DEPARTMENT OF THE NAVY
NAVAL STATION MAYPORT
P.O. BOX 280112
JACKSONVILLE, FLORIDA 32228-0112

NAVSTAMYPTINST 4101.1
N4
15 MAY 2014

NAVAL STATION MAYPORT INSTRUCTION 4101.1

Subj: NAVAL STATION MAYPORT ENERGY MANAGEMENT PROGRAM

Ref: (a) Energy Policy Act (EPACT) 2005
(b) Executive Order 13423
(c) Executive Order 13514
(d) Energy Independence and Security Act 2007
(e) DODINST 4170.11 (Series)
(f) OPNAVINST 4100.5 (Series)
(g) CNRSEINST 4101.1 (Series)
(h) Building Energy Monitor Guide

Encl: (1) CNRSE Best Energy Management Practices
(2) Installation Energy Manager Appointment Letter
(3) Building Energy Monitor Appointment Letter
(4) Building Energy Monitor Checklist
(5) Energy Conservation Waiver Request
(6) Energy Policy Violation
(7) Installation/Region BEM Award Nomination Form

1. Purpose. To provide Energy Management Program (EMP) policy, objectives, and responsibilities at Naval Station Mayport (NAVSTA Mayport) in order to achieve energy, water, renewable energy, greenhouse gas emissions, and sustainability reduction goals set for Federal agencies in references (a) through (d).

2. Scope. Actions detailed in this instruction apply to all NAVSTA Mayport departments, tenant commands, Department of Navy (DON) personnel, and contractor personnel working in government furnished facilities. It is designed to promote energy conservation goals and address responsibilities to establish a consistent, focused approach by all personnel onboard NAVSTA Mayport involved directly and indirectly in conserving energy.

3. Background. The Federal Government is the nation's largest single energy consumer. To overcome the challenges of the current energy crisis and to meet mandated Federal energy conservation goals, we are all charged with prudently managing the finite resources provided to operate and maintain NAVSTA Mayport. An effective EMP is integral to reducing energy usage, water consumption, and vehicle energy consumption and to increase the use of renewable energy. Dramatic decreases in

energy consumption are possible through increased personnel awareness, modernization of facilities, and strict compliance with established guidelines designed to minimize the use of utilities. References (e) through (h) provide guidance, assign responsibilities and prescribe procedures for installation energy management.

4. Objectives. NAVSTA Mayport will meet or exceed DON shore energy goals while not compromising the quality of life or negatively impacting mission execution or fleet support. Proactive leadership from all levels is essential to the success of this program. All hands will aggressively seek out opportunities to eliminate energy waste. Each department and tenant command shall implement every feasible initiative to achieve real and measurable utility consumption reduction while maintaining military readiness, sustainability, quality of life, and safety.

5. Responsibilities.

a. Installation Energy Conservation Board (ECB).

(1) Commanding Officer, NAVSTA Mayport shall chair the ECB and ensure it is conducted in accordance with reference (f).

(2) The ECB shall also be comprised of the Installation Energy Manager (IEM) and senior representatives from the installation's tenant commands. In addition to these members, the board shall include senior representatives from:

- Public Works Department
- Administrative Office
- Financial Management
- Public Affairs Office
- Security Department
- Exchange and Commissary
- Supply Department
- MWR Department
- Housing Department
- Top 10 Energy Consumers
- BUMED

(3) The ECB will provide oversight and policy direction to the installation EMP and will ensure the activity is in compliance with Commander, Navy Region Southeast (CNRSE) energy policies and is making acceptable progress towards DON energy goals.

b. Commanding Officer.

(1) Responsible for ensuring NAVSTA Mayport continues to meet reduction in consumption levels as mandated by references (a) and (b).

(2) Designate the IEM in writing utilizing enclosure (2).

(3) Ensure eligibility for the SECNAV platinum award level by participating in a minimum of two ECB meetings annually and maximizing participation in the EMP by partnering with supported commands throughout the installation to achieve efficiency goals.

(4) Ensure that mandated energy goals are being met or exceeded, provide command intervention when blatant energy waste is reported using enclosure (6), promote conservation in all endeavors, and create a culture of energy conservation throughout the installation.

c. Energy Conservation Board Chairperson.

(1) Develop and implement policy and procedures that best support NAVSTA Mayport in its energy conservation effort. Take steps to ensure that NAVSTA Mayport continues to make acceptable progress towards meeting the DON shore energy goals set in reference (f).

(2) Ensure the appointment of a Building Energy Monitor (BEM) for all departments, tenant commands and all government furnished facilities operated by contractors using enclosure (3).

(3) Promote and support new energy conservation regulations, policies, and initiatives from higher authority.

d. Installation Energy Manager.

(1) Prepare ECB agendas and maintain meeting minutes. Chair the ECB in the absence of the ECB Chairperson. Provide technical guidance to ECB members.

(2) Provide recommendations for, and coordination of, installation energy conservation programs. Develop innovative and effective ways to reduce energy consumption onboard NAVSTA Mayport. Advise the ECB Chairperson on energy conservation initiatives and status. Develop and maintain graphical energy management tools to measure the progress of energy conservation initiatives onboard NAVSTA Mayport.

(3) Promote energy conservation awareness and EMP updates year-round across NAVSTA Mayport with articles, presentations, spot inspections, etc. Discuss with the responsible supervisor, or if necessary, the ECB Chairperson or Installation Commanding Officer, cases of blatant or repetitive energy waste.

(4) Annually review energy conservation policies, procedures, and initiatives with the ECB. Recommend updates to this instruction.

(5) Organize, train, and oversee the BEM program. Coordinate BEM actions and provide guidance in the performance of BEM duties. Maintain a current roster of the BEM personnel and ensure that new personnel are appointed in a timely manner. Develop a checklist for BEMs to use for the monitoring of both abuse energy usage and exceptional compliance with energy conservation principles.

(6) Identify and develop projects to improve the energy efficiency of facilities and equipment based on feedback from various surveys, inspections, and audits. Research emerging energy conservation technologies to determine their viability for implementation at NAVSTA Mayport.

(7) Maintain a current library of the instructions referenced by this instruction and other publications dealing with energy conservation.

(8) Verify the accuracy of the facility square footage and energy consumption data provided to Naval Facilities Engineering and Expeditionary Warfare Center for entry into the Defense Utility Energy Reporting System (DUERS).

e. Tenant Commands and Departments.

(1) Champion energy conservation within respective work areas. Personnel shall take all practical measures to reduce energy waste and use energy efficiently in their work spaces.

(2) Appoint at least one BEM for each facility that consumes energy or water, whether occupied or not, including those occupied by contractor personnel. In the case where a facility is occupied by more than one tenant, contractor, or department, each entity within the structure should designate a BEM utilizing enclosure (3).

(3) Ensure utility deficiencies are reported promptly to Public Works Department (PWD) for corrective actions.

(4) Coordinate with PWD Utilities and Energy Management (UEM) Branch to obtain and monitor monthly consumption installation billing data (e.g. Virtual Bill).

f. Building Energy Monitors (BEM).

(1) The goal of the BEM Program is to have trained energy personnel in each facility to facilitate the reduction/elimination of energy and water waste. The BEM is a collateral duty appointed by the command or department and acts in cooperation and coordination with the IEM to increase energy and water efficiency.

(2) Ensure assigned building(s) comply with the energy conservation regulations and procedures described in this instruction. Routinely conduct a walk through of assigned areas to observe and correct any energy conservation deficiencies and coordinate corrective action promptly.

(3) Conduct monthly energy audits using enclosure (4) to assess energy efficiency and improve energy awareness of assigned building(s). Forward project suggestions to the IEM. Initiate trouble calls promptly to correct energy conservation deficiencies, track them through to completion, and advise personnel when energy conservation guidelines/policies are not being followed. If repeated violations occur, request supervisor assistance. Notify immediate supervisors of blatant or recurring wastes of energy.

(4) Encourage other building occupants to follow energy policies. Post energy awareness materials and instructions in conspicuous locations in assigned building(s).

(5) Attend at a minimum semi-annual BEM training organized by the IEM.

6. Inspections. NAVSTA Mayport Public Works Department may conduct energy inspections to verify compliance with the energy guidelines in enclosure (1). The aforementioned inspections may be scheduled or unscheduled. Any violations noted during an inspection will be documented via the Violation Letter in enclosure (6). Inspections are not only utilized to ensure compliance but are also utilized to track consumption behavior and identify potential conservation measures.

7. Violations of Energy Guidelines.

a. All violations will be documented in accordance with enclosure (6).

b. First violations will be brought to the attention of the BEM responsible for the area with a request for a response confirming corrective action taken within five working days.

c. Repeat violations will be brought to the attention of the appropriate Commanding Officer/Officer in Charge/Department Head with a request for a response confirming corrective action taken.

8. Waivers. Waivers to the energy conservation guidelines provided in enclosure (1) will be provided to those facilities determined by the NAVSTA Mayport Public Works Department as necessitating deviation from any NAVSTA Mayport Energy Conservation Guideline. All waivers will be requested in writing using enclosure (5). Approved waivers are valid for two years from the date of approval, at which time a request must be resubmitted and the waiver must be reevaluated and approved.

9. Recognition. Tenant Commands, departments, and personnel that excel in energy conservation, reduction, or awareness initiatives can be submitted to the ECB for quarterly and/or yearly recognition. Any command/department or person submitted for recognition to the ECB will be reviewed and recommended in accordance with the Region Energy Awards Program in reference (g). Recognition can include plagues, a Letter of Appreciation, or time off (for military personnel) and should be recommended by the individual submitting the request.

10. Review. The IEM will be responsible for conducting reviews and recommending revisions to this instruction annually.

W. R. McCALL
CAPT USN

Distribution:
All NAVSTA Mayport
Departments All NAVSTA
Mayport Tenants
All NAVSTA Mayport Permanent Contractors

BEST ENERGY MANAGEMENT PRACTICES

1. General Energy Management Requirements. The following general requirements and guidelines will be uniformly implemented and enforced:

a. The energy efficient operation of buildings, which costs little, can save as much energy as expensive energy projects. Reducing energy costs frees up scarce dollars for more important uses. Accordingly, CNRSE personnel will carry out the following basic energy management measures to minimize energy and water costs:

(1) Installations will participate in utility demand reductions when emergency curtailment conditions are called. Utility curtailments or reduction events may be called on short notice to cease or reduce use of electricity or natural gas.

(2) Secure lighting, air conditioning (AC), office equipment and other equipment to the greatest degree practical after working hours, on holidays, and on weekends. Do not operate central AC systems at occupied temperatures or keep on large blocks of lights for the watch section or personnel who may be working after hours. If the complex implements shortened work weeks, ensure that buildings are secured as fully as possible at the end of the last work day to maximize energy cost savings.

(3) Turn off all lights in individual offices and spaces whenever the occupant leaves the area for any period longer than five minutes. This will not impact lamp life due to newer electronic ballasts with soft starts. Turn off exhaust fans and lights in unoccupied restrooms. Secure machinery and equipment when they are not in use.

(4) Turn off lights and office equipment in classrooms, conference rooms, and other common use areas whenever they are unoccupied.

(5) Turn off lights and computer equipment and adjust the temperature in bachelor quarters (BQ) rooms whenever the room is unoccupied.

(6) Encourage others to take the initiative to turn off lights and equipment when not needed.

(7) Ensure outside lights are never on during the day. Report violations to the NAVSTA Mayport Public Works Department.

(8) Report broken or inadequate lighting, heating and AC controls to Public Works Department as potential energy problems. Do not be indifferent to malfunctioning heating, AC, and lighting controls.

(9) Secure interior lights whenever natural lighting provides adequate illumination. Recommended illumination for offices is 30-45 foot-candles. Illumination in excess of 45 foot-candles is only prudent for activities that require fine motor skills or frequent review of blueprint-type drawings.

(10) Turn off all or part of the overhead industrial lighting in hangars, warehouses, shops, and similar facilities as operations and lighting conditions permit. These lights are rarely all required during the day. Use task lighting for specific lighting requirements on the work floor.

(11) Secure exterior doors and windows when heating or cooling systems are in operation.

(13) Report all leaks, including steam, natural gas, water, sewer, and compressed air to the Public Works Department. Running toilets and similar minor problems can cost thousands of dollars each month.

b. Installations will provide at least semi-annual training to Building Energy Monitors (BEMs) on the general requirements above. BEMs will, in turn, train military, civilian, and contractor personnel working in their respective spaces on basic energy management practices. Training is to be done in conjunction with required occupant annual training.

c. Installations will further comply with the specific energy management requirements on the following pages.

2. Common Performance Level Standards (CPLS). CPLS have been established by Commander Navy Installations Command (CNIC) to show the expected mission and operational impacts of shortfalls in utilities (UT) funding. CNIC may set certain CPLS conditions to help reduce UT requirements to fit available funding and may prescribe actions to be taken by all CNIC commands to meet these standards. Prescribed actions typically include shortening heating and cooling seasons and setting minimum and maximum set points for cooling and heating. CPLS definitions are provided below:

a. CPLS 1. Utility is available to meet all mission requirements. Commodity availability has no negative impact on mission, quality of life, or routine station operations. Energy and water efficiency and awareness are used, and no forced reduction measures are required. Other services are available to meet all mission requirements.

b. CPLS 2. Utility is available to substantially meet mission requirements with minor difficulty. Utilities funding status or weather conditions compel building occupants and supported tenants to make minor operational adjustments to meet mission requirements in accordance with health and safety regulations. Minimal forced reduction measures include (but are not limited to):

(1) Turning on of heating and AC systems delayed no more than two weeks.

(2) Operation of climate control systems is reduced to lower energy consumption. Goal is to reach average temperatures that have minimum impact on warfighter support: less than 70 degrees in winter and higher than 76 degrees in the summer.

(3) Five percent or less reduction required for electrical service delivery facilities without direct support function to the warfighter (such as ball field lighting or decorative lighting).

(4) Five percent or less reduction required for steam service delivery facilities without direct support function to the warfighter (for example, warehouses and gymnasiums).

(5) Five percent or less reduction required in water use for facilities without direct support function to the warfighter (for example, irrigation and car washes).

c. CPLS 3. Utility is available to marginally meet mission requirements with major difficulty. Utilities funding status or weather conditions compel building occupants and supported tenants to make minor operational adjustments to meet mission requirements in accordance with health and safety regulations. Forced reduction measures include (but are not limited to):

(1) Turning on of heating and AC systems delayed no more than four weeks.

(2) Operation of climate control systems is reduced to lower energy consumption. The goal is to reach average temperatures that impact warfighter support, but do not prevent mission accomplishment: lower than 68 degrees in winter and higher than 76 degrees in summer.

(3) Six to ten percent reduction required for electrical service delivery facilities without direct support function to the warfighter (such as ball field or decorative lighting).

(4) Six to ten percent reduction required for steam service delivery facilities without direct support function to the warfighter (warehouses, gymnasiums, etc.).

(5) Six to ten percent reduction required in water use for facilities without direct support function to the warfighter (irrigation, car washes, etc.).

d. CPLS 4. Utility is not available to marginally meet mission requirements as a result of funding shortfalls or weather and climate conditions even after significant mission adjustments have been made. While meeting bare minimum health and safety regulations, building occupants and supported tenants will experience significant hardships that include:

(1) Turning on of heating and AC systems delayed more than four weeks.

(2) Operation of climate control systems reduced to prevent equipment failure or breakdown, regardless of impact on warfighter support. May achieve average temperatures less than 66 degrees in winter, and greater than 76 degrees in summer.

(3) Greater than ten percent reduction in all utilities service to all facilities without direct warfighter support function.

(4) Imposed two or more brief rolling blackouts of utilities services to reduce usage.

3. Energy Awareness.

a. Activities will establish and sustain an active Energy Awareness Program which will include, at a minimum, the following elements:

(1) Command Involvement. Installation Commanding Officers (ICOs) must be aware of, and be personally involved in, the EMP. They will take a leadership role in the program, promote energy conservation, and integrate energy efficiency into all aspects of installation operations. The activity Energy Management Team will provide energy program briefings at each Energy Conservation Board meeting.

(2) Training. Installations will maintain an active Energy Management Team, including an effective network of BEMs. The team will meet at least quarterly to discuss metrics, technology, conservation measures, and feedback on progress towards meeting energy goals. BEMs and other key members of the team will be trained in the most effective ways to manage energy in their facilities, key components to check in building systems, and new programs and ideas.

(3) Awareness Activities. Installations will conduct energy awareness activities throughout the year and during Energy Awareness Month (October) and Earth Day (April). Energy awareness is not intended to be a once-a-year event, but should be integral to daily operations. Awareness activities may

include an active energy suggestion and awards program, and the publishing of articles in installation publications and newsletters. In addition, activities may include e-mails and notices on subjects of concern, visits to schools, energy fairs and conferences, feedback to the command on energy goals and progress, and other similar activities.

4. Installation Awards. Installations will participate in federal, state, and regional energy awards programs and will conduct their own recognition programs as appropriate. The following are among the major energy awards programs available:

a. Presidential Award for Leadership in Federal Energy Management. The Department of Energy (DOE) Presidential Award is the most prestigious energy award for federal energy managers and programs. Only five or six awards are made each year for all federal agencies. Criteria and nomination procedures for the award are provided annually as part of the Navy's annual energy reporting process. Installations may initiate their own nominations, or the Navy may choose to nominate installation programs for this award based on their Annual Energy Reports.

b. Federal Energy and Water Management (FEMP) Awards. These awards provide high-level recognition for individuals, groups, and commands for their contributions to federal energy and water management efforts. DOE criteria and nomination procedures are provided to installations along with the presidential criteria. Installations may initiate their own nominations, or the Navy may nominate installation programs based on their Annual Energy Reports. The Navy may elevate particularly strong FEMP nominations for presidential consideration, while less competitive presidential nominations may be submitted as FEMP nominations.

c. Installations are encouraged to present military and civilian awards and provide other forms of recognition to personnel who have made significant contributions to the CNRSE Energy Program.

5. Lighting - Best Energy Management Practices (BEMPs). CNRSE facilities will be equipped with the most efficient lighting systems practical and will have the proper lighting controls to enable building occupants to operate buildings as efficiently as possible. Accordingly, the following operation and maintenance (O&M) requirements are set:

a. Prohibitions. All prohibitions, unless otherwise stated, were implemented by date of 1 October 2011.

(1) Incandescent and halogen light bulbs are prohibited in CNRSE facilities and sustainment supplies shelf-stock facilities except where there is no alternative product available, such as a projector lamp. Incandescent light bulbs will be replaced by compact fluorescent lamps or LED bulbs in all interior and exterior lighting fixtures, table and floor lamps, floodlights, fire alarm boxes, and other fixtures. Replacement of lights will either be done in conjunction with energy upgrade project or at the time the light bulb burns out. At that time, the entire fixture is to be upgraded to include fixture, ballast and lamps.

(2) T12-type fluorescent light fixtures are prohibited from use in all installation facilities. Any remaining T12 fixtures will be upgraded to T8 or T5 type, with electronic ballasts, as soon as possible. Lamp replacements for T8 systems will be only T8 products, as re-installing TI2 tubes in the upgraded fixtures will shorten the life of the ballasts and lamps.

(3) Exterior lights left on in the daytime and interior lights left on in unoccupied spaces are prohibited. Exceptions must be authorized in writing by the ICO or Public Works Officer (PWO) and exterior signage must indicate this authorization. Signage will read, "Night-Time Lighting Authorized by STATION NAME." The Installation PWD UEM Commodity Manager will maintain exception authorizations.

(4) Decorative lighting is prohibited in CNRSE facilities, except as specifically authorized by the PWO. Exceptions must be authorized in writing by the ICO and the PWD UEM Commodity Manager will maintain exception authorizations.

The BEM will be responsible for localized signage and marking to indicate exception approval. Decorative lighting includes exterior floodlights, down lights, up lights, and other purely architectural or display lighting. Where authorized, decorative lighting will be the most efficient type available and will be operated the minimum hours possible.

b. Lighting Controls

(1) Lighting controls will not be by-passed, removed, or defeated for any reason. If the control type, schedule, or mode of operation is unsuited for a particular application, the information must be reported to the Energy Manager (EM) or Resource Efficiency Manager (REM) for correction.

(2) Offices, classrooms, conference rooms, break rooms, restrooms, stairwells, and other spaces with sporadic usage will be equipped with motion or infrared sensors. All rooms with motion sensors will also be equipped with light switches. Motion sensors are to be set at less than 5-minutes and installed to ensure that motion outside of the room does not turn the lighting system on.

(3) Switches or other controls will be installed in mechanical rooms, industrial work centers, and similar locations in lieu of motion sensors. Occupants of these areas are to be instructed to turn the lights off when the room is vacated.

(4) Hangars, warehouses, and industrial facilities will be equipped with lighting controls appropriate to the building. Controls may dim or turn off the lights when there is sufficient ambient light, especially when hangar doors are open or there are skylights. Lighting in these facilities is to be used when needed and turned off or dimmed when it is not. Day-lighting in warehouses and hangars is to be incorporated into design and during major roof renovation.

(5) Exterior lights that must remain on all night will be equipped with photocells controls. The photocells will be the most sensitive type available to shorten lighting run time.

(6) Only photocell or timer controlled street and parking lot lighting is authorized. Parking lot lights will have instant on/off capability, and should be dimmed or turned off consistent with traffic patterns, security concerns, and other conditions.

(7) Janitorial work will be done during regular working hours to eliminate excessive lighting of facilities at night. Where cleaning crews must work at night, they will be instructed to light only the immediate area where they are working, turning lights off as they leave. Exceptions are required in writing and must be approved by the PWO and maintained by the PWD UEM Commodity Manager.

(8) Supplementary task lighting will be used to provide more light where it is needed, rather than adding more general lighting. Task lighting will be at least as efficient as compact fluorescent types. Cubicle lighting and other task lights will be secured when the area is vacated for any time. Task lighting is prohibited when general lighting is in use. Exceptions are to be managed by the BEM.

(9) Soda and juice vending machines will be de-lamped except where light is provided by LED lamps or where "vending misers" are installed. Soda and juice vending machines with lighting and compressor cycling controls may be lighted. Any machine lit by LED is to be labeled, "LED Lighting."

(10) Stairwell and elevator lighting will be T5, T8, or compact fluorescent type, meet all design and safety criteria, and be controlled by motion sensors.

(11) If skylights are installed, secure interior lights whenever natural light is available.

(12) If lighting is in excess of requirements, consider de-lamping alternate fixtures or removing two tubes from four lamp fixtures. Ballasts for the tubes that are removed should also be disconnected. Standard labels are to be placed on the exterior of the fixture that specifies the number of lamps

authorized if the BEM decides that lamps for a fixture are to be reduced below the number designed for the fixture. Required labels are to read, "X Lamps Only for this Fixture."

c. Maintenance

(1) Light fixtures will be re-lamped in groups (by room, area or building) and records should be kept of what was re-lamped and when. The decision to re-lamp a room will initiate the replacement of fixtures, ballasts and lamps to the more energy efficient requirements herein. This action must be coordinated through the PWD FMS by the BEM. PWD FMSs are still responsible for monitoring funding requirements for Sustainment (ST) funding in support of this effort. As lamps go out in a room and the foot-candles falls below 30, then it is prudent to take action if previous projects have not already replaced the fixtures. FMSs and BEMs are to also be aware of energy projects that are scheduled to address lighting in their respective buildings and coordinate with BOS contract requirements with respect to re-lamping.

6. Heating, Ventilation and Air Conditioning

a. Heating

(1) Working Hours Only Policy. Space heating in CNRSE facilities is authorized during normal working hours only, and only during the heating season. Twenty-four hour heating in BQs is authorized for occupied spaces during the heating season. Signage is to clearly identify and communicate building heating and cooling hours if something other than 'normal' working hours exists. Normal is some range of 8-12 hours per day and includes only one shift. Multiple shift buildings require signage stating hours of operation and temperature settings. Information is to be posted at entryways inside of the buildings. The BEM has the responsibility for execution.

(2) Heating Season

(a) CNRSE installations will normally set their own heating seasons based on CNIC guidance, prescribed CPLS level, UT funding availability, climatology weather forecasts, mission and personnel concerns. CNRSE may provide additional guidance or call for prescriptive measures to be followed during the season. As it may take up to two weeks to turn on the heat for all facilities, BQs, child care centers, and other critical facilities will be turned on first.

(b) Installations will similarly set their own heating season end dates, with critical facilities to be turned off last. In securing from heating season, hot water circulating pumps, heat exchangers, and other purely heating equipment will be secured.

(c) For facilities served by central steam systems or internal steam boilers, installations will provide alternative, more energy-efficient means of generating hot water so that the steam or boilers may be secured. Large boilers or central steam will not be used to provide domestic hot water outside of the heating season.

(d) Steam lines will be secured or laid up to the extent practical at the end of the heating season.

(3) Temperatures. CNRSE facilities will maintain heating temperatures as prescribed by the CPLS condition in force, or by CNRSE direction.

- Daytime heating is to be no higher than 70°F in spaces authorized for heating, and no higher than 55 degrees in warehouses and similar facilities. The PWO may authorize exceptions to temperature requirements on a case-by-case basis.

(4) Electric space heating is prohibited. If building temperatures cannot be maintained as prescribed then the BEM may allow space heating until temperatures are once again maintained. Building occupants are not authorized to possess space heaters. BEMs will maintain and keep secured all approved portable heating devices.

(5) New or replacement space heaters, boilers, and furnaces will be Energy Star listed or qualify as a FEMP recommended product.

(6) Redundant or back-up boilers will not be operated except as authorized by the PWO.

(7) Exterior steam distribution systems and steam systems in buildings will be maintained to minimize losses in facilities heated by steam. All steam leaks and inoperative condensate pumps will be repaired immediately. Bare steam piping, including valves, will be insulated. Steam traps will be checked for proper operation at least once a year and defective traps will be replaced or repaired as necessary.

b. Ventilation and Air Conditioning

(1) Working Hours Only Policy.

(a) Energy Management Systems (EMS), Direct Digital Controls (DDC), and other controls will be set and monitored to reflect actual operating hours and temperature requirements.

(b) After hours cooling for the purpose of "night flushing" or pre-cooling buildings using cool, night time air is permissible as authorized by the PWO and requires BEM oversight. Humidity must be lower than 50% at the time of flushing.

(2) Cooling Season

(a) CNRSE installations will normally set their own cooling seasons on the same basis as the heating season. CNRSE may occasionally provide additional guidance or call for prescriptive measures to be followed during the season. Cooling for unaccompanied housing (barracks), child care centers, and other critical facilities will be turned on first.

(b) Installations will similarly set their own cooling season end dates, with critical facilities turned off last. Chilled water circulating pumps and other purely cooling equipment will be secured at that time.

(3) Temperatures. Navy Region Southeast is classified as a "hot, humid" climate per Interim Technical Guidance ITG-FY05-02, NAVFAC Humid Areas Design Criteria. This guidance indicates that indoor humidity in areas designated hot and humid climates shall design and ensure a 76°F temperature is maintained at 50% or higher relative humidity. The guidance is in line with best industry practices per American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 55, Thermal Environmental Conditions for Human Occupancy. This information does not specifically align with CNIC CPLS levels and it is believed that failure to maintain at least daytime temperatures in this design range will subsequently lead to mold growth and subsequent health-safety related issues. The following temperature guidance has therefore been established:

- Daytime cooling is to be ≥ 76°F during occupied hours.

- During unoccupied hours the space cooling temperature will be set back to 85°F in all facilities. In facilities with humidity control, space humidity will be set back to 60% relative humidity. Cooling and heating systems, including refrigeration equipment, boilers, pumps, fans, air handling units, etc., will be cycled off (or placed in standby) when space temperature and humidity set-points are satisfied. Upon call for cooling in a particular zone, the HVAC system will be automatically restarted to satisfy the space unoccupied set-points (temperature and humidity). When the space unoccupied set-points are satisfied, the cooling system will be cycled off. Note that outside air dampers will be closed when the building systems are operating during unoccupied hours.

- Facilities with Direct Digital Controls (DDC) systems shall have the morning start-up feature programmed to "cool down" or "warm up" the building to ensure that the building environment is operating at the appropriate set-point

when the building's scheduled occupancy begins. Outside air dampers shall remain closed during morning start-up and shall open to their minimum set-points (50% of design maximum) when occupancy begins.

(4) Buildings that are cooled with air conditioning are not to be mechanically ventilated without cooling (manifests moisture and/or mold problems).

(5) AC systems that support data centers, flight simulators, and other critical equipment will be set at a temperature in the highest third of the temperature range prescribed by the equipment manufacturer. New technology will be implemented to the maximum extent possible to reduce full- room cooling requirements in these areas.

(6) Equipment rooms with particular temperature or humidity (or both) requirements will be addressed separate from the rest of the building. In other words, the entire building will not be operated at a temperature lower than otherwise would be authorized because one area requires it.

(7) Natural ventilation (operable windows and vents) in air conditioned buildings is not to be used during the cooling season. Fans are authorized whenever needed regardless of the season. Mechanical ventilation (without heating or cooling) is authorized to meet health and safety codes, regardless of the season, but is under the control of the BEM for execution and authorization of the PWO. Ceiling fans are authorized in common areas such as lunch rooms, break rooms, and conference rooms.

(8) Window AC units and air-to-air heat pumps are prohibited except where they are the lowest life cycle cost alternative, and are Energy Star listed or FEMP recommended products.

(9) AC boundaries will be maintained. Doors and windows are not to be propped open in air conditioned spaces.

(10) Blinds, shades, awnings, solar shields, tinted glass, heat reflective glass, or plastic film on windows and glass doors should be installed where solar heat gain is not desired. All east and west facing windows are to have tinting or heat reflective treatments.

(11) Chilled water systems and controls will be checked frequently to ensure efficient operation. Leaking valves and fittings will be repaired, all lines will be insulated, cooling tower water will be properly treated, cooling tower media will be kept clean, and the systems will be operated and maintained at optimum efficiency.

(12) AC ducts will be checked frequently to ensure they are properly sealed and insulated and are clean and mold free. Air filters will be replaced at least quarterly. Variable air volume (VAV) boxes and controls and air cooled condensers will also be checked and balanced as needed.

(13) Problems with AC systems that affect energy efficiency and that are beyond the technical, manpower, or funding ability of O&M personnel to correct will be reported to the EM or REM. The EM or REM will work with O&M personnel to develop and implement cost effective means to repair, improve, or replace the equipment as an energy cost saving measure.

(14) Supply and return air and chilled water temperatures will be monitored to avoid "low delta T syndrome," a situation where the temperature of the air or chilled water returning from conditioned spaces is only slightly warmer than the supply temperatures. These conditions may occur when the AC equipment is oversized, or when hot and cold air inside the space is mixed before returning to the AC system. This condition must be avoided for AC systems to operate efficiently, and for the building to be properly cooled.

(15) Where Variable Frequency Drives (VFDs) are installed on chilled water pumps, they will be properly controlled by system pressure, temperature, and other factors, and will not be manually set.

(16) Also, where VFDs are installed on chilled water pumps, ensure that equipment being cooled by the chilled water system has two-way and not three-way valves. Three-way valves allow chilled water to by-pass equipment where it is not needed and defeat the purpose of the VFDs, which is to reduce pumping energy when cooling requirements are reduced. When installing AHUs that will operate with chilled water, ensure the equipment is equipped with two-way valves.

(17) When one chiller, circulating pump, or other piece of equipment is sufficient to meet a building's cooling load, do not operate a second piece of equipment.

(18) Buildings that are exceptionally energy intensive typically have complex AC systems and require re-commissioning or retro-commissioning once every four years.

(19) Ensure that all new facilities are properly commissioned before they are accepted.

(20) Buildings with several stand-alone AC systems will be evaluated for the feasibility of tying the systems together to save energy and provide more redundancy. Similarly, consideration may be made into tying several nearby buildings together with a command chilled water loop to meet their combined cooling loads more efficiently.

(21) Economizers will be properly maintained and kept operational to greatly improve the efficiency of AC systems.

7. Office Equipment and Appliances

a. Office Equipment

(1) All new and replacement office equipment, whether owned or leased, will be Energy Star listed and the Energy Star features will be activated.

(2) Computers, monitors, dedicated printers, and speakers in CNRSE work spaces will be "shut down" at the close of business and when staff leave the work station for any significant period (more than three hours).

(3) "Sleep mode" will be activated on all office equipment (monitors, copiers, printers, etc.).

(4) Turn off common copiers and printers at the close of business unless there is an operational necessity to keep them on.

(5) Turn off power to the small transformers attached to office equipment when not needed. These transformers continue to use one to five watts of power even when the equipment is turned off. Install all small transformers/power strips at or above desk level within offices to provide quick and convenient access to turn them off as prescribed above.

(6) Leave personal computer speakers, scanners, and other ancillary equipment off except when actually needed.

(7) Fax machines and digital senders may be left on 24 hours a day, but users should determine whether continuous operation is mission critical for the office. If leaving a fax machine on is not mission essential and adds little value, it should be turned off at the end of the work day.

(8) Office equipment will be secured to the greatest degree possible over weekends, holidays, leave periods, and other periods when they will not be needed. All supervisors will designate a representative in their respective area to act as the energy monitor in support of the work center's equipment and to assist the BEM.

b. Appliances. The following energy requirements apply to all appliances, whether leased or owned, in all facilities aboard CNRSE installations, including UH and Morale, Recreation, and Welfare (MWR) facilities:

(1) Refrigerators. Refrigerators are authorized in CNRSE facilities as follows:

(a) All newly purchased refrigerators must be Energy Star listed or be FEMP recommended products and must be reasonably sized for the application.

(b) One refrigerator is authorized for each UH living space.

(c) Refrigerators are not authorized in offices or cubical shared spaces unless specifically authorized by the ICO or PWO. In an office setting, one full-size refrigerator is authorized per 30 occupants or two half-size refrigerators per 30 occupants except where specifically authorized by the ICO or PWO.

Refrigerators are to be placed in logical groupings such as in break rooms, lunch rooms, or coffee mess areas. Shop spaces may require more than one refrigerator per 30 occupants. A Personal Refrigerator Waiver Request form is located at the end of this enclosure.

(d) Unauthorized refrigerators, refrigerators that are not Energy Star listed (or FEMP recommended products), and refrigerators that have reached the end of their useful life or with worn or missing seals or poorly fitting doors will be removed from CNRSE facilities and recycled or disposed of properly. Refrigerators that are still usable will be disposed of through the Defense Reutilization Marketing Office. All non-Energy Star rated refrigerators will be replaced as funding becomes available. BEMs will ensure requirement is executed and be responsible for ensuring an appropriate, minimal amount of refrigerators are located in the IR respective buildings. BEMs will also maintain an accurate count of refrigerators in their area of responsibility.

(e) Walk-in refrigerators and freezers will be operated at temperatures as set by medical or other authority. Thermo-strip door curtains will be installed in walk-in freezers and refrigerators where doors must be open for extended periods.

(f) Empty and unused refrigerators and freezers will be properly secured. Empty refrigerators and freezers will not be operated only because they are available. BEMs will secure excess refrigerators above identified occupancy requirement.

(2) Washers and Dryers. Washers and dryers are authorized for CNRSE UH, fleet support, other MWR facilities and other facilities as needed. The following energy requirements apply whether these appliances are owned or leased:

(a) Washing machines will meet or exceed Energy Star standards, which consider both "energy factor" (annual cubic feet of laundry per annual energy use) and "water factor", or the water used per wash cycle per cubic foot of washer capacity. The most efficient washer will have a high energy factor and a low water factor. A life cycle cost analysis should be conducted to select the machine that offers the greatest life cycle cost savings.

(b) Leased washers that are not Energy Star listed will be replaced with units that satisfy this standard when the lease expires. Owned units will be replaced as soon as funding becomes available.

(3) Home Electronics. Televisions and other home electronic devices may be procured or leased for CNRSE facilities such as UH common areas. All devices will be Energy Star designated or listed on the FEMP recommended products website, unless there is no listing for the products. TVs are prohibited in individual offices with the exception of Commanding Officers, Executive Officers, Command Level Operations Officers, Public Works Officers, Emergency Management Officers and Command PAOs.

(4) Other Appliances. Ice machines, dryers, dishwashers, and other appliances procured or leased for CNRSE facilities will be Energy Star designated or listed on the FEMP recommended products website, unless there is no listing for the products. Dryers will be operated using energy-saving features. Ice machines are not allowed to exceed one device per 100 occupants.

8. Data Centers and Other Energy Intensive Facilities. Data centers, simulator facilities, and industrial facilities use a large part of an installation's total energy. For example, at one naval installation with about 1,000 energy consuming structures, three buildings consumed more than 20 percent of the total electricity used on the installation.

a. Discussion. Energy intensive buildings typically have specialized equipment drawing great amounts of power, heavy AC loads, sensitive computer equipment, round-the-clock operations, high reliability and redundancy needs, and other requirements that drive up energy use and that do not lend themselves to standard energy management practices. These buildings require the EM or REM to have a sophisticated understanding of the building's systems, operations, and processes to tailor energy use to actual requirements. Energy intensive facilities are a special focus area of the CNRSE EMP and must be addressed through a combination of technical and management measures.

b. Stakeholder Team Approach. It is vital to take a team approach to an energy intensive building. All the stakeholders in the building need to be identified and included on the team. The PWO or Deputy PWO may need to be personally involved in the process because the tenant may not understand how to make any changes to operations or processes to conserve energy when possible. Stakeholders typically include the EM or REM (Team Leader), Deputy PWO (Facilitator), Facilities Manager, Tenant Liaison, Equipment Technical Representative, Maintenance Foreman or Contractor, and Utilities Technical Representative.

(1) Suggested Process Steps. The following process steps can be successfully applied to address energy use in energy intensive buildings.

(a) State the Objective. The PWO shall help the team develop an objective statement. The objective could be to cut energy costs and consumption by 10 percent, to reduce electrical demand a certain amount, to identify and implement all cost effective and practical energy measures, or similar type statements.

(b) Analyze Data. All utilities services to the building should be metered and the data analyzed over time. Electrical data should include time-of-use load curves as well as cost and consumption data. Steam, gas, chilled water, water, and sewer usage and costs should also be determined. If EMS/DDC data are available, trend logs for major equipment, temperatures, schedules, and other data should be analyzed as well. Analysis of the available data will help the team focus resources on the areas of greatest concern.

(c) Survey the Building. The building should be surveyed to identify the equipment, operations, controls, and processes that may be contributing to excessive energy costs and consumption. Specifically:

1. The team should follow the use of the utilities of concern within the building to see how they are used. The team should examine equipment and building systems in mechanical rooms and throughout the building and evaluate whether it is operating properly and in accordance with the design concept for the building.

2. The team should review equipment operating schedules, controls and control sequences, operating paradigms, O&M practices, flow rates, temperatures, and any other measurable and observable parameters. Members of the team should compare this information with their understanding of the intended design of the building and mission requirements.

Note: it is almost universally true that the mission, equipment and operating requirements of energy intensive buildings have changed greatly since the building was designed, yet often the AC systems and other installed equipment have changed little. The team should consider the building's true, current needs and try to align the building's systems with the needs, beginning first with simple methods of control and system adjustments and then system modifications if necessary.

3. The team should identify all observed equipment, control, and facility deficiencies; O&M practices, and other factors that may contribute to high energy usage.

(d) Develop Energy Conservation Measures (ECMs). The stakeholders should analyze their observations and findings from the building surveys to develop potential ECMs. They should ensure the proposed ECMs are technically feasible and verify that they are life cycle cost effective. ECMs might range from:

1. No-cost actions with immediate savings, such as turning off an unused redundant chiller and its associated chilled water pumps, and training building occupants and O&M personnel on the most efficient ways to operate the facility.

2. Fast payback projects, such as resetting control sequences, installing or resetting variable frequency drives on chilled water pumps, and replacing three-way chilled water valves in computer room AC units with two-way valves.

3. Capital projects such as replacing steam absorption chillers with electric centrifugal chillers, lighting retrofits, or replacing the uninterruptible power system.

(e) Seek Stakeholder "Buy-in". The team should seek "buy-in" from all stakeholders, all building tenants and, in some cases, higher authority. It is possible that an ECM that is technically feasible and economically attractive may not be approved by all stakeholders for valid reasons. In such cases, the team should look for the best alternative solutions that are acceptable to all stakeholders.

(f) Implement Approved ECMs. The team should work together to implement all approved ECMs. Some members of the team may be involved in the process for extended periods to

help with implementation, provide training, monitor the building's performance, perform measurement and verification tasks, respond to problems, and take other actions as necessary to ensure the full implementation and successful performance of all approved ECMs.

c. Typical Findings. The following are among the energy wastes often found in data centers and other energy intensive buildings:

(1) Unnecessary Redundancy. Redundant chillers, boilers, circulating pumps, computer room AC units, and other equipment are often found on line when they are not required. Data center operators frequently operate all AC units in the area even though half of the units are intended as backups, while O&M personnel often run backup chillers, boilers, and pumps as a contingency in case of an after hour casualty or increased cooling demands.

(2) Poor Night-time Shutdown. Simulator facilities typically have a limited shutdown at night and a more complete shutdown on weekends, but rarely reduce demand below 200 to 300kW. The reason usually offered is that the simulator equipment is so unreliable, operators cannot be sure it will turn on again without problems. Equipment reliability problems should be addressed as such, running equipment constantly so it will work when it is needed is rarely cost effective.

(3) "Low Delta-T Syndrome. "Energy intensive buildings typically have large AC systems and heavy cooling loads. In data centers, particularly, operators often mistakenly attempt to cool the entire space, mixing hot air with cool air, so that the air returning to the heat exchanger is only slightly warmer than the supply air, resulting in a "low delta-T." A "low delta-T" is a symptom of a very inefficient system.

(4) Controls By-Passed. Building operators frequently by-pass or remove controls to keep the building operating despite serious equipment or controls problems, or because the installation may not have the manning or money to fix the

problems. Building occupants may not be aware that the equipment is being operated in a "jury rigged" manner as long as they are functioning. Operating a building without proper controls nearly always wastes energy dollars.

(5) Poor Temperature Control. Energy intensive buildings are often over-cooled out of concern for equipment, whether the temperatures are actually required or not.

(6) EMS/DDC Controls not Fully Used. Installations sometimes fail to use EMS/DDC controls to maintain authorized schedules or set points or to identify possible energy wastes. The full capability of EMS/DDC systems should be used to hold down energy costs.

(7) Air Conditioning Systems Mis-Matched to Requirements. Many buildings have multiple AC units, many of which are probably oversized. Tying them together or replacing them with a properly sized, more efficient AC system may offer substantial savings and provide more reliable AC.

(8) Other Oversized or Unnecessary Equipment. In many cases missions and building uses have changed so much that the building's boilers, AC systems, 400 Hertz (Hz) motor generator (M-G) sets, air compressors, and other equipment are grossly oversized for current needs, or may no longer be needed at all.

d. Data Center BEMPs. The Navy and NMCI have partnered to identify the following general BEMPs for data centers, many of which apply to other energy intensive buildings as well. These BEMPs are listed below:

(1) Reduce computer load.

(2) Reduce cooling load.

(3) Create and maintain hot and cold alleys.

(4) Eliminate mixing of air in the data center.

(5) Eliminate mixing of air in the false floor.

(6) Eliminate air flow restrictions in the false floor.

(7) Eliminate any mixing of air within racks.

(8) Match computer room AC units with cooling load and turn them off strategically.

(9) Adjust controls for best energy efficiency.

9. Building Envelope. Envelope-related energy deficiencies will normally be addressed in the energy efficient design of new facilities and major renovation projects, or in financed energy projects. CNRSE installations will also carry out the following building envelope BEMPs:

a. Identify facilities having insufficient or no insulation for upgrade as part of future facilities or energy projects where it will be most cost effective;

b. Identify facilities suitable for installation of white, reflective "cool roofs", or for installation of solar integrated roofing systems as part of future roof repair projects;

c. Promptly report and correct envelope problems that prevent the building from being operated efficiently;

d. Strictly maintain the integrity of AC and heating boundaries. Doors to AC spaces will never be kept open for convenience. Similarly, doors and windows will never be opened in an attempt to augment the AC system;

e. Keep hangar and industrial doors closed as much as possible during the heating season. Install switches to cut off heating in hangars and industrial facilities when the hangar or other large doors are open;

f. Windows will be kept operable to provide natural ventilation whenever possible, rather than relying solely on mechanical ventilation or AC.

10. Motors, Shop Equipment and Air Compressors

a. Shop Equipment

(1) Shop equipment will be operated only as needed and will be secured when not in use and at the close of business.

b. Air Compressors

(1) Air compressors will be secured after hours (except for pneumatic control compressors) and will be operated only at the pressure and flow rate required.

(2) Air compressors will be properly sized for actual, needs. In most cases, a 15 or 25-horsepower compressor is all that is needed to supply shop tools or even air hoists.

(3) If an air compressor is cycling too frequently, the system should be checked for leaks and other unnecessary demands. Often, the problem will be found to be inadequate air storage which can easily be increased to meet demand events with a minimum of compressor run time.

(4) Compressed air flexible hoses are wasteful. If a work station frequently needs air, supply compressed air through properly sized piping instead of long lengths of hose.

(5) Do not use compressed air to blow down equipment or shop spaces. Vacuums are much cleaner and more ENERGY efficient. If equipment must be blown clean, use an OSHA approved "blow gun" to reduce the amount of air needed and to limit noise.

11. Water Heating

a. New or replacement water heaters and boilers will be Energy Star listed and will have Energy Factor ratings of 80 percent or greater, or Annual Fuel Utilization Efficiency ratings of 95 percent or greater, as appropriate to the unit.

b. Domestic hot water (DHW) heaters and boilers will be separate from the building's heating system so that steam heat exchangers and heating boilers can be secured after the heating season. DHW units will be properly sized for actual facility demand.

c. DHW heaters and boilers will be gas fired except where they are not life cycle cost effective, or where natural gas is not readily available. DHW heaters remote from natural gas systems may be electric or propane fired.

d. Solar water heating systems are a cost effective way to reduce energy costs. Solar systems should be evaluated for all large scale water heating applications, including swimming pools, UH, dining facilities, and large administrative facilities. EMs and REMs can assist in developing an Energy Conservation Investment Program or financed energy project to implement these renewable energy projects.

e. Heat pump water heaters should be considered for locations where they can help remove heat from an area, such as an interior utility room.

f. Instantaneous water heaters should be considered in areas with sporadic demand for hot water to avoid long runs of hot water pipe or running a DHW circulating pump.

g. Hot water pipes will be adequately insulated, especially where recirculating pumps are in use. Insulating blankets will be installed on older hot water storage tanks. The insulation will be checked periodically to ensure its integrity

h. Water may also be heated or pre-heated by recovering heat from large waste heat sources, including fuel cells and micro-turbines. Heat recovered from these sources is considered "renewable" and contributes to CNRSE efforts to increase its use of renewable energy. Recovering this heat is also usually critical to the cost effectiveness of these projects. This heat is best suited for heating swimming pools, large DHW systems, large high temperature hot water loops, and other similar uses.

i. In conformance with state and association plumbing codes nation-wide, DHW temperatures at the point of use will be no higher than 120" F. DHW may be stored at temperatures up to 160" F as necessary to prevent growth of Legionella bacteria, but high temperature DHW must be mixed with cold water before the point of use to prevent scalding.

j. In buildings where a DHW circulating pump is used, a timer should be installed to deactivate the pump during periods when it is not in use.

k. Water temperatures for laundry facilities, galleys and other specific uses will comply with applicable health and safety codes.

INSTALLATION ENERGY MANAGER APPOINTMENT LETTER

From: Commanding Officer, Naval Station Mayport
To: Appointee

Subj: APPOINTMENT AS THE NAVAL STATION MAYPORT INSTALLATION

Ref: (a) NAVSTAMYPTINST 4101.1

1. You are hereby appointed as the Naval Station Mayport Installation Energy Manager. You will familiarize yourself with reference (a) and adhere to it in the performance of your duties.

2. You are responsible for the energy management and conservation efforts of Naval Station Mayport and all assigned tenant commands. Your duties include, but are not limited to, the effective utilization of Building Energy Monitors and directing them in the performance of their duties. Any conservation related deficiencies or problems that cannot be resolved will be brought to the attention of the Public Works Utilities and Energy Management Branch Head for appropriate action. Reasonable time will be allotted during regular working hours to receive and provide energy conservation training and attend meetings.

3. This appointment remains in effect until you are relieved or when revoked by proper authority.

W. R. McCALL
CAPT USN

BUILDING ENERGY MONITOR APPOINTMENT LETTER

From: Tenant Commander/Department Head/OIC, Command
To: Appointee

Subj: APPOINTMENT AS A NAVAL STATION MAYPORT BUILDING ENERGY MONITOR

Ref: (a) NAVSTAMYPTINST 4101.1

1. As a BEM you are hereby appointed as Building Energy Monitor (BEM) for (Command Name) in building(s)___(#) or Code____ workspaces. You will familiarize yourself with reference (a) and adhere to it in the execution of your duties.

2. As a BEM, you are hereby responsible to the Installation Energy Manager for the conservation of energy within your assigned building(s). You are to monitor your assigned area and ensure all hands are practicing sound energy conservation principles and practices. Report utility system deficiencies to the Installation Energy Manager or turn in a service call as appropriate. Report any blatant or recurring acts of wasteful energy consumption. Also, identify any command, department, organization, or building that has a reoccurring exceptional record or that has made significant progress in energy conservation for recognition by the Naval Station Mayport Commanding Officer.

3. This appointment remains in effect until you are relieved or when revoked by proper authority.

_____
Signature

BUILDING ENERGY MONITOR CHECKLIST

Building Number: _____

Energy Monitor: _____

Code/Shop: _____

Telephone: _____

Responsible for what part of the building: _____

Checklist Items

OFFICE EQUIPMENT	YES	NO	N/A	Corrective Action(s)
Power management features of computers/ monitor activated				
Computer, monitors, photocopiers, and/or printers turned off after normal business hour				
HEATING AND COOLING				
Unused areas closed off.				
Air conditioning or heating vents free from obstructions.				
Exterior doors closed during heating/ cooling season.				
Windows closed during heating/cooling season.				
Air intakes and exhausts free from plants and foliage.				
Steam system intact with no visible leaks.				
Thermostat works correctly and is properly set and calibrated.				
Radiators are clean.				
Air filters are clean.				
Pipe insulation is adequate and intact.				
Blinds/drapes on south-facing windows are open in the heating season/closed in the cooling season.				
The computer scheduled (if the computer control heating) matches your occupancy schedule.				
Thermostats are set at appropriate heating/ AC set points.				

Portable electric space heaters have received installation code approval.				
Lights turned off in unoccupied area.				
LIGHTING	YES	NO	N/A	Corrective Action(s)
Lights turned off when daylight is sufficient.				
Exterior lights turned off in daytime.				
Surfaces of lamps and/or light reflecting or diffusing surfaces of fixtures are clean.				
Fluorescent/HID lamps are in good shape (no burned out bulbs).				
Building occupants are using task lights where appropriate.				
Ambient light levels lowered when task lighting in use.				
Task lighting lamp equipped with compact fluorescent instead of incandescent bulb.				
Lighting on backshifts and weekends turned off when not needed.				
KITCHEN APPLIANCES				
Coffee pots turned off after normal operating hours.				
Unneeded light bulbs removed from vending machines.				
Dishwasher is operated with full load.				
Gaskets around refrigerator doors in good condition.				
ELECTRIC MOTORS				
Motors are turned off when not in use.				
Compressed air systems are in good condition.				
Compressed air systems are turned off when not in use.				
Restroom exhaust fans are turned off after normal hours.				
WATER HEATING				
Hot water set at proper temperature.				
Hot water pipe insulation is adequate and intact.				
BUILDING ENVELOPE				
Exterior doors are tightly sealed and weather stripping is in good condition.				
Windows panes are in good condition.				

WATER CONSERVATION				
Faucets show no signs of leaking.				
Faucets are low-flow or have aerators				
Toilets show no signs of leaking.				
WATER CONSERVATION	YES	NO	N/A	Corrective Action(s)
Low-flow showerheads are installed.				

Comments:

ENERGY MONITOR SIGNATURE: _____ DATE: _____

SUPERVISOR SIGNATURE: _____ DATE: _____

ENERGY CONSERVATION WAIVER REQUEST

Date:

From:
To: Naval Station Mayport Public Works Department, Facilities Management Division, Building 1966

Subj: ENERGRY CONSERVATION WAIVER REQUEST

1. Building Number:

2. Area of Waiver:

3. Type(s) of Waiver Requested

☐ Cooling*:
Requested Temp: Date(s): Hour(s):

☐ Heating*:
Requested Temp: Date(s): Hour(s):

☐ Hot Water*:
Requested Temp: Date(s): Hour(s):

☐ Lighting:

☐ Other (Specify): _____

4. Specific Description of Request: (attach additional sheets if necessary)

_____

5. Justification: (attach additional sheets if necessary)

_____

6. Building Energy Monitor Name and Signature:

_____

7. Command/Departmental Personnel Name and Signature:

_____

*Requires manufacturer's technical data, or T.O. manual requiring specific temperature for equipment or process located in space.

ENERGY POLICY VIOLATION

From: Commanding Officer, Naval Station Mayport
To:

Subj: ENERGY POLICY VIOLATION

Ref: (a) NAVSTAMYPTINST 4101.1

1. An energy use inspection of your activity's areas was made by the Public Works Department on (date). The following violation(s) to reference (a) have been noted and brought to the attention of your command.

Bldg. number: ___ Date: _____ Time: _____ Survey No:____

Building Energy Monitor:_____ Duty Phone:

Description of Violation(s):

_____

_____

_____

_____

Number of violations this FY:

2. It is imperative that all activities participate in energy Conservation so that Naval Station Mayport will be able to meet the Executive Mandate of 30% reduction in energy consumption by 2015.

3. A reply to confirm that corrective action has been taken is requested within **FIVE WORKING DAYS**. Replies may be typed on the reverse side of this letter and shall be sent to the Commanding Officer, Naval Station Mayport via the Installation Energy Manager. If the violation requires a service call or work request, include the number in the response.