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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON REGIONAL OFFICE
FIFTH FLOOR
803 WEST BROAD STREET
FALLS CHURCH, VIRGINIA 22046

SEP 7 1973

Mr. Frank Wille, Chairman
Federal Deposit Insurance Corporation
Washington, D.C. 20429

Dear Mr. Wille.

The General Accounting Office has been reviewing the potential for energy conservation in Federal office buildings. We had begun to study the energy consumption at the Federal Deposit Insurance Corporation (FDIC) building in Washington, D C , when the President requested that each agency establish a plan to reduce the demand for energy by 7 percent over the next year The FDIC plan was submitted on August 10, 1973.

In examining the FDIC plan we are impressed with your agency's intent to move forward affirmatively towards energy conservation. Particularly interesting is the concept of appointing conservation monitors to increase employee participation in the program and which could lead to further conservation efforts on the part of employees in their private lives. Similarly commendable are your efforts to reduce lighting through increased use of natural light sources and the turning off of lights in areas where they are not being used. In view of the recentness of your plan, we have deferred further review effort at this time. We do, however, have some observations on the FDIC building which could help in your energy conservation efforts.

The FDIC plan does not provide for the energy savings possible by shutting down the main air-conditioners when the building is unoccupied during evening hours, over weekends, and on holidays. Air-conditioners in the FDIC building are operated on a 24-hour-a-day basis during the cooling season In most Federal buildings managed by the General Services Administration (GSA) in the Washington, D.C , area, air-conditioners are not operated when the buildings are unoccupied. A similar practice could be adopted by FDIC without any adverse effect since the data processing area is served by an independent air-conditioner. Although the savings from not operating the air-conditioners can not be readily quantified because of the varying capacities at which the air-conditioners are operated and the effect of inside temperature settings and outside weather conditions on energy consumed, the potential for savings appears significant.

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A further opportunity for energy savings appears possible in revising the operations of ventilating fans, which operate 24 hours a day, 365 days a year, with the exception of the lobby fan which is operated only during the winter. We estimate that ventilating fans used 24 percent of the total electricity consumed in fiscal year 1972.

Ventilating fans are operated even during winter when the heat is turned off after normal working hours during the week and completely on weekends and holidays, except when outside temperatures are 45 degrees or below. During the time that heat is not being provided in the building, the ventilating fans could be shut down. Similarly, the operation of the ventilating fans could be eliminated during summer if the air-conditioners are not operated after normal working hours, on weekends, and on holidays.

Over 65 percent of the electricity used by the ventilating fans occurs, as the enclosure indicates, when the building is unoccupied, at a cost of $7,156. If the ventilating fans were not operated two-thirds of this time, a savings of $4,750 would be achieved. This represents 10 percent of the electricity consumed during fiscal year 1972.

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Because of our continuing interest in energy conservation, we would appreciate being informed of any action taken or planned as a result of the information we have provided Any questions which you or your representatives may have should be directed to Robert McLoughlin of this office, telephone 16-72151 (direct dial 557-2151)

Sincerely,

H. L. Krieger
Regional Manager

Enclosure

cc Mr Edward J Phelps, Jr
Controller, Federal Deposit
Insurance Corporation

ENCLOSURE

FDIC VENTILATING FANS

Fan (note a)	Horsepower	Annual kilowatt hour usage	Kilowatt usage when building not occupied (note b)	Cost of kilowatt usage when building not occupied (note c)
Dual duct supply	125	653,496	427,906	$3,445
Primary number one	30	156,839	102,697	827
Primary number two	30	156,839	102,697	827
Basement supply	15	78,419	51,349	413
Cafeteria multizone	7.5	39,210	25,674	207
Lobby supply (estimate on 6 months)	0.75	1,960	1,284	10
Dual duct return	30	156,839	102,697	827
Garage exhaust	15	78,419	51,349	413
Cafeteria exhaust	3	15,684	10,270	83
Toilet exhaust	3	15,684	10,270	83
Penthouse exhaust	0.75	3,921	2,567	21
Totals	260	1,357,310	888,760	$7,156

[a]Three fans serving the data processing area have been excluded from this listing since this area must have a controlled environment at all times We have also omitted three small fans located in electric closets which we were advised should be left on at all times.

[b]Based on shutdown from 6 p m. to 6 a m weekdays and all day on Saturday, Sunday, and holidays for a total shutdown of 5,736 hours a year including nine holidays.

[c]Electricity is billed at a decreasing rate with increasing usage. These savings are calculated at the more economical rate (.00805 per kilowatt hour) applied to the highest units used and without consideration of demand charges.