



6/27
DEPARTMENT OF THE NAVY

NAVAL EDUCATION AND TRAINING CENTER
ONE SIMONPIETRI DRIVE
NEWPORT RHODE ISLAND 02841-1711

IN REPLY REFER TO:

11310
Ser 422E/201

13 JUN 1997

From: Commander, Naval Education Training Center
To: Distribution List

Subj: ELECTRICAL ENERGY CONSERVATION PLAN (EECP)

Ref: (a) NETCNPT/LOCAL AREA RI COORDINST 11300.5A

Encl: (1) Electrical Energy Conservation Work Sheet
(2) Draft EECP Narrative
(3) Sample EECP Organization Chart
(4) EECP Individual Building Worksheet

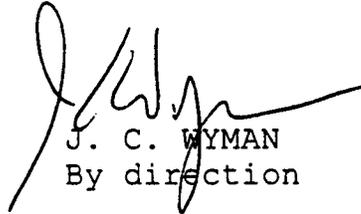
1. The Public Works Department is tasked to develop a comprehensive Electrical Energy Conservation Plan for the naval complex in the event that we are required by the electric utility company to cut consumption of electric power this summer.

2. Each department and tenant command on NETC is requested to complete enclosure (1) using guidance provide by enclosures (2) and (3). Return enclosure (1) to NETC Code 422, Building 1CC by 30 June 97. Point of contact for questions concerning the plan is Mr. David Pilkington at extension 1-7624. He may also be contacted by CCmail at "netc-nep.422dpil@smtp.cnet.navy.mil" or facsimile at 1-3190. Enclosure (4) is provide for your information and use.

3. The electric utility company may direct us to reduce consumption to avoid brown out and black out conditions during peak usage hours through the summer months. This plan is being developed to avoid disruptions in electric power service and avoid mission disruption through the systematic cut back of electric power use through conservation methods and planned service interruptions to non-mission essential buildings. The philosophy of the plan provides for restricting electrical energy use and initially scaling down use in areas most remote from the primary mission area, then progressing in a prioritized sequence to more mission-essential functions.

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4. The Local Area Coordinator will direct the execution of the plan throughout the naval complex by initially declaring the nature of the emergency and then specifying the degree of response desired. The completed Electrical Energy Conservation Plan will be distributed as Change 1 to reference (a).



J. C. WYMAN
By direction

Dist:
List A
List B
List K

ELECTRICAL ENERGY CONSERVATION PLAN
NARRATIVE

1. General. Navy power consumption remains fairly regular throughout the year, peaking generally in August when a number of training ships are in port and cooling requirements are at a maximum. This peak demand corresponds with the peak period experienced by Newport Electric Corporation. The naval complex does not generate its own electrical power and must rely on the electric utility company. This plan lists preventive measures to be taken to reduce the chance of a an electrical power "brownout" or "blackout" during the summer peak period when demand may exceed supply. These peak load hours are historically from 1000 through 1500 hours. Rapid response to a situation is absolutely essential to minimize the effect of a power shortage.

2. Organization & Implementation. Each command/dept. is required to have two Energy Conservation Officers in Charge (ECOIC), a primary and a secondary. And two Energy Conservation Officers (ECO) per building, a primary and a secondary. The Command/Dept. ECOIC is the point of contact for the command/Dept. and may serve as a building ECO. One ECO should be available at all times. In the event of a required energy cutback, the ECO will take the required action; inform all personnel in the building of the present energy condition, police the conservation effort and provide feedback.

3. Building Status Level

STATUS	REMARKS
D	Bachelor Quarters, MWR Facility
C	Operation and School Bldgs, Nonessential Utilities, other Admin Bldgs - Minor impact, will slow but not stop completion of command mission.
B	Dining Facilities, Refrigeration requirements and Critical Admin Bldgs
A	Mission Essential Bldgs, Critical Utilities, Fire and Police,

4. Narrative of Electric Energy Condition (ECON) Settings

a. **Electric ECON FIVE (V)**. This condition institutes energy conservation measures designed to both reduce the likelihood of causing or being affected by a serious power shortage and to

Enclosure (2)

lessen the chance of setting a new peak demand level. This condition may be set as a routine precaution during periods of peak electric power demands. Implementation of this condition should reduce daily power demand by about 10 percent.

(1) Turn off all unnecessary lighting

(2) Turn off all comfort only window air conditioning (AC) units. Set nonessential central AC system thermostats at 80 F. Essential AC spaces remain at original setting. Essential AC spaces are areas which have no other means of ventilation, or support electronic equipment which must be cooled in order to operate.

(3) Turn off electric hot water heaters, vending machines, water coolers, fans, coffee pots, etc.

(4) Turn off electronic and electrical equipment not in use.

(5) Reschedule machine and equipment operations to non-peak hours.

(6) Turn off anything else you can think of.

b. **Electric ECON FOUR (IV)**. Full implementation of this condition should reduce daily power demand by about 20 percent.

(1) Full implementation of the previous condition setting.

(2) Voluntary curtailment of lighting and appliance loads in housing areas. Word will be passed to occupants by security units, housing managers, Navy Cable, and military personnel calling home.

(3) Turn off all other personnel support type electronic equipment, fax machines, reproduction machines, etc.

(4) Ships in port implement energy conservation measures. Prepare to have shore power secured if ECON Three is set.

c. **Electric ECON THREE (III)**. Full implementation of this condition should reduce daily power demand by about 30 percent. Should a "brown out" occur, it may be necessary to go beyond the minor inconveniences and discomforts associated with ECON IV and set ECON THREE. Normally, the news media will publicize developing situations of this type to alert the public, and Newport Electric Corporation should be able to advise the NETC Energy Conservation Officer of the expected degree of a crisis so plans may be made for a timely response in the event of an actual emergency.

- (1) Full implementation of the previous condition settings.
- (2) Secure power to housing areas at substations.
- (3) Secure shore power to ships in port.

d. **Electric ECON TWO (II)**. At this level, no further curtailment is possible without affecting command missions. Spot shedding of building loads in whole or in part is not possible due to the time constraints. ECON TWO will deenergize a large block of loads which will reduce demand by approximately 40 percent. Category "B" and "A" building loads will be separated from category "D" and "C" building loads through switching and reenergize in full or in part.

- (1) Full implementation of the previous condition settings.

- (2) All category "D" and "C" buildings listed in Tab B will be without electric power.

- (3) Perform switching and restore power to all category "B" and "A" buildings listed in Tab B.

e. **Electric ECON ONE (I)**. This condition is an extension of ECON TWO and will reduce demand by a cumulative total of 50 percent. This is an extreme measure used to avoid a total "black out" condition.

- (1) Full implementation of the previous condition settings.

- (2) All category "B" buildings listed in Tab B will be without electric power.

- (3) Perform switching and restore power to all category "A" buildings listed in Tab B.

5. Each command/Dept. will be responsible for providing the following information on enclosure (1):

- a. The name and phone number of two persons for each building, who will be responsible for carrying out the duties as Building ECO and the Officer In Charge for Command Energy Conservation.

- b. List all buildings occupied by each command/dept.

- c. Assign a Building Category Level to each building.

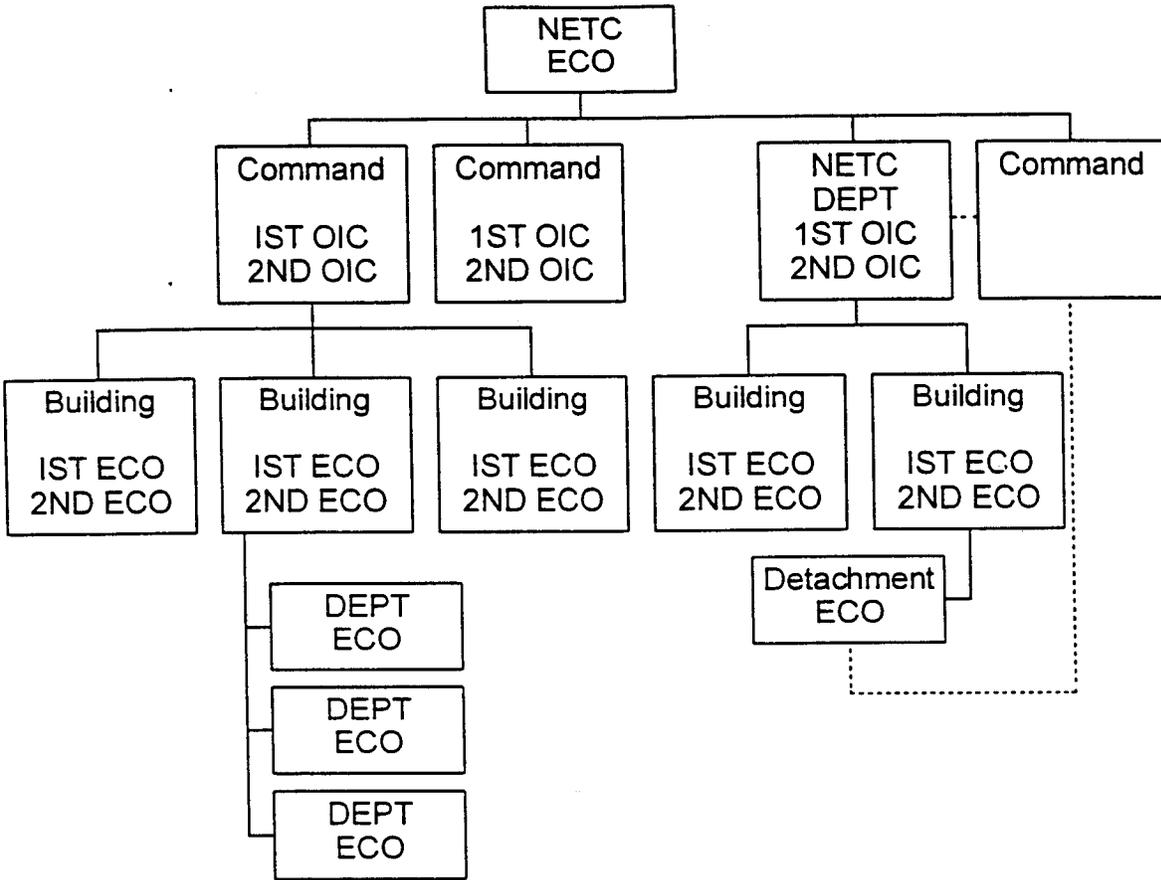
Enclosure (2)

6. Building Category Level

CATEGORY	REMARKS
D	No impact, will not have an effect on command mission.
C	Minor impact, will slow down but not stop completion of mission.
B	Partial Impact, will prevent the command from completing their full mission statement.
A	Full impact, unable to complete mission / critical utility.

7. In the event that a cutback is required the EC Conditions V will be set. The objective of this level is to shed as much of the load as possible with minimal impact to the command. This will include but is not limited to turning off, Decorative lighting, Air conditioning units for comfort, Office Lighting, Non-essential computer and electronic equipment. If proper attention and action is taken at this state, no further reductions may be required. If the amount of cutbacks are insufficient it may mandate securing power to buildings. The building status is divided into four levels, each level will have a larger effect then the previous. It is our goal never to reach any of these levels.

Energy Conservation Organizational Chart



Energy Conservation Plan

INDIVIDUAL BUILDING WORKSHEET

Command/Dept: _____
Command/Dept ECO: _____
Building Name: _____
Building Number: _____
Category Level: _____
Date Prepared: _____

Building ECO **Name** **Phone Number**
Primary: _____
Secondary: _____

	YES	NO
Emergency Generator Power Available?		
Critical Computer System?		
Mission Essential Equipment?		
Equipment That Requires Air Conditioning?		
Equipment Requiring an Orderly shut down?		
Can the building Operate with only 10% Available power?		

Keep Us Out of An EC Condition

- Clean Air Conditioner filters to obtain maximum efficiency.
- Use Energy efficient Computer Monitors.
- Turn off lights that are not needed. (save power and generate less heat).
- Enable Power saving options on Equipment

IF EC Condition V is set:

- Turn off
 - AC Equipment that is not protecting vital equipment.
 - Electrical and Electronic Equipment not being used
 - All Decorative lighting
 - Any Lighting that doesn't need to be on
 - Large Motor loads
 - Electric Domestic Hot Water Heaters
 - Anything else you can think of,
- The better we do now the less we have to do later

Form updated: 20 Jun 96