

Emergency Energy Management: San Bernardino's part-time energy manager is helping the cash-strapped municipality out of a fiscal crisis

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Summary

In 2012, four California cities declared a fiscal emergency and/or filed for bankruptcy. Under that gloomy economic cloud, the City of San Bernardino offers a silver lining—the story of how one account technician seized opportunities to save money on the City's energy consumption.

The Need

Susan Davis is a Departmental Accounting Technician who has worked for the City of San Bernardino, California since 2002. She was originally hired as an accounting clerk, and after several promotions, she now serves as a departmental accounting technician, responsible for managing and paying the City's utility bills.

But lately, her workload has increased dramatically. In August 2012, San Bernardino declared a state of fiscal emergency and filed for bankruptcy protection. A reduced staff necessitated that Davis take on management of fleet, integrated waste, and operation maintenance. With two electric companies, two water companies, a gas company, and nine months of backlogged energy bills for the City's energy management software, San Bernardino needed a way to stop paying late fees.

Davis' introduction to energy management was essentially trial-by-fire: "When I got there, they said, 'Here's a desk full of bills. Please start loading them,'" Davis said. "My supervisor was let go two weeks after I was hired; I had to figure it out myself."

For city governments in dire financial straits, savings comes in many forms. Reducing spending is always a priority, but saving time is a close second. Every hour that Davis spends on energy management is an hour that could be spent on other important areas she oversees. Davis is looking forward to diverting the hours she spends manually entering bills towards other more productive, energy saving projects.



Description: In 2012, the City of San Bernardino (population 210,000) declared itself in a state of fiscal emergency, filing for bankruptcy on August 1. [<http://www.ci.san-bernardino.ca.us>]

EnergyCAP Installation: The City of San Bernardino had been using FASER Energy Accounting since 1998, but upgraded to EnergyCAP in late 2010.

Tracking: 142 buildings including 12 fire stations, 4 libraries, 2 senior centers, a police headquarters, minor league baseball stadium, and a mall. The City tracks about 3,500 energy meters. Between 2,000 and 3,000 utility bills are entered by hand every month.

The Solution

Davis needed utility bill management software that made it easy to enter a large amount of bills, since the City of San Bernardino receives almost 3,000 utility bills a month. Davis also needed software that could provide historical information for more than 10 years, so she could demonstrate eligibility for grant monies for future energy saving initiatives. Fortunately for Davis, the City's EnergyCAP energy management software perfectly fit the bill.

Up and Running

With only a few hours of EnergyCAP training, and with about 30 hours of implementation consultation, Davis was up and running, manually entering bills into the software and sending bill batches to the Accounts Payable department. She credits the EnergyCAP sales and implementation solutions staff with her graceful transition into energy management.

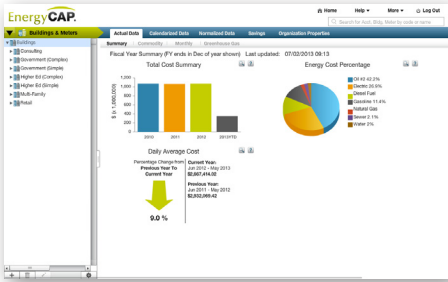
That's not to say it was a simple task—Davis had nine months' worth of backlogged bills that needed to be entered manually into the software. She worked nights and weekends to enter thousands of invoices, because she knew that just being able to see the data would result in savings. She was right.

Almost immediately, Davis was able to identify City facilities that were wasting electricity and water. In one instance, Davis discovered that a pump system for a public lake was malfunctioning. Instead of receiving a bill for about \$500 a month, San Bernardino was getting billed \$15,000. The pump had been broken for two months before Davis found the error. The system was flagged for an incident follow-up, and a worker was dispatched to fix the problem. The repairs cost about \$50,000—about what the City would have poured into water payments every three months. These kinds of mistakes can get lost in the shuffle when your organization is short-handed and you're paying thousands of bills each month.

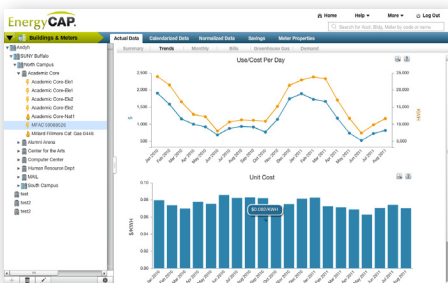
Finding Funds

Not only has Davis saved the City money through energy management; she started helping the City make money too. Davis has been able to creatively fund energy savings projects by leveraging her City's utility bill history. Using EnergyCAP, Davis can demonstrate responsible and effective energy management with powerful graphs and charts.

At the beginning, Davis' "energy plan" was simply to identify outrageous bills and then try to figure out what was going wrong. But as she gained experience, her strategy became more sophisticated. By aggregating accurate numbers for the City's electric bills, Davis was able to apply for and receive a \$375,000 grant to retrofit city lights.



The screenshot shows the 'Bill Entry' form in the EnergyCAP software. The form is divided into several sections. The 'Account' section includes fields for 'Account Number', 'Account Period', and 'Pay Amount'. The 'Address' section includes fields for 'Address', 'City', 'State', and 'Zip'. The 'Billing Period' section includes fields for 'Start Date', 'End Date', and 'Billing Period'. The 'Meter' section includes fields for 'Meter Number', 'Place Name', and 'Serial Number'. The 'Status' section includes a dropdown menu for 'Status'. The 'Total Cost' section includes a field for 'Total Cost'.



Davis has found funding for other projects as well. Recently, the City's Parks and Recreation Department was awarded \$248,000 for a program that helps bring food to seniors and homeless people in the San Bernardino area. A critical component of the grant application was the applicant's ability to effectively present utilities information for the location. The grant donor funded the program based on the utility bill history that Davis was able to provide.

Currently, Davis is looking for funding to fit street lights with LED bulbs and power them with solar power. She's using EnergyCAP to show energy use for the last 10 years, and she's generating custom comparisons charts to show the savings of lower wattage bulbs. "If I'd have done it the long way," said Davis—meaning, without EnergyCAP software, "I'd have been pulling my hair out." Thankfully, Davis still has her hair.

Granting Data Access

As a part-time energy manager, Davis is pulled in many directions and can only devote between 18 and 20 hours a week to energy-related tasks. For her, sharing utility bill data is a great way to save time.

Once, when a consultant asked Davis to run 50 to 60 reports (a significant addition to her already heavy work load), she was able to save time and money by granting the consultant view-only user access to EnergyCAP. This enabled the consultant to access needed information, but restricted him from making changes to the data.

"One of these days, I'll have an assistant again, but that doesn't look like it will happen for quite a while," says Davis. In the meantime, she can continue to grant customized user permissions as needed on an ad hoc basis.

Next Steps

Davis plans to use future grant funding to expand energy efficiency programs in San Bernardino. As she obtains funding, she also plans to add modules to her EnergyCAP software package.

For example, after hand-keying the utility bills that come across her desk (as many as 3,000/month), she sends a daily CSV file to the accounting department for payment.

But she would like to set up an interface to the City's Accounting System that matches existing accounting procedures. This would save time while ensuring a more efficient bill pay process.

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Conclusion

Susan Davis wears many hats as an employee of the City of San Bernardino, California. She's pulled in many different directions, and since the City lacks the personnel to build an energy management team, she is solely responsible for processing the thousands of utility bills that come to the City every month.

But that has not stopped her from becoming an effective energy manager.

Using EnergyCAP, Davis was able to dive head-long into the overwhelming task of logging almost 3,000 bills per month. And she was able to quickly reap the benefits of immediate savings by seeing an accurate picture of the City's utilities profile. Not only has Davis saved tens of thousands of dollars, but she has generated funds for energy projects, using EnergyCAP charts and spreadsheets to demonstrate that the City of San Bernardino is a worthy recipient of grant money.

Some of that grant money will go directly to energy savings initiatives, and Davis plans to continue to invest in EnergyCAP by adding modules that will enable her to save even more time and valuable energy resources.

Acknowledgement

Thanks to Susan Davis, Account Technician for the City of San Bernardino, California, for her assistance in preparing this case study.



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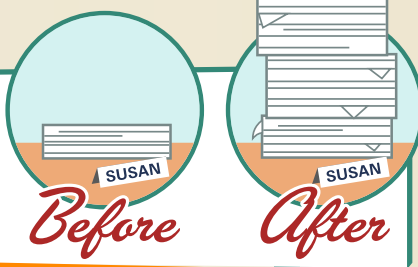
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SAN BERNARDINO

Out Of A Fiscal Crisis

Susan Davis

serves as San Bernardino's Departmental Accounting Technician, responsible for managing and paying the City's utility bills.



DAVIS TOOK ON
MANAGEMENT OF:

INTEGRATED WASTE
FLEET
OPERATION MAINTENANCE

AFTER THE CITY FILED FOR BANKRUPTCY PROTECTION, HER WORKLOAD INCREASED DRAMATICALLY.

With **2**
ELECTRIC
companies

TWO
Water
COMPANIES

a
GAS
company

and 9 months of backlogged
ENERGY BILLS,
San Bernardino needed a
way to stop paying late fees.

DAVIS NEEDED
utility bill management software
that made it easy to manually enter

3,000
monthly utility bills

FORTUNATELY FOR DAVIS,

Energy**CAP** fit the bill.

and saved
them money,
too!

Almost immediately, City facilities
that were wasting electricity
and water were identified.

DAVIS HAS BEEN ABLE TO
creatively fund energy savings projects
by leveraging the City's utility bill history.

By aggregating
ACCURATE NUMBERS
for the City's electric bills,

Davis was able to apply for & receive a

\$375,000

grant to retrofit city lights.

The City tracks about **3,500** energy meters and **142** buildings including:

12
FIRE STATIONS

2 Senior Centers

a mall

4 LIBRARIES

police
headquarters

minor league
baseball stadium

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