

Chargebacks Overview

EnergyCAP Version 7 chargebacks provide new features, are easy to configure and provide visibility into each step of the process. Chargebacks can be processed, for a single meter or bill, for multiple meters or bills from a list, and as part of a workflow. Two types of chargebacks are available: **bill calculations** and **bill splits**.

Bill Calculations

Bill calculations are configured at the meter level and allow use and cost to be calculated individually.

- Submeters
- Summary Meters
- Advanced Bill Creation

Configure

Use

- Readings from a channel*
- Fixed amount
- Copy use from another meter
- Summary (add and subtract meters)

Demand

- Channel readings (max value is used)
- Fixed amount

Cost

- Use x Meter's rate
- Use x Specific unit cost
- Use x Unit cost of another meter
- Fixed amount
- Copy cost from another meter
- Summary (add and subtract meters)

Additional Line Items

Meter charges

- Fixed Amount
- Percentage Amount
- Subtotal

Account-level charges

- Fixed Amount
- Percentage Amount

Process

A single meter

- Navigate to the Properties screen of the meter and select the Bill Calculations tab
- Click **Calculate Bills** button
- Set the billing period and year

Multiple meters

- In the Chargebacks module, select **Bill Calculations**
- Expand the tree to locate meters
- Select multiple meters
- Set the billing period and year

As part of a workflow

See reverse for more information

*Readings from a Channel

Hourly and daily readings can be automatically rolled up during bills calculations for use and demand.

Bill Splits

Bill splits are set up at the account level and split a bill to recipient meters.

- Static Percentage
- Dynamic Percentage
- Advanced Calculation



Configure

Static Percentage

- Are manually entered in to EnergyCAP
- Not required to total 100%
- If the total equals 100% the sum of the recipient bills will exactly match the master bill

Dynamic Percentage

- Based on building floor area
- Total of all recipient bills will be 100% of the source bill
- Weighting factor allows differences in energy utilization to be reflected across meters

Advanced Bill Split

- Distribute costs to groups of meters
- Select a meter group to receive bill splits
- Split use, cost or both from the master meter
- Determine how recipient share is allocated



Process

Single Bill

- Navigate to the Properties tab of the account
- Click **Split Bills** button
- Select the billing period and year

From a bill list

- In the Chargebacks module, select **Bill Splits**
- Select bills to split
- Click **Split selected bills** button

As part of a workflow

- See reverse for more information

Chargebacks Workflow

Workflow allows an organization to group together and run similar steps in a specified order. Workflow steps are visible and easy to reverse. Set up your workflow and steps once. Use the workflow each month to process chargebacks.

1. Review and determine if the step is ready to run.
2. Run each step of the process.
3. Review the results after each step.
4. Reverse steps and fix errors as needed.
5. Rerun steps.

Campus Chargebacks

Billing period: July 2020

Step not complete: 1 2 3 4 5

1 Calculate Steam Plant Output and Cost

Calculate steam plant output (submeter) and summarize cost from vendor bills on plant

Meter	This step	Jul 2020	Use	Jul 2019	Jun 2020	Unit Cost	Cost
Steam Plant	1 bill	1 bill	20,997.26 klb	4 %	11 %	\$ 7.704/klb	\$ 161,755.06

Bills created by workflow

Review created bills. Compare monthly totals to last month and last year.

Batch name: 20200717_165506_Calculation... 1 bill

Reverse step

comment: Bill list of created bills

2 Calculate Submeter Bills

Calculate use/cost on campus facilities with submeters

Meter	This step	Jul 2020	Use	Jul 2019	Jun 2020	Unit Cost	Cost
Classroom I	1 bill	1 bill	439.00 THERM	51 %	45 %	\$ 0.886/THERM	\$ 389.01
Classroom I	1 bill	1 bill	5,770.60 klb	6 %	14 %	\$ 7.704/klb	\$ 44,454.58
Classroom I	1 bill	1 bill	55.28 Kgal	1 %	19 %	\$ 22.903/Kgal	\$ 1,265.96
Gymnasium	1 bill	1 bill	16,254.00 kWh	3 %	5 %	\$ 0.120/kWh	\$ 1,957.76
Gymnasium	1 bill	1 bill	232.00 THERM	51 %	45 %	\$ 0.886/THERM	\$ 205.58

Download error spreadsheet

20200717_165514_Calculation... 20 bills 20 errors

Add a comment

Calculate step

3 Calculate Loss/Remainder from Steam Plant

Calculate the difference between the output and cost of the steam plant and the measured use at each downstream meter

Meter	This step	Jul 2020	Use	Jul 2019	Jun 2020	Unit Cost	Cost
Steam Rema							

Not calculated for July 2020

Split step

4 Redistribute Steam

True-up steam plant output to downstream steam meters

Meter	This step	Jul 2020	Use	Jul 2019	Jun 2020	Unit Cost	Cost
Student Unit	1 bill	1 bill	10,649.00 kWh	3 %	5 %	\$ 0.120/kWh	\$ 1,282.65
Student Unit							
Student Unit							

Bill is entered, step is ready to process

Not split for July 2020

Chargeback Log

Chargeback log lists each run of the chargeback engine, both manual and workflow processing steps.

Reverse step option is available if the step has not already been reversed.

Processed	Processed by	Workflow	Step	Billing period	Batch	Success	Errors	
Σ 04/02/2020 10:2	Mary Ann Hanlon	Monthly Electric Workflow	Combine Vendor Bills	March 2020	20200402_102209_	0 bills	1 error	ⓘ
> Σ 04/02/2020 8:35	Mary Ann Hanlon	Monthly Electric Workflow	Combine Vendor Bills	April 2019	20200402_083522_	0 bills	1 error	ⓘ
Comments available	David Ulmer	Monthly Electric Workflow	Split Submeter Bills to Facilities	March 2019	20191007_152809_	20 bills		ⓘ
10/07/2019 3:26	David Ulmer	Monthly Electric Workflow	Allocate Difference to Submeters	March 2019	20191007_152803_	3 bills		ⓘ
Σ 10/07/2019 3:26	David Ulmer	Monthly Electric Workflow	Calculate Submeters	March 2019	20191007_152749_	1 bill	0 errors	ⓘ
Σ 10/07/2019 3:26	David Ulmer	Monthly Electric Workflow	Calculate Submeters	March 2019	20191007_152631_	2 bills		ⓘ
Σ 10/07/2019 3:26	David Ulmer	Monthly Electric Workflow	Combine Vendor Bills	March 2019	20191007_152627_	1 bill		ⓘ
10/07/2019 3:26	David Ulmer	Monthly Electric Workflow	Split Submeter Bills to Facilities	February 2019	20191007_152615_	20 bills	0 errors	ⓘ
10/07/2019 3:26	David Ulmer	Monthly Electric Workflow	Allocate Difference to Submeters	February 2019	20191007_152615_	3 bills	0 errors	ⓘ
Σ 10/07/2019 3:26	David Ulmer	Monthly Electric Workflow	Calculate Difference Between Vendor	February 2019	20191007_152545_	1 bill	0 errors	ⓘ
Σ 10/07/2019 3:26	David Ulmer	Monthly Electric Workflow	Calculate Submeters	February 2019	20191007_152545_	3 bills		ⓘ
Σ 10/07/2019 3:26	David Ulmer	Monthly Electric Workflow	Combine Vendor Bills	February 2019	20191007_152540_	1 bill	0 errors	ⓘ

Manually processed chargebacks have no link to a workflow

Link to workflow

Link to batch and bills

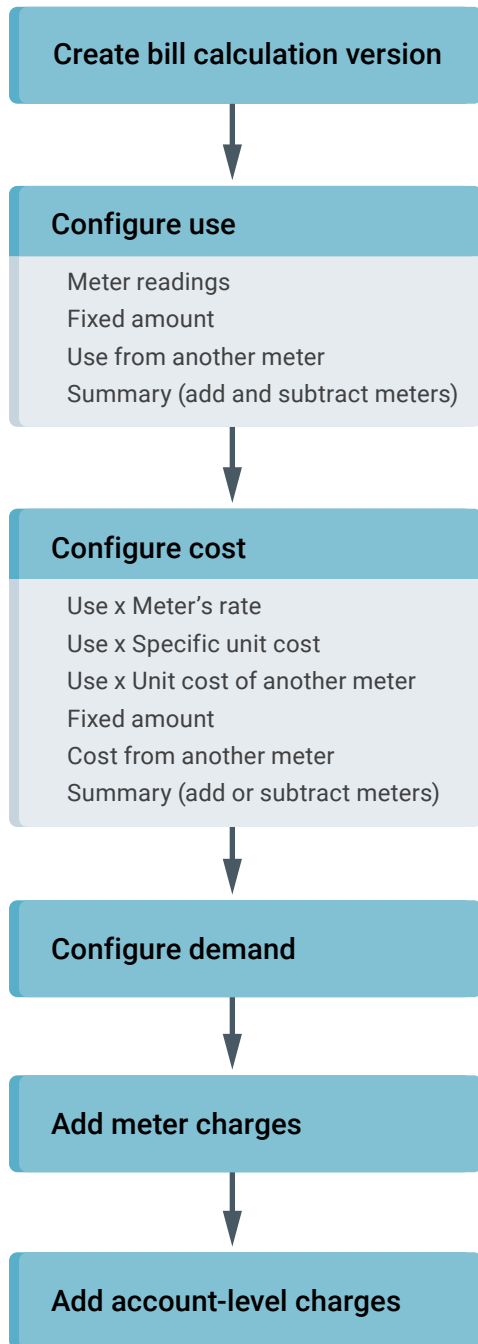
Download error spreadsheet

Add or edit comments

Reverse step

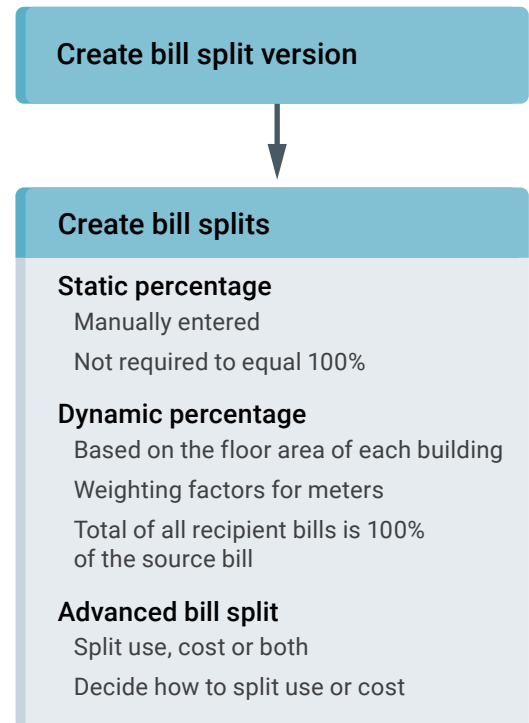
Bill Calculation

Submeters, Summary meters, Advanced bill creation



Bill Split

Static percentage, Dynamic percentage, Advanced bill split



Versions allow you to manage and update your chargeback calculations over time.

Bill Splits are set up in the Accounts module.

Bill Calculations are set up in the Buildings and Meters module.