

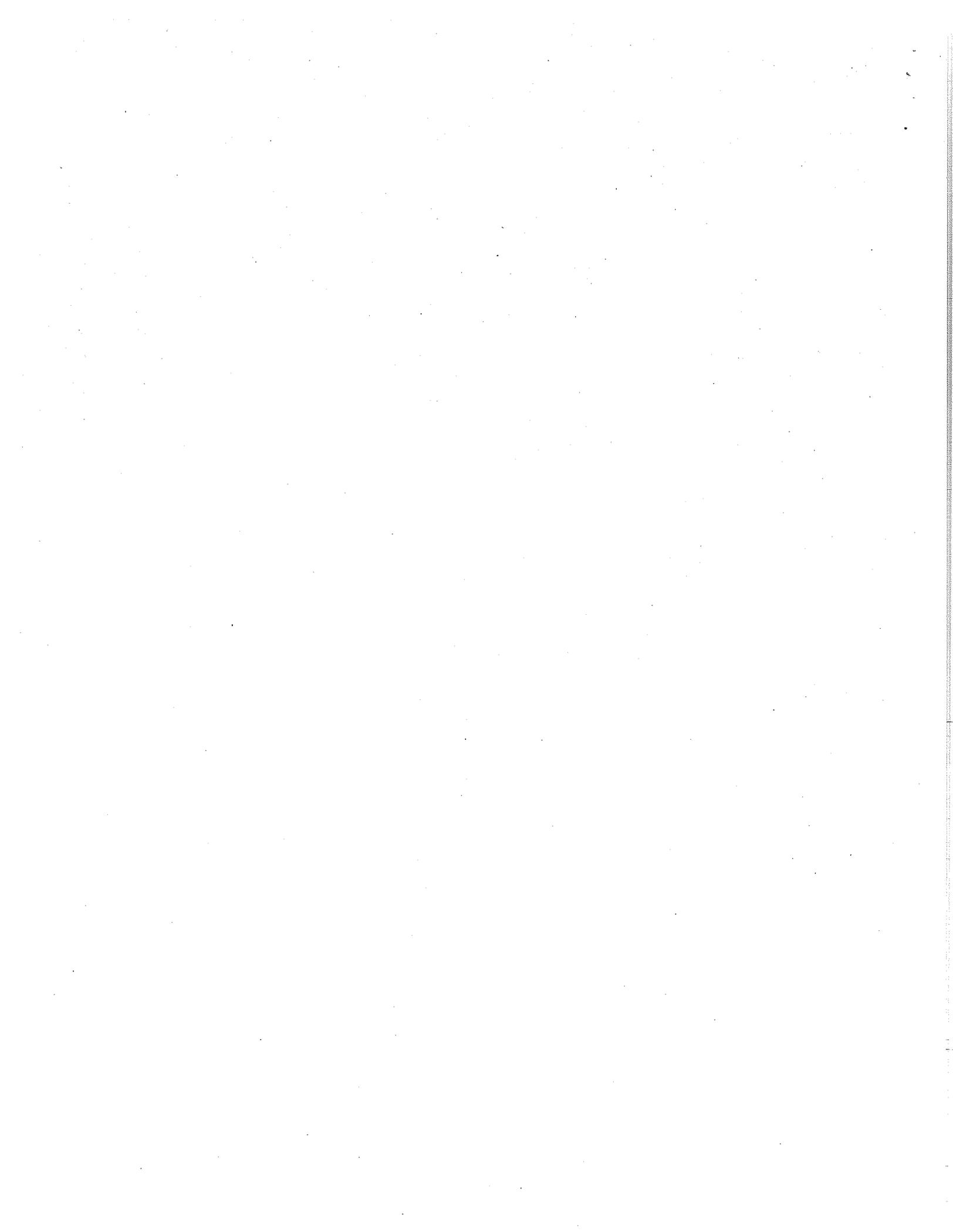
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Report to the Legislature

Minnesota Statute 16C.141
Employee Suggestions; Energy Savings Incentive Program

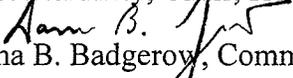
January 2, 2008





DATE: January 2, 2008

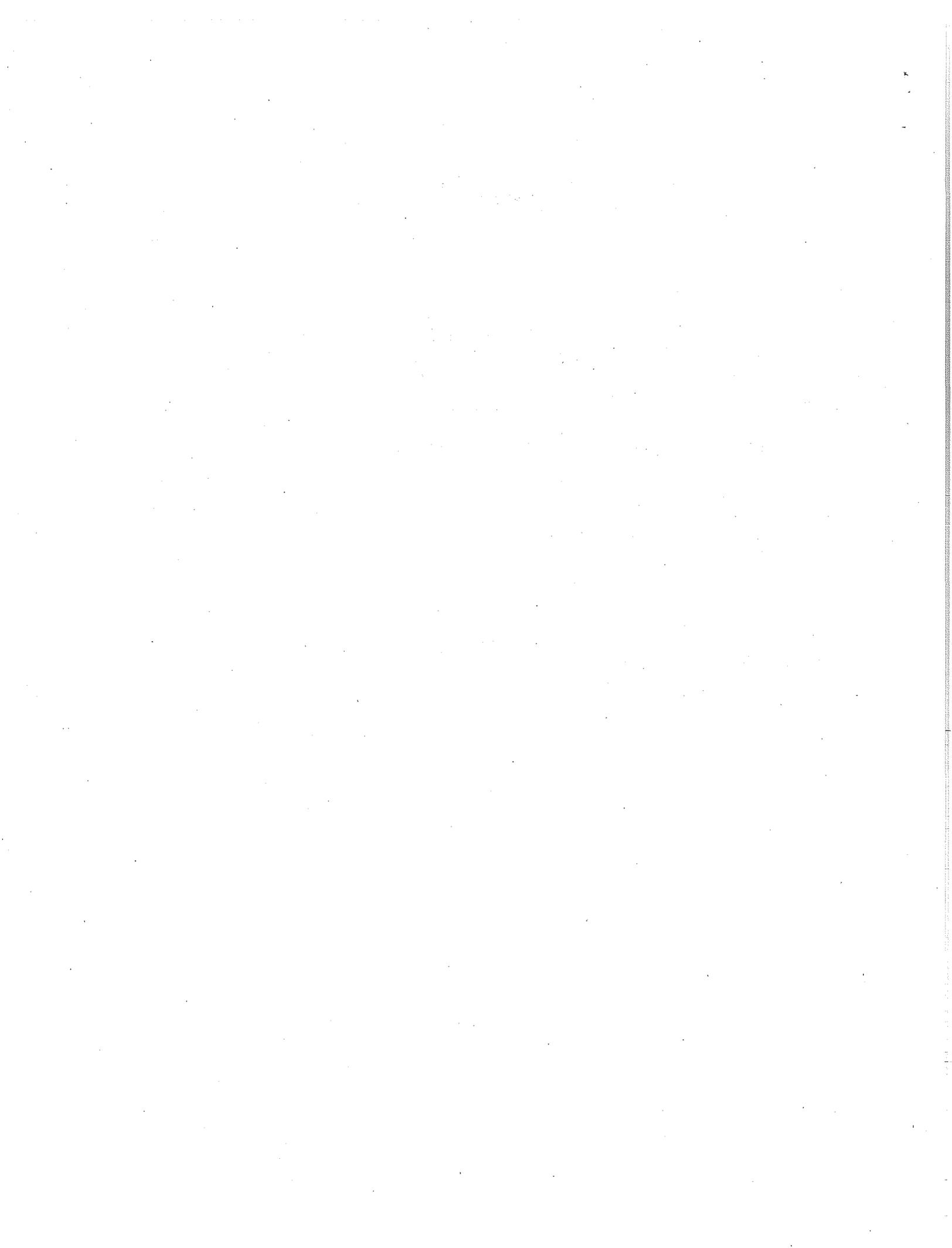
TO: Sen. Yvonne Prettner Solon, Chair, Senate Energy, Utilities, Technology
and Communications Committee
Rep. Bill Hilty, Chair, House Energy Finance and Policy Division

FROM: 
Dana B. Badgerow, Commissioner

SUBJECT: **Minnesota Statute 16C.141 – Required Report**

Pursuant to Minnesota Statute 16C.141, enclosed is a report regarding a State Employee Energy Savings Suggestion and Incentive program.

c: Governor Tim Pawlenty
Commissioner Pat Anderson, Department of Employee Relations
Commissioner Tom Hanson, Department of Finance
Legislative Reference Library (6)



Background

During the 2007 Legislative Session, bills were introduced in both the House (HF 295) and the Senate (SF 1090) calling for the creation and implementation of an employee suggestion program which would provide cash incentives for documented energy savings resulting from implementation of the suggestions.

The Department of Administration, Plant Management Division identified serious issues with the terms of the bills as introduced and was successful in revising certain provisions of the original bills. Unfortunately, a request for a fiscal note on these bills was not issued by the authors and attempts by the Department of Administration to submit a fiscal note were rejected.

Subsequent to the issuance of Minnesota Statute 16C.141, the Department of Administration has reviewed existing statutes with respect to the scope and financial issues contained in Statute 16C.141.

Issues Affecting Implementation

Our review has confirmed that the following conflicts exist and that implementation of the program outlined in Statute 16C.141 is not currently possible:

Issue No. 1: Minnesota Statute 16C.141, Subdivision 1 requires the Commissioner of Administration to implement a program under which state employees may receive cash awards for making suggestions that result in documented cost savings to state agencies from reduced energy usage in state-owned buildings.

Complication: In accordance with Minnesota Statute 16B.24, the Commissioner of Administration is authorized to maintain and operate

- State Capitol building and grounds
- All other buildings, cafeterias, and grounds in state-owned buildings in the Capitol Area
- Department of Public Safety/Bureau of Criminal Apprehension building in St. Paul
- 321 Grove Street in St. Paul

Conclusion: The authority of the Commissioner of Administration is limited to the buildings described in Minnesota Statute 16B.24. Maintenance and operations of all other state-owned buildings falls outside the authority of the Commissioner of Administration.

Issue No. 2: Minnesota Statute 16C.141, Subdivision 2 provides that funding to support cash awards should come from a transfer from the general services revolving fund to an energy savings reward account.

Complication: In accordance with Minnesota Statute 16B.48, Subdivision 2(4) (Purpose of Funds), money in the state treasury credited to the general services revolving fund and money that is deposited in the fund is appropriated annually to the Commissioner of Administration for the following purpose:

- To provide services for the maintenance, operation, and upkeep of building and grounds managed by the Commissioner of Administration

Conclusion: General Services revolving fund money cannot be used or transferred for use for any purpose other than maintenance, operation or upkeep of building and grounds.

Actions taken to date to reduce energy consumption at the State Capitol

Notwithstanding the issues outlined above, the Department of Administration has been aggressively pursuing energy conservation measures throughout State Capitol Complex buildings. The following are examples of initiatives taken during CY 2007:

- District Energy Chilled Water Extension – Construction began in late fall 2007 on the extension of the District Energy chilled water system to support the Administration Building and to prepare for support for additional buildings north of University Avenue which may be constructed in the future. The Administration building is the final Capitol Campus building to be connected to the central chilled water system. Construction completion is scheduled for the spring 2008 prior to the start of the next cooling season.
- Reduced Air Handling Unit Fan Operating Hours – Considerable electrical savings were achieved during the summer and fall 2007 through a comprehensive, building specific reduction in fan operating hours. While the majority of the savings were achieved after normal working hours and on weekends, further savings were realized during the operating days/hours through targeted shutoff of fans controlling unoccupied spaces. For example, fans in the State Office Building Committee Hearing Rooms remained off during the week and were only run when scheduled meetings were held. Similar fan use reductions are being implemented during the current winter season based upon opportunities tied to ambient air temperatures.
- Personal Computer Energy Reduction Initiative – The Plant Management Division of the Department of Administration identified personal computer energy consumption as an opportunity for meaningful energy savings. Beginning in August 2007, all Plant Management employees were directed to turn off their computers at the end of their work day and throughout the weekend. Software enhancements were implemented to ensure that all computers that were running after 6:00 p.m. would be automatically powered-down. The impact of the energy savings was then monitored. Savings were immediate and meaningful. The initiative is now being rolled-out on an enterprise level through OET with full, statewide implementation targeted for May 2008.
- Saving Energy Newsletter – Two newsletters have been prepared and published (Summer 2007 and Winter 2007/2008) which have sought to keep awareness high on the need for energy conservation, initiatives that are underway and to reinforce that employee suggestions are encouraged and can be forwarded to saving.energy@state.mn.us for handling.

Examples of suggestions received include:

- *Turning off water faucets, especially the hot-water faucet would save energy.*

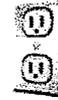
- *Implement a four-day, 40 hour (10 hour days) work week for state agencies that don't require 24/7 service. This would save heat and gasoline costs as people would be making four round trips to work each week instead of five. Keeping phone lines open longer during the day, from 7-5:30 or 6-4:30, would help citizens reach us during their non-working hours, making it more convenient for them.*
- *Encourage desk lamps and disconnect overhead lighting that is ineffective and high in energy consumption*
- *Turn off lights in unused rooms, storage areas or meeting rooms.*
- *Discontinue vending machines in break rooms; these take too much energy and are a luxury, not a need. Similarly, refrigerators (personal or full-size break room refrigerators) are not needed: if you bring a lunch it should keep just fine in a bag at your desk or in an individual bag until lunch.*
- *Require that all equipment be turned off when not in use.*
- *Heating temperatures can be lowered; air conditioning temperatures should be raised.*
- *Install sensor water faucet valves on sinks and showers. I know that the initial output of money would be high, but in the long run, the savings on water and energy for heating water could be significant. Just the savings in water cost would be worthwhile.*
- *There are three ways I can think of at the moment:*
 1. *Turn down heat to 60 degrees in all state buildings. Adjust the dress codes accordingly.*
 2. *When possible, go to a four-day, 10-hour per day work week for entire buildings, therefore for three days a week the building would be vacant and energy could be saved.*
 3. *Also, have no more than one main work shift per day and again make this shift 10 hours. This plan has been used in the past.*
- *Have no more hot water for faucets except for cafeterias.*
- *My only suggestion is to let us know how we're doing. Are we meeting the energy savings goal? Perhaps a biweekly update will encourage people to keep saving and let them know how much in energy costs have been saved*
- *How about some windmills on Capitol Hill? We could be generating our own electricity (I'm not sure if there's enough wind but it's a thought).*
- *Replace all regular light bulbs in state facilities with fluorescent bulbs. They cost more, but we could probably get a good deal on the volume. They are more energy efficient and they last a lot longer.*
- *All cubicles in my area have two lights under suspended cabinets; take one out. I will at least turn one off.*
- *Choose one cafeteria to be the main facility, expand it and reduce the rest to breakfast only with limited seating. The increased volume at the main facility might help the vendor improve the quality of the food and the service. This would save energy, free up some space that could be used as office space and perhaps improve the lunch-time experience.*
- *Have cleaning crews overlap more with core work hours. They could empty garbage cans, etc., and just do the vacuuming and carpet cleaning outside core hours. This would reduce the need to keep the buildings lit later in the evenings.*
- *Many people complain of being cold until they see that the thermometer shows that the air really is the correct temperature. If the thermometer shows it really is 68 degrees and they are cold anyway, they will realize that they really do need warmer clothes. Or it may show a cold spot and measures can be taken to bring that spot up to the correct temperature or move the person.*

- *Since many people will insist that they are way too cold, the building facilities staff should have a supply of cheap strip plastic thermometers to put in locations that inspire a lot of complaints.*
- *Turn off power strips at night or over the weekend. I would bet that my unit uses over 1,500 watts of electricity each and every weekend, just to power LEDs on flat panel monitors and on laptop computer docking stations. I also recommend replacing CRT monitors with LCD screens, which are far more energy efficient.*

- Guaranteed Energy Savings Program – In accordance with Minnesota Statute 16C.144, the Department of Administration's Energy Management Services is currently preparing RFP's for energy savings projects at the following state facilities:
 - Department of Human Services – St. Peter
 - Minnesota Correctional Facility – Stillwater
 - Minnesota Correctional Facility – St. Cloud

- RETAP (Retired Engineer Technical Assistance Program) – Plant Management has engaged the Twin Cities Chapter of RETAP to assist in the evaluation of Capitol Campus building energy consumption and waste generation in order to develop conservation recommendations. The first building being studied is the State Office Building.

Saving Energy



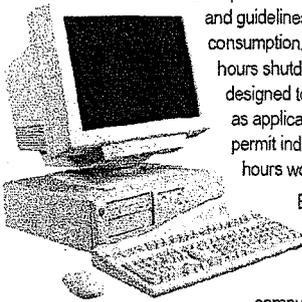
Energy Conservation Information for Minnesota State Employees

Winter 2007

Governor Tim Pawlenty has issued an Executive Order challenging all state agencies to reduce energy use in state-owned buildings by 10 percent. As we all know, rising energy prices pose a significant challenge for state government. Minnesota's state agencies should be leaders in saving energy and demonstrating the public benefits of energy conservation. This periodic e-letter is part of an effort to increase awareness across state government of the importance of SavingEnergy.

Power-saving computing

State agencies are taking the initiative to reduce personal computer energy consumption. Effective Dec. 1, all desktop and laptop computers available for purchase by the state now meet new, more stringent Energy Star 4.0 requirements. Additionally, an interagency team, led by the Office of Enterprise Technology, is developing standards and guidelines that would further reduce power consumption, including system wide after-hours shutdowns. These measures will be designed to allow routine maintenance, such as application and security updates and will permit individual user override for after-hours work needs.



Both actions respond to Governor Pawlenty's directive requiring Energy Star 4.0 compliance for all new purchases of computers and, on current equipment,

activation of power management functions that automatically transfer computers to a "sleep" or "hibernation" mode when not in use.

On Nov. 7, Governor Pawlenty announced a pioneering partnership between his National Governor's Association initiative, "Securing a Clean Energy Future," and the "Climate Savers Computing Initiative," founded by Google and Intel, to spur the deployment of more energy efficient computers and servers in state offices and agencies. Minnesota joined with Kansas as the first two states to sign a commitment to the Computing Initiative.

As agencies transition to Energy Star 4.0 compliant computers, state government will eventually realize a reduction in power consumption of up to 20,000 kilowatt/hours a day, trim costs an estimated \$320,000 and eliminate approximately 6.4 million pounds of carbon dioxide emissions.

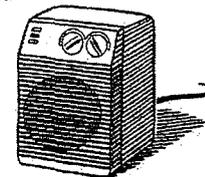
For more information on Securing a Clean Energy Future, visit www.nga.org/ci. For details on the state's computer purchasing program, see the IT Standards and Resource Management link at www.oet.state.mn.us. Energy Star is online at www.energystar.gov.

Send us your energy saving tips

Do you have an idea about how state government can reduce energy consumption in its buildings? We've received a bunch already (see "That's an Idea" at www.savingenergy.state.mn.us), but can always use more. Building-specific ideas will be passed along to facility engineers; those of a more general nature may be included on the web site. E-mail your suggestions, big or small, to saving.energy@state.mn.us.

Friendly reminder

Personal space heaters pose a significant safety and fire hazard (most require 24" clearance) and are not permitted in state buildings. They are also electricity and money hogs, costing as much as \$3 a week to operate. One solution is warmer clothing and physical activity, even if it's only stretching at your desk. The perceived need for space heaters, however, may also indicate a larger issue with the operation of the building—which can actually be made worse if individual space heaters are added here and there. Check with your facility engineer or building operator to be sure the entire building is operating as efficiently as possible.



Lighting opportunities

Lighting consumes a significant amount of energy in most commercial buildings, which means that careful lighting choices can have a big effect on energy use. Here are a few things to consider:

- Turn it off. If a light isn't needed, simply turn it off. This includes lights in a cubicle, a storage space, or a room with good daylight.
- Switch the bulbs. Wherever possible, incandescents should be replaced with CFLs or LEDs. New versions allow for dimming, outside use, and different color temperatures.
- Automatic control. For infrequently used areas, occupancy detector switches can keep lights off until someone enters the space—and then turn them off after they leave. These are great for storage areas, loading docks, low-traffic bathrooms and conference rooms.
- Task vs. general lighting. If general lighting is lowered, there is often still a need for controllable, directional, and higher lumen task lighting at workstations—which should be as energy-efficient as possible.

Want to know more?

Visit the SavingEnergy web site, www.savingenergy.state.mn.us or www.commerce.state.mn.us and click on Energy Info Center.

The SavingEnergy e-letter is produced by the
Minnesota Department of Commerce,
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and the Minnesota Department of Administration.

