# Welcome!

### <u>Mass Energy Insight – Training Session 7:</u> Troubleshooting (2 of 2)



### Introductions

**Presenters:** 

- Dugan Becker Clean Energy Extension (CEE)
- Mary Kraus CEE

### Additional Facilitators / Resource People:

- John Snell CEE Consultant
- Gamaliel Lodge Optimiser
- Joanne Bissetta Department of Energy Resources (DOER)
- Chelsea Kehne DOER

### Who We Are



Massachusetts Department of Energy Resources





**UMassAmherst** 

### What you will learn:

- Correction Bills What they are, and how to deal with them
- Common Questions about Municipal Building Stock
- How to rectify "Null" items/accounts

First Topic: Correction Bills

# What is a Correction Bill, and why do they occur?

- A correction bill is essentially a bill issued by a utility company, to account for an error in a previous bill
  - These can be errors in the usage values, cost values, demand values, etc.
- Correction bills can occur for a wide variety of reasons, including:
  - Miscalibrated meters
  - Infrequent meter reading
  - Miscategorized billing rates
  - Etc.
- Some corrections are relatively minor, and some are quite significant

### Why do Correction Bills matter in MEI?

- When a correction bill is issued, <u>they cause double counting in MEI</u>, resulting in artificially high usage totals for the affected account.
- How do Correction Bills cause double counting?
  - When a correction bill arrives to "correct" a previously supplied record, <u>that</u> original record is not automatically removed/overwritten, so you end up with two bills for the affected months.
- Lets take a look at some examples...

#### Displaying usages **41 - 60** of **179** in total

\_\_\_\_\_

(	From Date	To Date	Use (Therms)	Use (ccf)	Cost - Utility	Cost - Competitive supplier	Price � Competitive Supply	Read Type Days	Rate Class		
	2017-03-10	2017-04-11	217	211	142.93			32	951		
	2017-02-09	2017-03-10	195	189	128.57			29	951		
	2017-01-11	2017-02-09	198	192	130.30			29	951		
	2016-12-12	2017-01-11	212	206	138.94			30	951		
	2016-11-09	2016-12-12	207	201	137.71			33	951		
	2016-10-12	2016-11-09	154	150	99.30			28	951		
	2016-09-12	2016-10-12	147	143	94.45			30	951		
	2016-08-11	2016-09-12	145	141	94.62			32	951		
	2016-07-13	2016-08-11	132	128	86.06			29	951		
•	2016-06-30	2016-07-13	60	58	39.00			13	951		
	2016-05-06	2016-06-30	268	261	172.39			55	951		
	2016-05-06	2016-06-10	176	171	112.54			35	951		
	2015-11-04	2016-05-06	444	431	323.01			184	951		
	2016-03-11	2016-04-13	213	207	124.13			33	951		
	2016-02-10	2016-03-11	215	208	123.47			30	951		
	2016-01-12	2016-02-10	212	206	121.43			29	951		
	2015-12-10	2016-01-12	217	211	126.12			33	951		
κ.	2015-11-04	2015-12-10	220	214	129.28			36	951		
	2015-04-13	2015-11-04	842	819	553.19			205	951		
۲	2015-09-11	2015-10-09	137	133	87.39			28	951	-	

Displaying usages **21 - 40** of **179** in total

#### « Previous 1 2 3 4 5 6 7 8 9 Next »

From Date	To Date	Use (Therms)	Use (ccf)	Cost - Utility	Cost - Competitive supplier	Price � Competitive Supply	Read Type	Days	Rate Class		
2018-11-05	2018-12-07	159	154	114.23				32	951	8	•
2018-10-08	2018-11-05	138	134	97.40				28	951	5	,
2018-09-06	2018-10-08	135	131	97.66				32	951		,
2018-08-07	2018-09-06	72	70	59.85				30	951	9	•
2018-07-09	2018-08-07	8	8	24.42				29	951	9	•
2018-06-08	2018-07-09	142	138	101.12				31	951	9	•
2018-05-29	2018-06-08	50	49	35.06				10	951	9	•
2016-05-06	2018-05-29	3190	3101	2,227.88				753	951	5	•
2018-03-12	2018-04-11	202	196	136.24				30	951	8	•
2018-02-09	2018-03-12	201	196	136.19				31	951	5	,
2018-01-11	2018-02-09	205	199	137.46				29	951		,
2017-12-12	2018-01-11	234	227	155.20				30	951		•
2017-11-09	2017-12-12	213	207	144.41				33	951	9	
2017-10-11	2017-11-09	149	145	101.64				29	951	9	
2017-09-12	2017-10-11	135	131	92.63				29	951	3	
2017-08-10	2017-09-12	151	147	103.96				33	951	8	•
2017-07-13	2017-08-10	128	125	88.14				28	951	8	
2017-06-12	2017-07-13	141	137	97.18				31	951	8	•
2017-05-11	2017-06-12	164	160	110.60				32	951	8	,
2017-04-11	2017-05-11	164	160	108.65				30	951	5	•

### Correction Bills – An Example:

	From Date	To Date	Use (Therms)	Use (ccf)	Cost - Utility	Cost - Competitive supplier	Price � Competitive Supply	Read Type	Days	Rate Class	
	2015-11-04	2016-05-06	444	431	323.01				184	951	9
٢	2016-03-11	2016-04-13	213	207	124.13				33	951	•
	2016-02-10	2016-03-11	215	208	123.47				30	951	•
4	2016-01-12	2016-02-10	212	206	121.43				29	951	9
	2015-12-10	2016-01-12	217	211	126.12				33	951	9
L	2015-11-04	2015-12-10	220	214	129.28				36	951	

Actual usage for 11/04/15 – 05/06/16 period: 444 Therms

Current usage for 11/04/15 – 05/06/16 period reported in MEI: 1,521 Therms

Excess of 1,077 Therms reported in MEI!

Usages

being double

counted

### How do you fix this error?

### Correction Accounts ("C- Accounts"):

- A correction account (also known as a C- Account), is a secondary utility account that can be used to modify flawed values reported in your primary utility account
  - Since users can't edit data loaded into MEI by utility companies, C- accounts serve as an opportunity to make revisions without messing with the original data.
- C- accounts are created by adding a new account, formatted with a prefix of "C-" and then the original account number
  - For example, if you are addressing a correction bill in account #1234, create a new account with the number: C-1234
  - Provider should be "Other"

### How are C- Accounts used?:

- C- Accounts can serve many purposes:
- Adding usages that were not reported in MEI
- Distributing lumped usages
- Removing erroneous/double counted usages, by inserting negative values

However...

- C- Accounts aren't always the answer!
- Data in C- accounts gets counted just as any other account in MEI, so please be careful to ensure that any data you enter is accurate!
- If you aren't sure, or need help Reach out to MEI Support

### **Fixing Correction Bills in MEI**

There are multiple approaches to fixing correction bills, dependent on the context of the correction...

# **Fixing Correction Bills in MEI**

Ask yourself the following questions:

- Does the correction bill fall within one fiscal year, or does it have days in multiple fiscal years?
- Is the difference between the correction amount and the original bills large or small?
- Does the account in question have significant heating or cooling loads?

Is the difference between the correction amount and the original bills large or small?

#### Small

- 1) Copy and paste the correction bill and the original bills that it replaces into a spreadsheet.
- 2) Replace the correction bill usage and cost values with the sum of the original bills, as **negative** values.
- 3) Create a C- account, and upload this spreadsheet to that account.

4) Contact Support to delete your original bills.

	From Date	To Date	Use (Therms)	Use (ccf)	Cost - Utility	Cost - Competitive supplier	Price � Competitive Supply	Read Type	Days	Rate Class
	2019-11-30	2020-03-29	827		7,873.04			А	123	Click to edit
Sum =	2020-01-30	2020-02-29	212		2,018.24	Guine		E	30	Click to edit
618 Therms 🚽	2019-12-30	2020-01-29	205		1,951.60	5883 36		E	31	Click to edit
	2019-11-30	2019-12-29	201		1,913.52	JJ00J.J0		E	31	Click to edit



	А	В	С	D	E	F	G	Н	I	J
1	Account Number	From Date	To Date	Use (Therms)	Use (ccf)	Cost - Utility	Cost - Competitive supplier	Price � Competitive Supply	Read Type	Days
2	C-12345	11/30/2019	3/29/2020	-618		-5,883.36			A	123
3	C-12345	1/30/2020	2/29/2020	212		2,018.24			E	30
4	C-12345	12/30/2019	1/29/2020	205		1,951.60			E	31
5	C-12345	11/30/2019	12/29/2019	201		1,913.52			E	31
6										



# How do I determine if a Correction is "Small" or "Large"?

1. Subtract the sum of your original bills from the correction bill:

	From Date	To Date	Use (Therms)	Use (ccf)	Cost - Utility	Cost - Competitive supplier	Price � Competitive Supply	Read Type	Days	Rate Class
	2019-11-30	2020-03-29	827		7,873.04			А	123	Click to edit
Sum =	2020-01-30	2020-02-29	212		2,018.24			E	30	Click to edit
618 Therms	2019-12-30	2020-01-29	205		1,951.60			E	31	Click to edit
027 The survey	2019-11-30	2019-12-29	201		1,913.52			E	31	Click to edit

- 618 Therms 209 Therms

- 2. Does the remaining balance seem to be a reasonable total for the final month?
  - Use your best judgement, or compare to a record for that month in a previous year

Is the difference between the correction amount and the original bills large or small?

#### Small

- 1) Copy and paste the correction bill and the original bills that it replaces into a spreadsheet.
- 2) Replace the correction bill usage and cost values with the sum of the original bills, as a **negative** value
- 3) Create a C- account, and upload this spreadsheet to that account.

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### Correction Bills – An Example:

	From Date	To Date	Use (Therms)	Use (ccf)	Cost - Utility	Cost - Competitive supplier	Price � Competitive Supply	Read Type	Days	Rate Class	
	2015-11-04	2016-05-06	444	431	323.01				184	951	3
٢	2016-03-11	2016-04-13	213	207	124.13				33	951	•
	2016-02-10	2016-03-11	215	208	123.47				30	951	•
$\left  \right $	2016-01-12	2016-02-10	212	206	121.43				29	951	9
	2015-12-10	2016-01-12	217	211	126.12				33	951	9
	2015-11-04	2015-12-10	220	214	129.28				36	951	-

Actual usage for 11/04/15 – 05/06/16 period: 444 Therms

Sum of original bills: 1077 Therms

444 Therms

Usages

being

double

counted

<u>- 1077 Therms</u>

-633 Therms = Not a realistic usage for the final month



### **Recap: Fixing Correction Bills in MEI**

Identifying Correction Bills:

- Keep an eye out for values greater than ~1 month in the "Days" column
- Look for From Date / To Date combinations that span more than 1 month, and cover periods already reported in MEI.
- Verify usages listed in MEI with your hardcopy bills

Fixing Correction Bills:

- Refer to the Decision Tree
- Reach out to MEI Support for Guidance

### Next Topic: Common Questions about Building Stock

### **Common Questions about Building Stock**

Common themes:

- Recently Acquired Buildings
- Recently Constructed Buildings
- Recently Closed Buildings
- Recently Renovated Buildings

# **Building Stock – Recently Acquired Buildings**

Scenario: Your town recently <u>acquired</u> a new building, <u>after</u> your baseline year.

Key questions:

- Is the new building replacing an old building that was included in your baseline year usage?
  - If Yes This building needs to be entered in MEI, and included in your annual report (AR). You will also want to mention this replacement in your <u>AR narrative</u>.
  - If No The building should be entered into MEI, and usage should be recorded, but it does not need to be included in your AR. You can exclude a building from reports in MEI by utilizing the "Exclude from Baseline" option.

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need to cli	ck a S	ave button.				
	Туре	Facility				
Add	ress 1	Click to ed	dit		Address 2	Click to edit
	City	Click to ea	lit		State	Click to edit
	Zip	Click to ed	lit			
* Gross Floo	r Area (Sq ft)	Add, edit, history	or view d	etailed	Occupants	Add, edit, or view detailed history
	Notes	Add, edit,	or view n	otes	Interventions	Add, edit, or view detailed
					* Category	Click to edit
					* Subcategory	Click to edit
					I Ochool Topo	
					School Type	Click to edit
					Portfolio Manager Sync	Click to edit
					Portfolio Manager Sync WWTP Nutrient Removal	Click to edit Click to edit Click to edit
					Portfolio Manager Sync WWTP Nutrient Removal DWTP Water Source	Click to edit Click to edit Click to edit Click to edit
					Portfolio Manager Sync WWTP Nutrient Removal DWTP Water Source Exclude from Baseline?	Click to edit Click to edit Click to edit Click to edit -N/A- ~ -N/A-
					Portfolio Manager Sync WWTP Nutrient Removal DWTP Water Source Exclude from Baseline? Exclude from ESCO?	Click to edit Click to edit Click to edit Click to edit -N/A- ~ -N/A- ~ -N/A- ~ -N/A- ~
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  - If No The building should be entered into MEI, and usage should be recorded, but it does not need to be included in your AR. You can exclude a building from reports in MEI by utilizing the "Exclude from Baseline" option.
- Do you hope to obtain Green Communities grant funding to make alterations to this building?
  - If Yes This building needs to be entered in MEI, and included in your annual report (AR).
  - If No The building should be entered into MEI, and usage should be recorded, but it does not need to be included in your AR. You can exclude a building from reports in MEI by utilizing the "Exclude from Baseline" option.

### Building Stock – Recently Constructed Buildings

Scenario: Your town recently <u>built</u> a new building, <u>after</u> your baseline year.

- The building should be entered into MEI, and usage should be recorded, but it <u>should not</u> be included in your annual usage totals. You can exclude a building from reports in MEI by utilizing the "Exclude from Baseline" option.
- New construction is not eligible for Green Communities grant funding
- Usage associated with new construction needs to be reported in a separate section of your Annual Report.

# Building Stock – Recently Closed Buildings

Scenario: Your town recently closed/sold a building, <u>after</u> your baseline year.

Solution:

• Step 1 - Mark the accounts for this facility as "Inactive".



Some editing features are deactivated for account data received directly from the utility.

#### Account Info

Account Nickname	Click to edit	Fuel Type	Electric
Provider	Sampleville Municipal Electric	Notes	Click to
	1010571000	Rate Code	
Account Num	1246571068	Service Street1	Click to
		Service Street	CIICK LU
Active?	Yes 🗸	Service Street2	Click to
Matar	of Yes	City	Click to
Meter	CILICO Palt	ony	Cher to

# Building Stock – Recently Closed Buildings

Scenario: Your town recently closed/sold a building, <u>after</u> your baseline year.

- Step 1 Mark the accounts for this facility as "Inactive".
  - <u>Do not remove this facility from your organizational tree, or exclude from baseline</u>. Your historical data is accurate and valuable.
- Step 2 Was this building replaced by a new building?
  - If Yes That new building needs to be entered into MEI, and included in your annual report.
  - If the employees were relocated to an existing municipal building Continue recording usage in that building, you will be credited with a reduction in energy & more efficient use of space.
  - If none of the above Move on to Step 3
- Step 3 Include a comment in your AR narrative, explaining that this building is no longer a part of your town's building stock.

# Building Stock – Recently Renovated Buildings

Scenario: Your town recently expanded a building through renovations.

- If this building was included in your baseline year reporting, it should continue to be reported on.
- In MEI, navigate to this facility's Info tab, and modify the square footage to reflect the building's updated footprint.



# Building Stock – Recently Renovated Buildings

Scenario: Your town recently expanded a building through renovations.

- If this building was included in your baseline year usage report, it should continue to be reported on.
- In MEI, navigate to this facility's Info tab, and modify the square footage to reflect the building's updated footprint.
- Make sure to report this renovation in your Building Stock Narrative

### Next Topic: How to rectify "Null" Items in MEI

### What does "Null" mean?

"Null" simply means there is a lack of data.

### There are multiple occurrences of "Null" in MEI:

**UNACCEPTABLE** cases of "Null":

- Accounts with no usage data
- Accounts not associated with a Department or Facility
- Facilities not assigned a Category/Subcategory

**ACCEPTABLE** cases of "Null":

- Accounts not associated with a Complex or Unit
- Accounts without meter numbers \*
- Bill Alerts Report

\* Meter numbers are required for <u>multi-meter accounts</u> only.

### How to Identify and Fix Null Items

To recap:

### **UNACCEPTABLE** cases of "Null":

- Accounts with no usage data
  - Identify using the <u>Data Loaded Reports</u>
  - If delivered fuel, enter usage data. If IOU, double-check acct number or reach out to Support.

### Data Loaded - Overview

This report shows whether or not data is loaded for a given account and period. Green indicates data loaded, blank cells indici in the "Null" column have no data loaded for that account. To see accounts with no data loaded, be sure to include "Null" unde

						Null						FY 2	2019				
Department	Complex	Facility	Fuel	Account #		Null		Α	S	0	Ν	D	J	F	М	Α	М
Null	Null	Null	Electric	14321													
				654876													
				12345342													
			Gas	987674													
		Golf Course	Electric	580293	C		γ										
Administration	Null	Null	Propane	178942													
	Administrative	Town Clerk	Electric	1648388286													
	Complex		Propane	1117058407													
		Town Hall	Electric	1246571068													
			Gas	53467													
			Oil	1461354020													

### How to Identify and Fix Null Items

To recap:

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- Accounts with no usage data
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- Accounts not associated with a Department or Facility
  - Identify using the <u>Data Loaded Reports</u>
  - Relocate accounts to appropriate facility/department

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		$\overline{}$			Null						FY 2	2019				
Department	Complex	Facility	Fuel	Account #	Null	J	Α	s	0	Ν	D	J	F	М	Α	М
Null	Null	Null	Electric	14321												
				654876												
				12345342												
			Gas	987674												
		Golf Course	Electric	580293												
Administration	Null	Null	Propane	178942												
	Administrative	Town Clerk	Electric	1648388286												
	Complex		Propane	1117058407												
		Town Hall	Electric	1246571068												
			Gas	53467												
			Oil	1461354020												
										1	1			1		

### How to Identify and Fix Null Items

To recap:

### **UNACCEPTABLE** cases of "Null":

- Accounts with no usage data
  - Identify using the <u>Data Loaded Reports</u>
  - If delivered fuel, enter usage data. If IOU, double-check acct number or reach out to Support.
- Accounts not associated with a Department or Facility
  - Identify using the <u>Data Loaded Reports</u>
  - Relocate accounts to appropriate facility/department
- Facilities not assigned a Category/Sub-category
  - Identify with the <u>Setup Completeness Report</u>
  - Select appropriate category/subcategory on the Facility's Info Tab

#### Setup Completeness Dashboard

These tables show you work you still need to do to set up your city, town or district. Click on an item name to go directly to that item and update it. The item will open in another browser window or tab. You can then make edits which will appear in the reports the next business day. If there is not business in a table, then you've completed that tack!

#### Assign these accounts

These accounts have not been assigned to a department, complex, building or unit. Assign these accounts to ensure their data is reported properly.

1	Baltimore Ga	Electric	
21-45	BWSC	Water	
2009 Town H	Other	Oil	
Assign a cate items	egory to thes	e	
Administrative C	Office		
Fire Station 6			
oreilly building			
Doiron Hall of W	lisdom		
College Departr	nent		
Town Hall			
new stuff noot in	n baseline		
Street Lights			
Jim B Facility - F	Fire Station		
Vehicles			
Vehicles			

This table shows you how many facilities you have created, by facility Category and Subcategory. To expand or collapse click the plus (+) or minus (-) symbols.

Facility Counts by Type

Facility Category	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Building	1	2	3	3	3	2
Grand Total	1	2	3	3	3	2

Assign a subcategory to these items					
Elementary Building					
Administrative Office					
Ames Juvenile Detention Facility					
Fire Station 6					
oreilly building					
Doiron Hall of Wisdom					
cushing					
College Department					
building 1					
Town Hall					
new stuff noot in baseline					
Wood Pellett Shed					

Enter a square footage for these buildings

Elementary Building Ames Juvenile Detention Facility Oreilly Building cushing building 1 Wood Pellett Shed test Jim B Facility - Police Station Maynard High Kennedy Service Building Broccoli Building Neals Police Station

### Your Turn:

### 1) Open up MEI in your browser

### 2) Go to your Table 2 Report

### 3) Check if you have any usage listed under "Null"

#### Annual Report Table 2 (MMBTU) Fiscal Year (July 1 start) 2008 Baseline

#### Please make sure that any data submitted to DOER contains complete Data!

The data in this table reflects the data in the Baseline. Buildings marked in MassEnergyInisight as "Exclude from Baseline" are not included in this dashboard. Please set the baseline year filter on the right to your baseline year and create a custom view so that this report always shows the correct data.

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Null	Use (MMBTU)			0		92					118	110	115	219
	% Difference from Baseline													
Building	Use (MMBTU)	18,279	18,632	18,707	20,264	20,639	21,019	21,319	21,579	21,810	22,018	22,207	22,382	23,254
	% Difference from Baseline	0.00%	1.93%	2.34%	10.86%	12.91%	14.99%	16.63%	18.05%	19.32%	20.45%	21.49%	22.45%	27.22%
Open Space	Use (MMBTU)	7	7	7	7	8	8	8	8	8	8	8	8	8
	% Difference from Baseline	0.00%	2.48%	4.21%	9.27%	12.04%	13.75%	15.29%	16.56%	17.72%	18.68%	19.67%	20.55%	21.35%
Vehicle	Use (MMBTU)													179
	AL D.M													

Thank you for coming!

Any Questions?