2011 SENATE POLITICAL SUBDIVISIONS

SB 2296

2011 SENATE STANDING COMMITTEE MINUTES

Senate Political Subdivisions Committee
Red River Room, State Capitol

SB2296
February 7, 2011
14023

☐ Conference Committee

Committee Clerk Signature	

Explanation or reason for introduction of bill/resolution:

Relating to an energy usage database for public buildings.

Minutes: You may make reference to "attached testimony."

Senator Andrist: Opened the committee hearing on SB2296, relating to an energy usage database for public buildings. All members present.

Senator Laffen: District 42. Sponsor and in support of SB 2296. See written testimony.

Senator Andrist: The mandate would not extend, as I understand it, to political subdivisions?

Senator Laffen: That's correct. Senator Andrist: it would provide an option for them to plug into if they wanted to? Senator Laffen: That is absolutely correct.

Senator Lee: But that isn't what the first sentence says, so, I wonder if we just need to be assured that it doesn't, if it says each public building. Maybe, we need to look at saying each state building. **Senator Laffen**: The intent was to mandate this for our own state buildings. **Senator Lee**: Right. **Senator Laffen**: but make it optional for everybody else. **Senator Lee**: Everybody could, is what you're telling me. We have a lot of state buildings heated by coal and there isn't. I recognize the water and natural gas and electricity consumption, but is there any benefit to overseeing what's going with the facilities who heat with coal, because that is ton of state buildings? **Senator Laffen**: That is a good question. I don't know that we have any coal heated buildings left that have their own individual coal facility within them. The only ones that I think that are left, are heated by coal at the central plant. I think the idea of the database is to let the department figure some of those details out, but we just want to track the BTU's basically that they use. We can still gather data even if its' using coal. **Senator Dotzenrod**: Your bill calls for measuring the consumption of these energy inputs, to really determine what buildings are good and which ones aren't so good. This must be a term from your profession, energy hog. I would've thought energy like most inefficient users of electricity or something, but I can relate to that. Is it by square foot? Is that how you end up measuring one building against another or against some standard? It would not be just consumption but would have to be based on the cubic feet or the volume of air in the building or square feet of the footprint of the building or some

measure that way. **Senator Laffen**: That is exactly right. The database would have to include wither cubic feet or square feet, so that we could have some measure of the efficiency of that building. I didn't include this in the bill; I sort of assumed the people who put this together will figure that out.

Senator Olafson: The energy usage is already being tracked so this shouldn't be a major headache for those who are in charge of these energy needs in our state buildings to provide this information. Have you looked in to that at all? **Senator Laffen:** Every building gets a bill or at least, has a way of tracking each one of their usage, so that is the intent to keep it simple. It can be traced from their meter for from their bill. I haven't written into this whether each agency would provide that data into an on-line database on their own. I think the dilemma will be in trying to sort that out. If they require each agency to just enter themselves, they'll become a policing agent to try and get that from them. The idea is to keep it simple, as simple as they can figure out how to do it. **Senator Andrist:** One of the things I want to examine is how much is going to cost to do this?

Kim Christianson, Vice-Chair of the North Dakota Alliance for Renewable Energy. Supports SB2296. See written testimony.

Al Christianson, representing Great River Energy. We are in support of this bill SB2296. If you don't know what's happening, you won't know where to go. For somebody that sells electricity for a living, you would think I would like energy hogs, but, again, the cheapest megawatt that a power plant has is the one we don't have to build. In our own case, we've take the energy efficiency of Coal Creek Station from 13% of the power we use when we started in 1979; we're down to 8%. That difference is the total amount of electricity used by Bismarck, Mandan 24/7, 365, days a year. That power is now going out on the grid because we're not using it because we've done energy efficient things. It's a minor amount of money to be spent to find out where we need to go. With this you can track what you've done, we do it at the power plants, at home, and it's the right thing to do.

Harlan Fugleten: Representing the North Dakota Association of Rural Electric Cooperatives. We stand in support of SB 2296. We also support the companion bill which is 2299 which would establish this revolving loan fund. My main purpose today is to bring along someone who is an expert on data management as it applies to information technology and energy management systems. We have here in North Dakota probably one of the leading, if not the leading company in the nation when it comes to energy management information and that is the National Information Solutions Cooperative (NISC) which is part of the campus that we have our offices in Mandan.

Tracy Porter: Chief Financial Officer for NISC, in support of SB2296. We are a software developer. The software we develop is used by the rural electrics and rural telephone companies all across the country. What our tools does, its' not just a database of numbers. It's a full energy management tool that has components like benchmarking, so you can benchmark like facilities against each other. We are interfaced directly into the EPA Energy Star. We would hope that you wouldn't tie this bill directly to developing something new, because we think something exists today at NISC that could be used to help the state manage their facilities. (Colored handout #4 on J.C. Penney's Energy Star rating).

Senator Andrist: According to the information a lot of this effort is being made of course to reduce energy consumption. Of course energy use continues to grow. Are we slowing it any or what's the increase in our use of energy? I've been told for instance that the goal of wind power is primarily been to take care of our growing demand, you can't ever displace what we've got and I am just wanting to get your comments in regard to overall energy trends?

Tracy Porter: People are definitely using energy more efficiently. There's no question. There is awareness out there, they are doing lighting retrofits, their setting their cooling and heating at low temperatures or higher temperatures for cooling, but we're also using more devices that require electricity. So there is a little bit of a balance there where we are being more energy aware but we have more devices that use energy. **Senator Andrist**: Do you have any information on the growth rate of energy consumption? **Tracy Porter**: For our individual customers we certainly could. I'm probably not in a position where I could disclose that for them. I can tell you and answer your question by saying yes, they are saving energy. Another huge awareness initiative right now is what they refer to as Smart Meter technology. That's where they can read the meter every 15 minutes and then pass it electronically to someone at NISC and we can compare the data more accurately. This helps the company track their energy usage more accurately. (Example given).

Dave McFarlane: McFarlane Inc., Grand Forks, North Dakota. In support of SB2296; see written testimony and handout #4.

Senator Olafson: Give us some sense of the things you do in a building once you've identified an energy hog. What are some of the common changes you suggest? Dave McFarlane: We tune the mechanical system. Typically when engineers design buildings they want to be safe. They do not want to have a building that does not heat, or does not cool, so they add 20% fat just to be safe. Well that 20% has a tendency of causing inefficiency. We look at air vents for heat and cold and determine which one is heating and cooling and fighting with each other. We tune it so they come in unison. What we do is that we rid the building of those oscillation problems. We bring the code required amounts of fresh air. (Example given). It's a very sophisticated re-engineering of the building to make it work properly.

Heather Jones: Owner of City Air Mechanical, in support of SB2296. She also stressed the importance of this bill. This opens a big opportunity not only for the state to save some money on energy efficiencies but for small businesses such as mine who employ just 30 people in Bismarck to go in and make a vast improvement. I think it offers a big opportunity for us as well.

Scott Rising, representing the North Dakota Soybean Growers Association, in support of SB2296. The identification of who might consume the most energy in state government with the opportunity to reduce that budget attracts us.

No one came forward in opposition of SB2296.

Laura Glatt North Dakota University System spoke in a neutral position for SB2296. She stated the campuses have done energy efficiency savings projects over the last several

years. She is asking for some latitude in this bill, as it would be impossible to track each individual building on the campus when they are not metered separately. (Examples given). We ask for your consideration for some amendment that would limit the requirement to only those where we can meter. Certainly we would be more than happy to meter, if we could.

Russ Buchholz, IT Director for the Department of Transportation, spoke in neutral testimony for SB2296. The fiscal note only addresses the on-line database as well as the maintenance side of the house. The fiscal note does not address basically the time or resources for obtaining the requested information nor does it really define a public building.

Senator Andrist closed the committee hearing on SB2296.
Committee Discussion Followed.

Senator Laffen' intent of this bill was to create the idea of making a database to track the energy usage for state buildings. **Senator Lee** had concerns in monitoring each building individually, the cost involved to do this on the college campuses. **Senator Olafson** expressed concerns because the bill did not clarify specifically public buildings. He asked if this was included in the bill. Do we make it mandatory at this time? **Senator Lee** stated perhaps a task force and delaying the implementation date would enable the stakeholders to do it as they are able to finance the meters to collect the data. **Senator Andrist** asked the committee to amend the bill with language that is specific for the intent of the bill.

Senator Lee: Moved to amend
Senator Dotzenrod: 2nd
5 Yeas, 0 No, 0 Absent
Unanimously adopted

Senator Lee: Move Do Pass as Amended and Refer to Appropriations
Senator Olafson: 2nd
5 Yeas, 0 No, 0 Absent
Carrier: Senator Laffen

FISCAL NOTE

Requested by Legislative Council
02/08/2011

Amendment to: SB 2296

1A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

	2009-2011 Biennium		2011-2013 Biennium		2013-2015 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
Revenues						
Expenditures			$40,000		$20,000	
Appropriations						

1B. **County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

2009-2011 Biennium			2011-2013 Biennium			2013-2015 Biennium		
Counties	Cities	School Districts	Counties	Cities	School Districts	Counties	Cities	School Districts

2A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

This bill requires the Office of Renewable Energy and Energy Efficiency to create and maintain a database to track the energy usage of all state-owned buildings that is or can be separately metered within budget constraints.

B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

Section one requires the Office of Renewable Energy and Energy Efficiency to create and maintain a database to track the energy usage of all state-owned buildings that is or can be separately metered within budget constraints. Costs associated with this database would include development and maintenance costs. This fiscal note reflects the costs associated with the development and maintenance of the database and does not reflect the costs for state entities to comply with providing the information.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*
   A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

None.

B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

It is anticipated that the database would cost $40,000 during the 2011-13 biennium, including upfront costs associated with the development of an online database. Future cost of maintenance of the database is estimated at $20,000 per biennium. The Department of Commerce would contract with a vendor for development and maintenance of the database.

Additional expenditures would be incurred by the state entities responsible for providing the information for the database. These compliance costs are unknown.

C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and*

appropriations. Indicate whether the appropriation is also included in the executive budget or relates to a continuing appropriation.

No appropriations were included in this bill nor were they included the executive budget.

Name:	Justin Dever	**Agency:**	Department of Commerce
Phone Number:	328-7258	**Date Prepared:**	02/09/2011

FISCAL NOTE

Requested by Legislative Council
01/24/2011

Bill/Resolution No.: SB 2296

1A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

	2009-2011 Biennium		2011-2013 Biennium		2013-2015 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
Revenues						
Expenditures			$40,000		$20,000	
Appropriations						

1B. **County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

2009-2011 Biennium			2011-2013 Biennium			2013-2015 Biennium		
Counties	Cities	School Districts	Counties	Cities	School Districts	Counties	Cities	School Districts

2A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

This bill requires the Office of Renewable Energy and Energy Efficiency to create and maintain a database to track the energy usage of all public buildings.

B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

Section one requires the Office of Renewable Energy and Energy Efficiency to create and maintain a database to track the energy usage of all public buildings. Costs associated with this database would include development and maintenance costs.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*
   A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

None.

B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

It is anticipated that the database would cost $40,000 during the 2011-13 biennium, including upfront costs associated with the development of an online database. Future cost of maintenance of the database is estimated at $20,000 per biennium. The Department of Commerce would contract with a vendor for development and maintenance of the database.

C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and appropriations. Indicate whether the appropriation is also included in the executive budget or relates to a continuing appropriation.*

No appropriations were included in this bill nor were they included the executive budget.

Name:	Justin Dever	Agency:	Department of Commerce
Phone Number:	328-7258	Date Prepared:	02/01/2011

Date: 2/4/2011
Roll Call Vote # 1

2011 SENATE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 2296

Senate Political Subdivisions Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken: ☑ Do Pass ☐ Do Not Pass ☐ Amended ☑ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Senator Judy Lee Seconded By Senator Dotzenrod

Senators	Yes	No	Senators	Yes	No
Senator John Andrist	✓		**Senator Curtis Olafson**	✓	
Senator Lonnie Laffen	✓				
			Senator Jim Dotzenrod	✓	
Senator Judy Lee	✓				

Total (Yes) 5 No 0

Absent 0

Floor Assignment _____

If the vote is on an amendment, briefly indicate intent:

Date: 2/4/2011
Roll Call Vote # 2

2011 SENATE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 2296

Senate Political Subdivisions Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken: ☑ Do Pass ☐ Do Not Pass ☑ Amended ☐ Adopt Amendment

☑ Rerefer to Appropriations ☐ Reconsider

Motion Made By Senator Judy Lee Seconded By Sen. Olafson

Senators	Yes	No	Senators	Yes	No
Senator John Andrist	✓		Senator Curtis Olafson	✓	
Senator Lonnie Laffen	✓				
			Senator Jim Dotzenrod	✓	
Senator Judy Lee	✓				

Total (Yes) 5 No 0

Absent 0

Floor Assignment Senator Laffen

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

SB 2296: Political Subdivisions Committee (Sen. Andrist, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (5 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). SB 2296 was placed on the Sixth order on the calendar.

Page 1, line 8, after "track" insert ", on an annual basis,"

Page 1, line 8, replace "public" with "state-owned"

Page 1, line 9, replace "on an annual basis" with "that is or can be separately metered within budget constraints"

Renumber accordingly

2011 HOUSE POLITICAL SUBDIVISIONS

SB 2296

2011 HOUSE STANDING COMMITTEE MINUTES

House Political Subdivisions Committee
Prairie Room, State Capitol

SB 2296
March 11, 2011
Job # 15301

☐ Conference Committee

Committee Clerk Signature

Explanation or reason for introduction of bill/resolution:

Relating to an energy usage database for public buildings.

Minutes: Testimony 1, proposed amendment 2, 3

Chairman Johnson: Opened the hearing on SB 2296.

Senator Laffen: (See testimony 1) (proposed amendment 2). An example of that one idea if you have ever been in your house chamber you will notice on the sides of each desk is a vent and if your chamber is anything like our chamber it is blowing an enormous amount of air and that air is very cold. If that system were calibrated probably correctly probably we could lower the amount of air coming into that space. We only need so much fresh air by code and I measure the two chambers and we are bringing more fresh air than we need. We have to heat that air once it gets into the building. That extra air we don't need is costing us about $1.23 every hour. When you do the math it adds up to about a quarter of a million dollars a year just for our two chambers to heat that air. It has been doing that for 77 years. The problem with buildings is there is a lot of space and a lot of time. If you take that number by the next 77 years it is just about $1 million. It is a really big number. We have recently learned we can save a lot of money by fine tuning our buildings. The average savings is about $1 per square ft. We have 22 million square feet in this state that we won so that would be an annual savings of $22 million if we could implement these kinds of ideas throughout all of our facilities. So I am proposing two steps to help with that process. I have introduced two bills. This is the first one and I would like to explain both. This first bill 2296 would create a database that will track the annual usage of gas, electricity and water for each of our states buildings and that will do three things. It will give us a benchmark of where we stand today. It will quickly highlight our energy hogs and help us focus our efforts where we will get the greatest payback and it will give us an ongoing record to see what works and what doesn't. Then also verify that we are in fact getting savings as we make changes as we go along. The second one is a study that will create a plan to reduce our energy use and create more sustainable plan going forward. A key component of the plan is to create a policy for our operation like I just spoke about in our two chambers. Oklahoma State University created and implemented such a plan about five years ago. They have 8 million sq. ft. of space and they have spent $1.9 million making changes and have saved $12 million in energy costs in that time. Their numbers are easily verified because they started by creating this database so they know exactly

what they spend in each building every year so as they make changes they know where they are saving money. The database would be administered by ND Office of Renewable Energy within the Department of Commerce. The intent is to keep it simple and just track the numbers annually for each building. We have 1400 total. I hope it could be on line and open to the public which would allow private entities to propose cost saving measures. Of the 50 states and the District of Colombia North Dakota was ranked 51 on the energy efficiency score card by the American Council for Energy Efficient Economy. ND has more heating degree days than any of the other states in the lower 48. That is not all bad news, but it just means we have a lot more money we can save than any of the other states. It was the last bill heard in my political subs committee before crossover and the testimony from the State Board of Higher Ed revealed a couple of flaws that we did not have time to fix. So I brought a friendly amendment that I would like to pass out. ND DOT called me yesterday and said they had a few and I didn't get a change to write you an official amendment so these are my hand scribbled notes on top of the bill. In addition to tracking water, natural gas and electricity, we want to add steam. All our state board of higher Ed institutions uses steam. They have 16 million of the 22 million sq. ft. that we have. Line 9 after the word each we want to put each occupied building. It is not worth our effort to try and track all the little salt storage buildings etc. Also in line 9 after building I would like to add or group of buildings. That State School of Science in Wahpeton only has one meter for the entire campus so we can't measure each building. We want to capture the number so we would note the steam usage for that entire group of buildings and we could do the math and see how that campus is fearing energy wise. On line 8 on top we also want to capture the square footage so we can use do the math and see where each building stands. We want the information electronically. That is a proposed amendment.

Rep. Koppelman: Is the Office of Renewal Energy an entity in ND or is that something?

Senator Laffen: That is an office currently over in our Department of Commerce. That office use to track this data on their own. They just knew this was a good idea. When the stimulus money came along and some staff changes in their office they were overrun with the projects that the state needed to do and couldn't keep it up. We do have a starting point that they could use.

Chairman Johnson: Explain the fiscal note. $40,000 general funds for the 2011-2013 for setting up the database. Zack Weis will explain the fiscal note.

Rep. Koppelman: Are there any health benefits for fresh air versus a sealed room or building where you don't have it?

Senator Laffen: We need fresh air for that reason. The system is bringing in more fresh air than we need for our own health. Likely it was started and set up by a couple of guys turning the system on in 1934 and my story is one guy looked in the vent and one guy was down in the basement cranked it up until the first guy blew back and we have been there since 1934. We know more now. In this building they have done a very good job of working on these issues and UND has done a fantastic job but we have a lot more facilities than those two.

Al Christianson, Great River Energy: I am here in favor of this bill. One reason is you would think an electric facility wouldn't mind if you continued to use more electricity, but I

am also a tax payer and actually I am one of your largest physical tax payers. Not in money, just my size. This bill would let you look at the operation and maintenance. I have an example that is very important. I worked at Cool Creek Station for 34 years; since it was built and we started Cook Creek Station you make 1200 Megawatts of electricity. We were installed in there the ability to look at where we used electricity. Over the years we have gone from using 14% of the electricity produced internally to 8% by doing energy efficiency projects. That amount of electricity is the amount of electricity that takes Bismarck and Mandan continually for 24/7 365 days a year. So we have been able to serve that many customers without doing anything but energy efficiency things. The cheapest megawatt for a power company is the one we don't have to build. The one we already have. We built Cook Creek Station back in the 70s; it is 1200 kilowatts for about billion dollars worth of power line. We just built Spirit Wood Station which is 99 megawatts without a power line for $360 million so you do the math. If we can continue to take power off the Cook Creek Station, which has another life expectancy into the 2050's that is what we need to do. I am here to say we need to take and look at this database and the people that take care of the buildings for the people of ND need to see where they can make improvements. In you in your wisdom have to give them the money to make those improvements but we will save money continually for the rest of our lives by doing the right thing. I would stand for any questions.

Chairman Johnson: Having been on the school board for many years there were a lot of energy efficiency ideas that came through and they give you how long the payback time would be. It was very beneficial. A lot of schools reduced the size of their windows and exposure for cold air and it does have an impact.

Scott Weis: Normally I am with the soybean growers but this morning I am with NDARE: (See testimony #3). Testimony from Vice chairman Kim Christianson, who is a past director of the State Office of Renewable Energy. Efficiency has done much to facilitate energy efficiency improvement in state buildings. We believe however there are amble opportunities for additional efforts. Unfortunately the companion bill 2299 would have provided a small percentage of funding from the resources trust fund for revolving loan program for efficiency projects in the state and other public buildings did not pass the full Senate. Earlier in the session you were provided with copies of NDARE's energy efficiency policy recommendations along with the results of a statewide public opinion poll. The poll says we know we need to do these kinds of things. North Dakota citizens overwhelmingly confirmed that energy efficiency is an important issue in over 97% of the responders indicated it is either somewhat important to them. The survey also indicates very strong support for standards of high energy efficiency in public buildings. The full survey can be viewed at the site located at NDARE.org. ND is blessed with abundant energy resources. We also have the highest average number of heating degree days of any of the lower 48 states, which is an indication of our cold climate. We are rated last in promotion programs for energy efficiency. We can and should do better. I have to talk you as a citizen of this state. I will give you a background of my history. I spent my adult life in the military, either in active duty with the Navy or with ND Air National Guard. Ten or eleven years of that I spent doing something that I thoroughly enjoyed and most of us don't ever experience and that is called war planning. I can tell you with absolute certainty today as we reside here in Bismarck, ND around the world there are military people engaged in planning activities that revolve around either the concern from where the energy is coming from or the logistics

that it is taking in order to arrive at our country or be available to us in some format. In many ways we don't see we pay. That is the bottom line. What Mr. Christianson said about the power plant we don't build, I would argue in addition to that, the gallon we don't import? It makes good sense to insulate and that is what this bill does. It allows us to know and expand what is possible. What was lost in the Senate was the piece about how to start dealing with that. So we have planners planning and users using. In my personal life I have known for a long time I have to do better. A couple years ago I got rid of a bigger vehicle and got a smaller one. That is not working for me so good. I am use to space and the mileage isn't all that great. I did something else this year and I want to thank you for the opportunity to do base on tax credits. I knew 30 years ago that geothermal heat would be a good idea. Knowing it and doing it were two different things. I finally did it and I can only give you two months worth of heat bills. I went from buying natural gas and heating my home at the rate last month of what would have been $150 to $57. What am I going to do with the $100? I have to go to Fargo and pay my taxes and keep this boat afloat today. We don't see the dividend instantly. We don't get a check in the mail so obviously I would like to support this bill. If you can find a way to put $10 million or $7 million back into what the Senator proposed in 2299 I would ask you to consider that. Knowing we should do it and doing it are two very different things. Doing it has a payback. I will answer any questions.

Opposition: None

Chairman Johnson: We would like Zack Weis to explain what he does at the Office of Renewable and Energy Efficiency in the Department of Commerce.

Zack Weis, Office of Energy and Renewable Resources in the Department of Commerce: I am the state energy engineer. Like it was said before this is information that we have collected in the past. Last time we did a survey we sampled different agencies throughout the state. The last time we collected that data was 2005. Since then there have been some position changes, some promotions, and untimely death that happened in our office. Also some stimulus dollars that were pumped through our office and throughout all that mix it has kind of been put on the back burner and hasn't been collected for awhile. This bill would require it for the different agencies throughout the state and we would be collecting from a lot more of them. Regarding the fiscal note, that $40,000 for this biennium would be to develop this online database and for use to get that started and to collect that information and then the $20,000 for the next biennium would be to maintain the database and to continue the operation of it. I am again the state energy engineer. I would with energy efficiency and promoting energy efficiency and renewable energy throughout our state and I work a lot with the different state agencies with providing them different funding opportunities. Our office had over $65 million in stimulus dollars that we have been trying to get out there throughout our state and it has been quite the ride so far. I can stand for any questions?

Rep. Koppelman: The bill says that this needs to be done within budget constraints and yet there is a fiscal note attached which implies the expenditure of more dollars. Can you reconcile that?

Zack Weis: Within the budget restraints had to do with the agencies. I believe that came through an amendment in the Senate regarding the buildings that weren't individually metered. So there was a worry that that would then require these buildings and campus that didn't have an individual meter on the building to put that meter on so it gives them a way to not require them to do that.

Rep. Hatelstad: You said you collected this information up until 2005 so you have a database set up already?

Zack Weis: It is an excel spreadsheet that we have right now. This would require us to put together a user friendly and be on the internet and be for all North Dakota citizens to get out there and look at. The one we have right now we just sent them a letter and asked them to give us some information and we would transfer it to the Excel spreadsheet.

Hearing closed.

Rep. Beadle moved Senator Leffen's amendments be added onto the bill. Seconded by Rep. Maragos:

Rep. Klemin: I don't know how they can do this database relatively inexpensively when everyone else we have asked for a database it has been hundreds of thousands of dollars that are required to do it? The amendment looks fine to me.

Rep. Hatelstad: I would also like to ask the committee if we could hold off after we do the amendment to see if we could possible put back in maybe the revolving loan fund in some way shape or form and if that is not what the committee wants to do that is fine. At least I could prepare an amendment for that.

Voice vote carried.

Chairman Johnson: We have had a request to hold the bill as amendment for perhaps further amendments so we shall do that.

2011 HOUSE STANDING COMMITTEE MINUTES

House Political Subdivisions Committee
Prairie Room, State Capitol

SB 2296
March 17, 2011
Job # 15582

☐ Conference Committee

Committee Clerk Signature

Minutes:

Chairman Johnson: Opened discussion on SB 2296.

Rep. Heilman: I was going to explore the possible of amendments on this because there was a companion bill that died in the Senate that basically set up a revolving loan fund for state buildings that would like borrow against this revolving loan and improve some of their infrastructure in terms of building energy usages efficiency. I visited with appropriations and leadership as well as leadership in general and it didn't seem to have any will to move forward. They wanted to study it first to see where there were big holes and then revisit it next year if we need to set up a revolving loan fund. I did not bring the amendments forward.

Rep. Beadle: I think if we were to amend it and put in a $1 million or $10 million revolving loan fund we might have a change of killing the whole bill. I personally like the concept and I don't want to see it go away because I do want to move it forward. I see it as a $40,000 expenditure that would go to the position we already have in Commerce to do these kinds of things. Do we need $40,000? Can they already do it in the budget that would be my question?

Chairman Johnson: We can't on our own just say their fiscal note is wrong and change to say you only need $20,000. We have to go with what they submit. We don't have that flexibility.

Rep. Beadle: We could amend it so they would have to do it out of their existing budget?

Chairman Johnson: I think that has to come from the agency.

Rep.Devlin: You could amend it to $55,000 then someone else would deal with it.

Do Pass As Amended by Rep. Zaiser: Seconded by Rep. Beadle

Chairman Johnson: We have a motion of a do pass as amended on Engrossed SB 2296. Any further discussion? Seeing none I will ask the clerk to take the roll.

Vote: 12 Yes 0 No 2 Absent Carrier: Rep. Heilman:

VR 3/17/11

11.0724.02001
Title.03000

Adopted by the Political Subdivisions Committee

March 17, 2011

PROPOSED AMENDMENTS TO ENGROSSED SENATE BILL NO. 2296

Page 1, line 8, after after the fourth underscored comma insert "steam,"

Page 1, line 8, after "consumption" insert "as well as square footage"

Page 1, line 9, after "each" insert "occupied"

Page 1, line 9, replace "that" with "or group of buildings which"

Page 1, line 11, after "provide" insert "electronic"

Renumber accordingly

Date: 3-11-11
Roll Call Vote #: 1

2011 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 2296

House **Political Subdivisions** Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken ☐ Do Pass ☐ Do Not Pass ☑ Amended ☐ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Rep. Beadle Seconded By Rep. Maragos

Representatives	Yes	No	Representatives	Yes	No
Chairman Nancy Johnson			Rep. Kilichowski		
Vice Chairman Hatelstad			Rep. Shirley Meyer		
Rep. Beadle			Rep. Mock		
Rep. Devlin			Rep. Zaiser		
Rep. Heilman					
Rep. Klemin					
Rep. Koppelman					
Rep. Kretschmar					
Rep. Maragos					
Rep. Pietsch					

Total (Yes) _____ No _____

Absent _____

Floor Assignment _____

If the vote is on an amendment, briefly indicate intent:

Steffen's amendment.

Voice Vote. Carried!

Date: 3-17-11
Roll Call Vote #: 1

2011 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 2296

House **Political Subdivisions** Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken ☑ Do Pass ☐ Do Not Pass ☑ Amended ☐ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Rep. Zaiser Seconded By Rep. Beadle

Representatives	Yes	No	Representatives	Yes	No
Chairman Nancy Johnson	✓		Rep. Kilichowski	✓	
Vice Chairman Hatelstad	✓		Rep. Shirley Meyer	✓	
Rep. Beadle	✓		Rep. Mock	✓	
Rep. Devlin	✓		Rep. Zaiser	✓	
Rep. Heilman	✓				
Rep. Klemin					
Rep. Koppelman					
Rep. Kretschmar	✓				
Rep. Maragos	✓				
Rep. Pietsch	✓				

Total (Yes) 12 No 0

Absent 2

Floor Assignment Rep. Heilman

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

SB 2296, as engrossed: Political Subdivisions Committee (Rep. N. Johnson, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (12 YEAS, 0 NAYS, 2 ABSENT AND NOT VOTING). Engrossed SB 2296 was placed on the Sixth order on the calendar.

Page 1, line 8, after after the fourth underscored comma insert "steam,"

Page 1, line 8, after "consumption" insert "as well as square footage"

Page 1, line 9, after "each" insert "occupied"

Page 1, line 9, replace "that" with "or group of buildings which"

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Renumber accordingly

2011 TESTIMONY

SB 2296

SB 2296 - TESTIMONY TO THE SENATE POLITICAL SUBDIVISIONS COMMITTEE
JANUARY 28, 2011
LONNIE J. LAFFEN, AIA, LEED AP

My name is Lonnie Laffen, Senator from District 43 in Grand Forks. In my other life I am an architect of 27 years. You will notice two credentials behind my name. AIA stands for American Institute of Architects and LEED stands for Leadership in Energy and Environmental Design. The two would suggest that I am passionate about energy conservation as it relates to buildings, so today I bring to you an idea intended to reduce our state's energy consumption and save money.

North Dakota owns and operates 22 million square feet of building space. Virtually all of it was built prior to today's energy conservation breakthroughs such as high efficiency lighting, digital temperature controls and heat recovery systems. We have learned over the past ten years that it is possible to significantly reduce our energy consumption by making small physical and operational changes to our buildings. The average savings is typically $1 per square foot. That would equate to an annual savings of $22M for North Dakota.

I am proposing three steps to help make that happen and have introduced three bills. This bill is actually the first step but I'd like to explain all three.

1. The first step (SB2296) would create a database that will track the annual usage of gas, electricity and water for each of the state's buildings. This will do two things:
    a. It will quickly highlight our energy hogs and help us focus our efforts where we will get the quickest payback.
    b. It will give us an ongoing record to see what works and what doesn't and verify that we are, in fact, getting value and savings as we implement changes.
2. The second step is Bill SB2299 which picks off the low hanging fruit by making small physical changes to our buildings that we know will save energy and money. Changes such as lighting retrofits, mechanical retrofits, heat reclamation systems and digital controls capable of shutting down systems automatically at night. The Bill would create a $10M revolving loan fund that our state agencies could use to make small energy updates. The loans would be interest free and paid back by the savings. The projects would need to have paybacks less than 15 years and no one building could use more than $100,000. The idea is to continually make improvements to our buildings, continually lower our state's energy cost and continually replenish the loan pool.
3. The third step is SCR 4011 which would create an overall plan to manage our public building energy use and sustainability going forward. A key component of the plan is to create policy for ongoing operations. Oklahoma State University has created and implemented such a plan. They have 8M square feet of space, have spent $1.9M and saved $12M. The numbers are easily verified because they too started by creating the database I am proposing in this bill.

The data base would be administered by ND's Office of Renewable Energy within the Department of Commerce. The intent is to keep it simple and just track the numbers annually for each building (of which we have 1,400). I would hope it could be online and open to the public which will allow private entities to propose cost savings measures. You will hear from some of those companies next.

Of the 50 states and the District of Columbia - North Dakota was ranked 51st on the Energy Efficiency Scorecard by the American Council for an Energy Efficient Economy (http://www.aceee.org/node/820) and North Dakota has more heating degree days than any other state in the lower 48. That's not all bad news. It just means we have more opportunity to save money than everyone else. This bill is the starting point and will provide proof when we start doing so.

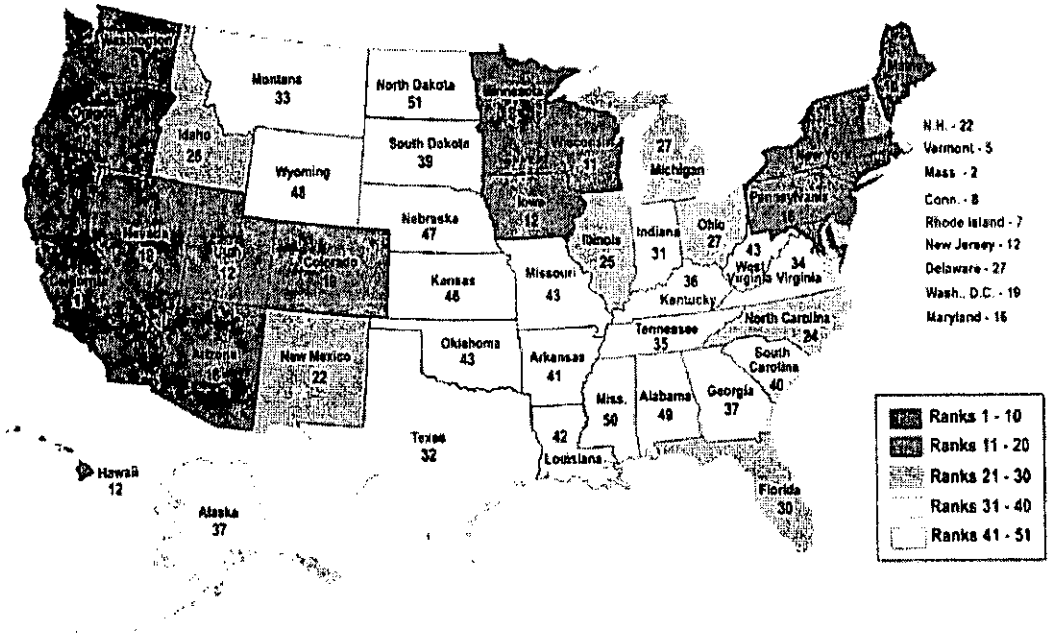
ACEEE State Energy Efficiency Scorecard

Washington Gridlock on Climate/Energy Issues Not Seen in States, Which Are Moving Ahead Strongly on Energy Efficiency; UT, AZ, NM and AK Most Improved; OR, NY, VT, WA, RI, CT, MN and ME Are Balance of Top 10; LA, MO, OK, WV, KS, NE, WY and AL Round Out Bottom 10; TX and NH Drop Farthest

Washington, D.C. (October 13, 2010): Even as Congress failed to take major action on climate and energy legislation in 2010, states across the United States achieved major new strides in energy efficiency, according to the 2010 State Energy Efficiency Scorecard from the nonprofit and independent American Council for an Energy-Efficient Economy (ACEEE). View the full press release.

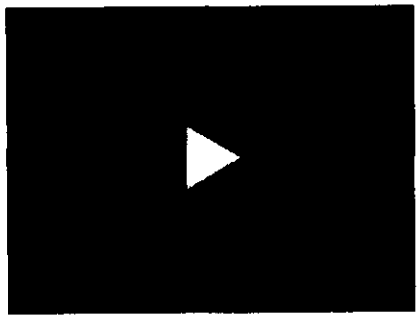
Click on a state to view its energy efficiency policies and ranking in the 2010 Scorecard report

View the Full 2010 Scorecard Rankings



State Energy Efficiency Scorecards

- 2010 State Energy Efficiency Scorecard
- 2009 State Energy Efficiency Scorecard
- 2008 State Energy Efficiency Scorecard
- 2006 State Energy Efficiency Scorecard



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NDARE TESTIMONY IN SUPPORT OF SB 2296

ND SENATE POLITICAL SUBDIVISIONS COMMITTEE

FRIDAY, FEBRUARY 4, 2011

Submitted by: Kim Christianson, Vice Chair

Chairman Andrist, Committee members: The North Dakota Alliance for Renewable Energy (NDARE) supports SB 2296 which we believe will provide information needed for a comprehensive approach to energy efficiency improvements in state facilities. NDARE applauds the ND Dept. of Commerce Office of Renewable Energy & Energy Efficiency for the many energy efficiency projects that they have helped facilitate in state buildings, but we think there are ample opportunities for additional efficiency projects.

On Wednesday of this week, all of you were provided with copies of NDARE's energy efficiency policy recommendations, along with the results of a statewide public opinion survey on energy efficiency. North Dakota citizens overwhelmingly confirmed that energy efficiency is an important issue, with over 97 percent of respondents indicating that energy efficiency is either very or somewhat important to them. The survey also indicated very strong support (85%) for high standards of energy efficiency in public buildings. The full survey can be viewed at www.ndare.org.

There is a companion bill to this one, SB 2299, that establishes and funds a revolving loan program for energy efficiency projects in public facilities. Our organization has gone on record in support of that bill, also.

We ask the committee's support of SB 2296.

#3

JCPenney Sets Goal to Reduce Energy Use 20 Percent by 2015

Company's Commitment to Energy Conservation Prevented 80 Million Pounds of Greenhouse Gas Emissions in 2009

PLANO, Texas (May 3, 2010) – J. C. Penney Company, Inc. (NYSE: JCP) today announced an environmental goal to reduce facility energy consumption 20 percent per gross square foot by 2015 through increasing energy efficiency improvements and driving a company culture which advocates and practices conservation. Over the past decade, the Company has invested more than $130 million to improve the energy efficiency of its existing stores and logistics centers by installing advanced metering technology, building control systems, lighting retrofits and high-efficiency heating, ventilation and air-conditioning (HVAC) systems. In 2009 alone, these combined efforts resulted in a year-over-year elimination of approximately 80 million pounds of greenhouse gas emissions by reducing energy use across comparable stores.

JCPenney has taken an inclusive, "hands-on" approach to addressing the Company's environmental impact. In 2004, JCPenney launched an Associate awareness and engagement program, now referred to as EMPowered, which encourages and educates every Associate to seek out innovative ways to save energy. Associates are regarded as environmental stewards who are actively involved in helping to reduce the Company's overall emissions by curtailing unnecessary energy usage. Through EMPowered, JCPenney stores designate an "Energy Captain" who takes responsibility for monitoring energy usage levels, identifying opportunities for improvement and promoting energy-saving efforts throughout the facility. JCPenney logistics centers employ similar initiatives using Associate-based "Green Teams."

"To become a more sustainable business, we needed to involve our 150,000 Associates whose individual actions and habits can have a profound effect in achieving energy conservation every day," said Myron E. (Mike) Ullman, III, chairman and chief executive officer of JCPenney. "A true commitment to environmental progress begins with an organization that is willing to take the necessary steps toward a cleaner environment."

Due to the Company's comprehensive approach to energy management, JCPenney was the first retailer to earn the ENERGY STAR® Award for Sustained Excellence by the U.S. Department of Energy and the U.S. Environmental Protection Agency. JCPenney recently earned its 100th ENERGY STAR building certification for the JCPenney store in Glenwood Springs, Colo. To be certified, stores must attain an energy efficiency rating in the top quartile for all retail buildings while maintaining appropriate levels of comfort, lighting and air quality. The Company seeks to achieve ENERGY STAR certifications for a total of 200 Stores by the end of 2010 – a significant accomplishment given the average age of JCPenney stores.

Exploring Renewable Options
Complementing the Company's energy management strategy, JCPenney is aspiring over time to obtain 25 percent of its total operating power from renewable sources. JCPenney currently hosts rooftop solar power systems on nine California and New Jersey stores with at least three more locations being planned for this year. In addition, JCPenney hosts 12 Architectural Wind™ turbines at its Manchester, Conn. logistics center as part of a joint project with AeroVironment, Inc. The small, modular turbines are specially designed to harness the building's aerodynamics to bolster electrical power generation. When the turbines are operating at optimal speed, the expected power generated is equal to the electricity used to light up a 50,000-square-foot warehouse space. JCPenney is also piloting the commercial use of a wind energy project at its Reno, Nev. logistics center. The project utilizes Broadstar Wind Systems™ patented AeroCam wind turbine technology; an innovative cycloturbine design built to generate electricity from multiple blades that turn on a horizontal axis. Installation of a second generation design is expected to be completed later this year.

JCPenney's energy reduction goal is a reflection of the Company's commitment to the environment based on a social responsibility platform known as JCPcares™. For detailed information regarding JCPcares initiatives, JCPenney has released its 2009 Corporate Social Responsibility Report, which is available for download at www.jcpenney.net.

About JCPenney
JCPenney is one of America's leading retailers, operating 1,110 department stores throughout the United States and Puerto Rico, as well as one of the largest apparel and home furnishing sites on the Internet, jcp.com, and the nation's largest general merchandise catalog business. Through these integrated channels, JCPenney offers a wide array of national, private and exclusive brands which reflect the Company's commitment to providing customers with style and quality at a smart price. Traded as "JCP" on the New York Stock Exchange, the Company posted revenue of $17.6 billion in 2009 and is executing its strategic plan to be the growth leader in the retail industry. Key to this strategy is JCPenney's "Every Day Matters" brand positioning, intended to generate deeper, more emotionally driven relationships with customers by fully engaging the Company's approximately 150,000 Associates to offer encouragement, provide ideas and inspire customers every time they shop with JCPenney. For more information visit www.jcpenney.net

Media Contact:
Daphne Avila; (972)431-3400; jcpcorpcomm@jcpenney.com

Utility Bill Pay

National Information Solutions Cooperative®

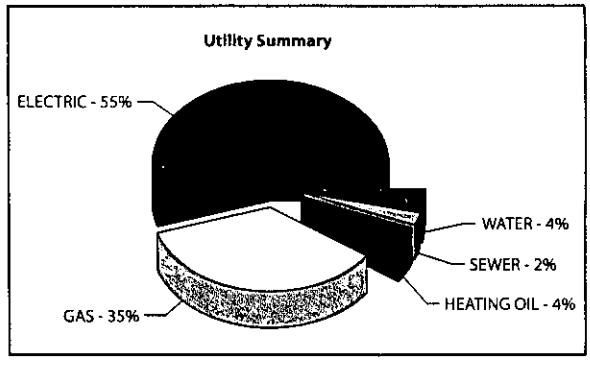
NISC® offers multi-site utility end-customers with a utility information management service called Utility Bill Pay. This service offers utility bill payment administration, utility consumption and cost tracking as well as utility information services via the internet. NISC processes and pays your utility bills prioritized by due date. By adopting our "First Due, First Through" standard, NISC achieves a higher level of on-time payments, thus reducing your late fees and the potential for disconnection of service. At NISC, our primary concern is paying your utility bills timely and accurately and "First Due, First Through" is the process that sets our service apart.

NISC's Utility Bill Pay provides an aggregated billing solution for companies with multiple locations and a total outsourcing solution for utility payables. It helps accelerate invoice processing, assuring prompt vendor payments. Other features and benefits of Utility Bill Pay include:

- Processing of electric, gas, water, sewer, fuel oil, waste and telecom invoices
- Ability to benchmark consumption and cost data across facilities
- Duplicate payment protection and balance due research
- Internet-based invoice inquiry
- Customized accounting/General Ledger interfaces
- Archived images of bills on CD-ROM
- Energy information management services
- Reduce costs

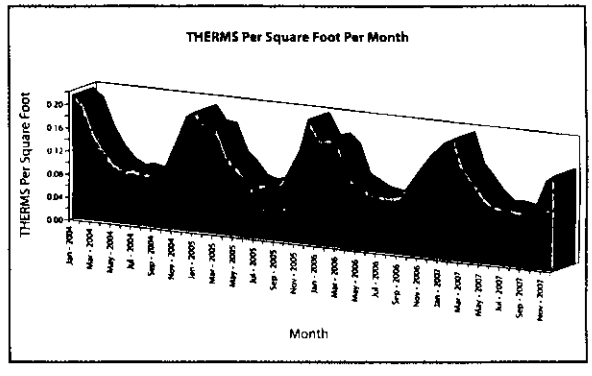
NISC Utility Bill Pay®
First Due, First Through

With Utility Bill Pay, you can reduce your company's administrative costs, save time and provide powerful management decision support. Now you can outsource the costly and time-consuming task of tracking, evaluating and managing utility costs across multiple sites.



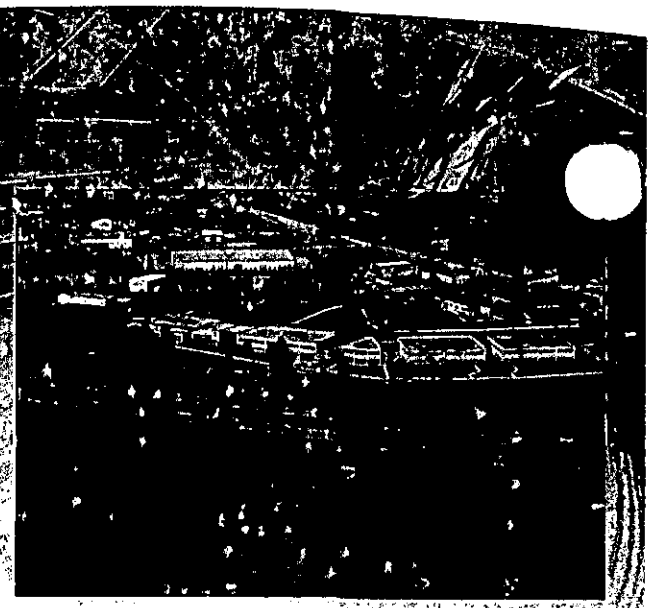
Complete Bill Payment Administration

Payment administration of all your company's utility bills will reduce billing errors and late payment fees, while enabling you to resolve utility billing issues. In addition, transaction costs are reduced because utility bills for all your business locations - often numbering in the hundreds or even thousands - can now be consolidated easily into an internet-accessible, easy-to-read and understandable format. Staff accounting time required to review and reconcile utility payments is virtually eliminated, resulting in even greater administrative cost savings. You can enjoy the economy and convenience of outsourcing your utility bill payment process to a leading industry expert.



Internet Access

Designed to complement and enhance cost reduction programs, NISC's Utility Bill Pay provides a superior level of information and analysis. All your utility billing and cost data are accessible through a password-protected internet site. The Utility Bill Pay software is a user-friendly analytical tool to help you better understand, manage and control your utility costs.



One of the most significant differences about NISC is that it is almost unheard of for a software company to be in business for over forty years. This type of accomplishment only happens for companies that provide solid products and excellent customer service. We've summarized our differences into five different areas: product, pricing, company, people and service.

Our Product

We view accounts payable as a necessary function of all companies. Our product makes this necessary function extremely efficient through the use of our streamlined processes. From the mailroom to accounts payable, we have created effective processes based on prioritizing on a first-due, first-through basis and benefited from technology allowing us to pay your utility bills in the most efficient manner possible. As a by-product of this accounts payable process, we have captured the necessary energy information you need to make sound business decisions and made it available to you in a powerful, user-friendly database-reporting tool.

Our Pricing

Our pricing model is intended to be transaction based so you don't pay for any services you're not receiving. We also welcome long-term contracts without any concerns over price adjustments. We value our customers as long-term relationships and create efficiencies and economies-of-scale based on automation and technology.

Our Company

As a cooperative owned company, we are owned by the majority of our customers. This creates a higher level of accountability for customer satisfaction. We take pride in providing our customers with world-class technology solutions while at the same time developing long-term relationships. As evident by the fact, our original three customers from 40 years ago are still customers today and our customer churn rate is under 2%. We also take care of our employees and provide them with a work environment that encourages work/life balance, a creative atmosphere and a career in the information technology profession. This type of care substantiates the recognition we received as one of the "Top 100" workplaces. Our employees show the same type of care for our customers and provide them with quality services.

Our People

Our people believe in striving for excellence with a passion and determination that is founded on our shared values (integrity, relationships, innovation, teamwork, empowerment and personal development). These values inspire and guide us in the manner in which we conduct ourselves in carrying out the business of our organization.

Our Service

At NISC, we recognize the importance of dealing with every customer encounter in an urgent manner, constantly demonstrating our passion to serve. Every customer contact requires us to be fully engaged to demonstrate a sense of urgency in identifying problems, solutions, expectations and delivering on our promises. It is this sense of urgency and commitment that will allow us to exceed the expectations of our customers.

NISC **Utility Bill Pay**®
First Due, First Through

Additional Information
Learn more about Utility Bill Pay.

CALL 1.866.999.6472
VISIT www.nisc.coop/Services/UtilityBillPay.htm
E-MAIL stephen.oberhousen@nisc.coop

NISC® **National Information Solutions Cooperative®**

Mandan, North Dakota | Lake Saint Louis, Missouri
1.866.WWW.NISC (1.866.999.6472)

NISC Mission Statement

To deliver information technology solutions and services that are Member and Customer focused, quality driven and value priced.

NISC Vision Statement

To enhance the success of our Members-Owners by providing world class information technology solutions while building lasting business relationships.

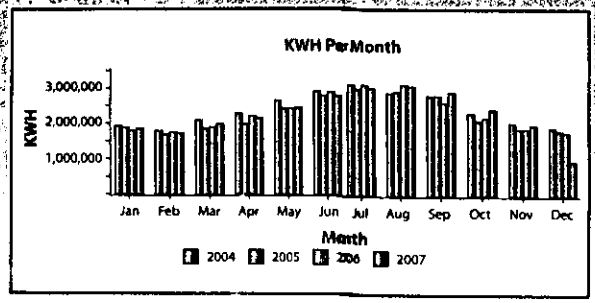
NISC Shared Values

At NISC, we believe in striving for excellence with a passion and determination that is founded on our shared values. These values will inspire us, guide us, and determine the manner in which we will conduct ourselves in carrying out the business of our organization.

- **Integrity** - We hold ourselves to the highest professional, moral, and ethical standards. We are committed to doing the right thing, always.
- **Relationships** - We believe people are the heart of our organization. We are committed to building, nurturing, and preserving lasting relationships with our member-owners, customers, partners, our families and friends, and one another. We are passionate about the service we provide and demonstrate that by being responsive to the needs of our customers and constantly striving to exceed their expectations. We believe in engaging in honest communication, showing respect for others, and treating all people with the dignity they deserve. Because we understand the importance of all our relationships, we support a healthy balance between work and family.
- **Innovation** - We promote the spirit of creativity and champion new ideas. We believe a passion for quality and the desire to constantly improve what we do is critical to our success. We challenge each other to continually strive for excellence and define new ways to build our future.
- **Teamwork** - We exemplify the cooperative spirit by working together with respect for one another's ideas and contributions. We believe in using our individual and collective knowledge and skills to improve our organization and agree to show support of all decisions once they are made. We know the combination of our talents allows us to accomplish great things because there is greater potential for success when we share our diverse experiences.
- **Empowerment** - We believe individuals have the power to make a difference. We agree to be accountable and responsible in the decisions we make, use good judgment, and take pride and ownership in our work.
- **Personal Development** - We believe the free exchange of knowledge and information is absolutely necessary to the success of each individual and the organization. We agree to work every day to learn new things and are committed to sharing our ideas with one another. We support education and learning and are dedicated to providing opportunities for every individual to grow in their abilities.

"Just-in-Time Funding"SM

The traditional method of bill payment requires the customer to fund the bill pay provider in advance of the bills being paid. This method allows the bill pay provider to earn the "float" or interest on the customer's money until the payment to the utility clears the bank. NISC's "Just-in-Time Funding" method allows our customers the opportunity to fund the exact amount clearing the NISC bank account each day. This means NISC Utility Bill Pay customers are able to maximize the earning potential on their cash.



Analyzing Energy Information

Energy Efficiency Benchmarking

NISC can assist you in managing the complex task of analyzing the energy efficiency performance of all of your facilities. This service helps you make informed and intelligent energy usage decisions and gives you the answers to these questions:

- How do my corporate-wide energy costs differ at like facilities, businesses or operations?
- How do my company's facilities compare with other comparable energy-efficient facilities?

We can help you answer these questions by offering customized reporting of normalized energy consumption data such as kilowatt usage per square foot of production basis. You may then compare individual facility performance against industry leaders, identify abnormally high energy costs, chart usage trends and develop cost-reduction strategies.

Energy Profile Development

NISC has the capability and expertise to help your company develop a corporate-wide energy profile today. Now you can have the advantage of a thorough understanding of your own company's energy consumption patterns.

Energy Saving Tracking

Traditionally, the process of measuring and monitoring energy savings has been difficult and evasive. Our breakthrough utility cost-management tool meets this complex challenge by tracking savings after installation of energy efficiency equipment.

You can now measure and monitor monthly, quarterly and annual differences in energy consumption at your facilities. This unique ability to track energy savings provides your company with a powerful tool to justify energy retrofit investments.

Energy Star®

NISC can help you earn the Energy Star label for your buildings by providing a one click interface to the EPA's Energy Star benchmarking tool. The EPA will benchmark your data against other "like" buildings and return a rating to you within minutes.

Greenhouse Gas Reporting

NISC has a Greenhouse Gas reporting tool to assist you with Greenhouse Gas regulation compliance, sustainability reporting or tracking emission reductions to meet your organization's goals. Emission factors are stored and maintained by NISC for virtually any reporting agency available in the marketplace. Direct and indirect emissions can be calculated and then reported via trending and annual reports. The tool enables the user to identify a baseline and a reduction goal and then is able to track their companies reduction progress from a company wide level to a building specific level.

Weather Normalized Benchmarking

Weather normalized benchmarking, variance, and usage reports enable you to get a true look at your sites performance with the impact of all weather-related variations removed.

SAS 70 Compliant

SAS 70 audits on third-party service organizations have become more visible due to the control requirements introduced in Section 404 of the Sarbanes-Oxley Act. NISC has successfully completed a SAS 70 audit each year since 2005 which indicates the internal controls within NISC are in place and working as designed. The opinions issued by the independent auditors relate to the accuracy of the description of our controls, the appropriateness of our controls and the operating effectiveness of our controls.

Utility Bill Pay

NISC® offers multi-site utility end-customers with a utility information management service called Utility Bill Pay. This service offers utility bill payment administration, utility consumption and cost tracking as well as utility information services via the internet. NISC processes and pays your utility bills prioritized by due date. By adopting our "First Due, First Through" standard, NISC achieves a higher level of on-time payments, thus reducing your late fees and the potential for disconnection of service. At NISC, our primary concern is paying your utility bills timely and accurately and "First Due, First Through" is the process that sets our service apart.

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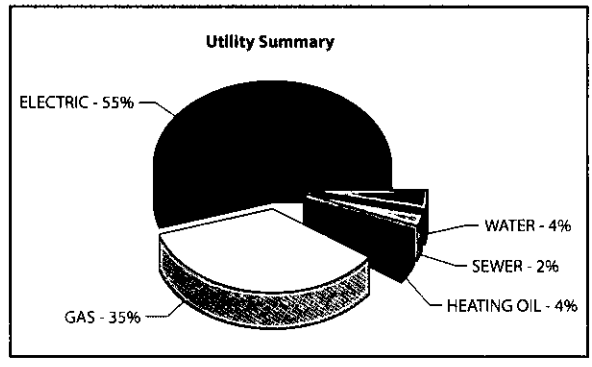
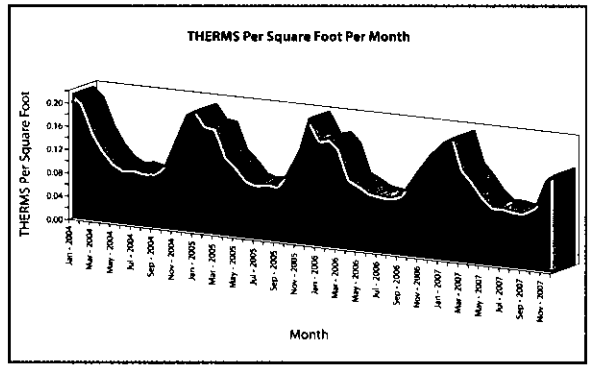
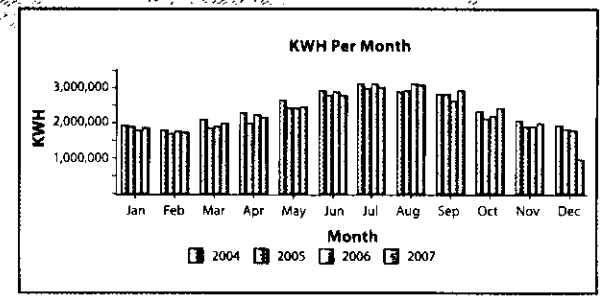
First Due, First Through





"Just-in-Time Funding"℠

The traditional method of bill payment requires the customer to fund the bill pay provider in advance of the bills being paid. This method allows the bill pay provider to earn the "float" or interest on the customer's money until the payment to the utility clears the bank. NISC's "Just-in-Time Funding" method allows our customers the opportunity to fund the exact amount clearing the NISC bank account each day. This means NISC Utility Bill Pay customers are able to maximize the earning potential on their cash.



Analyzing Energy Information

Energy Efficiency Benchmarking

NISC can assist you in managing the complex task of analyzing the energy efficiency performance of all of your facilities. This service helps you make informed and intelligent energy usage decisions and gives you the answers to these questions:

- How do my corporate-wide energy costs differ at like facilities, businesses or operations?
- How do my company's facilities compare with other comparable energy-efficient facilities?

We can help you answer these questions by offering customized reporting of normalized energy consumption data such as kilowatt usage per square foot of production basis. You may then compare individual facility performance against industry leaders, identify abnormally high energy costs, chart usage trends and develop cost-reduction strategies.

Energy Profile Development

NISC has the capability and expertise to help your company develop a corporate-wide energy profile today. Now you can have the advantage of a thorough understanding of your own company's energy consumption patterns.

Energy Saving Tracking

Traditionally, the process of measuring and monitoring energy savings has been difficult and evasive. Our breakthrough utility cost-management tool meets this complex challenge by tracking savings after installation of energy efficiency equipment.

You can now measure and monitor monthly, quarterly and annual differences in energy consumption at your facilities. This unique ability to track energy savings provides your company with a powerful tool to justify energy retrofit investments.

Energy Star®

NISC can help you earn the Energy Star label for your buildings by providing a one click interface to the EPA's Energy Star benchmarking tool. The EPA will benchmark your data against other "like" buildings and return a rating to you within minutes.

Greenhouse Gas Reporting

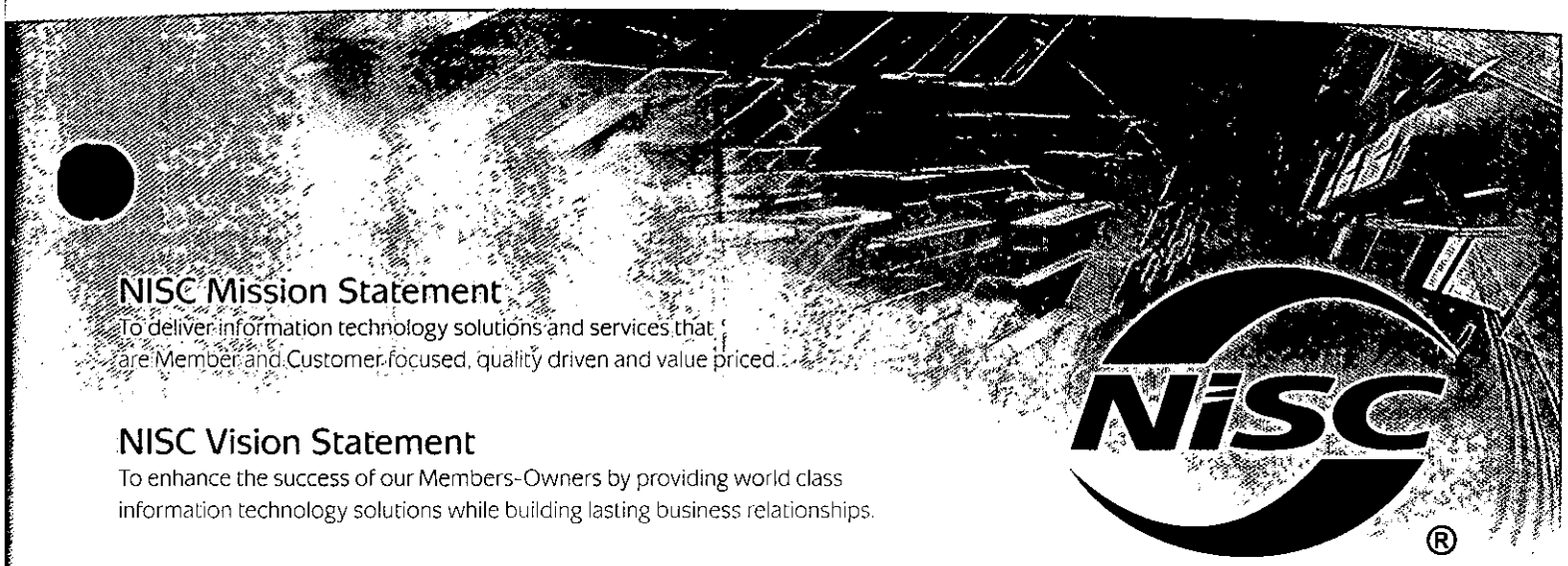
NISC has a Greenhouse Gas reporting tool to assist you with Greenhouse Gas regulation compliance, sustainability reporting or tracking emission reductions to meet your organization's goals. Emission factors are stored and maintained by NISC for virtually any reporting agency available in the marketplace. Direct and indirect emissions can be calculated and then reported via trending and annual reports. The tool enables the user to identify a baseline and a reduction goal and then is able to track their companies reduction progress from a company wide level to a building specific level.

Weather Normalized Benchmarking

Weather normalized benchmarking, variance, and usage reports enable you to get a true look at your sites performance with the impact of all weather-related variations removed.

SAS 70 Compliant

SAS 70 audits on third-party service organizations have become more visible due to the control requirements introduced in Section 404 of the Sarbanes-Oxley Act. NISC has successfully completed a SAS 70 audit each year since 2005 which indicates the internal controls within NISC are in place and working as designed. The opinions issued by the independent auditors relate to the accuracy of the description of our controls, the appropriateness of our controls and the operating effectiveness of our controls.



NISC Mission Statement

To deliver information technology solutions and services that are Member and Customer-focused, quality driven and value priced.

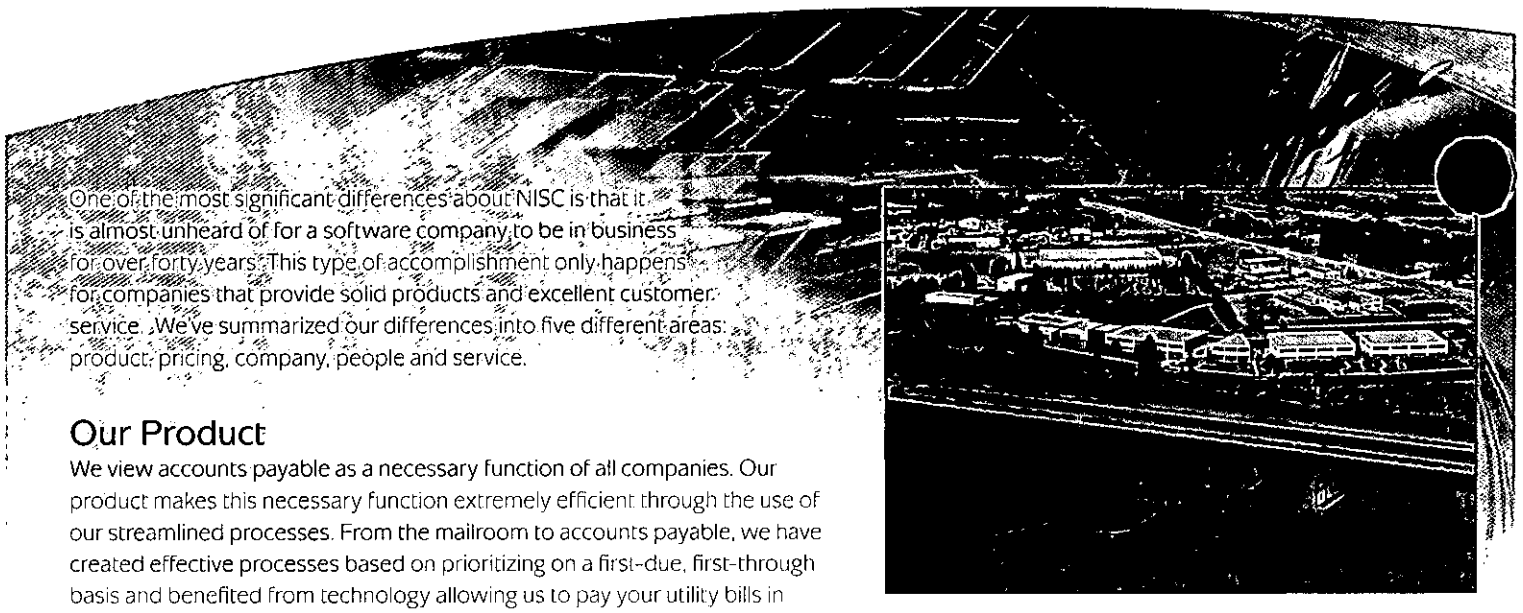
NISC Vision Statement

To enhance the success of our Members-Owners by providing world class information technology solutions while building lasting business relationships.

NISC Shared Values

At NISC, we believe in striving for excellence with a passion and determination that is founded on our shared values. These values will inspire us, guide us, and determine the manner in which we will conduct ourselves in carrying out the business of our organization.

- **Integrity** - We hold ourselves to the highest professional, moral, and ethical standards. We are committed to doing the right thing, always.
- **Relationships** - We believe people are the heart of our organization. We are committed to building, nurturing, and preserving lasting relationships with our member-owners, customers, partners, our families and friends, and one another. We are passionate about the service we provide and demonstrate that by being responsive to the needs of our customers and constantly striving to exceed their expectations. We believe in engaging in honest communication, showing respect for others, and treating all people with the dignity they deserve. Because we understand the importance of all our relationships, we support a healthy balance between work and family.
- **Innovation** - We promote the spirit of creativity and champion new ideas. We believe a passion for quality and the desire to constantly improve what we do is critical to our success. We challenge each other to continually strive for excellence and define new ways to build our future.
- **Teamwork** - We exemplify the cooperative spirit by working together with respect for one another's ideas and contributions. We believe in using our individual and collective knowledge and skills to improve our organization and agree to show support of all decisions once they are made. We know the combination of our talents allows us to accomplish great things because there is greater potential for success when we share our diverse experiences.
- **Empowerment** - We believe individuals have the power to make a difference. We agree to be accountable and responsible in the decisions we make, use good judgment, and take pride and ownership in our work.
- **Personal Development** - We believe the free exchange of knowledge and information is absolutely necessary to the success of each individual and the organization. We agree to work every day to learn new things and are committed to sharing our ideas with one another. We support education and learning and are dedicated to providing opportunities for every individual to grow in their abilities.



One of the most significant differences about NISC is that it is almost unheard of for a software company to be in business for over forty years. This type of accomplishment only happens for companies that provide solid products and excellent customer service. We've summarized our differences into five different areas: product, pricing, company, people and service.

Our Product

We view accounts payable as a necessary function of all companies. Our product makes this necessary function extremely efficient through the use of our streamlined processes. From the mailroom to accounts payable, we have created effective processes based on prioritizing on a first-due, first-through basis and benefited from technology allowing us to pay your utility bills in the most efficient manner possible. As a by-product of this accounts payable process, we have captured the necessary energy information you need to make sound business decisions and made it available to you in a powerful, user-friendly database-reporting tool.

Our Pricing

Our pricing model is intended to be transaction based so you don't pay for any services you're not receiving. We also welcome long-term contracts without any concerns over price adjustments. We value our customers as long-term relationships and create efficiencies and economies-of-scale based on automation and technology.

Our Company

As a cooperative owned company, we are owned by the majority of our customers. This creates a higher level of accountability for customer satisfaction. We take pride in providing our customers with world-class technology solutions while at the same time developing long-term relationships. As evident by the fact, our original three customers from 40 years ago are still customers today and our customer churn rate is under 2%. We also take care of our employees and provide them with a work environment that encourages work/life balance, a creative atmosphere and a career in the information technology profession. This type of care substantiates the recognition we received as one of the "Top 100" workplaces. Our employees show the same type of care for our customers and provide them with quality services.

Our People

Our people believe in striving for excellence with a passion and determination that is founded on our shared values (integrity, relationships, innovation, teamwork, empowerment and personal development). These values inspire and guide us in the manner in which we conduct ourselves in carrying out the business of our organization.

Our Service

At NISC, we recognize the importance of dealing with every customer encounter in an urgent manner, constantly demonstrating our passion to serve. Every customer contact requires us to be fully engaged to demonstrate a sense of urgency in identifying problems, solutions, expectations and delivering on our promises. It is this sense of urgency and commitment that will allow us to exceed the expectations of our customers.

NISC Utility Bill Pay℠
First Due, First Through

Additional Information

Learn more about Utility Bill Pay.

CALL 1.866.999.6472
VISIT www.nisc.coop/Services/UtilityBillPay.htm
E-MAIL stephen.oberhousen@nisc.coop

NISC®
National Information Solutions Cooperative®

Mandan, North Dakota | Lake Saint Louis, Missouri
1.866.WWW.NISC (1.866.999.6472)

Testimony for Senate Bill 2296 Establish a Data base

Dave McFarlane with McFarlane Inc Grand Forks. Our firm provides comprehensive energy solutions to commercial building customers.

Of the 50 States + PR, ND ranks # 51 in Energy Usage per square foot of building area. We are in last place

This year ND finally adopted the International Building Code establishing energy efficient construction methods in new construction projects. Until now ND was one of only a handful of states that did not have a state building code.

3 bills are in process in the ND State legislature

1 Develop a state wide energy policy
2 Set up a state wide data base to track the energy usage in buildings
3 Set up a funding source to fund energy savings projects.

Separately each bill makes sense. Together they form a powerful basis for comprehensive energy management for the state.

The bill being discussed in this committee will set up a data base that will provide the information to rate the energy usage in buildings. The data collected would be the electric and gas usage or other sources. This information will allow the state to see where the energy "hogs" are and will provide the data base for private firms to recommend improvements for comfort and energy reductions.

Once the energy usage is entered into the system or a program similar to DOE Energy Star Portfolio Manager program, A buildings rating is determined and rated on a scale of 0 to 100 with 100 being perfect. A special Energy Star rating is available for buildings that reach 75.

Once the buildings are found, we know how to make corrective actions to improve comfort and energy usage.

We know these projects work.

160,000 BTU / FT 2 to 85,000 BTU / Foot Square
$100,000 in GF County Office in 2001 = $140,000 per year
$ 65,000 in GF County Court House in 2007= $45,000 per year
$ 60,000 in GF County Correction Center in 2009 = $35,000 per year.

This averages $1 per square foot.
We have been able to reduce the energy usage in buildings by 30% and increase comfort.

Problems occur when agencies don't know how much energy they should be using. You can't manage costs if you don't know where you are and where you should be. UND has practiced energy conservation for over 15 years has has the lowest costs of all ND state campuses by a factor of 2-3.

This bill would provide the data necessary to establish bench marks for existing state buildings.

It will lower the energy costs for the state. Should result in lower taxes, and will provide jobs for firms such as ours.

I am asking you to support this legislation

Technical RCx For Office

By Dave McFarlane, Member ASHRAE

Grand Forks County Office Building.

Technical retrocommissioning (RCx) is the systematic process where corrective action is taken to make an existing building conform to the owner's current facility requirements. Two approaches to RCx are in common use: process and technical. These approaches parallel the process and technical approaches taken in new building commissioning.

Process RCx

The process RCx approach relies on the testing, adjusting and balancing report (made by others), the temperature control sequences shown in the contract documents and a review of the plans and specifications to determine corrective action. Minimal time is spent obtaining site data.

Technical RCx

The technical RCx process requires the RCx team to determine the actual flows, temperatures and pressures for the various building systems and compare the actual control sequences to known energy-efficient control sequences.

The team confirms proper operation of all dampers, control valves, variable frequency drives (VFDs) and other equipment. Controls are calibrated to scheduled setpoints and proper control loop response time is verified.

Electrical systems are checked. Thermal imaging is used to determine loose connections. Power quality analysis is used to determine low voltage, low power factor or load imbalance in electrical systems and proper grounding is confirmed. Lighting systems are evaluated for efficient ballasts, lamps, occupancy control, daylight harvesting and lighting levels.

The building envelope is evaluated for air infiltration, building pressurization and glazing efficiencies.

Technical RCx in Practice

Our firm recently used the technical RCx process to reduce the energy use in the new Grand Forks County Office Building, a six-story 140,000 ft^2 (13 000 m^2) building completed in 2000. The county commissioners were concerned with the building's relatively high energy costs of \$1.40/ft^2 (\$15/m^2) as compared to the \$0.90/ft^2 (\$9.67/m^2) originally anticipated.

This office building houses social services, public health and safety, taxation, county auditors, property records and administration. The entire sixth floor contains meeting rooms and the county commissioners' offices.

The RCx team met with the commissioners' building committee, design engineers, and building maintenance staff to understand their concerns. During these meetings, we learned that the maintenance staff was overriding the original temperature setpoints in response to occupant complaints.

The technicians checked equipment for flows and operation. The building's mechanical and electrical system controls were compared to scheduled building occupancy periods. The plans and specifications were reviewed to understand the systems, types of equipment used, and actual operations data provided information for modeling. Data loggers provided actual space temperature variation measurements.

The blue line in *Figures 1* through *3* shows the energy use before changes were made. The first two years' energy use was determined from actual gas,

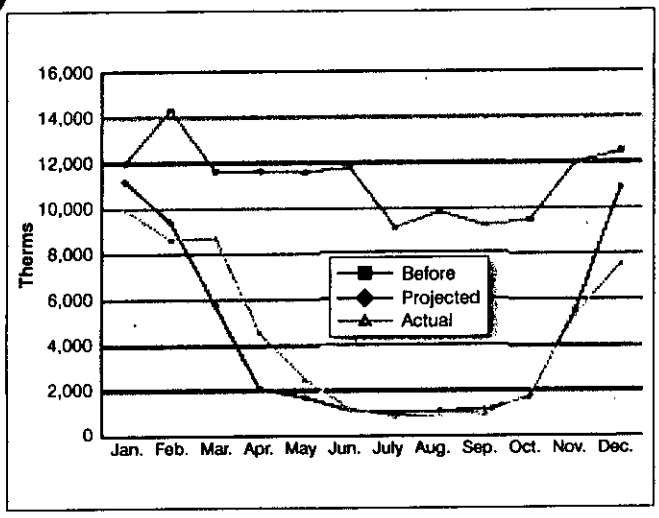


Figure 1: Grand Forks County Office Building natural gas use.

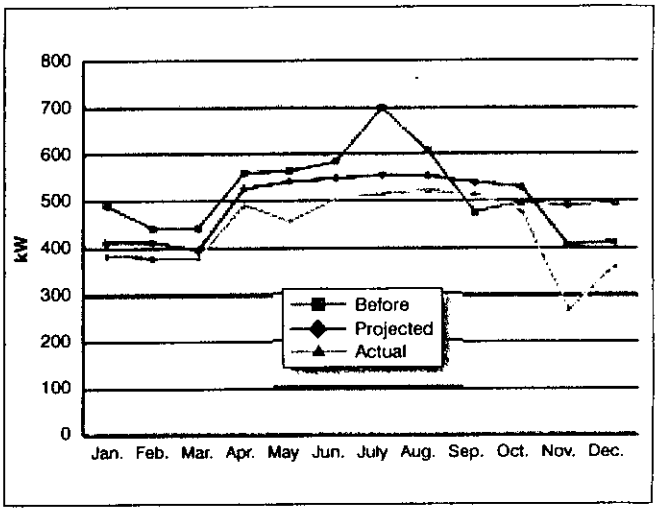


Figure 2: Grand Forks County Office Building electrical demand.

electric and off-peak fuel oil billings. Field readings provided actual data for input into DOE-2 energy modeling software. The completed model was calibrated to the known energy use and accurately predicted monthly energy use.

Discovery Phase

The discovery phase is the first phase of the technical RCx and optimization process. The RCx team learns how the building currently operates. Discovery is accomplished by investigating and testing building systems, as well as listening to the occupants, owners and maintenance staff.

The following issues were found:

Design

- A 5% cooling and a 30% heating safety factor were used in design.
- Air change rates were maintained at eight air changes per hour in the office spaces and 15 changes per hour in the large meeting and conference rooms.
- ASHRAE 99.6% design percentile (*ASHRAE Handbook—Fundamentals,* Ch. 14, Annual heating and humidification design conditions) was used for load calculations.

Operational

- Variable frequency drives on the heating pumps ran at 100% output.
- Hot water leaked past the two-way heating valves on many reheat coils even when the valves were supposed to be 100% closed.
- The duct static pressure sensor was set to control at 2 in. (500 Pa) of static pressure. Most VAV boxes were throttled back to reduce airflow because of the high static pressure.
- The fresh air dampers opened whenever the air handlers started to maintain the night setback temperature. The HVAC system mistakenly cooled the building down to the setback temperature of 55°F (13°C).

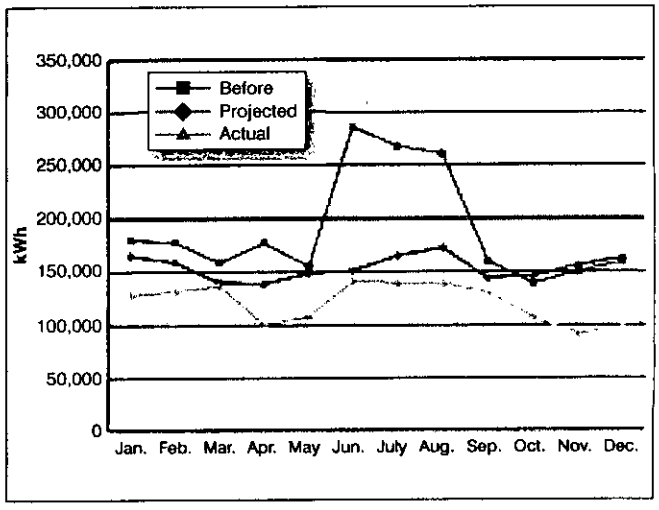


Figure 3: Grand Forks County Office Building electrical use.

- The building ran in the occupied mode for 16 hours per day, while only being occupied for 10 hours.
- Meeting rooms used high airflow rates when the rooms were empty.
- Discharge temperature controllers on air handlers were set to control at a constant temperature of 55°F (13°C).
- Building exhaust fans ran 24/7.
- Data logging showed that space temperatures varied by more than 7°F (3.8°C). Most thermostats required a differential of 5°F (2.7°C) before full output occurred.
- Occupants were able to adjust all space thermostats to the full 55°F to 85°F (13°C to 89°C) range of the thermostat, causing complaints when rooms were left in full heat or full cool.
- The unoccupied setpoints on VAV boxes had the same flow as the occupied setpoints. Interior zoned VAV boxes were set to the same unoccupied airflows as the exterior zones.
- Electric baseboard radiation was energized whenever the outdoor temperature was below 50°F (10°C).

- The boiler reset temperature was reduced to 120°F (49°C) during the summer, which caused inadequate reheat and corresponding cool spaces in the summer.
- Most VAV boxes required constant reheat, showing excessive amounts of air were used in the ventilation of the building.
- Excessive outside air was validated with CO_2 readings of 400 ppm inside the building and 350 ppm outside the building.
- Although a full outdoor air economizer was used on the air-handling system, the chiller was energized at 50°F (10°C) outdoor air temperature.
- Many of the minimum and maximum VAV airflow settings had been changed in response to occupant complaints.

Evaluation Phase

Phase II of the technical RCx and optimization process involves evaluating the data and determining the actual design requirements based on current building occupancy. During the final steps of Phase II, facility improvement measures (FIM) are outlined and evaluated for cost, cost savings and comfort improvements.

New Design Evaluation

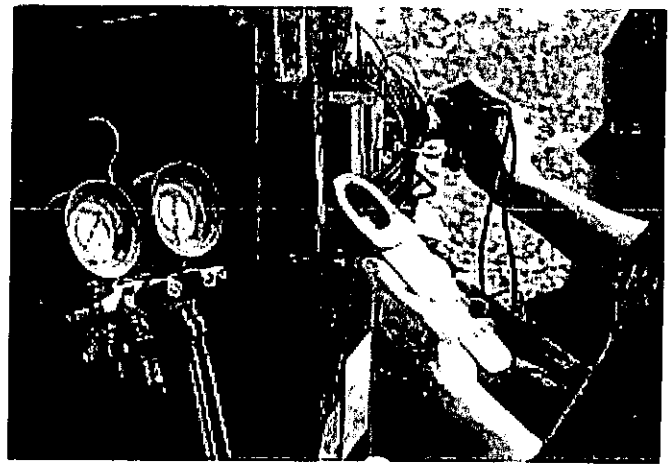
- Airflows and water flows were recalculated based on the ASHRAE 99% data, using actual room loads and eliminating safety factors. These changes lowered the building's airflow, corresponding reheat requirements and electrical use. Winter temperatures were set at 72°F (22°C) and summer temperatures at 75°F (24°C). While additional saving could be found by lowering the space temperature setpoints to 68°F (20°C), commissioners were not willing to sacrifice occupant comfort for savings.
- VAV minimums were evaluated when lowered from eight to four air changes per hour.
- CO_2 levels were evaluated when controlled at 800 ppm.

Identifying, Correcting Operational Issues

- A closed discharge valve on the piping heating system caused the pressure sensor to always read a low differential. Once opened, the VFD controlled pump returned to setpoint control and reduced pressure, which stopped the reheat coil valve leakage.
- A VAV fan system pressure setting of 1.25 in. (311 Pa) was used as the basis for new energy improvement calculations. The system was able to operate at 1.25 in. (311 Pa) by eliminating one undersized duct leading to a VAV box inlet. The entire building was operating at an unnecessarily high static pressure because of the restriction to this one VAV box.

Evaluating Improved Operational Issues

- Control sequences modifications were evaluated that kept the fresh air dampers closed on night setback. The sequence that cooled the building down on night setback would be removed from the control sequence.
- Occupancy times corresponding to actual occupant requirements were evaluated.
- Interior zone VAV boxes were evaluated at zero airflow settings on night setback.
- Occupancy sensors and lighting interlocks on all conference and meeting room VAV boxes were modeled. In the unoccupied mode, the room would be maintained at 72°F (22°C) with reduced airflow rates using the standby mode of the VAV box controller. The control sequence would increase the airflow only when the lights were on and the occupancy sensors energized.
- Unoccupied VAV minimum setpoints would be set below the occupied values.
- Building exhaust fans would be shut off in the unoccupied mode.
- Mixed air and discharge temperatures would be reset from 55°F to 60°F (13°C to 16°C), depending on cooling and humidity control requirements, based on outside air temperatures.
- The chiller would activate at a 58°F (14°C) outdoor temperature.
- The boiler temperature would be reset between 200°F and 140°F (93°C and 60°C). An upper limit of 200°F (93°C) was set because the conservative winter design temperature in our area is –30°F (–34°C). The lower limit of 140°F (60°C) provided adequate reheat to larger conference spaces during summer months.
- Baseboard electric radiation would be deactivated until the outside air temperature was 30°F (–1°C). Electric baseboard heaters would be cycled every five minutes to reduce electric demand.
- The data automation system would be modified to control all thermostats. Occupants would still have the ability to adjust the thermostat setpoint dial full range; however, the direct digital control (DDC) system would only allow a two degree change from the predetermined setpoints.



Technician verifies chiller operation.

- Control parameters would be adjusted to maintain control within ±0.5°F (±0.3°C).

An overall energy plan where CO_2 levels were specified to be maintained at 800 ppm and space temperatures set at 72°F ±2°F (22°C ±1°C) in the winter and 75°F ±2°F (24°C ±1°C) in the summer was presented to the commissioners. The building maintenance staff was given a digital thermometer to monitor complaints. Occupant complaints would be considered invalid if the space conditions fell within the constraints listed earlier.

This energy policy was one of the more important parts of the program. Before the implementation of these guidelines, maintenance staff would react to perceived complaints and make adjustments to flows, temperature setpoints, VAV box settings, etc., to try to keep occupants happy. This new policy eliminated unnecessary system adjustments.

The DOE-2 energy-modeling program used to predict energy use was rerun with the proposed improvements. The red lines on *Figures 1* through *3* show the reduced energy costs if the energy improvements were implemented.

Energy modeling was conducted by the University of North Dakota's energy management manager, who also consults on building energy modeling.

The new predictions showed the potential to reduce energy costs by more than $68,000 per year (based on 2002 costs).

FIM Description	Cost	Projected Savings	Simple Payback (Years)
Reduce Airflows	$25,000	$7,540	3.31
Reset Discharge Temperature	$800	$4,708	0.17
Reduce Occupied Run Time	$700	$7,976	0.09
Reduce Outside Air	$7,500	$27,432	0.27
Reduce AHU Static Pressure	$2,000	$2,068	0.96
Reduce Pump Pressure	$500	$2,072	0.24
Eliminate Leaking Reheats	$2,500	$8,368	0.30
Improve Control Sequences	$5,000	$5,000	1.0
Investigative Costs/Misc.	$56,000	$2,836	19.7
Total	$100,000	$68,000	1.47

Table 1: FIM analysis (costs in 2002).

Energy Component Yearly Use	Pre-Modification Use	Predicted Use	Actual Use
Gas (Therms)	135,234	52,760	52,939
Electrical (kWh)	2,273,000	1,852,500	1,453,280
Demand (kW)	6,344	5,831	5,249

Table 2: Phase IV of the technical RCx process documents the improvements.

Implementation Phase

Phase III implements the changes evaluated in Phase II. The cost to perform this work was $100,000 with projected savings of $68,000 per year. The Grand Forks County Commission voted to proceed with the recommendations and to implement the energy policy. During the implementation phase, the building maintenance staff worked with the RCx team to gain a better understanding of the system.

The building now operates in a manner consistent with the commissioners' original expectations. Because of the enhanced tuning of controllers, room temperatures are maintained within 0.5°F (0.3°C) of setpoint and were verified by trend logs. The original $68,000 predicted savings actually resulted in a $91,000 savings. Because of improved temperature control and the new energy policy, occupant complaints have been reduced by 90%. People stop complaining when they know that their space is being maintained within agreed upon temperature ranges.

Documentation Phase

Phase IV of the technical RCx process documents the improvements.

The green line on *Figures 1* through *3* shows actual monthly energy use. The county auditor entered actual energy use from energy bills on spreadsheets developed for this project, and the results to date show the actual energy savings continue to exceed projected savings. This reduction has been maintained for the past seven years.

Because of the increase in utility cost between 2002 and today, the county now sees yearly savings of more than $140,000. Overall, yearly energy consumption is now 85,000 Btu/h·ft^2 (267 750 W/m^2). The original expenditure of $100,000 has generated more than $1.2 million in energy savings.

The comprehensive technical RCx approach shown in the article can be used in most buildings with sophisticated HVAC systems and used to reduce energy by 20% to 35% in most buildings.

Dave McFarlane is president of McFarlane Inc., in Grand Forks, N.D. He was chair of the National Environmental Balancing Bureau's Building Commissioning Committee.●

#1

SB 2296 - TESTIMONY TO THE HOUSE POLITICAL SUBDIVISIONS COMMITTEE
MARCH 11, 2011
LONNIE J. LAFFEN, AIA, LEED AP

My name is Lonnie Laffen, Senator from District 43 in Grand Forks. In my other life I am an architect of 27 years. You will notice two credentials behind my name. AIA stands for American Institute of Architects and LEED stands for Leadership in Energy and Environmental Design. The two would suggest that I am passionate about energy conservation as it relates to buildings, so today I bring to you an idea intended to reduce our state's energy consumption and save money.

North Dakota owns and operates 22 million square feet of building space. Virtually all of it was built prior to today's energy conservation breakthroughs such as high efficiency lighting, digital temperature controls and heat recovery systems. We have learned over the past ten years that it is possible to significantly reduce our energy consumption by making small physical and operational changes to our buildings. The average savings is typically $1 per square foot. That would equate to an annual savings of $22M for ND.

I am proposing two steps to help start that process and have introduced two bills. This bill is the first step but I'd like to explain both.

1. The first step is this bill, SB2296, which would create a database that will track the annual usage of gas, electricity and water for each of the state's buildings. This will do two things:
    a. It will give us a benchmark of where we stand today.
    b. It will quickly highlight our energy hogs and help us focus our efforts where we will get the quickest payback.
    c. It will give us an ongoing record to see what works, what doesn't and verify that we are, in fact, getting value and savings as we implement changes going forward.
2. The second step is SCR 4011 which would study and create a plan to reduce our energy use and create a more sustainable plan going forward. A key component of the plan is to create policy for our ongoing operations. Oklahoma State University has created and implemented such a plan. They have 8M square feet of space, have spent $1.9M and saved $12M. The numbers are easily verified because they too started by creating the database that this bill would create.

The data base would be administered by ND's Office of Renewable Energy within the Department of Commerce. The intent is to keep it simple and just track the numbers annually for each building (of which we have 1,400). I would hope it could be online and open to the public which will allow private entities to propose cost savings measures. You will hear from some of those companies next.

Of the 50 states and the District of Columbia - North Dakota was ranked 51st on the Energy Efficiency Scorecard by the American Council for an Energy Efficient Economy (http://www.aceee.org/node/820) and North Dakota has more heating degree days than any other state in the lower 48. That's not all bad news. It just means we have more opportunity to save money than everyone else. This bill is the starting point and will provide proof when we start doing so.

#2

11.0724.02000

FIRST ENGROSSMENT

Sixty-second
Legislative Assembly
of North Dakota

ENGROSSED SENATE BILL NO. 2296

Introduced by

Senators Laffen, Dever, Schneider

Representatives Louser, Sanford

A BILL for an Act to create and enact a new section to chapter 54-44.5 of the North Dakota Century Code, relating to an energy usage database for public buildings.

BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:

SECTION 1. A new section to chapter 54-44.5 of the North Dakota Century Code is created and enacted as follows:

Public building energy usage database.

The office of renewable energy and energy efficiency shall create and maintain an energy usage database to track, on an annual basis, the water, natural gas, ~~and~~ electricity consumption for each state-owned building that is or can be separately metered within budget constraints. The database must be accessible by the public. Each state entity with a public building shall provide information for inclusion in the database to the office in the form required by the office. A political subdivision in this state with a public building may provide information for inclusion in the database.

steam

occupied

electronic

or group of buildings

and square footage

#3

NDARE TESTIMONY IN SUPPORT OF SB 2296

ND HOUSE POLITICAL SUBDIVISIONS COMMITTEE

FRIDAY, MARCH 11, 2011

Submitted by: Kim Christianson, Vice Chair

Chairman Johnson, Committee members: The North Dakota Alliance for Renewable Energy (NDARE) supports SB 2296 which we believe provides critical data needed for a comprehensive approach to energy efficiency in state facilities. NDARE applauds all efforts to improve the efficiency of state-owned facilities and recognizes that the ND Dept. of Commerce - Office of Renewable Energy & Energy Efficiency has done much to facilitate energy efficiency improvements in state buildings. We believe, however, that there are ample opportunities for additional efficiency efforts. Unfortunately, a companion bill (SB 2299) that would have provided a small percentage of funding from the Resources Trust Fund for a revolving loan program for efficiency projects in state and other public buildings did not pass the full ND Senate.

Earlier in the session, all of you were provided with copies of NDARE's energy efficiency policy recommendations, along with the results of a statewide public opinion survey on energy efficiency. North Dakota citizens overwhelmingly confirmed that energy efficiency is an important issue, with over 97 percent of respondents indicating that energy efficiency is either very or somewhat important to them. The survey also indicated very strong support (85%) for high standards of energy efficiency in public buildings. The full survey can be viewed at www.ndare.org.

North Dakota is blessed in a number of ways, especially with abundant energy resources. We also have the highest average number of heating degree days of any of the lower 48 states, which is an indication of our cold winter climate. A recent report by the American Council for an Energy Efficient Economy (ACEEE) rated our state dead last among all states and the District of Columbia as far as policies and programs to promote energy efficiency. We can and should do better.

We ask the committee's support of SB 2296.