DEPARTMENT OF THE NAVY
COMMANDER, NAVY INSTALLATIONS COMMAND
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CNICINST 4101.2
N4
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CNICINST 4101.2

From: Commander, Navy Installations Command

Subj: EVALUATION OF ENERGY PROJECT INVESTMENT PERFORMANCE

Ref: (a) SECNAVINST 4101.3
(b) OPNAVINST 4100.5E
(c) CNICINST 4101.1

Encl: (1) Energy Project Data Reporting

1. Purpose. In support of references (a) through (c), provide supplemental guidance and establish policy for reporting energy project investment performance data.

2. Background. The Navy significantly increased energy project investments to reduce total ownership costs of utility consumption while cost-effectively achieving compliance with efficiency, renewable and alternative energy goals. As a result, energy projects are assessed with the energy return on investment (eROI) tool and implemented based on the expected savings they will return to the Navy. Per references (a) and (b), shore energy performance must be accurately assessed to reliably determine actual savings created within a facility by an energy conservation or energy efficiency project.

The process to verify energy project savings (both cost and energy) is called measurement and verification (M&V). CNIC will leverage the eROI tool and existing energy management systems to cost-effectively perform M&V and monitor executed energy projects to analyze their effectiveness. This analysis will be used to assess facility energy efficiency performance, identify projects which have the greatest risk and/or impact to the shore energy investment portfolio, determine tradeoffs between investments, and develop the *Shore Energy Implementation Plan* (SEIP) (as described in reference (b)).

3. Policy

a. This policy applies to facility and utility infrastructure investments executed via the following resource types: Utilities Energy Savings Contracts (UESC), Energy Service Performance Contracts (ESPC), Energy Conservation Investment Program (ECIP), Energy Major Maintenance and Repair Program (eMMRP), Restoration and Modernization Energy (RMe) and Energy Military Construction (eMILCON) projects.

b. Enclosure (1) provides the periodicity and energy project data required.

4. Responsibilities

a. CNIC Facilities and Environmental (N4) is responsible for providing implementation guidance and management of Navy shore energy program requirements in alignment with references (a) and (b) and shall:

(1) Coordinate, manage, and prioritize all shore energy projects regardless of tenancy and maintenance responsibility.

(2) Monitor and assess shore energy performance using advanced metering, facility energy audits, SEIP, and energy management systems (e.g., Navy Shore Geospatial Energy Module (NSGEM) and eROI tool).

(3) Coordinate with Naval Facilities Engineering Command (NAVFAC) to:

(a) Provide business rules for submission of energy project investment data to CNIC N4.

(b) Ensure internet Navy Facility Asset Data Store (iNFADS) and Centralized and Integrated Reporting for Comprehensive Utilities Information Tracking System (CIRCUITS) meet requirements to accurately collect and track facility energy and real property data.

b. CNIC Regional Commanders (REGCOMs) shall:

(1) Coordinate and ensure planning and execution oversight of energy projects within their area of responsibility (AOR).

(2) Report energy and cost savings in accordance with enclosure (1).

c. Installation Commanding Officers shall:

(1) Provide planning and execution oversight of energy projects within their AOR.

(2) In accordance with enclosure (1), report energy and cost savings via the eROI tool for projects meeting the criteria specified. Generally, energy and cost savings reporting is required at project award and each January.

(3) Ensure real property data (via iNFADS) and facility consumption data (via CIRCUITS) is accurate and up-to-date in accordance with standard NAVFAC practices and publications (located on the NAVFAC Portal here: hub.navfac.navy.mil).

5. Action. REGCOMs, Regional Engineers, and Installation Commanding Officers will ensure this guidance is provided to and executed by their subordinates.

6. Records management. Records created as a result of this instruction, regardless of media and format, shall be managed in accordance with SECNAV M-5210.1 of January 2012.

D. R. SMITH
Vice Admiral, U.S. Navy

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ENERGY PROJECT DATA REPORTING

1. Utilities Energy Savings Contract (UESC), Energy Service Performance Contract (ESPC) and Energy Conservation Investment Program (ECIP) Projects. Energy project investment data reporting (for each applicable facility) is required for all currently active UESC and ESPC projects.

a. Baseline project data. Project data shall be submitted to CNIC via the energy return on investment (eROI) tool at project award to establish baseline project information in accordance with reference (c).

b. Updates to existing project data. An annual update to project cost savings should be provided to CNIC in January during the contract performance period. The following data elements shall be updated for each project:

Project Overview	
Project Name	
Project Number (RMxx-xxxx)	
Activity UIC	
Economic life (years)	
Fund type	
Baseline Project Consumption (MBTU)	
Data Source of Baseline Project Consumption	e.g. CIRCUITS
Facility Information	
NFAID	For all applicable facilities
Maintenance UIC	
Building Number	
Maintenance Fund Source Code	
Square Footage	
Total Buildings	
Is this Project a Result of an Audit?	
Project Category	
Project Type	
ECM Economic Life	
Cost Information	
Planning cost (current $)	Effort to develop 1391/eROI in call for work
Environmental cost (current $)	Effort for environmental study (e.g. CATEX)
Development cost, in-house(current $)	Effort for CI, UEM, ACQ personnel
Development cost, contractor (current $)	Effort by contractor for IGA/DES
Annual administration cost, in-house (current $)	Effort by FEAD during construction
Annual O/M cost (current $)	Added support contract costs
Annual M/V cost (current $)	During economic life of system
Annual contract support cost, post-award, project specific (current $)	Effort by ACQ/UEM to validate savings
Construction cost (current $)	
Disposal cost (current $)	
Interest (current $)	
Savings Information	
Annual electricity supply-side savings, efficiency (MWH)	Utility Efficiency, At the "fenceline"
Annual electricity supply-side savings, renewable (MWH)	Utility-Scale Generation, At the "fenceline"
Annual electricity demand-side savings, efficiency (MWH)	Facility Efficiency, Inside the "fenceline"
Annual electricity demand-side savings, renewable (MWH)	Facility-Based Generation, Inside the "fenceline"
Annual consumption savings per commodity (i.e. natural gas, water, steam, LPG, coal, distillate oil, residual oil, gasoline, chilled water, steam and sewage) (MBTU/kGAL)	Utility-Scale (At the “fenceline”) and Facility-Based (Inside the “fenceline”) Efficiency and Renewable Consumption Savings
Unburdened rate ($/MWH)	i.e. Purchased utility cost
Annual O&M savings ($)	Added support contract costs
Renewable power generated (MW)	
Salvage value ($)	

2. Restoration and Modernization Energy (RMe), Energy Major Maintenance and Repair Program (eMMRP), and Energy Military Construction (eMILCON). Energy project investment data reporting (for each applicable facility) is required for projects meeting the following criteria:

a. Programmed for execution in FY12 and beyond.

b. Project construction cost greater than or equal to $5M.

c. Project that saves greater than or equal to 5,000 MBTU annually.

d. Project that saves greater than or equal to 5,000 kGal annually.

(1) Baseline project data. Project data shall be submitted to CNIC via the energy return on investment (eROI) tool at project award to establish baseline project information.

(2) Updates to existing project data

(a) For RMe and eMILCON, an updated eROI template shall be submitted to CNIC one year after beneficial occupancy date (BOD).

(b) For all eMMRP, an updated eROI template shall be submitted to NAVFAC HQ one year after project completion.

(c) Annual updates to project cost savings should be provided to CNIC in January. This data shall be reported until energy savings are achieved or 10 years after construction (whichever comes sooner). The following data elements shall be provided:

Project Overview	
Project Name	
Project Number (RMxx-xxxx, Pxxx)	Enter EPG-generated Project Number
Activity UIC	
Economic life (years)	
Fund type	
Baseline Project Consumption (MBTU)	
Data Source of Baseline Project Consumption	e.g. CIRCUITS
Facility Information	
NFAID	For all applicable facilities
Maintenance UIC	
Building Number	
Maintenance Fund Source Code	
Square Footage	
Total Buildings	
Is this Project a Result of an Audit?	
Project Category	
Project Type	
ECM Economic Life	
Cost Information	
Planning cost (current $)	Effort to develop 1391/eROI in call for work
Environmental cost (current $)	Effort for environmental study (e.g. CATEX)
Development cost, in-house(current $)	Effort for CI, UEM, ACQ personnel
Development cost, contractor (current $)	Effort by contractor for IGA/DES
Annual administration cost, in-house (current $)	Effort by FEAD during construction
Annual O/M cost (current $)	Added support contract costs
Annual M/V cost (current $)	Only applies to efficiency projects implemented w/i 2yrs as result of EISA 2007 audit.
Annual contract support cost, post-award, project specific (current $)	Effort by ACQ/UEM to validate savings
Construction cost (current $)	
Contingency cost (current $)	
Disposal cost (current $)	
Savings Information	
Annual electricity supply-side savings, efficiency (MWH)	Utility Efficiency, At the "fenceline"
Annual electricity supply-side savings, renewable (MWH)	Utility-Scale Generation, At the "fenceline"
Annual electricity demand-side savings, efficiency (MWH)	Facility Efficiency, Inside the "fenceline"
Annual electricity demand-side savings, renewable (MWH)	Facility-Based Generation, Inside the "fenceline"
Annual consumption savings per commodity (i.e. natural gas, water, steam, LPG, coal, distillate oil, residual oil, gasoline, chilled water, steam and sewage) (MBTU/kGAL)	Utility-Scale (At the “fenceline”) and Facility-Based (Inside the “fenceline”) Efficiency and Renewable Consumption Savings
Unburdened rate for all applicable commodities ($/MWH)	i.e. Purchased utility cost
Annual O&M savings ($)	Added support contract costs
Renewable power generated (MW)	
Salvage value ($)	