BUSINESS OPERATING PROCEDURE

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Supplemental Procedures for Alternative Financed Energy Savings Projects

NATIONAL NUCLEAR SECURITY ADMINISTRATION
Office of Safety, Infrastructure and Operations

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SUPPLEMENTAL PROCEDURES FOR ALTERNATIVE FINANCED ENERGY SAVINGS PROJECTS

1. PURPOSE. This Business Operating Procedure (BOP) provides supplemental procedures to be used along with other alternative financing materials developed by the Federal Energy Management Program (FEMP). The BOP identifies specific activities along with accompanying responsibilities for the various organizational elements involved with Energy Savings Performance Contract (ESPC) projects with a focus on pre-planning, project planning, initial project development, implementation/construction & acceptance, and performance/closeout phase activities. The procedures included in this BOP supplement the FEMP procedures promulgated in guidance and training materials. This BOP, when used in conjunction with the FEMP guidance, will help the reader gain a full understanding of the ESPC process. The overarching principles of this BOP also apply to Power Purchase Agreements (PPA), Utility Energy Service Contracts (UESC), and ESPC ENABLE[1].

2. CANCELLATION. NONE

3. APPLICABILITY.

   a. Federal. This BOP applies to all NNSA Field Offices, Associate Administrator for Acquisition and Project Management (NA-APM) and Associate Administrator for Safety, Infrastructure and Operations (NA-50) organizational elements involved with planning, awarding, and monitoring ESPCs.

   b. Contractors. This BOP does not apply to contractors.

   c. Equivalency. In accordance with the responsibilities and authorities assigned by Executive Order (EO) 12344, codified at 50 U.S.C. sections 2406 and 2511, and to ensure consistency through the joint Navy/DOE Naval Nuclear Propulsion Program, the Deputy Administrator for Naval Reactors (Director) will implement and oversee requirements and practices pertaining to this Directive for activities under the Director's cognizance, as deemed appropriate.

4. BACKGROUND.

   a. ESPCs, as authorized by 42 U.S.C. 8287, means a contract (or task order (TO)) awarded to an energy service company (ESCO) for up to 25 years that provides for the design, acquisition, financing, installation, testing, operation, and maintenance and repair of identified energy conservation measures (ECMs) at one or more locations. Section 3.(k) in Executive Order (EO) 13693, *Planning for Federal Sustainability in the Next Decade*, March 19, 2015, promotes performance contracts as an important tool to help meet identified energy efficiency and management goals while deploying life-cycle cost-effective energy

[1] The ESPC ENABLE program provides a standardized, streamlined process for small federal facilities to install targeted energy conservation measures.

efficiency and clean energy technology and water conservation measures. The ESPC is an alternative financed performance contract. The ESPC is similar to a conventional firm-fixed-price turn-key energy project; however, the ESPC allows NNSA to provide only minimal "up front" implementation cost. The primary benefits of ESPCs are to provide:

(1) Alternative financing mechanism. Contract payments are made from energy savings;

(2) Energy savings and guaranteed cost savings;

(3) A means for infrastructure improvements, obtaining new equipment, improving energy systems operations, and obtaining energy services.

b. Alternative financing concepts apply to ESPCs, PPAs, UESCs, and ENABLE contracts. The PPA is typically a part of an ESPC that sets a unit price for delivered energy. The UESC is very similar to an ESPC. The UESC is a contract administered by the General Services Administration (GSA) that allows a utility company to provide its Federal customers with energy and water efficiency improvements and demand-reduction services. A primary advantage with the UESCs is the existing and continuing business relationship with the contracted utility. ENABLE is another GSA administered program that provides a standardized and streamlined process for Federal facilities to install targeted ECMs that can be completed in six months or less. The advantage of the ENABLE contract is the use of pre-defined easy to install ECMs that do not require extensive on-site audits. Typically, ENABLE contracts are smaller and have lower administrative cost to the contractor and the Federal agency.

c. ESPC projects make a substantial contribution towards achieving the sustainability goals set forth in statutes and EO 13693. ECM selection, execution and persistence of savings are of key importance to NNSA in achieving its sustainability goals.

d. NA-50 provides coordination and guidance related to application of alternative financed projects concepts for infrastructure improvements and sustainability goals. The objective is to ensure that ESPC "best practices" are used by NNSA Field Offices in their ESPC activities.

e. The ESPC Integrated Project Team (IPT), led by NA-APM, ensures a streamlined acquisition process consistent with mission, quality, and regulatory requirements. The ESPC IPT has a specific interest in the success of the procurement activities to ensure compliance with sound business practices, proper planning, understanding of the performance-based requirements, and consideration of advice from subject matter experts internal and external to NNSA and the FEMP.

5. REQUIREMENTS.

a. Alternative financing must be considered to the maximum extent practicable for energy and water projects. Field Offices must ensure a periodic evaluation and analysis is conducted of life-cycle cost-effective energy savings opportunities and other capital improvements for implementation through contracting vehicles such as ESPCs.

b. Alternative financed energy savings projects must be systematically planned and actively managed throughout the life of the contract to ensure that guaranteed savings are being delivered, and that equipment is in place, operational and is being maintained and operated according to the terms of the contract. This includes ensuring that the project has a contracting officer assigned, witnessing of the ESCO's measurement and verification (M&V) activities by the contracting officer's technical representative, and review of annual M&V reports.

c. To the extent practicable, available appropriated funds must be applied to alternatively financed projects to increase energy savings and leverage additional investment.

d. Renewable Energy and High Performance Sustainable Building (HPSB) measures must be considered in each ESPC and UESC proposal and be implemented where practicable.

e. All facilities must incorporate the inclusion of metering requirements in ESPCs and UESCs, as practicable.

f. Best practices and lessons learned for Federal agency ESPCs must be considered during the ESPC process to help award high-quality, high-value ESPC TOs.

6. RESPONSIBILITIES.

The capital letters (i.e., (A), (B), (C)) correlate with the Appendix 1 process flow diagram steps.

a. Associate Administrator for Safety, Infrastructure and Operations, NA-50.

(1) Pre-Planning Phase. Participate with the Field Office during the pre-planning phase activities for alternative financed projects. (C)

(2) Project Planning Phase. Participate with the Field Office during the project planning phase activities for alternative financed projects. (G)

(3) Initial Project Development Phase

(a) Review the utility rates for energy savings. (K)

(b) Review and submit comments on the PA to the COR. (N)

(4) Negotiation & Award Phase

(a) Participate in IPT discussions to include ECM selection, M&V, and risk assumption. (S)

(b) Review and submit comments on the IGA to the COR. (U)

(c) Concur with the award of contract when the cost is greater than or equal to $10.0 million. (Z)

(5) Implementation/Construction and Acceptance Phase. Participate in discussions of change proposals that may affect scope, energy savings, or TO term. (EE)

(6) Performance Period through Closeout Phase

(a) Review COR's summary of findings from the ESCO's Annual M&V Report for status of ESCO performance. (GG)

(b) Participate in discussions of change proposals that may affect scope, energy savings, or TO term. (II)

(c) Receive notification from NA-APM when the contract is successfully closed out. (JJ)

b. Associate Administrator for Acquisition and Project Management, NA-APM.

(1) Project Planning Phase

(a) Designate the Federal Project Director, CO and/or COR, as appropriate. (E)

(b) Designate members of the IPT including NA-50. (F)

(c) Encourage IPT team members to complete ESPC training. (H)

(d) Initiate procurement activities to include issuing the NOO after receiving written concurrence from Field Office management. (J)

(2) Initial Project Development Phase

(a) Incorporate utility rates prepared by the FO into the TO as the base rates. (K)

(b) Provide, subject to the Procurement Integrity Act, the DOE ESPC Review Board members access to the PA documents needed for its review and comment. Board members participate on the IPT and

provide technical comments to the COR in accordance with the Board procedures. (M)

(c) Consider the comments received from the DOE ESPC Review Board members on the PA prior to issuance of the Notice of Intent to Award (NOITA). Provide a written reply to the ESPC Review Board members' comments. (P)

(d) Issue the NOITA after receiving written concurrence from the Field Office management. (R)

(3) Negotiation & Award Phase

(a) Participate in IPT discussions to include ECM selection, M&V, and risk assumption, as appropriate. (S)

(b) Provide, subject to the Procurement Integrity Act, the DOE ESPC Review Board members access to the IGA documents needed for its review and comment. Board members participate on the IPT and provide technical comments to the COR in accordance with Board procedures. (T)

(c) Consider the comments received from the DOE ESPC Review Board/IPT members prior to award of the TO. Provide a written reply to the DOE ESPC Review Board members' comments. (W)

(d) After the Field Office Manager provides written concurrence to NA-APM on the IGA, the CO awards the TO. (AA)

(4) Implementation/Construction & Acceptance Phase. Lead the discussions of change proposals that may affect scope, energy savings, or TO term. (EE)

(5) Performance Period through Closeout Phase

(a) Review COR's summary of findings from the ESCO's Annual M&V Report for status of ESCO performance. (GG)

(b) Participate in discussions of change proposals that may affect scope, energy savings, or TO term. (II)

(c) Advise NA-50, Field Office and COR when the project is successfully closed out. (JJ)

c. Field Offices.

(1) Pre-Planning Phase

(a) Consider alternative financing to the maximum extent practicable for energy and water projects. (A)

(b) Advise NA-50 (Office of Environment and Sustainability) and NA-APM (Office of Utilities and Construction) when pre-planning activities start. (B)

(2) Project Planning Phase

(a) Provide written request to NA-APM to initiate project planning activities and notify NA-50. (D)

(b) Participate in planning activities. (G)

(c) Arrange for FEMP ESPC training for NNSA IPT members. This training is offered on-demand and/or by live session from FEMP. (H)

(d) Give approval to CO to issue Notice of Opportunity (NOO). (I)

(3) Initial Project Development

(a) Calculate the current site unit cost of energy to be used in the ESPC contract. Provide the rates and computations to NA-APM and NA-50. Determine how the proposed project and savings will affect existing utility contracts for energy, gas, etc. (K)

(b) Inform the COR about the customer's scope and expectations for the ESPC (or other alternative financed) project. The COR (or FPD, if one is assigned) speaks for the Field Office with regard to the scope of the project. (L)

(c) Review and submit comments on the PA to the COR for transmittal to the CO. (N)

(d) Discuss PA with COR and provide written concurrence to CO to issue the NOITA. (Q)

(4) Negotiation & Award Phase

(a) Participate in IPT discussions especially for ECM selection, M&V, and risk assumption. (S)

(b) Review and submit comments about the IGA to the COR. (U)

(c) Field Office Manager provides written concurrence on the IGA to NA-APM prior to CO award of the TO. (Z)

(5) Implementation/Construction and Acceptance Phase

(a) Provide coordination between the ESCO and the M&O contractor in scheduling work requirements under the ESPC. (BB)

(b) Participate in commissioning activities. (CC)

(6) Performance Period through Closeout Phase

(a) Review COR's summary of findings from the ESCO's Annual M&V Report for status of ESCO performance. (GG)

(b) Receive notification from NA-APM when the contract is successfully closed out. (JJ)

d. Contracting Officer's Representative (COR).

(1) Project Planning Phase. Participate in planning activities. (G)

(2) Initial Project Development Phase

(a) Review and provide comments on utility rates for energy savings. (K)

(b) Receive, review, and consolidate DOE ESPC Review Board/IPT comments on the PA and submit to the CO. (O)

(c) Provide Field Office management with concurrence needed for the issuance of the NOITA which starts the IGA. (Q)

(3) Negotiation & Award Phase

(a) Participate in IPT discussions especially for ECM selection, M&V, and risk assumption. (S)

(b) Receive, review, and consolidate DOE ESPC Review Board/IPT comments on the IGA and submit to the CO. (V)

(c) Provide the CO with concurrence on the technical aspects of the IGA. (X)

(d) Conduct an economic analysis based on IGA documentation using the FEMP life cycle cost methodology. (Y)

(4) Implementation/Construction and Acceptance Phase

(a) Participate in the project commissioning activities. Provide written recommendations of the technical acceptability of the project to the CO. (CC)

(b) Notify NA-50 and the CO of any potential changes to the ESPC TO that may impact energy and water savings, energy and water cost savings, implementation cost, or TO term. (DD)

(c) Participate in discussions of change proposals that may affect scope, energy savings, or TO term. (EE)

(5) Performance Period through Closeout Phase

(a) Conduct life-of-task-order activities along with the ESCO. (FF)

(b) Review the Annual M&V Reports and provide a summary M&V Report to NA-50, NA-APM and the Field Office along with a copy of the Report. (GG)

(c) Notify NA-50 and the CO of any potential changes to the ESPC TO that may impact energy and water savings, energy and water cost savings, implementation cost, or TO term. (HH)

(d) Participate in discussions of change orders that may affect scope, energy savings, or TO term. (II)

(e) Receive notification from NA-APM when the project is successfully closed out. (JJ)

7. REFERENCES.

a. Executive Order 13693, *Planning for Federal Sustainability in the Next Decade*, March 19, 2015.

b. DOE Order 436.1, *Departmental Sustainability*, May 2, 2011.

c. FEMP resources to help federal agencies implement ESPCs including case studies and training are available at: http://www.energy.gov/eere/femp/resources-implementing-federal-energy-savings-performance-contracts.

8. ACRONYMS.

a.	CO	Contracting Officer
b.	COR	Contracting Officer's Representative
c.	DOE	U.S. Department of Energy

d.	ECM	Energy Conservation Measure
e.	ENABLE	The name of an alternative financing program (not an acronym).
f.	EO	Executive Order
g.	ESCO	Energy Services Company
h.	ESPC	Energy Savings Performance Contract
i.	FEMP	Federal Energy Management Program
j.	FO	Field Office
k.	GSA	General Services Administration
l.	IGA	Investment Grade Audit
m.	IPT	Integrated Project Team
n.	M&V	Measurement and Verification
o.	NA-50	Office of Safety, Infrastructure & Operations
p.	NA-APM	Office of Acquisition and Project Management
q.	NOITA	Notice of Intent to Award
r.	NOO	Notice of Opportunity
s.	PA	Preliminary Assessment
t.	PPA	Power Purchase Agreement
u.	TO	Task Order
v.	UESC	Utility Energy Services Contract

9. CONTACT. Office of Safety, Infrastructure and Operations, Office of Environment and Sustainability, 202-586-6882.

BY ORDER OF THE ADMINISTRATOR:

James J. McConnell
Associate Administrator
for Safety, Infrastructure and Operations

Appendix 1: Process Flow Diagram for Alternative Financed Energy Savings Projects

Appendix 1: Process Flow Diagram for Alternative Financed Energy Savings Projects

The process flow diagram addresses the key steps outlined in this BOP and not the entire ESPC process. The connecting intermediate steps between the various process steps are not listed. The key phases of the ESPC process which correlate to the flow diagram steps include:

a. Management and coordination of Pre-Planning activities. These activities start when the Management and Operating (M&O) contractor and the Field Office participate in discussions about sustainability and energy efficiency projects which may be candidates for alternative financing. Pre-Planning may also start when there are discussions and requests for ESPC assistance and information from individuals and organizations outside of the NNSA. Pre-Planning includes activities needed to determine if an energy efficiency project should be accomplished through an ESPC, through another alternative financing method, through a non-alternative financing mechanism or postponed.

b. Management and coordination of Project Planning activities. These activities start when the Field Office provides a written request to NA-APM to initiate project planning acquisition activities. Project Planning includes, but is not limited to, issuance of the Notice of Opportunity (NOO) and other documents to the ESCOs.

c. Management and coordination of Initial Project Development activities. These activities include Preliminary Assessments (PA) and selection of an ESCO.

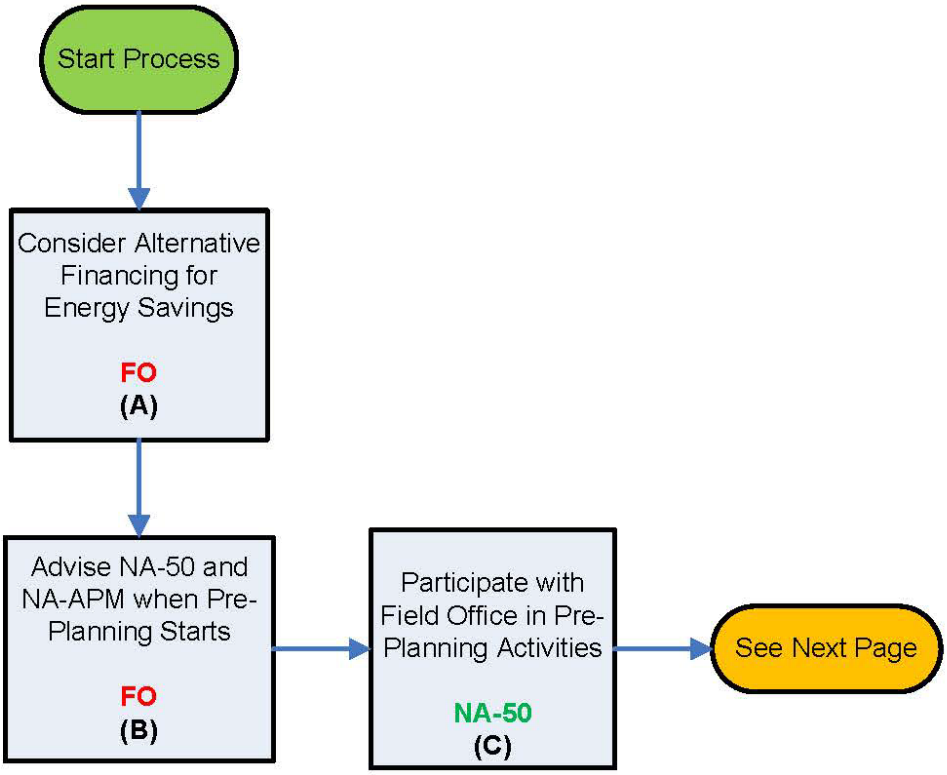
d. Management and coordination of Negotiation & Award of TO activities. These activities include the Investment Grade Audit (IGA), coordination with the DOE ESPC Review Board, and award of the TO.

e. Management and coordination of Implementation/Construction and Acceptance activities. These activities start after TO award and include project change proposals, commissioning, and project acceptance.

f. Management and coordination of Performance/Closeout activities. These activities start after the Field Office accepts the completed project and include the acceptance of the Measurement and Verification (M&V) report and change proposals to the TO. These activities end when the CO advises NA-50, NA-APM, the Field Office, and the COR that the contract is closed.

Supplemental Procedures for Alternative Financed Energy Savings Projects

Pre-Planning Phase

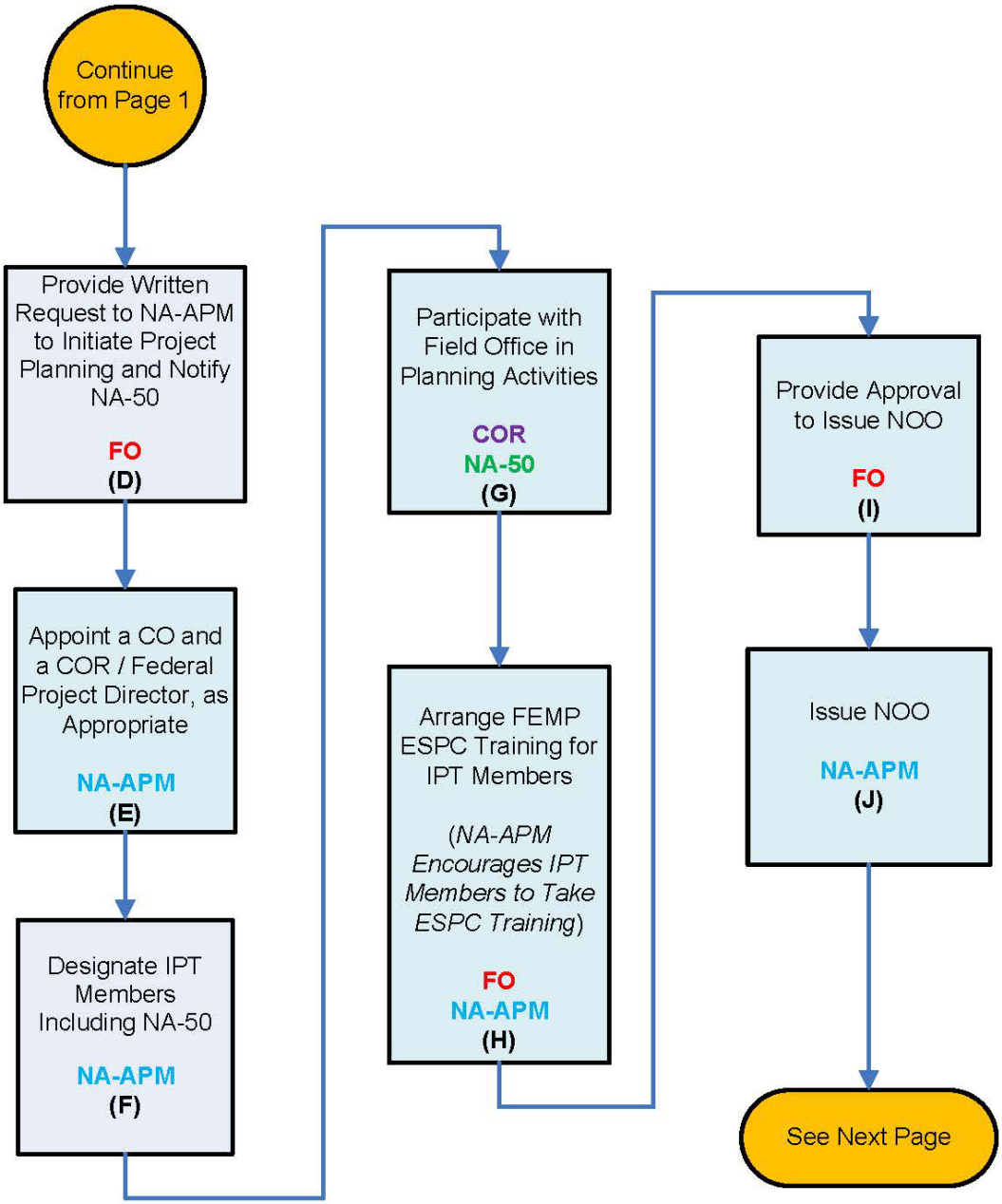


KEY

FO – NNSA Field Office
COR – Contracting Officer Representative, Field Office
NA-APM – NNSA NA-APM
NA-50 – NNSA NA-50

Note: This is an abbreviated process flow diagram. Reference BOP text for details associated with process steps (i.e., (A), (B), (C), ...)

Project Planning Phase



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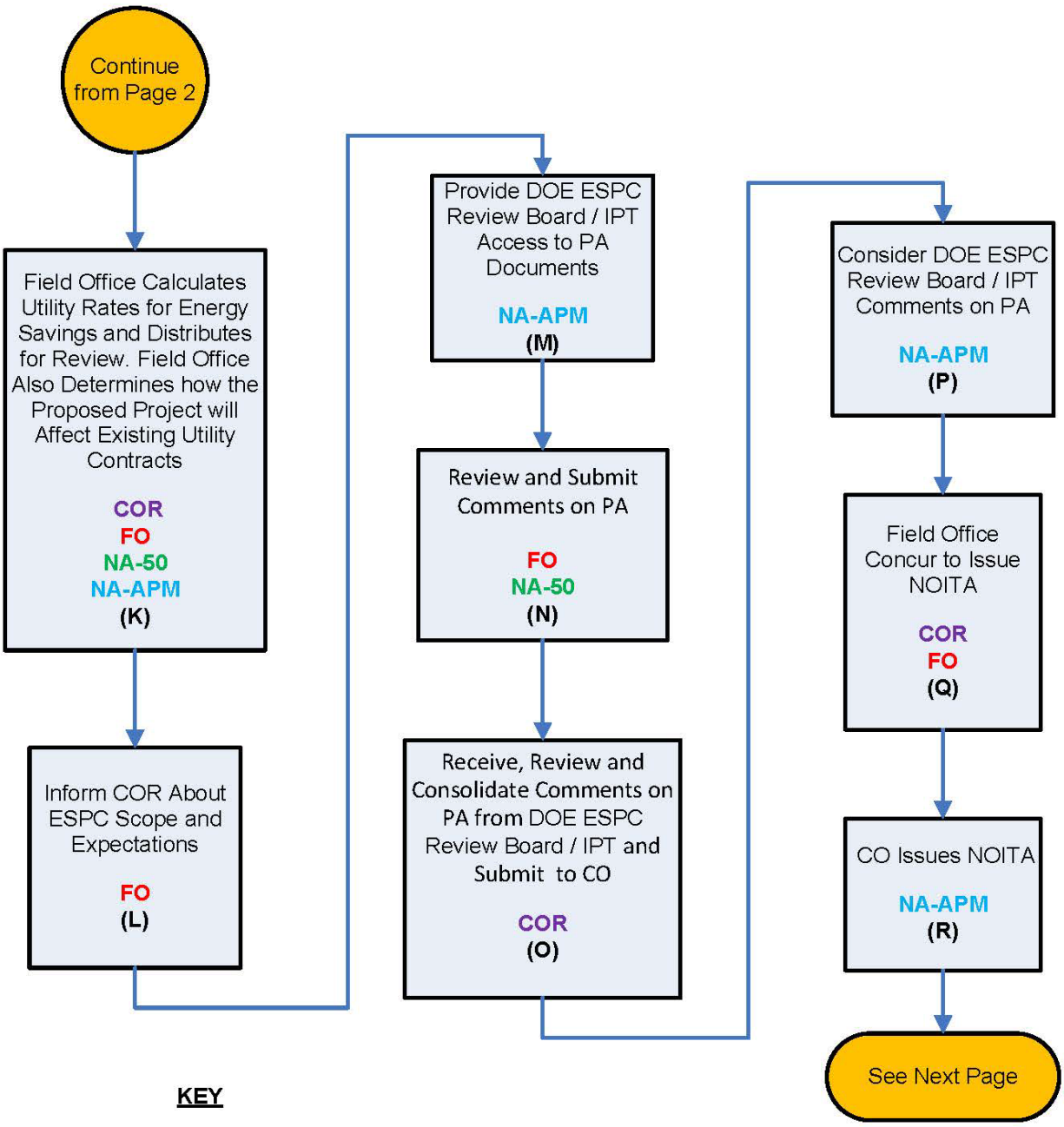
NA-APM – NNSA NA-APM
NA-50 – NNSA NA-50

Initial Project Development Phase



KEY

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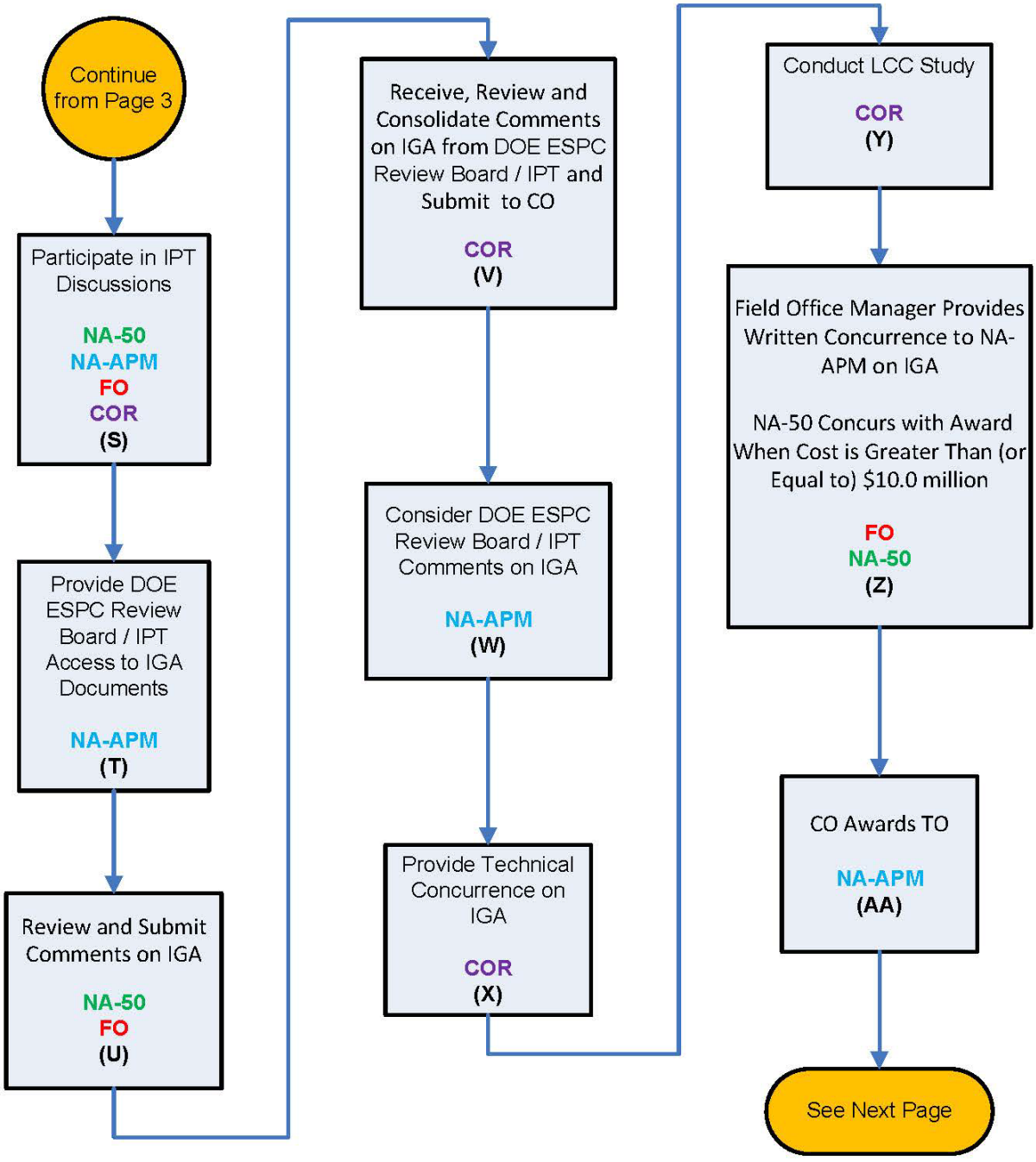
COR – Contracting Officer Representative, Field Office
NA-APM – NNSA NA-APM
NA-50 – NNSA NA-50

Negotiation and Award Phase



KEY

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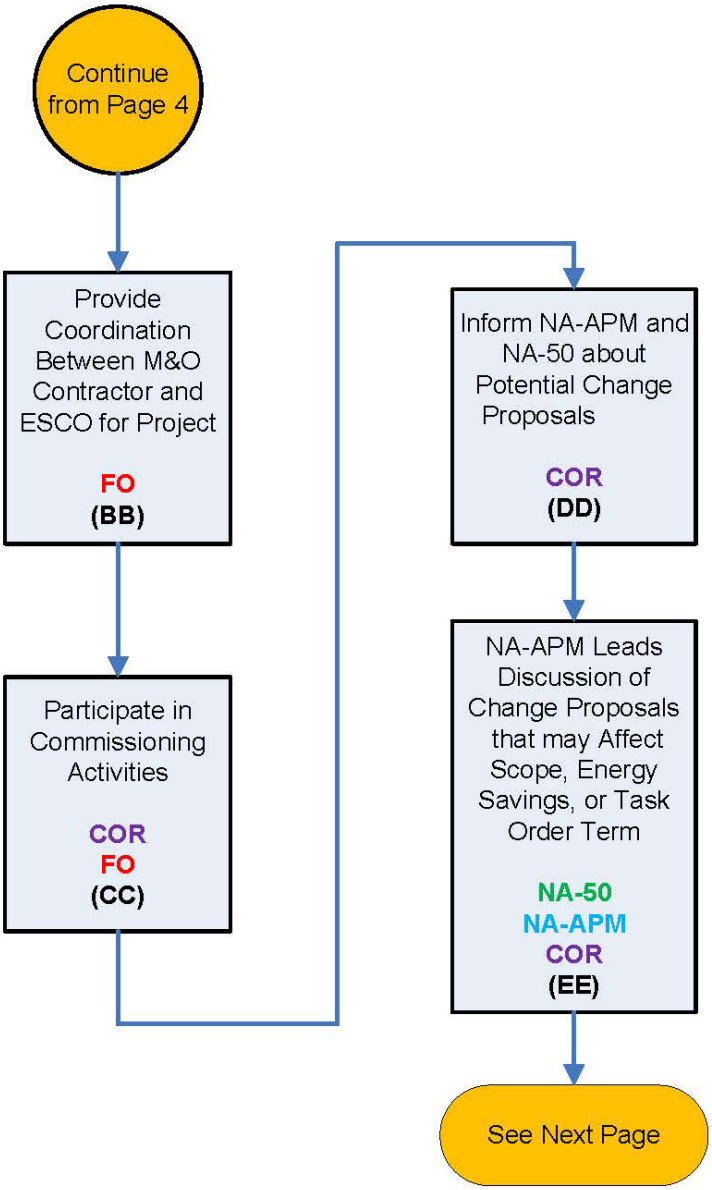
COR – Contracting Officer Representative, Field Office
NA-APM – NNSA NA-APM
NA-50 – NNSA NA-50

Implementation / Construction and Acceptance Phase



KEY

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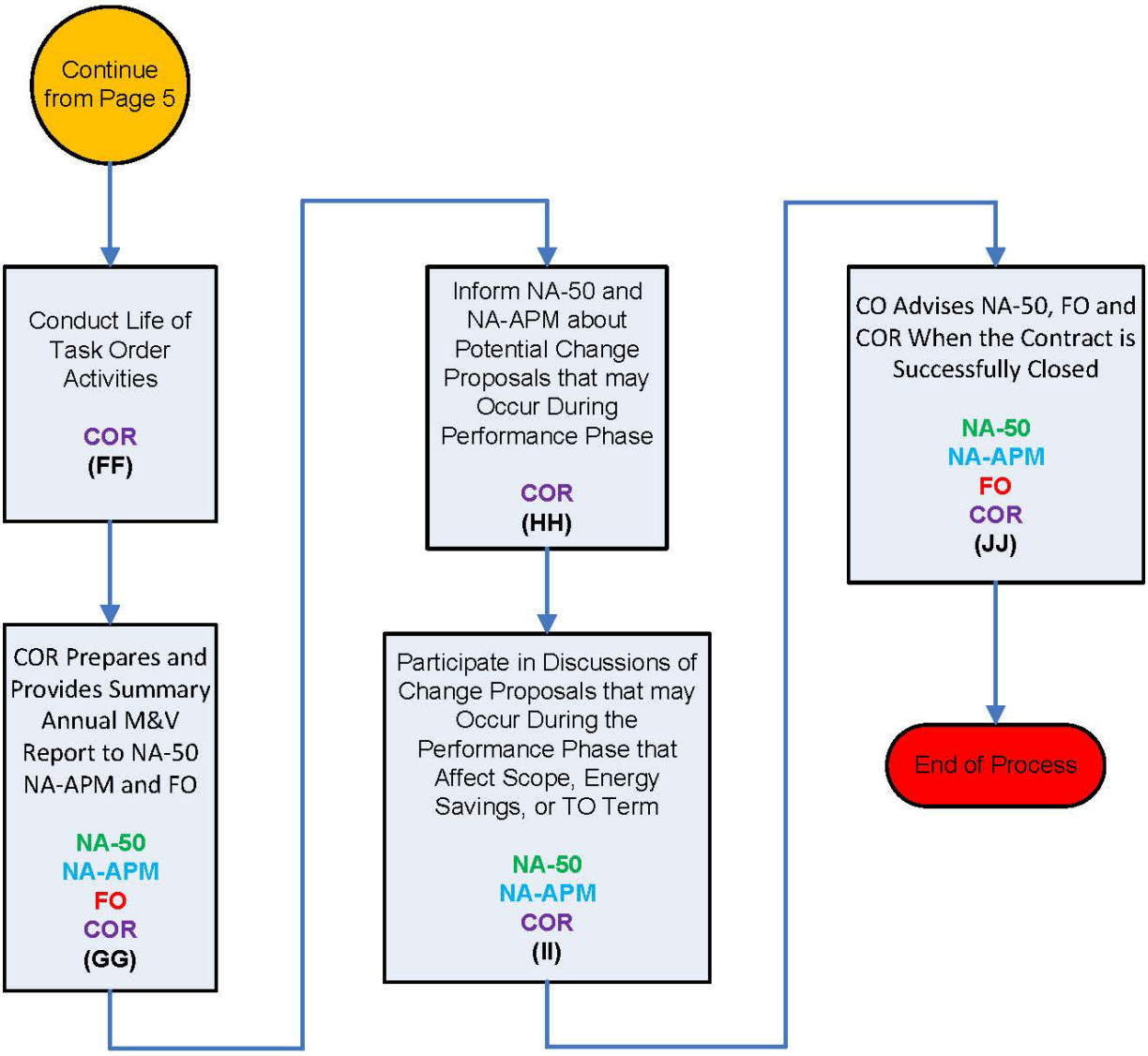
COR – Contracting Officer Representative, Field Office
NA-APM – NNSA NA-APM
NA-50 – NNSA NA-50

Performance / Closeout Phase



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NA-APM – NNSA NA-APM
NA-50 – NNSA NA-50