



**Better
Buildings[®]**
U.S. DEPARTMENT OF ENERGY

Accelerating Access to Energy Data

Better Buildings Summit

May 10, 2016, 3:45 – 5:00 pm

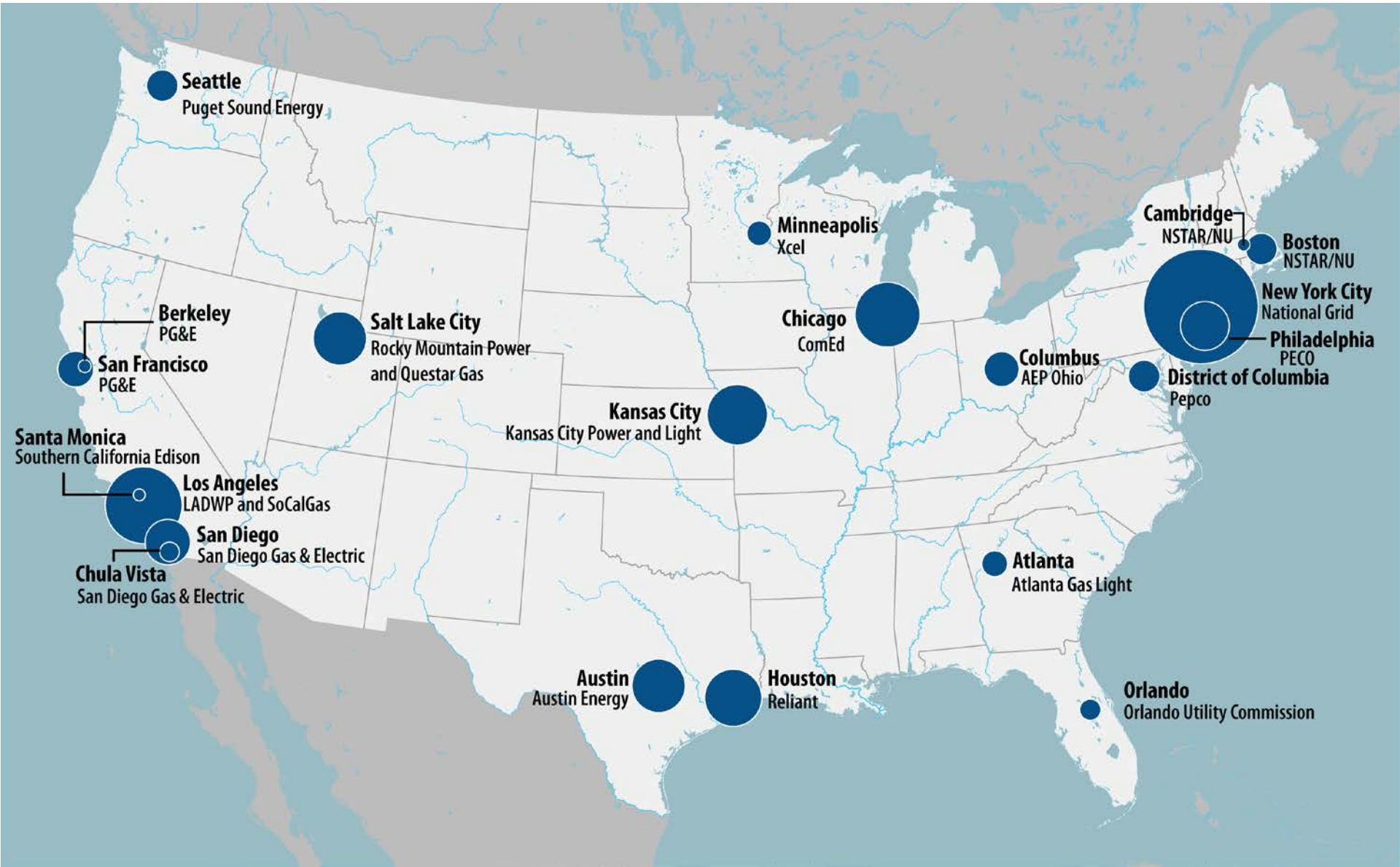
Agenda

- Energy Data Accelerator Overview
- Presentations
- Moderated Q&A
- Audience Q&A

Today's Presenters

- Andrew Burr, U.S. DOE
- Drew Quirk, Xcel Energy
- Kevin Emerson, Utah Clean Energy

Energy Data Accelerator





Accelerator Outcomes

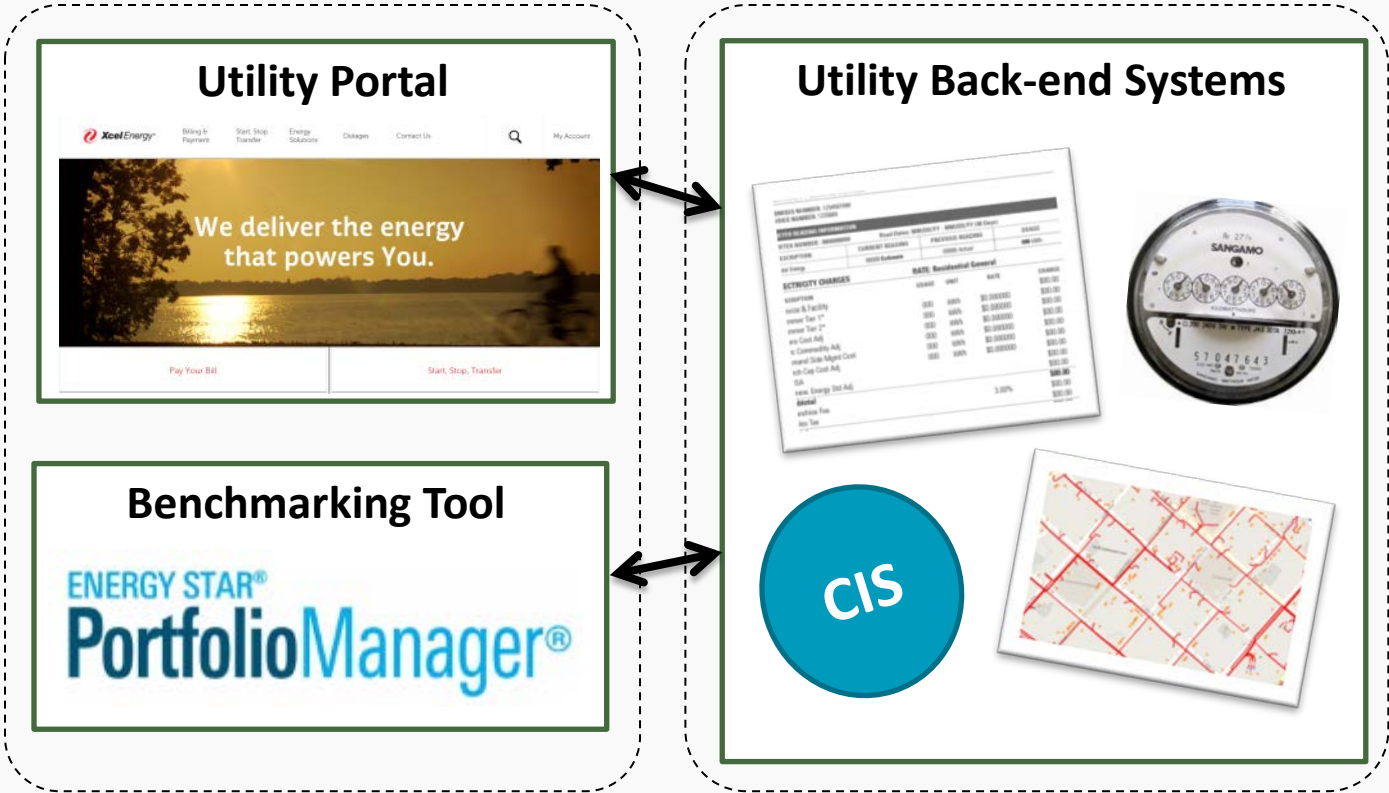
- Eighteen utilities serving 2.6 million commercial customers to provide whole-building energy data to property owners by 2017
- Publication of Energy Data Accelerator Toolkit to share resources and best practices, and support replication
- U.S. EPA to add ENERGY STAR Awards category for utility data innovation in 2017
- Carry-forward commitments from 6 organizations: ACEEE, IMT, NMHC, NRDC, USDN, USGBC



WHOLE-BUILDING
BENCHMARKING WITH
XCEL ENERGY

Drew Quirk – Product Developer

HOW XCEL ENERGY IS SUPPORTING ENERGY BENCHMARKING

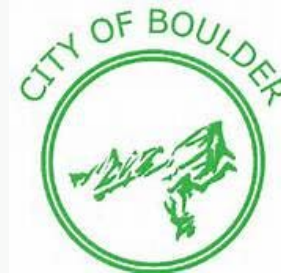


HOW WE GOT THERE

- Collaboration with Key Stakeholders critical to success
 - Create good policy
 - Galvanize support internal to utility
 - Solution designed for success



Minneapolis
City of Lakes

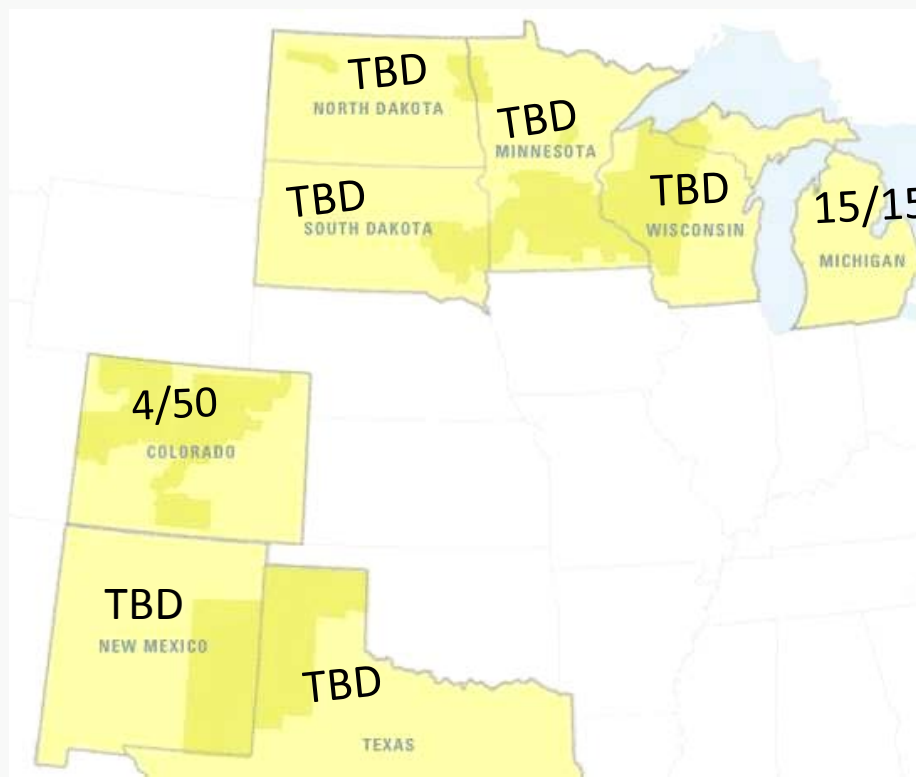


DENVER
THE MILE HIGH CITY



- Data Privacy Protections
- Integration with Portfolio Manager
- Integration with Customer Information Systems

- Privacy policy with regard to data privacy for whole-building data is not consistent across the country



CURRENT DESIGN RELIES ON STANDARDIZED POLICIES

- Property Owner Verification
 - Ensure requestor has a relationship with the building owner of record
- Aggregation Rule of 4/50
- Tenant Consent via standard form where required



WHY PORTFOLIO MANAGER?



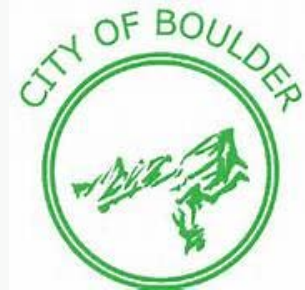
- Industry standard for energy managers who benchmark
- Cities and states with benchmarking policies are unanimously using it



Minneapolis
City of Lakes

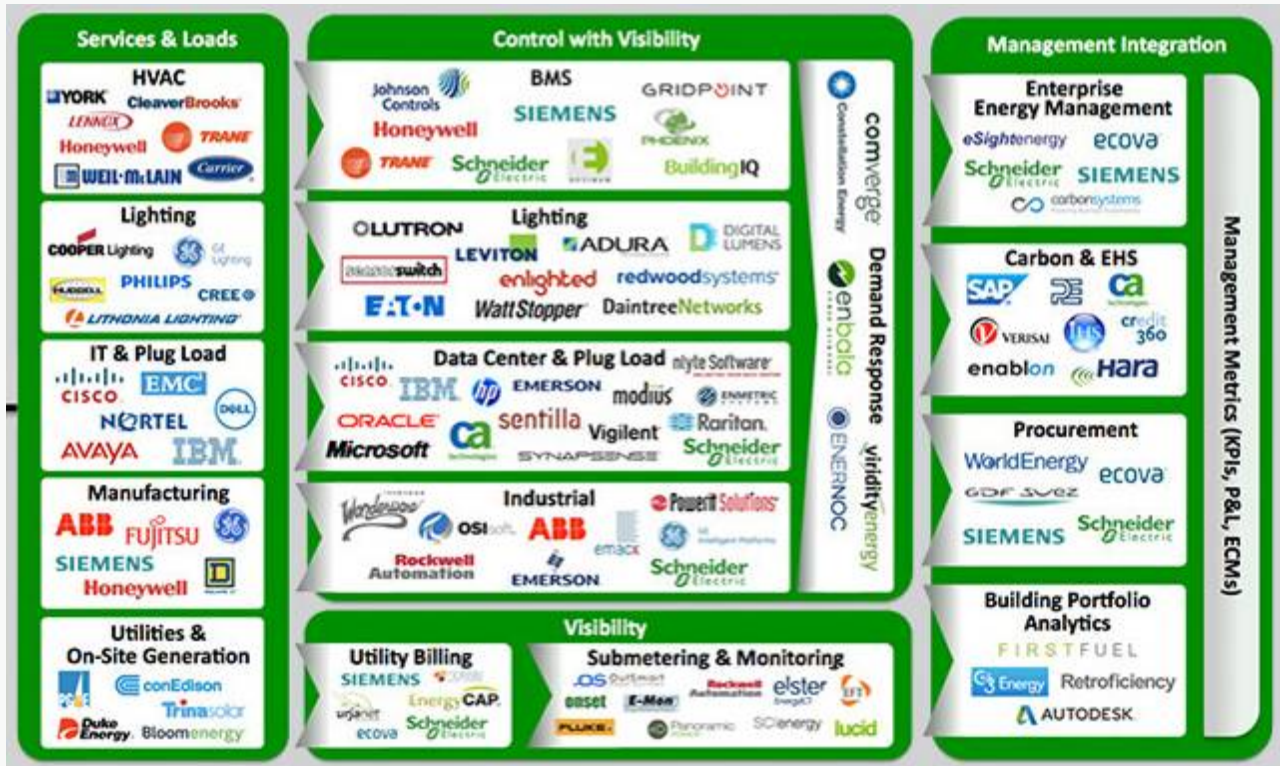


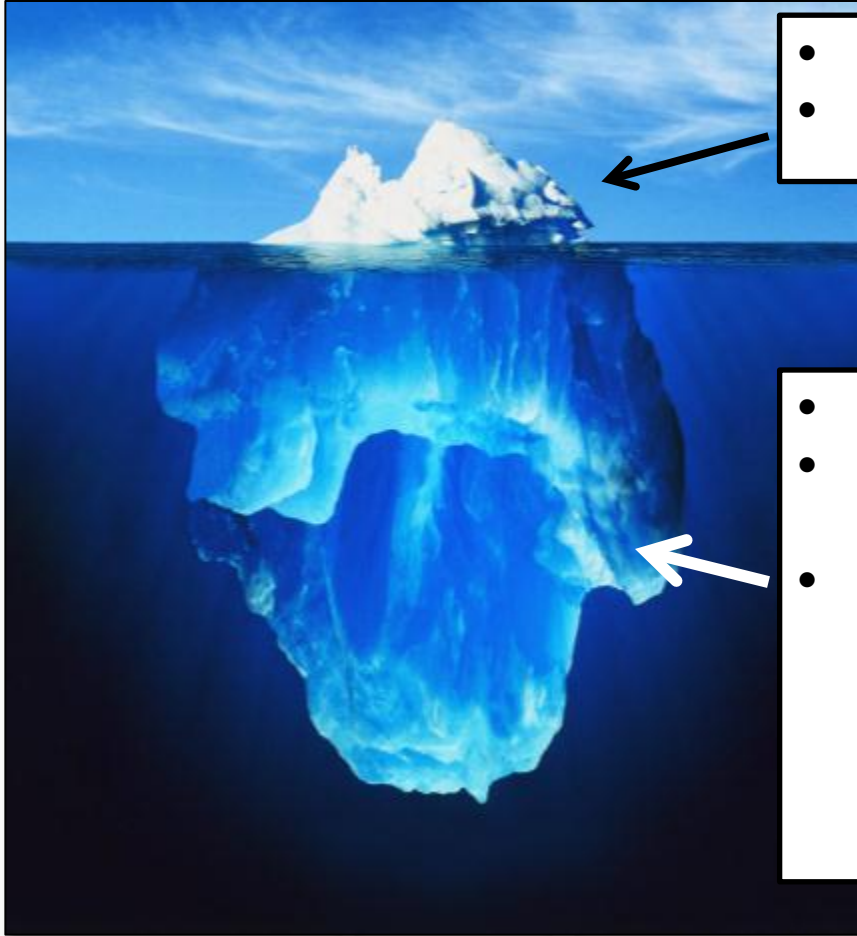
DENVER
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WHY PORTFOLIO MANAGER?

- Open data exchange protocol has many applications





- Customer and community satisfaction
- Cost efficiencies relative to manual practices

- New valuable customer touchpoint
- Receive high-quality data about buildings, leading, and an ability to better serve customers
- Advanced analytics energy program platform
 - Virtual Audits
 - Continuous Commissioning
 - Demand response, dynamic pricing
 - Storage and renewables

THANK YOU





Partnering with Stakeholders to Support Energy Data Access in Salt Lake City

Kevin Emerson, MSc, LEED GA
Senior Associate



Better Buildings Summit

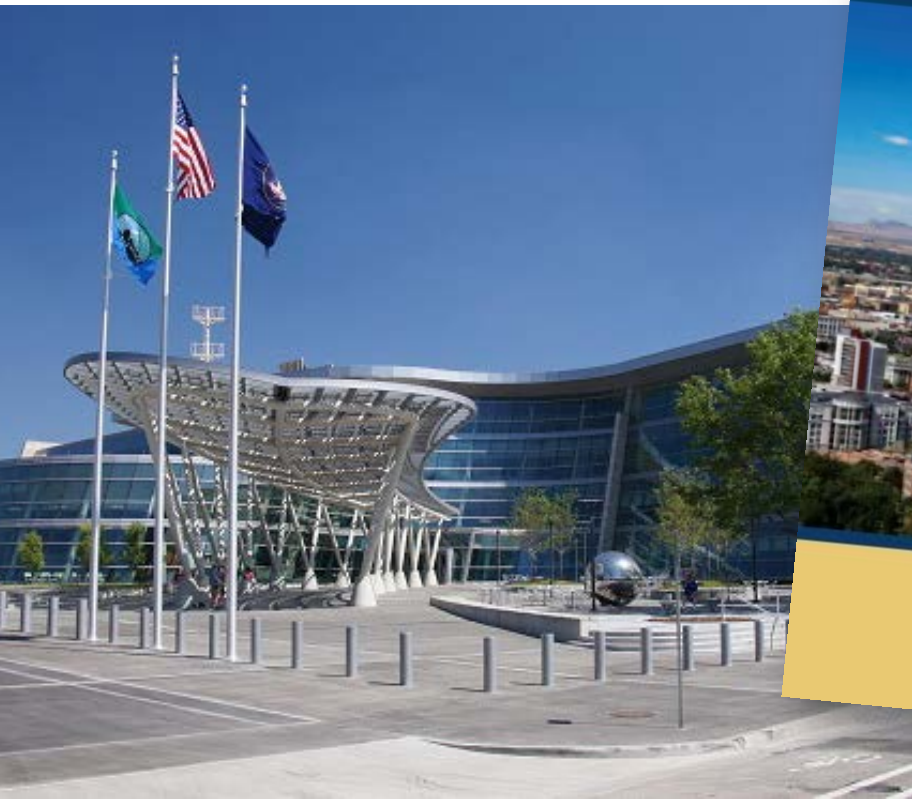
May 9–11, 2016 ■ Washington, D.C.



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UTAH ENERGY EFFICIENCY & CONSERVATION PLAN

Preparing for Utah's Energy Future



2014

But making large buildings across Salt Lake City more energy efficient directly contributes to cleaner air **while also improving the financial bottom line for building owners.**

It could help remove over 1 million pounds of pollutants – equivalent to taking more than **32,000 vehicles off the road for 1 year**



32,000 CARS

We'd also prevent over **650 million pounds of CO₂** from entering the atmosphere each year...

Utility Bill

**ROCKY MOUNTAIN
POWER**

Questions about your bill: 1-888-221-7070
Call toll free 24 hours a day, 7 days a week
www.rockymountainpower.net

PAGE 1 OF 2

BILLING DATE: Feb 6, 2013
ACCOUNT NUMBER:
DATE DUE: Feb 22, 2013
AMOUNT DUE: \$136.90

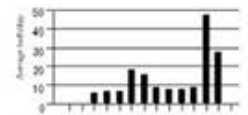
Your Balance With Us

Previous Account Balance	171.80
Payments/Credits	-71.80
New Charges	+36.90
Current Account Balance	\$ 136.90

Payments Received

DATE	DESCRIPTION	AMOUNT
Feb 6, 2013	Payment Received - Thank you	71.80
Total Payments		\$ 71.80

Historical Data - ITEM 2



Your Average Daily kWh Usage by Month

PERIOD ENDING	FEB 2013	FEB 2012
Avg. Daily Temp.	22	27
Total kWh	360	0
Avg. kWh per Day	28	0
Cost per Day	\$2.84	\$0.00

Detailed Account Activity

ITEM 2 - ELECTRIC SERVICE

1104 W 2ND St Lot 23 Lander WY
Residential Rv Park - Schedule 2

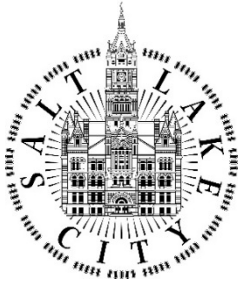
METER NUMBER	SERVICE PERIOD From To	ELAPSED DAYS	METER READINGS Previous Current	METER MULTIPLIER	AMOUNT USED THIS MONTH
66099285	Jan 23, 2013 Feb 5, 2013	13	4327 4687	1.0	360 kWh

NEW CHARGES - 40/13

	UNITS	COST PER UNIT	CHARGE
CLOSING CHARGES			
Basic Charge - Single Phase for 13 day(s)			8.67
Energy Charge Block 1 for 13 day(s)	217 kWh	0.0040000	0.87
Energy Charge Block 2 for 13 day(s)	143 kWh	0.0105500	1.51

Customer will be responsible for reasonable costs associated with collection of unpaid accounts, including but not limited to: court costs, attorney's fees and a collection agency fee.

**ROCKY MOUNTAIN
POWER**
A DIVISION OF PACIFICORP



Key activities:

- Kick-off workshop
- In-person meeting with utility staff
- Letter of support to utility
- DSM Advisory Group meeting
- Stakeholder updates



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Understand Your Bill

Your Energy Data

Energy Profiler
Enrollment

Energy
Benchmarking

Your Electricity
Charges

Blue Sky Renewable
Energy

Rates & Regulation

Payment & Billing Options

Power Outages

Streetlights

If your business is wattsmart, we've got a sign for you. [More](#)

Energy

Track your business energy usage with Rocky Mountain Power's historic electricity Resource Advisor transfer on a Manager@.

Requesting

Click on any of the following links:

- STEP 1: Usage Data
- STEP 2: Usage Data
- STEP 3: Usage Data
- STEP 4: Usage Data
- STEP 5: Usage Data

Salt Lake City

By participating in the Better Buildings Energy Data Accelerator, building owners can play an important role in creating a cleaner skyline and local jobs.

Tools and Resources

Frequently Asked Questions

Step-by-Step Guide to Portfolio Management

Resource Center

Property Information

Tenant Data

Terms and Conditions

U.S. DEPARTMENT OF ENERGY

Recognizing leadership and innovation as part of the Better Buildings Energy Data Accelerator

Salt Lake City, UT

In partnership with Rocky Mountain Power

Presented by the U.S. Department of Energy
January 28, 2016

Dr. Kathleen Hogan
Deputy Assistant Secretary of Energy Efficiency

U.S. DEPARTMENT OF
ENERGY

Thank you!

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www.utahcleanenergy.org



STOP
ENERGY WASTE



CREATE
CLEAN ENERGY



BUILD
A SMART ENERGY FUTURE

Case Study: Salt Lake City Stakeholder Engagement Process

<http://betterbuildingsolutioncenter.energy.gov/toolkits/energy-data-access-blueprint-action>

Better Buildings
U.S. DEPARTMENT OF ENERGY

Salt Lake City Stakeholder Engagement Process
ENERGY DATA ACCELERATOR

Introduction
Better Buildings Energy Data Accelerator (BBEDA) partners Salt Lake City, the investor-owned electric utility Rocky Mountain Power (RMP), and the investor-owned natural gas utility Quasar worked with community stakeholders throughout 2014 and 2015 to design and implement a data access solution. As a result, RMP created a data access portal for its customers in 2016, and Quasar is working toward a data access solution that will be operational by 2017.

Drivers for Energy Data Access
Public and private sector-led efforts to encourage building energy benchmarking in the Salt Lake City area grew significantly over the past few years. Benchmarking was a key strategy in several initiatives, including the State of Utah's Energy Efficiency and Conservation Plan, Salt Lake City's Project Skyline, and the Kilowatt Crackdown program launched by the Building Owners and Managers Association Utah chapter.

Local real estate owners cited the need to access whole-building energy consumption data to conduct benchmarking and participate in these initiatives. Responding to this need, Salt Lake City officials, along with a local nonprofit organization, Utah Clean Energy, began a process to identify and convene stakeholders to develop solutions, working in close coordination with Rocky Mountain Power and Quasar.

Stakeholder Engagement Process Timeline

- August 2013**: Utah Governor launched a stakeholder driven process to create the Utah Energy Efficiency and Conservation Plan.
- May 2014**: Salt Lake City launched Project Skyline, a collection of initiatives to reduce wasted energy in buildings, as part of the Mayor's Sustainable Salt Lake Plan 2015.
- June 2014**: Salt Lake City & Utah Clean Energy organized a formal workshop on building energy benchmarking.
- January 2015**: BOMA Utah launched the Kilowatt Crackdown, a local voluntary competition to reduce energy use over time.
- February 5th 2015**: Salt Lake City Mayor Becker issued an Executive Order to increase energy efficiency at city facilities.
- February 24th 2015**: Salt Lake City organized a workshop to educate stakeholders about Whole Building Energy Data Access.
- March 2015**: RMP initiated a plan to implement a whole-building data access solution during a DSM steering committee.
- September 2015**: RMP launched Resource Advisor as a whole building data access tool for customers.

Solutions

Issue	Solutions
Used data for operational	Utah Clean Energy and City officials convened meetings to clarify the expectations and objectives of a whole-building data access solution.
the	Utah Clean Energy and City officials discussed data aggregation practices that help protect tenant privacy. Building owners were comfortable with an aggregation threshold of 5 or more tenants.
cost of provide	The utilities discussed their customer privacy concerns with peer BBEDA utilities and were comfortable with an aggregation threshold of 5 or more tenants.
owners	The utilities determined that they would work with a vendor to develop data access solutions, rather than use in-house IT resources, and that development costs could be covered with DSM budgets.

Stakeholders and their key needs related to data

Stakeholder Engagement Process Timeline

Learn more at www.energy.gov/buildings/betterbuildings/accelerators/energy.html

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Discussion

Thank you!

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