DEPARTMENT OF THE NAVY
NAVAL AIR STATION OCEANA
VIRGINIA BEACH, VIRGINIA 23460-5120

IN REPLY REFER TO:

NASOCEANAINST 11010.6B CH-2
18
08 JUL 1993

NAS OCEANA INSTRUCTION 11010.6B CHANGE TRANSMITTAL 2

Subj: ENERGY CONSERVATION PROGRAM

1. Purpose. To update temperature control standards.

2. Action. Make pen and ink changes to the basic instruction. Change the words "70 degrees" to read "68 degrees" on the following pages:

a. Enclosure (1), page 2, paragraph 3c(2).

b. Enclosure (2), page 3, paragraph 1b(3)(a).

c. Enclosure (9), page 1, paragraph 1(a)(2).

J. W. CRAINE, JR.

Distribution:
NASOCEANAINST 5216.1L
Lists I, II, III

DEPARTMENT OF THE NAVY

NAVAL AIR STATION OCEANA
VIRGINIA BEACH, VIRGINIA 23460-5120

IN REPLY REFER TO:

NASOCEANAINST 11010.6B CH-1

23 SEP 1992

NAS OCEANA INSTRUCTION 11010.6B CHANGE TRANSMITTAL 1

Subj: ENERGY CONSERVATION PROGRAM

Encl: (1) Energy Conservation Committee

1. Purpose. To issue Change 1 to subject instruction.

2. Action. Remove enclosure (4) from basic instruction and replace with enclosure (1) of this change transmittal.

3. Cancellation. Upon completion of required action.

J. W. CRAINE, JR.

Distribution:
NASOCEANAINST 5216.1L
List I, II, III

Stocked by:
Commanding Officer
Naval Air Station Oceana
Virginia Beach, VA 23460

DEPARTMENT OF THE NAVY
NAVAL AIR STATION OCEANA
VIRGINIA BEACH, VIRGINIA 23460-5120

Change 1 dated 23 Sep 92
Change 2 dated 8 Jul 93

IN REPLY REFER TO:

NASOCEANAINST 11010.6B
18
MAY 5 1992

NAS OCEANA INSTRUCTION 11010.6B

Subj: ENERGY CONSERVATION PROGRAM

Ref: (a) OPNAVINST 4100.5C
(b) CINCLANTFLTINST 4100.2A (A
(c) COMNAVAIRLANTINST 4100.1A (A
(d) COMTACWINGSLANTINST 4100.1A (A
(e) OPNAVINST 4100.7A (A

Encl: (1) Policy, Standards and Requirements
(2) Energy Conservation Requirements
(3) Energy Conservation Program Organization
(4) Energy Conservation Program Committee
(5) Command Energy Conservation Programs
(6) Energy Conservation Officers
(7) Energy Program Manager (R
(8) Energy Conservation Representative/Monitors
(9) Energy Conservation Representative/Monitor Guidelines
(10) Energy Waiver and Permit Procedures
(11) Energy Permit Request Format
(12) Energy Alteration and Improvement Program
(13) Energy Conservation Investment Program
(14) Energy Cost Avoidance Program (A
(15) Energy Technology Applications Program
(D

1. Purpose. To establish guidelines for an effective energy (R conservation policy and an integrated energy conservation program in accordance with references (a) through (e) for NAS Oceana and all tenant activities.

2. Cancellation. NASOCEANAINST 11010.6A

3. Discussion

a. Reference (a) provides policy, goals and objectives for (R the management of energy resources for ships, aircraft, vehicles and shore installations. The prime objective of the Navy's Energy Conservation Program is to "..achieve maximum practical energy conservation for facilities and operations with particular emphasis on conservation of petroleum.." In support of this objective, reference (a) sets the following specific conservation goals in terms of reductions to be achieved by 1995 and 2000 relative to fiscal year (FY) 1985 baseline:

R) (1) Reduction by 12 percent in FY 1995 and 15 percent in FY 2000 of energy use per thousand gross square foot (KSF) of building floor area for existing facilities.

R) (2) Reduction by 90 percent of fleet and shore fuel surveys.

R) (3) Substitution of more abundant or renewable energy forms for petroleum used ashore, culminating in an overall Navy substitution rate of 10 percent.

A) (4) Reduction of new building energy use by 1 percent per gross square foot per year, achieving 10 percent for buildings designed in FY 1995 compared to comparable buildings in FY 1985.

A) (5) Reduction of aircraft fuel consumption per flight hour by 5 percent by the end of FY 1995 and 10 percent by end of FY 2000.

A) (6) Increase the miles per gallon efficiency of administration vehicles (CESE A-N) by 12 percent, and increase the usage of alternative vehicle fuels.

R) b. In support of and in conformance with the policy, direction and guidance provided by references (a) through (d) and enclosures (1) through (16), and to live within continuing funding constraints, this instruction establishes guidelines for the integrated Energy Conservation Program for NAS Oceana.

4. Action. The Commanding officer, department heads, commanding officers of tenant commands/activities, and officers-in-charge of tenant activities, shall take the following action in support of this program:

a. Energy utilization standards established herein are to be implemented immediately and compliance shall be strictly monitored and enforced within each command and activity. Compliance with these requirements shall constitute command/activity-level plans as required by reference (b) for CINCLANTFLT activities.

b. Actions suggested for adoption are to be thoughtfully reviewed and every effort made to implement all practical conservation measures.

c. Tenant command/activity representatives will be appointed to the NAS Oceana Energy Conservation Committee. Each representtative shall have sufficient authority and command backing

to enforce conservation requirements and shall have demonstrated an interest in conservation effort. Such assignments shall be considered major collateral duties.

d. Full command/activity participation in the Secretary of the Navy's Energy Conservation Award Program in accordance with reference (e). (A

e. The Commanding officer, via the Public Works Officer, shall see that engineering and technical assistance is provided to commands as may be requested to aid in taking conservation initiatives and in preparing supporting command/activity-level energy programs.

5. Electrical Demand Reduction Plan. Virginia Power Company uses the peak summer electrical demand to determine the minimum monthly demand charges for NAS Oceana for the following eleven months. To keep this demand as low as possible, all tenant commands and activities shall particpate in the plan to secure all electrical equipment which is not mission essential. (A

a. Each tenant command and activity shall designate an energy conservation officer (ECO) and energy conservation representative/monitor (ECRM) to be responsible for implementing and monitoring the plan, shall submit the names and phone numbers of the members, and shall develop a list of equipment to be secured when the plan is implemented.

b. The names shall be submitted to Energy Program Manager, Public Works Department, Code 18630, NO LATER than 30 days after receipt of this instruction. In addition, the Energy Program Manager shall be kept updated when changes to the above lists and names occur.

c. Notification to implement the plan will be via telephone by the Energy Progam Manager to key personnel. Conditions for implementing the plan and the Electrical Demand Reduction Equipment List are contained in most current NASOCEANANOTE 11310.

6. Personal Awareness. One of the most critical elements in a program is personal acceptance and active concern about its principal issues. It requires intensive informational action to instill energy conservation habits in employees. By making energy conservation information available to employees in a highly visible manner on a daily basis, wasteful practices can be reduced. Accordingly:

a. The Public Affairs Officer shall be committed to include

in each issue of "The Jet Observer", an energy conservation exhibit or article provided by the Energy Program Manager.

b. A weekly energy conservation hint shall be provided by energy conservation representative/monitor and shall be included in each command/ activity Plan of the Day.

c. Posters, flyers, stickers, and promotional material for use throughout the command/activity shall be coordinated and distributed by the energy conservation representative/monitor.

R) d. The "energy conservation" telephone number is provided to allow employees to report energy conservation violations, and to suggest improvements. The number to be called between 0730 and 1600 Monday through Friday will be the Public Works Energy number (433-2121 ext. 274). At other times the OOD (ext. 2367) shall be notified. Personnel receiving calls regarding energy violations shall have a list of all NAS Oceana buildings and shall have the names of cognizant energy conservation officers and energy conservation representatives/monitors. During working hours (0730 to 1600) the energy conservation officer and/or the energy conservation representative/monitor shall be notified immediately to take action.

e. The first report of a problem shall result in a verbal call for confirmation/action from the energy conservation representative/monitor to the offender. A second report, involving a repetition of the same offense, shall generate a letter from the energy conservation officer to the command/activity commanding officer. Finally, if the offense continues, a formal letter specifying the offense and naming the offender (if possible) will be sent from the energy program
R) manager to the NAS Oceana Executive Officer in order to achieve command-level attention and/or corrective action. Typical items to be reported would be lights burning unnecessarily, open windows in an air-conditioned space, thermostats set outside specified limits, etc..

f. The Administrative Officer will insure that Navy and Marine Corps personnel newly assigned to NAS Oceana are aware of the station's recommendations for carpooling and of the commands concern for energy conservation. This action will be taken at the time that new personnel report on board and will be part of the check-in procedure.

g. Supervisors shall encourage employees to bicycle or walk to work and to rely less on government sedans and pickups for on base transportation.

h. All personnel are encouraged to submit energy conservation ideas as beneficial suggestions. All beneficial suggestions designated as energy conserving shall be brought to the attention of the energy program manager by the beneficial suggestions committee. (R

i. Energy conservation officers/energy conservation representatives/monitors shall conduct monthly energy conservation training and information meetings with their command/activity employees. A brief summary of each meeting shall be provided to the energy program manager not later than 10 days after the meeting has occurred. (R

7. Reports

a. The energy program manager shall prepare reports for signature of the Commanding Officer, NAS Oceana, and tenant commanding officers as tasked by enclosures (1) through (3) or as otherwise required. (R

b. Tenant commanding officers, officers in charge, and department heads shall submit reports to the commanding officer, NAS Oceana, or to other authorities in each respective chain of command as required by enclosure (3) or other applicable directives.

L. W. URBIK

Distribution:
NASOCEANAINST 5216.1K
Lists I,II,III

Copy to:
Energy Program Manager
Energy Conservation Committee
Energy Conservation Officers
Energy Conservation Representatives/Monitors

Stocked by:
Commanding Officer
Naval Air Station Oceana
Virginia Beach, VA 23460

POLICY, STANDARDS, AND REQUIREMENTS

1. General. Commanding Officer, Naval Air Station Oceana sets energy policy for ALL Oceana commands and activities in accordance with references (a) through (d) and other appropriate authority. This consolidates applicable energy policy with local (R
conservation requirements and promulgates energy standards, conservation requirements, permit and waiver procedures, and outlines the energy conservation representative/monitor guide. These requirements and guidelines together with the policy objectives stated below comprise the Naval Air Station Oceana Energy Conservation Program.

2. Policy. It is the policy of the Commanding Officer, Naval Air Station Oceana that:

a. A rigorous program of energy conservation is to be conducted throughout the Naval Air Station Oceana in accordance with this instruction and other appropriate authority. This program is to achieve the conservation goals within the timeframes prescribed by CNO in reference (a).

b. Energy directives emanating from higher authority shall be strictly observed and applicable provisions thereof shall be incorporated into this instruction. The CNO's Energy Management Standards for Shore Activities, reference (a), will be strictly enforced. Exemptions, when allowed, will be submitted in (R
accordance with enclosures (10) and (11) and other pertinent guidelines. In the case of conflicting requirements, the more stringent will apply.

c. Conservation goals established in reference (a) and by other competent authority shall be attained without compromise to military readiness, safety, or effectiveness.

d. NAS Oceana and tenant commands/activities shall institute all controls and procedures necessary to insure compliance with the provisions of this instruction. Strict compliance with program requirements is required. Aggressive measures beyond the requirements of this instruction are strongly encouraged.

e. In order to attain the conservation goals established by references (a) through (d) the following standards are (R
established for NAS Oceana commands.

3. Standards

a. Lighting. Lighting levels will be maintained as specified in enclosure (2).

b. Air-Conditioning (A/C). Air-conditioning will be operated as specified in enclosure (2). Briefly;

(1) Air-conditioning may be activated ONLY when space temperature exceeds 80 degrees Fahrenheit (F) during published air-conditioning hours, and when ALL OTHER possible ventilation and air circulation means have been shown to be inadequate to relieve discomfort.

(2) Space temperatures shall be maintained at a minimum
R) 78 degrees F after meeting the activation criteria of subparagraph 3b(1) above.

c. Heating. Heating will be maintained as specified in enclosure (2). Briefly;

(1) Heating in a facility can only be actuated when the space temperature falls below 65 degrees F.

(2) Space temperature shall be maintained at a maximum of
R) ~~70~~ 68 degrees F after meeting activation criteria of subparagraph 3c(1) above.

(3) Temperatures in unoccupied or industrial areas, such as warehouses, hangar bays, and automotive repair facilities, will be maintained at 55 degrees F or lower.

d. Water temperature. Water temperatures for heated water, will be maintained in accordance with enclosure (2).

e. Water Utilization

(1) All newly installed tank and flushometer-type toilets shall have a flush volume not to exceed 3 1/2 gallons.

(2) All newly installed flushometer-type urinals shall have a flush volume not to exceed 2 gallons.

(3) Water pressure in mains shall not exceed that necessary to provide adequate fire protection flow and service pressure.

f. Steam. Steam pressure shall not exceed 125 pounds per square inch gauge (PSIG) for all uses except for steam equipment with documented higher pressure requirements. Steam pressure shall be further reduced wherever individual applications permit.

4. Requirements

a. This enclosure details conservation requirements in support of actions required by references (a) through (d). These requirements are necessarily general and may be modified by specific requirements based on Facility Energy Surveys.

b. Energy permits and waivers of energy standards and conservation requirements may be granted by the Commanding Officer, NASO Oceana in accordance with procedures outlined in enclosure (10).

c. The Energy conservation program requires that individual command/activity Energy conservation programs support this instruction. Enclosures (8) and (9) provide an outline of these supportive responsibilities and guidelines.

ENERGY CONSERVATION REQUIREMENTS

1. Energy Utilization Requirements. These requirements are derived from references (a) through (d). Energy in all its forms is to be thoughtfully and efficiently used in the accomplishment (R of mission-essential or other beneficial purposes. The energy conservation requirements herein, standardize and limit the authorized uses of energy throughout the station. Requirements are necessarily broad and may be individually accelerated, broadened, or otherwise modified for specific facilities. (Enclosure (10) details energy permit and waiver procedures.) The requirements represent the MINIMUM energy conservation measures. Commands/activities are encouraged to AGGRESSIVELY pursue further means to reduce energy use beyond the following prescribed actions:

a. Air-Conditioning Requirements. Air-conditioning is a major form of energy use aboard the station. Consequently, the following requirements will be strictly enforced:

(1) Air-conditioning Hours. Normal air-conditioning (cooling) hours are 0700 to 2200, Monday through Sunday. During weekends air-conditioning will be deactivated in unoccupied spaces.

(a) Air-conditioning may be activated during cooling hours only when the air temperatures exceeds 80 degrees and use of possible natural ventilation and air circulation means cannot relieve severe discomfort of personnel.

(b) Fans and central air-handler units may be used outside of air-conditioning hours as necessary to ventilate and/or to cool working personnel or equipment.

(c) Central automatic air-conditioning systems are exempted from compliance with subparagraph 1.a.(1) above. Manually controlled and fan coil units will comply.

(d) Waivers to air-conditioning hours may be granted in accordance with enclosures (10) and (11).

(2) Air-Conditioning Areas

(a) Cooling is to be limited to occupied areas which cannot be adequately cooled by natural means and to patient care, specialized equipment rooms, and other authorized areas as may be

waived in accordance with enclosures (10) and (11). Air-conditioning is not authorized in the following areas:

1 Hangar bays.

2 Storage or warehouse spaces.

3 Automotive repair facilities.

4 Shops (other than electrical) or industrial areas.

5 Spaces with low frequency of use, such as hallways/passageways/heads/anterooms, except as may be specifically waived.

(b) Air-conditioning for lounges, meeting rooms, conference areas, dining areas, and other areas of sporadic use, is authorized only during the period of use.

(c) Air-conditioning may not be maintained in any space solely because of existing ducting. Vents to unoccupied spaces or spaces which do not qualify for cooling shall be temporarily or permanently secured. The use of air-conditioned spaces shall be periodically re-examined to determine if use warrants cooling or if cooling requirements might be reduced by consolidating or relocating functions, or because of facility renovation.

(d) Air-conditioning in vacant government quarters is prohibited. Air-conditioning must be secured upon vacating quarters permanently or when vacating for leave, or extended period of deployment. Residents of government quarters are urged to secure air-conditioning daily when going to work or whenever leaving quarters for any reasonably extended period.

(e) Waivers of any of the above requirements may be granted in accordance with enclosures (9) and (10).

(3) Air-Conditioning Temperatures

R) (a) Air temperature shall not be lower than 78 degrees Fahrenheit in air-conditioned spaces except where specifically exempted.

(b) Window air-conditioning units shall be set on "LOW" or "NORMAL" cool with a moderate thermostat setting to permit the compressor to cycle.

(c) Spaces requiring a temperature lower than 78 degrees F to protect equipment or other reason may be waived based on documented justification, such as specifications or technical manuals for installed electronic equipment. (R

(4) Air-Conditioning Operation.

(a) Clean or replace A/C filters prior to A/C season.

(b) Clean filters on window A/C's monthly.

(c) Clean filters on Central A/C units quarterly.

(d) Reduce outside make-up air to the allowed minimum by heat stress and ventilation standards.

(e) Adjust water chiller head pressure to its most efficient setting.

(f) Raise chilled water temperature to within 5 degrees F of design air temperature during low air-conditioning load periods, when unit cannot be secured.

b. Heating Requirements. Heating, like air-conditioning, is a major form of energy use at NAS OCEANA. Restrictions on heating are as follows;

(1) Heating Hours. Heating may be used 24 hours a day when required. Heating will only be used when the enclosed space temperature falls below 65 degrees F. Temperature control devices shall be set to maintain temperatures of not more than 55 degrees F during non-working hours. Outside ventilation will be used when possible to warm facilities during the day.

(2) Waivers for heating in excess of that allowed in subparagraph 3.b.(1) will be granted in accordance with enclosures (9) and (10).

(3) Heated Areas. heating will be limited to occupied areas and those areas required to prevent pipe freezing or equipment malfunction. Areas exempted from the restrictions listed below, must be wavered in accordance with enclosures (10) and (11). Heated areas are to be controlled as follows;

(a) Administrative spaces, schools, places of assembly, exchange facilities and specialized equipment working areas shall be maintained at a maximum of ~~70~~ 68 degrees F. (R

(b) Hangar bays, automotive work areas, and unoccupied warehousing shall be maintained at a maximum of 55 degrees F.

(c) Unoccupied spaces such as empty BEQ/BOQ rooms, unused administrative buildings, and the like, will be heated ONLY enough to prevent frozen pipes or damage to equipment. Vents to unoccupied areas will be secured when feasible.

(4) Heating Operation

(a) Clean or replace heating filters prior to the heating season.

(b) Clean filters quarterly. Replace if necessary for optimum performance of heating unit.

(c) Reduce outside make-up air to the minimum allowed by ventilation standards.

(d) Lower hot water temperatures to levels consistent with temperature standards for that facility.

c. Lighting Requirements

(1) Interior Lighting

(a) Lighting is tailored to actual requirements in accordance with lighting standards set forth in reference (c):

1 50 foot-candles at work stations
2 30 foot-candles in work areas
3 10 foot-candles in general areas

(b) Task lighting (lamps) shall be used in lieu of overuse general lighting. Full use shall be made of natural, light-colored interior walls.

(c) Lights shall be secured in unused spaces, including storage rooms, laundry rooms, closets, heads and lounges during all periods of non-use. Incandescent lights shall be secured upon leaving a space for any reason. Fluorescent lights shall be secured when leaving a space for a period exceeding 15 minutes.

(d) Lights shall be wired as feasible to permit selective use of lighting at occupied work stations without turning on entire banks of lights. Individual pull-chains at each work station are recommended.

(e) Decorative lighting in clubs and messes shall be minimized, with the exception of seasonal lighting. All other decorative lighting for display or other purposes shall be specifically authorized by the Commanding Officer, NAS Oceana in accordance with permit procedures prescribe in enclosure (10).

(f) Interior security lighting shall be minimized consistent with security requirements. Consideration shall be given to the cost-to-benefit ratio of security lighting.

(g) Exit signs shall be lighted with a single 15 watt bulb.

(h) Fluorescent fixtures shall be a reflective type to make the best use of available light.

(i) Forty watt fluorescent tubes shall be converted to thirty-five watt tubes. All light bulbs shall be replaced with lower-wattage bulbs consistent with illumination standards. Replacement shall occur through attrition.

(j) Overhead lights, owing to the limited usefulness of such lights for most purposes, shall be secured in warehouses and industrial areas except on very overcast days, as required for safety reasons, or at the discretion of the shop supervisor. Task lighting (lamps) shall be provided at work stations wherever possible to replace over-sized overhead lights.

(2) Exterior Lighting.

(a) Exterior lighting shall be held to a minimum, and must be specifically authorized in accordance with enclosure (10).

(b) Exterior security lights shall be mercury or sodium vapor type of the smallest size possible. Each such installation must be justified in terms of cost-to-benefits ratio, most efficient placement of lights, and types of lights installed.

(c) Exterior task lighting (portable light plants) shall be used only for safety reasons, or at the discretion of the shop supervisor.

(d) Exterior display lighting, with the exception of seasonal lighting, is NOT permitted except on a waiver basis.

(e) Exterior lighting is NOT permitted during the day.

(f) Fire alarm boxes are to be lighted with 15W bulbs.

d. Facility Requirements. Basic facility requirements are necessary to provide for efficient utilization of all energy forms;

(1) All air-conditioned spaces shall be insulated above the ceiling and, as cost effectiveness warrants, in the walls.

(2) Venetian blinds and/or curtains shall be used wherever possible to further reduce heat gain in air-conditioned spaces.

(3) Water heaters, heat exchangers and boilers shall be fully insulated and all hot water lines shall be lagged. Condensate return lines and cold water lines shall also be insulated.

(4) Facilities shall be zoned to permit easy securing of air-condition in unused spaces. Ducts shall be secured in unused areas. Cross-connects between A/C spaces and other areas shall be blocked.

(5) Restricted-range thermostats shall be installed in all air-conditioned facilities.

(6) Timers shall be installed to provide for automatic setback or securing of air-conditioned units and other equipment.

e. Fuel Utilization Requirements

(1) Automotive Fuel

(a) Use of government owned vehicles (GOV) for any purpose NOT authorized or not in direct support of the commands/activity's mission is prohibited. To conserve automotive fuel, all necessary measures shall be established to eliminate misuse. Key control and trip ticket accounting procedures shall be established to maintain accountability for vehicle use.

(b) All possible steps to reduce official vehicle mileage are directed. Recommended reductions include consolidation of trips and use of "drop off/pick up" service.

(c) An allocation program will be established stipulating a 12 percent decrease in fuel use per vehicle based on the 1985 baseline.

(2) Waste Oil. Waste oil shall be reclaimed for sale in accordance with waste oil recovery procedures in order to achieve CNO objective of 90 percent reduction in fuel surveys. Only oil not meeting the quality criteria for turn-in shall be disposed of through hazardous waste turn-in. (R

f. Water Temperature Requirements

(1) Facilities with only a few showers or with showers having low use frequency, shall have hot water not to exceed 105 degrees F for use in showers only.

(2) Shops and "dirty work" areas may have hot water not to exceed 105 degrees F during working hours.

(3) Temperature control devices for domestic hot water (DWH) must be set at 110 degrees F or the lowest setting on the control device, whichever is higher, for:

(a) Head facilities with showers.

(b) BOQ's and BEQ's.

(c) Married government quarters without dishwashers.

(4) Domestic hot water temperature, delivered to user, shall not exceed 140 degrees F in:

(a) Married government quarters with dishwashers.

(b) Other facilities, with approved dishwashers, not engaged in public food service.

(5) DWH temperature shall NOT exceed 180 degrees F in dishwashers at restaurants, clubs, messes and other public food service facilities.

(6) Chilled water temperature shall NOT be lower than 50 degrees F, except where required by equipment manufacturer manuals or specifications.

(7) It is not intended that the above standards supplant current medical, dental, and food service hot water requirements. Exceptions to standards for other reasons may be made by the Commanding Officer, NAS Oceana on a waiver basis.

ENERGY CONSERVATION PROGRAM ORGANIZATION

1. General. The NAS Oceana energy conservation program organization (Chart 1), is streamlined yet provides adequate policy guidance, engineering and technical review and assistance capability and facility-level involvement in the conservation effort. This organization also provides tenant command/ activity representation on the policy-making advisory body. Concurrent responsibility for technical aspects of the program is appropriately assigned to cognizant elements of the Public Works Department of NAS Oceana. Responsibility for continuing compliance with energy regulations is tasked to tenant commands/activities with cognizance over individual facilities. Facility-level implementation of energy requirements shall be a function of the energy conservation representative/monitor program as further defined by representative/monitor guidelines provided in enclosure (9).

2. Organization. The NAS Oceana energy conservation program organization is outlined on Chart 1 and is detailed in the text of enclosures (4), (5), (6), (7), and (8). This organization is comprised of the following principal elements:

a. Energy Conservation Committee. This committee serves as an advisory board to the Commanding Officer, NAS Oceana. It is comprised of membership drawn from station and tenant commands and activities. The committee recommends energy policy to Commanding Officer, NAS Oceana, including energy standards, utilization requirements and supporting program requirements. The chairman of the energy conservation committee supervises the activities of the energy conservation officers and the energy program manager.

b. Energy Conservation Officers. The energy conservation officers supervise their energy conservation representatives/monitors and are responsible for energy standards and requirements in buildings under their command. The energy conservation officers are responsible to the chairman of the energy conservation committee for these activities and for providing energy briefings and reports as required.

c. Energy Conservation Representatives/Monitors. Representatives/ monitors, appointed by each facility throughout the station, are responsible to their individual commands for the implementation of energy utilization requirements and for compliance with energy standards within their facilities. Energy conservation representatives/monitors are under the technical guidance of the energy conservation officer.

R) d. Energy Program Manager. The NAS Oceana Energy Program Manager is responsible for monitoring the overall effectiveness of the station conservation plan. The Energy Program Manager assists the Energy Conservation Officers and the Energy Conservation Representatives/Monitors in the management of the Energy Conservation Program. The Energy Program Manager is responsible for ongoing Energy Awareness and will work directly with the Public Affairs Office to promote and publicize energy conservation.

NAS OCEANA ENERGY CONSERVATION PROGRAM ORGANIZATIONAL CHART

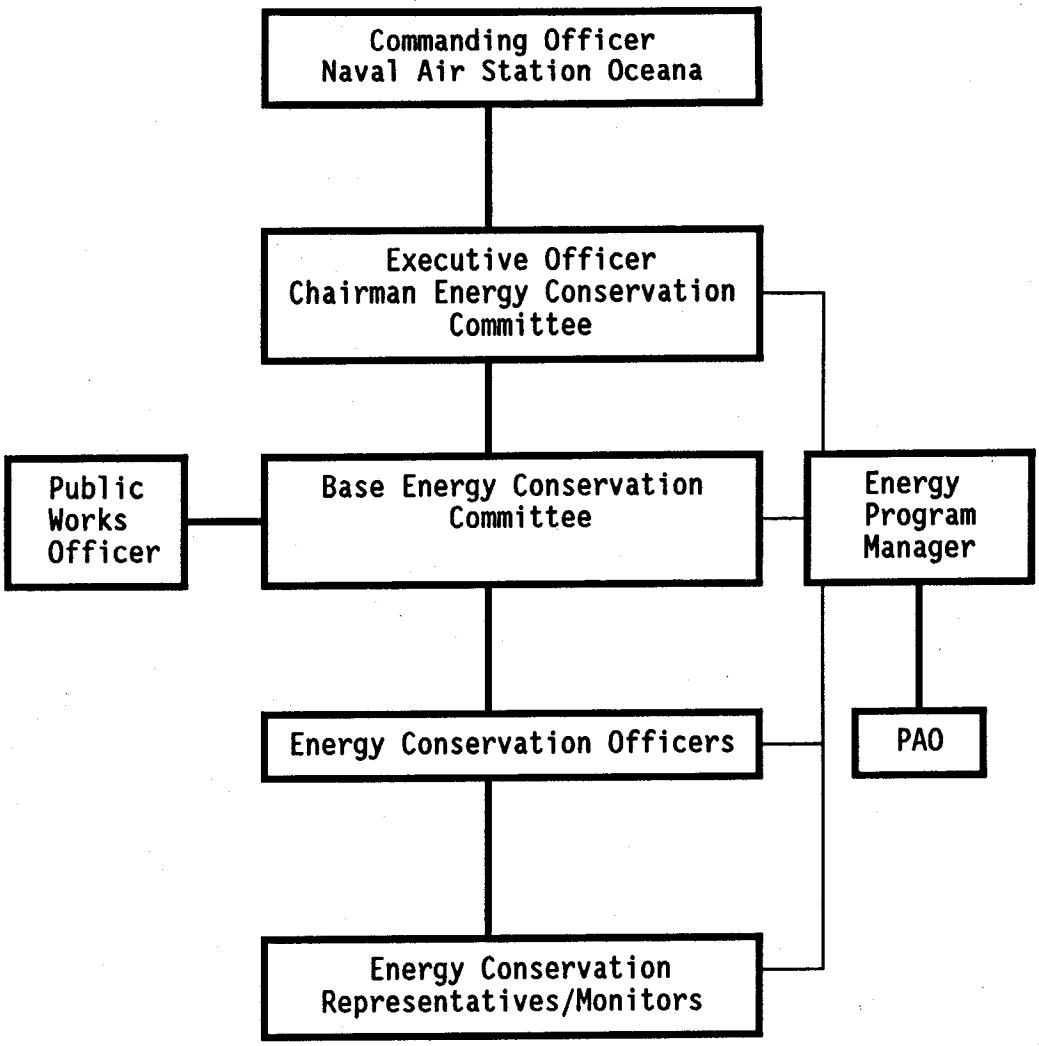

CHART 1

ENERGY CONSERVATION COMMITTEE

1. Organization. The Energy Conservation Committee is an advisory body reporting to the Commanding Officer, NAS Oceana, on energy matters. It is chaired by the Executive Officer with membership comprised of responsible representatives of commands and heads of tenant activities, namely Department/Activity Energy Conservation Officers and the Energy Program Manager. Representatives of other area activities, detachments and community groups are invited to attend committee meetings. The Energy Conservation Committee consist of the following departments and tenant activities:

Department Members

ADMINISTRATION	AIMD	AIR OPERATIONS	BILLETING
CHAPEL	ADP	EEO	HRM
MWR	NAVY EXCHANGE	PWD	SAFETY
SECURITY	SUPPLY	WEAPONS	

Tenant Activity Members

CBU-415	COMFITWING ONE	COMMATWING ONE
DECA, AFO-CO	DENTAL	FACSFAC VACAPES
FASOTRAGRULANT	FLTIMAGCENLANT	HRO
LSO SCHOOL	MEDICAL	NAESU
NAMTRAGRUDET	NAVCAMSLANTDET	NAVY CAMPUS
NFS	NLSODET	NOCD
NWAC	PSD	ROICC

2. Authority. The energy conservation committee is limited in authority to making recommendations to Commanding Officer, NAS Oceana for program modifications and to advising area commands and activities of the status of the energy conservation program. The committee notes apparent deficiencies in activity-level energy conservation programs.

3. Tasking. The energy conservation program committee is responsible to the Commanding Officer, NAS Oceana for the following;

a. Reviewing this instruction and other pertinent energy directives for correctness, applicability to prevailing conditions, and compliance with Navy energy policy and recommending necessary changes.

b. Reviewing the accomplishments of the energy conservation officers and command energy conservation representatives/monitors in the execution of the energy conservation program. The energy conservation officers shall further brief the committee on representative/monitor training efforts and will report findings of facility energy surveys as they pertain to the conservation program and their activity-level energy conservation program.

c. Reviewing the status of the energy conservation program relative to Navy energy conservation goals as reported by the energy program manager.

d. Nominating persons or activities to receive a NAS Oceana energy conservation citation for superior conservation achievement.

e. Hearing suggestions, complaints, and other comments on the energy conservation program, and initiating appropriate action.

4. Action. The committee shall meet at least quarterly and monthly during the peak electrical demand period.

COMMAND ENERGY CONSERVATION PROGRAMS

1. General. All NAS Oceana commands and activities shall comply with and fully support the specific provisions of this instruction. Activity-level Energy directives are not mandatory for implementation of required conservation actions, however, commands shall appoint personnel to energy-related duties and institute energy standards and operating requirements as prescribed herein in support of the NAS Oceana energy conservation program.

2. Command Program Requirements. All NAS Oceana commands and activities shall comply with the following requirements:

a. A senior energy conservation officer shall be designated to supervise the command energy conservation program, advise energy conservation officers and exercise authority over command energy conservation representatives/Monitors for conservation matters.

b. Energy conservation representatives/monitors shall be appointed to monitor all command facilities in which any form of energy is consumed. The energy conservation officers and the energy program manager shall maintain liaison with the NAS Oceana (R energy conservation committee chairman to insure that all representatives/monitors are trained and kept advised of conservation requirements.

c. Tenant commands shall identify and report to the Commanding Officer, NAS Oceana, all energy problems within the command beyond the capability of the command to address, such as major facility deficiencies. The NAS Oceana energy program manager will investigate such reports and advise the command of (R alternative courses of action to correct wastes.

d. Commands shall submit work requests to initiate special projects & military construction (MCON) projects to correct major facility deficiencies and shall program O&MN funds as available, and as priorities dictate, to correct minor energy problems.

e. Commands shall adopt all energy standards set by this instruction and comply with all energy operating requirements. Energy utilization requirements may be accelerated or partially waived by separate CO, NAS Oceana action. This action shall take precedence over general requirements set herein. Commands shall seek additional actions which might further reduce energy use.

f. Commands shall seek energy permits as required by enclosure (10) for certain required types of energy use and shall insure that waivers are obtained for required energy uses outside established standards.

b. Making recommendations for modification of the energy policy, establishing conservation targets based on CNO-directed or budget-limited goals and publicizing the energy conservation program through his or her command.

c. Serving on the energy conservation committee and providing information and technical advice as required. The ECO's make specific recommendations to the committee regarding energy policy amendments and required modifications to operating requirements, permit and waiver procedures and other key elements of the energy conservation program.

d. Refer suggestions considered noteworthy of station wide application to the energy conservation committee.

ENERGY CONSERVATION OFFICERS (ECO'S)

1. Appointment. The ECO's will be appointed by each activity's commanding officer or department head.

2. Authority. The ECO's serve as advisory members of the energy conservation committee through which they may recommend conservation actions. The ECO's also serve as advisors to CO, NAS Oceana and to the chairman of the energy conservation committee. They shall perform such duties as may be directed by these superiors.

3. Tasking. The ECO's are responsible to the Chairman of the Energy Conservation Committee for the following:

a. Supervising the execution of the following elements of the energy conservation program;

(1) Review and investigate Energy permit and waiver requests generated from facilities under his or her cognizance before submitting requests to the Energy Program Manager.

(2) Conducting facility energy surveys with the assistance of the energy program manager to insure compliance with program requirements. The ECO's may recommend specific energy operating requirements for individual facilities on the basis of such surveys.

(3) Appointing a building energy conservation representative/monitor for each building (or buildings). A responsible individual from each duty section will be designated in order to provide adequate coverage at all times. An energy conservation checklist shall be developed by the ECO specifically for building(s) under his or her cognizance using guidelines included in, but not limited to, enclosure (9). This checklist shall be furnished to representatives/monitors who shall insure all items on the list are inspected daily or as frequently as possible.

(4) Supervising the training of energy conservation representatives/ monitors with assistance from the NAS Oceana (R
energy program manager and maintaining communication with representatives/monitors in the field through notices, energy surveys, and periodic meetings.

(5) Reporting to the energy program manager those (R
facility deficiencies and energy wastes which cannot be corrected by the officer or within the officer's command.

ENERGY PROGRAM MANAGER (EPM) (R

1. Appointment. The EPM will be appointed by the CO, NAS Oceana.

2. Authority. The EPM has authority over the generation and distribution of utilities and may make conservation improvements to those functions to the extent that station mission capabilities and the safety and well-being of personnel are not impaired. The EPM serves as an advisor to the CO, NAS Oceana, the chairman of the energy conservation committee, the ECO's, and the energy conservation representatives/monitors.

3. Tasking. The EPM is responsible to the chairman of the energy conservation committee for the following;

a. Supervising the execution of the following elements of the energy conservation program:

(1) Receiving and investigating energy permit and waiver requests from ECO's and recommending decisions on each to the chairman of the energy conservation committee.

(2) Conducting energy surveys in all facilities aboard the station as well as spot checks for standards violations with the exception of spaces for which a clearance cannot be obtained.

(3) Collecting and reporting utilities production and consumption data and monthly DEIS II report data. Presenting this information in the form of briefings for CO, NAS Oceana and the chairman of the energy conservation committee.

(4) Assisting ECO's in the training of energy conservation representatives/monitors and maintaining communication with representatives/monitors in the field through notices, energy surveys, and periodic meetings.

b. Developing and publicizing programs for Energy Awareness Week and continuing energy awareness.

c. Participating in the energy conservation committee and providing technical advice as required. Preparing agenda and serving as recorder for the committee.

ENERGY CONSERVATION REPRESENTATIVES/MONITORS (ECRM'S)

1. Background. The ECRM's are the "grass roots" of the energy conservation program and are its most visible element. ECRM's, based on familiarity with and close observation of their areas, offer the energy conservation program an intimate knowledge of facility deficiencies, operational requirements, and the habits and conservation practices of facility occupants. It is an essential part of the program to properly indoctrinate, train, and support the ECRM's in the field in order to capitalize thoroughly on this resource.

2. Purpose. The purpose of this guide is to provide a single reference document for ECRM's and to assign responsibilities for the conduct of the ECRM program.

3. Organization and Tasking

a. Organization. The NAS Oceana energy conservation program organization outlined in enclosure (3) provides for an ECRM to be assigned to each facility. ECRM's report directly to the executive officer or ECO within their commands and receive technical guidance from the NAS Oceana EPM.

b. Tasking

(1) ECRM's are tasked with the following responsibilities:

(a) Conducting continuing inspections or monitoring of assigned facilities to insure compliance with energy utilization requirements.

(b) Maintaining a list of energy-related facility deficiencies.

(c) Reporting to the ECO those facility deficiencies and energy wastes which cannot be corrected by the ECRM or within the ECRM's command.

(d) Acting as a liaison between the energy conservation program central organization and occupants of assigned facilities and helping to maintain a free flow of information and ideas.

(e) Reporting difficulties in implementing energy standards or requirements and making recommendations for changes to this or other related instructions.

(2) In addition to the above, ECRM's are tasked to cooperate fully with the NAS Oceana EPM and other members of the central program organization, who act as NAS Oceana's agents in pursuing conservation efforts.

4. Guidance. Enclosure (9) provides guidance for the execution of the responsibilities tasked above. This guidance, which is largely non-technical, is intended to provide ECRM's with a sufficient background to enable them to better observe and understand conservation problems, make their efforts more meaningful and encourage them to take an aggressive approach to their duties.

5. Authority. ECRM's are the extension of the energy conservation program within each facility. They shall have the backing of the NAS Oceana EPM and the full support of their commands. ECRM's are authorized direct liaison with the ECO and with other members of the energy conservation program to seek/receive assistance. ECRM's may initiate action to correct major energy wastes via the normal chain-of-command.

6. Action. ECRM's shall make themselves familiar with the guidance provided herein and shall carry out assigned responsibilities. Other activities and personnel in the energy conservation program shall provide all possible assistance to the ECRM's. Commands shall comply with program ECRM requirements as tasked in enclosure (9).

ENERGY CONSERVATION REPRESENTATIVES/MONITORS GUIDELINES

1. The following guidelines are provided as reference for energy conservation representatives/monitor (ECRM) facility inspection. The ECRM shall inspect facility thoroughly and continuously to ensure compliance with NAS Oceana energy standards and utilization requirements. The practices and wastes listed below by category are among the most common and shall be guarded against constantly. Wasteful practices deficiencies listed are also common to most facilities and shall be reported to the ECO as prescribed by enclosure (7).

(a) Heating/Ventilation/Air-Conditioning (HVAC)

(1) Are air-conditioning hours observed for individual window-type air-conditioners and individually controlled fan coil units?

(2) Is air temperature with air-condition maintained at 78 degrees F except as waived? Are heated areas being maintained at ~~70~~ 68 degrees F and 55 degrees F as applicable?

(3) Are storage areas, unused spaces or other unauthorized areas being air-conditioned? Are areas being heated where no heat is required?

(4) Are windows and doors closed when air-condition or heat is in use?

(5) Is mechanical ventilation restricted to occupied spaces and other authorized areas?

(6) Can functions be consolidated or relocated to reduce air-condition and heating requirements?

(7) Are waivers on file for all justified air-condition and heating requirements which exceed standards?

(b) Lighting

(1) Are lights secured in all spaces when not in use?

(2) Are illumination levels appropriate for stations and other areas?

(3) Are only required lights turned on in partially occupied spaces?

(4) Is there a permit on file for new interior and exterior security and display lighting?

(5) Are all fluorescent, incandescent and exit sign fixtures lamped in accordance with enclosure (2)?

(6) Have all unnecessary fixtures been secured?

(7) Have all possible light fixtures been relamped with smaller lamps?

(c) Electricity

(1) Are unauthorized water heaters or other appliances in use?

(2) Are all fan motors the minimum size necessary to provide required air flow?

(3) Are prescribed chilled and hot water temperatures maintained?

(d) Water

(1) Are tank and flushometer type toilets and urinals equipped with flow reducer devices?

(2) Are showers equipped with flow reducer devices?

(3) Are hoses equipped with self-closing nozzles?

(4) Are there any water leaks, running toilets or unexplained pools of water in or near buildings?

(e) Automotive Fuels

(1) Has misuse of government owned vehicles (GOV) such as trips to the exchange, quarters, galley or other unauthorized use been eliminated? Have department heads established clear policy regarding misuse and abuse of GOV's?

(2) Are assigned vehicles in good running order? Is preventive maintenance up to date? Is first echelon maintenance being practiced daily?

(3) Have all possible trips been consolidated to reduce overall mileage?

ENERGY WAIVER AND PERMIT PROCEDURES

1. General. Energy standards and utilization requirements set forth by this instruction are not intended to supplant bonafide energy operating requirements established by other appropriate authority. Required exemptions to standards and utilization requirements shall be accommodated by waiver procedures set forth below.

2. Waiver and Permit Procedures

a. Waivers

(1) Request for waiver to energy standards established by enclosure (1) or conservation requirements set by enclosure (2) are to be addressed to the Commanding Officer, NAS Oceana. Areas exempted by Department of Energy regulations and on file with Public Works are exempt from the waiver requirement. Requests must detail the exact nature of the waiver requested and must cite adequate justification, such as:

(a) Operating or technical manual specifications for the specific equipment in question.

(b) Medical or dental regulations concerning patient care, sanitation, heat stress or other applicable criteria.

(c) Supply regulations concerning material storage requirements.

(d) Engineering or other recognized standards for lighting, water, air-conditioning and other energy form use except as specifically superseded by references (a) through (d).

(2) Waiver requests will be investigated and a written decision will be provided within ten working days after receipt. Waivers must be renewed annually in January.

b. Permits

(1) Permits are required for the following uses of energy:

(a) New exterior and interior security lighting, excluding quarters "porch" or carport lighting.

(b) New exterior and interior display and decorative lighting, including exterior holiday displays but excluding interior decoration in quarters, such as for Christmas.

(2) Permit requests must include the following information:

(a) Requirement for the requested use of energy.

(b) Justification for the quantity and cost of energy to be used to meet requirements, including an analysis of the cost-to-benefit ratio, where applicable.

(3) Permit requests will be investigated and a written decision will be provided within ten working days after receipt. Energy permits must be renewed annually in January.

3. Action. Commanding officer of tenant commands, department heads, and officer-in-charge must apply for energy permits as required above within sixty days of the publication of this instruction. Request for waivers to standards or conservation requirements, where current waivers do not address standards established herein, must be submitted within sixty days of publication.

ENERGY PERMIT REQUEST FORMAT

1. Energy permit requests must detail energy requirements and provide justification for the energy expense entailed. Requests should take the following general form:

a. Requirement. A general statement as to the type of energy use requested and the requirement to be satisfied. Example: Interior security lights for Navy Exchange Mini-Mart.

b. Energy Cost. An approximate calculation of units of energy, i.e., kilowatt hours, gallons of water or oil required on a weekly basis.

EXAMPLE:

Navy Exchange Mini-Mart

Lights Required	Demand x Hours/Week = Total Energy
Main Sales Room	
16-40w overhead	640w x 70hr/wk = 44800w(44.8kwh)
2-15w display	30w x 70hr/wd = 2100w(2.1kwh)
Country Store	
4-40w overhead	160w x 70hr/wd = 11200w(11.2kwh)
1-15w display	60w x 70hr/wk = 4200w(4.2kwh)

Total Energy Requirement 62.3kwh/wk

c. Justification. A qualitative statement describing the need for the requested use of energy and expected benefits of use relative to the magnitude of energy consumption. The deterrent effect of security lighting and the need for new hot water heaters or air-conditioners must clearly stated in all permit requests, where applicable.

ENERGY ALTERATION AND IMPROVEMENT PROGRAM

1. General. The energy program encompasses those energy initiatives programmed in accordance with normal procedures for specific and minor maintenance work and alterations and improvements within each activity's O&MN funding authority. Energy related alterations and improvements fall within existing planning board procedures. Inasmuch as maintenance of real property funds to accomplish maintenance, alteration and improvement projects are limited, the selection of energy projects to be funded is accomplished in much the same way as ECIP MILCON projects; i.e., by priority order of savings-to-investment ratio.

2. Tasking. The energy management branch of the Engineering Division within the Public Works Department shall conduct the energy alteration and improvement program for all air station commands and activities in accordance with normal project development procedures. The energy manager is tasked with the development of potential energy projects and will work closely with the base planner and the engineers within the division to identify and prepare documentation for promising projects. He will also interface with the facilities maintenance engineering director (FMED) on energy-related work requests received involving work under $25,000. Responsibilities for the key elements of the program are assigned as follows:

a. Engineering Division. The Engineering Division is (A
responsible for the following tasks:

(1) Identification and development of energy alteration and improvement projects for submittal for funding consideration under the Energy Conservation Investment Program (ECIP), Energy Cost Avoidance Program (ECAP), and Energy Technology Applications Program (ETAP) through work requests, concepts, beneficial suggestions, command direction, review of energy engineering literature and a rational, innovative approach to resolving energy problems.

(2) Continuous monitoring and review of station operations to insure maximum energy efficiency and conformance with all applicable energy regulations, criteria and goals.

(3) Liaison with station commands, tenants and with other divisions within the Public Works Department to foster an awareness of energy conservation goals and solicit ideas for improvements and alterations for consideration.

(4) Review of energy-related work requests received through the FMED for coordination within the overall energy program.

R) b. Facilities Maintenance Engineering Director (FMED). The FMED is responsible for the following tasks:

(1) Receiving, logging, planning and estimating energy-related work requests in accordance with regular work planning procedures.

(2) Issuing job orders to the shops for the accomplishment of adopted projects. The issue of a job order is contingent upon availability of funds within the cognizant activity.

(3) Program a reasonable share of available funds and shop manpower for energy related work in monthly shop load plans.

(4) Providing a monthly updated listing of energy-related work requests to the energy manager for review and coordination within the overall energy program.

ENERGY CONSERVATION INVESTMENT PROGRAM

1. General. The Energy Conservation Investment Program (ECIP) is a dedicated military construction program intended to reduce energy consumption at Naval shore activities through retrofit of existing facilities at a cost of $300,000 or more. Projects (R funded under this program are those offering maximum return in energy savings for the investment cost. ECIP projects are submitted in the same manner as other military construction program projects and, therefore, fall under the cognizance of the Engineering Division of Public Works.

2. Tasking. The Engineering Division is responsible to the energy committee for the management of all phases of the ECIP, specifically including the following tasks:

a. Initiating MCON program submittals for energy conservation projects which fall within MCON cost limits. The Engineering Division shall dedicate sufficient engineering and technical resources to ensure the timely submittal of energy projects to enhance selection for an early programming cycle.

b. Monitoring project review and processing at the major claimant level and within NAVFACENGCOM, providing supplementary information and calculations as required to complete processing and to update submittals, and making scope changes as necessary to enhance estimated savings-to-investment ratio.

c. Reviewing designs for programmed projects to ensure technical validity and to reflect current conditions. Many ECIP projects will have elements that will have been accomplished locally by the time projects are funded.

d. Advising the chairman of the energy committee of the status of the ECIP projects.

e. Maintaining liaison with the Atlantic Division, Naval Facilities Engineering Command (LANTNAVFACENGCOM) to seek assistance in identifying further ECIP projects through energy surveys and engineering service requests to examine specific problems.

3. Action. The Engineering Division shall normally designate the planning engineer to perform the duties listed above in connection with the ECIP in the course of performing other MCON management tasks.

ENERGY COST AVOIDANCE PROGRAM (ECAP) (A

1. General. The purpose of ECAP is to assist activities and claimants reduce energy costs and achieve the energy goals and energy management standards. Navy Facilities Engineering Command Headquaters is providing policy and guidance in managing ECAP. The ECAP revenues are generated from third party geothermal development contract at the Naval Weapons Center (NWC) China Lake, California. These revenues will be used to develop additional revenue producing geothermal projects, implement energy saving projects at shore activities, and develop additional third party projects. ECAP projects must conform to the following criteria:

a. ECAP projects shall be prepared as special projects.

b. ECAP projects must be cost effective and have a simple payback of 3 years or less.

c. Project scope for minor construction and equipment shall be between $50,000 and $300,000, and for repair between $50,000 and $500,000.

d. ECAP projects are usually facility retrofits and are justified primarily by energy cost savings.

2. Procedures. ECAP projects are submitted to LANTNAVFACENGCOM for technical review and for assurance of criteria conformance. Submittals are made on Step Two Special Project forms together with ECAP Economic Analysis Forms and energy usage and conservation calculations. LANTNAVFACENGCOM then forwards submittals to NAVFACENGCOM for further technical review and coordination with operational actions and to the Navy Environmental Support Office for maintenance of a prioritized ECAP backlog list.

3. Tasking. The Engineering Division is responsible to the energy committee for the management of all phases of the ECAP, including the following:

a. Initiating ECAP project submittals as directed by the chairman of the energy committee or as developed within the engineering division. Sufficient resources shall be dedicated to ECAP projects to ensure timely submittal.

b. Monitoring project review phases within LANTNAVFACENGCOM, NAVFACENGCOM, COMNAVAIRLANT and CINCLANTFLT, providing

supplementary information as required to speed review, and revising scope as necessary to enhance saving-to-investment ratio.

c. Reviewing designs for programming ECAP projects to ensure technical validity and to reflect current conditions.

d. Advising the chairman of the energy committee of the status of active ECAP submittals.

4. Action. The Engineering Division shall normally designate the Planning Engineer to perform the duties outlined above.

ENERGY TECHNOLOGY APPLICATIONS PROGRAM (ETAP)

1. General. ETAP is an O&M,N funded CNO program to accomplish energy conservation retrofits. ETAP is centrally managed by CONNAVFACENGCOM. ETAP projects must conform to the following criteria: (R

a. ETAP projects must be justified on a present value life-cycle cost analysis and must be cost-effective, with a savings investment ratio (SIR) equal to or greater than 2.5. (R

b. Project scope for minor construction shall be between $50,000 and $300,000, for equipment between $50,000 and $100,000, and for repair between $500,000 and $3,000,000. (A

c. Projects must deal primarily with alterations to existing facilities but may include some repair and maintenance if such work results in energy savings and is of the type that can be amortized over the life of the project. The larger percentage of the total annual dollar savings should be attributable to energy (BTU) savings. (R

d. Projects may include multiple category codes, and separate small tasks may be grouped to meet funding minimums.

e. Metering may be included if the energy savings of other portions of the project meet the above criteria.

2. Procedures. ETAP projects are submitted to LANTNAVFACENGCOM for technical review and for assurance of criteria conformance. Submittals are on step two special project forms together with ETAP life cycle cost analysis form and energy usage and conservation calculations. LANTNAVFACENGCOM then forwards submittals to NAVFACENGCOM for further technical review and coordination with operational actions and to the Navy Environmental Support Office for maintenance of a prioritized ETAP backlog list.

3. Tasking. The Engineering Division is responsible to the energy committee for the management of all phases of the ETAP, including the following:

a. Initiating ETAP projects submittals as directed by the chairman of the energy committee or as developed within the Engineering Division. Sufficient resources shall be dedicated to ETAP projects to ensure timely submittal.

b. Monitoring project review phases within LANTNAVFACENGCOM, NAVFACENGCOM, AIRLANT and CINCLANTFLT, providing supplementary information as required to speed review and revising scope as necessary to enhance savings-to-investment ratios.

c. Reviewing designs for programmed ETAP projects to ensure technical validity and to reflect current conditions.

d. Advising the energy committee chairman of the status of active ETAP submittals.

4. Action. The Engineering Division shall normally designate the Planning Engineer to perform the duties outlined above.