

JUDICIAL COUNCIL OF CALIFORNIA

455 Golden Gate Avenue · San Francisco, California 94102-3688

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REPORT TO THE JUDICIAL COUNCIL

For business meeting on: September 14-15, 2017

Title

Court Facilities: Report Back on Utility and Maintenance Costs Reduction and Revised Energy Conservation Guidelines

Rules, Forms, Standards, or Statutes Affected None

Recommended by

Trial Court Facility Modification Advisory Committee Hon. Donald Cole Byrd, Chair Hon. William F. Highberger, Vice-chair Agenda Item Type Action Required

Effective Date September 15, 2017

Date of Report August 29, 2017

Contact

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Executive Summary

The action plan adopted by the Judicial Council in May 2017—to address the Court Facilities Trust Fund's (CFTF) funding shortfall of \$10.3 million in fiscal year 2017–2018—targeted cutting 10 percent of operations and maintenance costs and utility costs in trial court facilities statewide. Progress toward realizing a 10 percent reduction in operations and maintenance costs continues as council staff negotiate with onsite service providers, delegated trial courts, and counties. Progress continues toward a 10 percent reduction in utility costs through energy-efficiency projects and behavioral changes. As part of the effort to affect behavioral changes that quickly impact utility costs and realize savings, the Trial Court Facility Modification Advisory Committee (TCFMAC) recommends that the Judicial Council adopt the revised energy conservation guidelines. As every dollar saved in utility costs can be applied to trial court facilities operations and maintenance, the TCFMAC advocates for quick action on energy conservation and efficiency in order to protect CFTF funds.

Recommendation

The Trial Court Facility Modification Advisory Committee recommends that the Judicial Council, effective September 15, 2017, adopt the revised energy conservation guidelines (see Attachment A).

Previous Council Action

On July 13, 2001, as branchwide policy to encourage individual courts to reduce energy consumption, the council adopted a set of guidelines for energy conservation in court facilities (see Attachment B). The purpose of the guidelines was to raise court awareness on energy usage and to encourage reduction in power usage where practicable. To implement the guidelines, the council directed the trial courts to collaborate with their counties and the appellate courts to work with the state Department of General Services or their landlords. The council also directed the courts to report back on the steps taken to reduce energy consumption. The minutes of the July 13, 2001, council meeting are available (see Link A).

On May 18, 2017, to address the CFTF's revenue shortfall of \$10.3 million for FY 2017–2018 and projected shortfall of \$12.6 million in FY 2018–2019, the council directed its staff to take all actions necessary to reduce utility and maintenance costs—including engaging the local trial courts—and to report back on its progress at the September 2017 Judicial Council meeting (see Link B). This action directed council staff to work with the trial courts to implement a series of conservation and energy-efficiency strategies for: facilities lighting; heating, ventilation, and air conditioning (HVAC); plug load from any device that plugs into a building's electrical system such as computers, printers, and copiers; tracking and reporting utility cost and usage; and updating the council's 2001 energy conservation guidelines for implementation by the trial courts.

Rationale for Recommendation

Update on utility and maintenance costs reduction in FY 2017-2018

As presented to the council in May 2017, the action plan to address the CFTF's funding shortfall in FY 2017–2018 has been focusing on cutting 10 percent of operations and maintenance costs and utility costs in trial court facilities statewide. It is expected that maintenance costs will be reduced by approximately \$6.3 million as council staff continue to negotiate with onsite service providers, delegated trial courts, and counties. Utility costs are forecasted to be reduced by \$3.3 million. Additional costs savings to achieve the 10 percent reduction should be in place by November 1, 2017. It should be noted that the council's Sustainability Unit is currently implementing 59 energy-efficiency lighting projects, with plans to complete 44 additional projects by the end of the fiscal year. Also planned for completion by the end of the fiscal year are 22 energy-efficiency, HVAC-related projects. Moreover, this unit continues to complete energy-efficiency audits on facilities to identify future utility cost savings.

Revised Guidelines for Energy Conservation in Trial Court Facilities

Quick and effective utility cost reduction cannot be achieved without collaboration with the trial courts. Utilities comprise almost 45 percent of CFTF expenses, with 75 percent of utility costs

coming from electricity usage. In terms of electricity usage, generally one-third of electricity costs are generated by lighting, one-third by HVAC systems, and one-third by plug load. Since electricity comprises 75 percent of utility costs, conservation and efficiency efforts are focusing on electricity, which is why the attached, revised energy conservation guidelines have been developed with more of an emphasis on lighting, HVAC, and plug load for trial court implementation. These guidelines also identify conservation efforts council staff will be implementing in collaboration with the trial courts.

The revised guidelines are part of the renewed effort to increase awareness and collaboratively address electricity usage, such that a 10 percent reduction in utility costs can be realized. This 10 percent reduction translates to an ongoing savings that will reduce ongoing costs with minimal impact on court operations and maintenance. Every dollar saved in utility costs is a dollar that can be applied to operations and maintenance.

Comments, Alternatives Considered, and Policy Implications

At the May 31, 2017, meetings of the Executive Committee of the Court Executives Advisory Committee (CEAC) and the joint CEAC/Trial Court Presiding Judges Advisory Committee, council staff provided an update on the progress made toward savings on operations and maintenance costs and utility costs as well as on the revised energy conservation guidelines. Also, draft guidelines were presented at the June 6, 2017, and July 13, 2017, meetings of the CEAC Facilities Working Group and shared again with the full CEAC on July 28, 2017.

The Trial Court Facility Modification Advisory Committee discussed the revised guidelines at its meeting on July 21, 2017. No public comments were received.

Implementation Requirements, Costs, and Operational Impacts

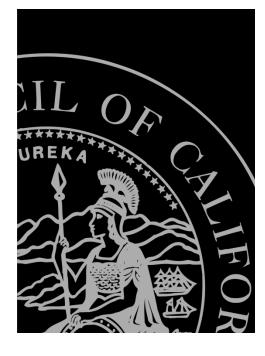
Costs incurred by implementing the recommended council action are still to be determined.

Relevant Strategic Plan Goals and Operational Plan Objectives

The recommended council action supports Goal III, Modernization of Management and Administration; and Goal VI, Branchwide Infrastructure for Service Excellence.

Attachments and Links

- 1. Attachment A: *Guidelines for Energy Conservation in Trial Court Facilities*, revised September 15, 2017
- 2. Attachment B: Judicial Council meeting report: *Judicial Council Policy on Energy Conservation in the Courts* (July 3, 2001; for meeting of July 13, 2001)
- 3. Link A: Judicial Council meeting minutes (July 13, 2001), www.courts.ca.gov/documents/min0701.pdf
- Link B: Judicial Council meeting report: Court Facilities: Court Facilities Trust Fund— Reducing Operations and Maintenance Costs, and Utility Costs in Courthouses (May 18, 2017), <u>https://jcc.legistar.com/View.ashx?M=F&ID=5158715&GUID=2D6F9000</u> <u>-00C7-4291-86F6-A18A85165A4C</u>



Guidelines for Energy Conservation in Trial Court Facilities

ADOPTED: JULY 13, 2001 REVISED: SEPTEMBER 15, 2017



JUDICIAL COUNCIL OF CALIFORNIA

| Ene | Energy Conservation Guidelines Trial courts should perform the following guidelines: | | | | |
|------|---|--|--|--|--|
| Tria | | | | | |
| 1. | Designate a staff member to assist in communicating energy-related issues courtwide through email, informal discussions, meetings, or other method. This per will be added to the Judicial Council's Sustainability Unit email list; so that news, tips, success stories, project updates, and the like can be effectively communi The council's Sustainability Unit can be contacted at JCCSustainability@jud.ca.gov. | | | | |
| 2. | Designate a staff member to work with the Judicial Council's Sustainability Unit as it rolls out an energy dashboard in early-2018. This dashboard will provide d utility cost and usage data to monitor and track energy-consumption data of trial court buildings. The council's Sustainability Unit will support this tracking tool a provide user training to the trial courts. Trained court staff should alert court administrators during periods of higher than expected usage. | | | | |
| 3. | Use motion-sensor plug load controls for desktop electric devices. Task lighting, portable fans, and similar devices can be easily connected to a motion-control power strip to automatically shut off those devices if left on for long periods of time. | | | | |
| 4. | Establish reasonable hours for operating HVAC and lighting during normal business hours. Designate a procedure or override capability for staff who utilize the facility during off hours or on weekends. All non-essential lighting and other electrical loads should be minimized outside of normal building hours. | | | | |
| 5. | Maintain ambient temperature settings at manufacturer specification maximums in data centers or MDF/IDF rooms. | | | | |
| 6. | Prohibit the use of personal heaters (as mandated in 2010 under the authority of the Office of the State Fire Marshal [Health and Safety Code, § 13108]) without express written consent of an approved reasonable accommodation request or from Judicial Council staff. Accommodation requests must meet specific condit the Office of the State Fire Marshal and Judicial Council. | | | | |
| 7. | Enable the automatic power-down or Energy Saver feature on all electronic office equipment such as copiers and printers. Purchase (or suggest for purchase) practical Energy-Star-rated equipment deemed the most energy efficient. | | | | |
| 8. | Ensure personal devices, such as coffee pots, microwaves, and refrigerators, are not plugged into workstations (cubicles). Breakrooms or rooms used as breakrooms are excluded. Exception: The following may be allowed if Judicial Council staff determines the circuit can safely accommodate the electrical load: • Cell phones and tablets; and • Task lighting that is UL-approved and does not use incandescent or halogen bulbs. | | | | |
| 9. | Turn off all lights and equipment in work spaces, including copiers and printers, at the end of the workday or when not needed, except for equipment designate 24/7 or for which there is a specific need for after-hours operations (e.g., email servers, fax machines, or other essential equipment). Install reminder labels as needed. | | | | |
| 10. | Maintain building temperatures within an acceptable range to avoid wasteful over-control patterns. Although this range may vary with each building's control sy the target range should be 72°F–75°F, unless such a temperature in a particular job or occupation may expose employees to a health and safety risk. Simultar or alternate heating and cooling should be avoided. | | | | |
| 11. | Adjust (if installed) window blinds or coverings, including closing them fully to the extent possible throughout the day, to prevent solar heat gain during summer months and heat loss during winter months. | | | | |



JUDICIAL COUNCIL OF CALIFORNIA OPERATIONS AND PROGRAMS DIVISION FACILITIES SERVICES

| | Staff Member Type | Guideline Type | Short-term Effort | Long-term Effort | Estimated Energy Saved ¹ |
|---------------------|-----------------------------|---------------------------------|----------------------|---------------------|---|
| | | | | | |
| erson hicated. | Any designated | General | ✓ | | N/A |
| detailed and | Any designated | General | ✓ | ~ | N/A |
| olled | All, upon approval | Plug Loads | ~ | ~ | 17–38% |
| IE | Facility Managers | General | ~ | ~ | 5-10% |
| | IT and Facility Managers | Building Heating and Cooling | ~ | \checkmark | 5-10% |
| out the tions of | All | Plug Loads | ~ | ~ | 5-10% |
|) as is | All | General | | ✓ | 1–10% |
| | All | Plug Loads | ~ | ~ | 1-5% |
| ed as | All | General | ~ | ~ | 2–4% |
| ystem, neous | Facility Managers | Building Heating and Cooling | ✓ | ✓ | 1–3% |
| r | All | Building Heating and Cooling | ~ | ~ | 2% |

Energy Conservation Guidelines Judicial Council staff should perform the following guidelines:² Replace any incandescent, halogen, or fluorescent lighting with higher-efficiency, light-emitting diode (LED) lighting, in coordination with the Judicial Council's 1. Sustainability Unit. 2. Ensure facilities with a Building Management System, which controls HVAC and possibly lighting, is scheduled correctly and in accordance with normal building operational hours. Define a procedure, if needed, to temporarily override the set schedule for the use of the building in unscheduled timeframes for occurrences as staff overtime, an after-hours meeting, or a Saturday workshop or training event. 3. Install some form of daylight controls in day-lit zones (near windows and under skylights) in coordination with the Judicial Council's Sustainability Unit. When su lit areas exceed 10,000 square feet, consider including these day lighting controls (e.g., sensors that adjust artificial lighting in response to the available natural in Building Automation Systems. 4. Operate and adjust controls to get optimum advantage from outside temperatures for meeting cooling demand (e.g., using outside air economizers and night fl cycles). Avoid operating chillers and compressors when possible. All "pre-cooling" options for buildings should be employed. 5. Inspect and maintain ducts, air filters, and related hardware to maximize effectiveness at the lowest acceptable power use. 6. Minimize hot water usage. Ensure domestic hot water temperatures are not set above 105° F, unless this conflicts with a code requirement for the facility. Tune up all forced and induced draft gas and oil-fired boilers at least twice annually. If there are automated combustion controls, verification of combustion effic 7. should be conducted at least twice annually. Install motion detectors that turn off lights in unoccupied rooms. In facilities where occupancy controls are not accessible in common areas, turn off all non-ess 8. equipment and non-emergency lighting at the end of the workday or when not needed.

Footnotes:

1. The estimated energy saved is the percentage saved of the affected system, such as heating and cooling or lighting, and not of entire building usage. Typically, heating and cooling, lighting, and plug loads comprise the largest end-use types and therefore have the greatest impact on energy consumption.

2. Costs paid by the Judicial Council.



JUDICIAL COUNCIL OF CALIFORNIA

OPERATIONS AND PROGRAMS DIVISION FACILITIES SERVICES

| | Staff Member Type | Guideline Type | Short-term Effort | Long-term Effort | Estimated Energy Saved ¹ |
|-----------------------|----------------------|------------------------------|----------------------|---------------------|---|
| | | | | | |
| | Facility Managers | Lighting | ~ | ✓ | 30%-60% |
| ng es such | Facility Managers | Building Heating and Cooling | | ~ | 10-20% |
| uch day- al light) | Facility Managers | Lighting | | ~ | 5-10% |
| lush | Facility Managers | Building Heating and Cooling | | ✓ | 3-10% |
| | Facility Managers | Year-round Maintenance | | ~ | 2–5% |
| | Facility Managers | Building Heating and Cooling | | ~ | 2-5% |
| iciency | Facility Managers | Year-round Maintenance | | ~ | 2-5% |
| sential | Facility Managers | Lighting | | ~ | 2–4% |

JUDICIAL COUNCIL OF CALIFORNIA ADMINISTRATIVE OFFICE OF THE COURTS

455 Golden Gate Avenue San Francisco, California 94102-3660

Report

| TO: | Members of the Judicial Council |
|----------|--|
| FROM: | Robert D. Lloyd, Manager, Facilities Unit 415-865-7971 |
| DATE: | July 3, 2001 |
| SUBJECT: | Judicial Council Policy on Energy Conservation in the Courts |

(Action Required)

Issue Statement

As extensively reported in the media, California is experiencing a persistent power emergency, resulting in increased costs for energy, energy shortages, and occasional rolling blackouts. Governor Davis has called on all Californians to reduce energy usage. The executive branch, local governments, businesses, and residential consumers have implemented, to varying degrees, measures to reduce energy consumption.

Recommendation

AOC staff recommends that the Judicial Council, effective July 13, 2001:

- 1. Adopt "Guidelines for Energy Conservation in California Court Facilties" as branchwide policy to encourage individual courts to reduce energy consumption;
- 2. Urge trial courts to work with their counties, and appellate courts with the state Department of General Services or their landlords, to implement the guidelines; and
- 3. Request that the courts report to the council, within 60 days of the issuance of the request, on the steps they are taking to reduce energy consumption.

Rationale for Recommendation

The recommendation will raise the courts' awareness of energy usage and encourage them to reduce power usage where practicable. It is expected that this step will reduce energy costs for the courts as well as contribute to overall reduction in power consumption within the state. The courts' reports to the council will provide a means by which to assess the courts' contributions to the overall conservation effort.

Alternative Actions Considered None.

<u>Comments From Interested Parties</u> None were requested.

Implementation Requirements and Costs

The trial and appellate courts would make efforts to implement the guidelines and report on the energy conservation measures they adopt. Implementation costs were not quantified. Most of the guidelines require little or no cost to implement. Any expenditures are expected to result in long-term savings.

Attachment

Attachment

Guidelines for Energy Conservation in California Court Facilities

California faces a statewide energy crisis that requires the cooperation of all citizens, businesses, and government and private entities. The judicial branch is committed to taking all reasonable steps necessary to conserve energy. Therefore, the Judicial Council directs all trial and appellate courts and other judicial branch offices to work cooperatively with lead executive branch agencies (for example, California Department of General Services for appellate courts and host counties' administrative office for trial courts) to establish and implement a plan to reduce energy consumption. The plan shall include, but not be limited to, the actions below:

- Reducing lighting levels throughout the facility. This may be accomplished by removing some of the bulbs or tubes from general work-area lighting and reducing lighting in hallways, lobbies, and other public areas. Encourage the use of task lighting in lieu of overhead lighting wherever possible. Eliminate decorative lighting.
- Increasing the setting of cooling system thermostats. Thermostats are often set in the range of 68 to 72 degrees and should be increased generally to 74 to 78 degrees. The implementation of increased thermostat settings should take temperature zoning into consideration wherever possible. Courtrooms may be set at 70 to 74 degrees because the occupants are normally in formal business attire or robes.
- Establishing reasonable hours of operation for lights and HVAC (e.g., in warmer regions turn HVAC on at 6:00 a.m. rather than earlier and turn it off at 6:00 or 7:00 p.m. rather than later; on weekends turn on HVAC only when actual use of the facility is scheduled and for the limited time of building occupancy.)
- Encouraging informal dress, as appropriate, to help compensate for higher temperatures.
- Encouraging employees to shut off lights and computers when not in use. Install motion detectors that turn off lights in unoccupied rooms. Turn off copiers and printers at night if not used.
- Evaluating and incorporating, where possible, detailed recommendations on energy conservation measures available from *www.energy.dgs.ca.gov* (refer to Memorandum 01-05 and Message from the DGS Director) and from local utility Web sites and information offices.