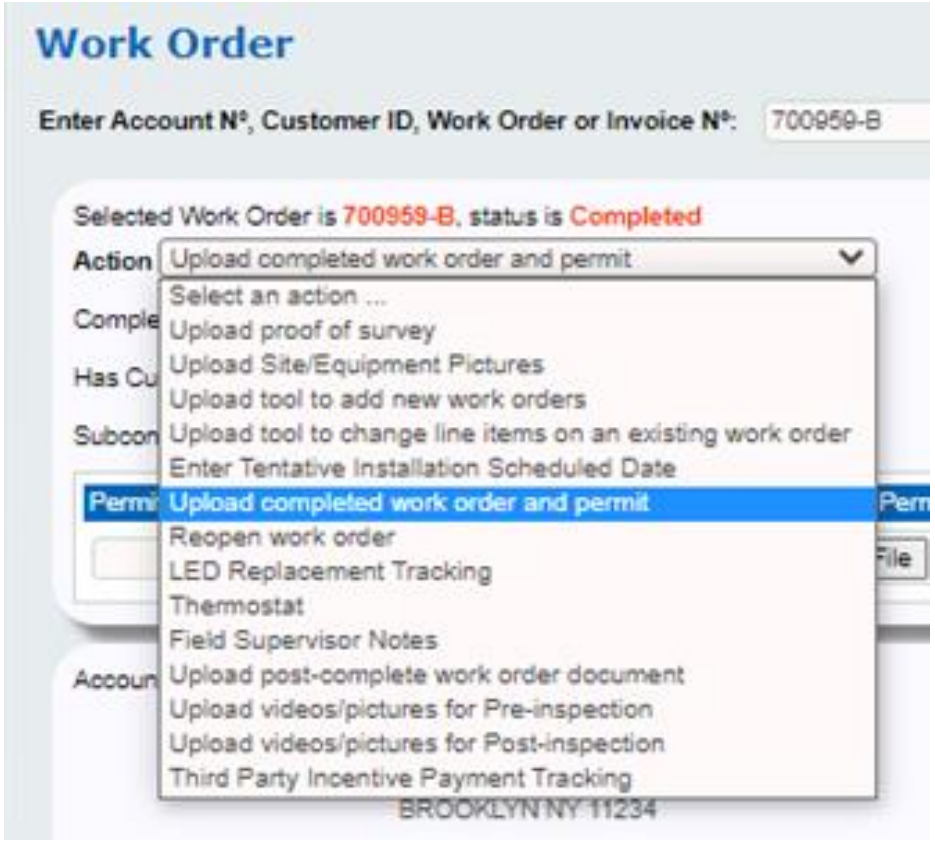
CHP – PIOL (SMB)

1. Once you've completed and uploaded the excel Tool and other relevant files for your project, the SMB team will review it to confirm the applicable incentives and savings ("Initial Desk Review").
2. An onsite Pre-inspection will be conducted to verify the site's existing conditions (smaller projects can be submitted virtually).
3. If your project passes the initial desk & pre-inspection review, SMB will issue you a document authorizing the job to move forward to installation. We refer to this document as the Preliminary Incentive Offer Letter (PIOL).
4. The PIOLwill be signed by you and the Customer.
5. To upload the signed PIOL, go to the Work Order page for the project:
   a) *Search for the project, or*
   b) *Use Workspace to navigate to the Work Order page*
6. Once on the Work Order page, go to the Action dropdown and select "Upload PDF document.." & Select Upload MTP (to be changed to PIOL in the coming weeks by our development team).
7. Proceed with the Installation



CHP – Final IOL / Cust. Acknowledgement (SMB)

1. Complete the project in SMART, by uploading a Statement of Completion w/ scope. See screenshot to right.
2. Upload your post-installation documentation (i.e. photos, final invoice) and the program will conduct a final desk review.
3. After an on-site post-inspection is conducted and passed, you will receive a Final IOL / Customer Acknowledgement form, which must be completed and signed.
4. To upload the signed forms, go to the Work Order page for the project.
5. On the Work Order page, go to the Action dropdown and select “Upload Post-complete work order document”
6. If all is in order, the SMB team will pass the post-inspection, changing the status from "Completed" to "Post-inspected" in workspace.
7. After post-inspection, a final document review is conducted and the project is moved to Approved.
8. There is a potential 3rd Party QAQC selection and post-inspection at this stage, otherwise the project will move to invoicing



CHP – SMB Post-Inspection Requirements

1. Photos of **all outdoor units**
   a) Zoomed out photo of each unit
   b) Zoom in photo of each nameplate. Make sure the serial number is clearly captured.
2. Photos of **20% of all indoor units** (this is to confirm Ducted vs. Non-Ducted units)
   a) Zoomed-out photo of each unit
   b) Zoomed-in photo of each nameplate. Make sure the serial number is clearly captured.
3. An on-site QAQC post-inspection will be conducted to verify the scope and quality of all installs.

**** Willdan highly recommends taking photos in parallel during installation ****

CHP – SMB Post-Inspection Requirements

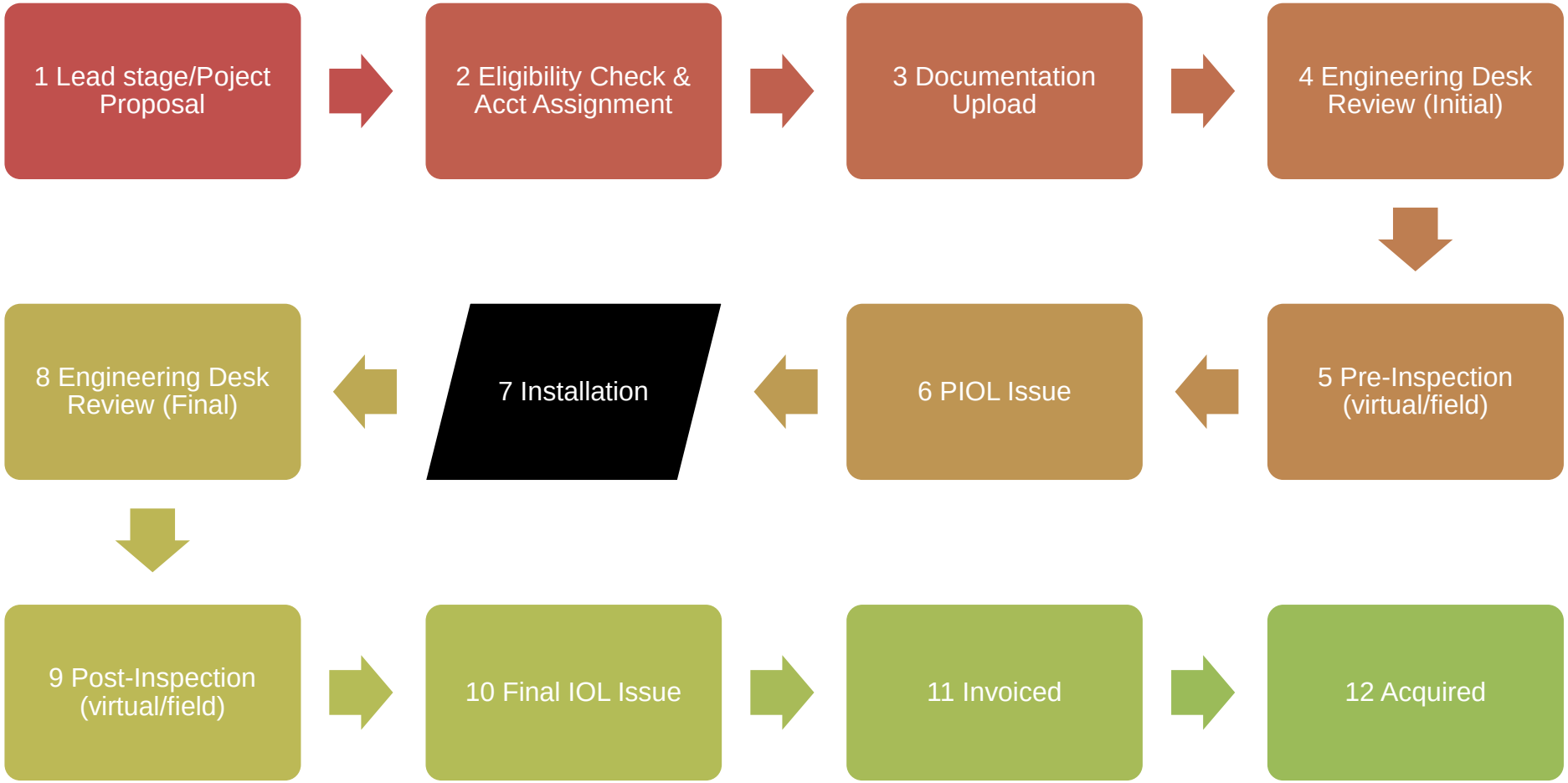
Outdoor Unit Zoom out:
ACCU-1_Office101_out

Outdoor Unit Zoom In Nameplate:
ACCU-1_Office101_out name

Indoor Unit Zoom out:
AHU-1.1_Office101_in

Indoor Unit Zoom in Nameplate:
AHU-1.1_Office101_in name

CHP – SMB Application Review Process - RECAP



SMB Clean Heat – Contractor Training

- January 19 – SMART Training
- January 20 – Tool Training
  a) SMB CHP Prescriptive Tool
  b) SMB CHP Custom Tool
- All PCs are strongly encouraged to attend
- Email ConEd-SMBProgram@willdan.com with any questions

SMB Clean Heat - Closing

- Thank you for participating!
- Questions for SMB?

  Email: ConEd-SMBProgram@willdan.com

Agenda

Morning – The Con Edison Clean Heat Program

- Relaunch Status
- Sectoral Changes and Allocations
- Residential Program
- Non-Residential Program
- Con Edison Program Documentation
- Becoming a Participating Contractor

Afternoon – How to Apply for Incentives

- Application Process
  - Residential – ICF (including OIT)
    - 12:30-1:30
  - Multifamily & Small Business – Willdan (including SMART)
    - 1:45-3:00
- **Next Steps**

Next Steps

Relaunch on January 17, 2023!

Thank You!

conEdison

FOR DISCUSSION