

Nebraska Energy Office

State of Nebraska

Project Management Plan

U.S. Department of Energy

National Energy Technology Laboratory

Recovery Act – Enhancing State Government Energy
Assurance Capabilities and Planning for Smart Grid
Resiliency Funding

Opportunity No. DE-OE0000094 CFDA Number 81.122

October 13, 2009

PROJECT MANAGEMENT PLAN

Recovery Act – Energy Assurance Planning – State of Nebraska

October 9, 2009

WORK PERFORMED UNDER AGREEMENT

DE-OE0000094

SUBMITTED BY

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1. Executive Summary

This Project Management Plan guides the State of Nebraska's Energy Assurance planning and training effort as specified in Funding Opportunity Number DE-OE0000094, Recovery Act – Enhancing State Government Energy Assurance Capabilities and Planning for Smart Grid Resiliency. The Plan includes an overview of the tasks required by DE-OE0000094 followed by a discussion of how the tasks will be addressed. The Plan is understood by the U.S. Department of Energy (DOE) to be a “living” document, subject to updates and revisions as work progresses. Nebraska anticipates changes in the Project Management Plan as lessons learned are applied to subsequent tasks.

Overview

The Project Management Plan covers five major tasks required by DOE. The first task is to create this Project Management Plan (PMP). The second task, the Workforce Development Plan (WDP), addresses a major goal of DE-OE0000094 to ensure that each participating state develops the in-house capacity and expertise to implement the goals and activities of its Energy Assurance Plan by training, retaining, and hiring personnel as needed. The third task is to develop (or revise as appropriate) the state's Energy Assurance Plan. This task is central to the remaining tasks – the development of a data tracking system for use before, during, and after emergencies (Task 4) and to conduct training simulations for stakeholders from within the state and from neighboring jurisdictions (Task 5). For purposes of managing the state's energy assurance planning process, Nebraska has chosen to divide the third task into two sections – plan preparation and internal plan revision and completion.

Energy Assurance Planning in Nebraska and Project Goals

Nebraska's current energy emergency plan was created in 2005 and will be updated to include renewable and alternative energy sources and supporting data in addition to major energy sources (e.g., petroleum, natural gas, electricity), in response to DE-OE0000094 and the need to broaden the scope of the plan. DOE asked states to consider the potential impact of the Internet, computer-dependent energy controls (e.g., SCADA controls), and related cyber protection protocols that can affect the continuity of energy delivery. Further, Nebraska recognizes the potential role of energy alternatives (such as Smart Grid technology, biofuels, combined heat and power, wind and solar power) to reduce the state's vulnerability during energy shortages by enhancing the state's energy use resiliency.

To maximize the impact of a new Energy Assurance Plan on improving the state's energy resiliency in emergencies, Nebraska recognizes the critical role of sound data collection and management. One goal of this PMP is to improve the ability of state officials to understand and use energy data, including how data collection and dissemination methods are used to protect citizens during an energy shortage.

Nebraska joins the DOE in understanding the value of on-going exercises and training as part of an Energy Assurance planning process. This PMP includes the first two exercises the state will join as a part of the development of the Energy Assurance Plan. After that, the state will continue its energy assurance training efforts led by designated energy assurance personnel that are responsible for energy assurance planning and implementation, and in coordination with

other state agencies that have significant assurance training responsibilities. Training and simulations also will help guide future energy assurance planning as they reflect the energy situation at the time of the exercises.

2. Risk Management

Nebraska acknowledges that any project has some risk of failure to complete the agreed-upon tasks. The Nebraska Energy Office (NEO) is subject to all the State of Nebraska accounting, procurement, payroll, and budgetary procedures and oversight.

The NEO will exercise normal project oversight in accordance with Nebraska's extensive procurement and project management protocols and rules.

3. Milestone Log

Table 1 summarizes the elements of the PMP and provides an overview, with time frames and milestones as specified, for the state's energy assurance planning process. Specific projects are listed in the order they will be undertaken. Following the table are detailed descriptions of each task. A Gantt chart for this section is contained under Part 5 in Figure 1, and includes additional timing detail and required milestone dates.

Table 1 – Milestone Log

Tasks by number - FILL INDICATES CRITICAL REVIEW and MILESTONES	Year Range	Start Date	Approximate Duration of Task in Days	DOE Completed Task End Date and Subtask End Dates	Key Personnel Principal/1st Coordinating/2nd Coordinating
TASK 1 PMP	2009				
MILESTONE: Submit PMP to DOE		9/1/2009	8	10/13/2009	NEO
Continuing updates for duration of project		10/30/2009	875		
TASK 2 WDP	2009-2010				
Discuss contracting requirements		10/6/2009	11	10/17/2009	NEO
Prepare outline followed by review		10/17/2009	10	10/27/2009	NEO
Draft WDP		10/27/2009	8	11/4/2009	NEO
Review		11/4/2009	7	11/11/2009	NEO
MILESTONE: Submit WDP to DOE		11/11/2009	1	11/12/2009	NEO
Develop request for proposals and select contractor(s)		10/13/2009	90	1/11/2010	NEO
TASK 3a EA Plan Development	2010				
Begin statewide energy studies		1/13/2010	140	6/2/2010	Contractor(s)
Develop Plan outline		1/27/2010	14	2/10/2010	Contractor(s)
Review outline		2/10/2010	14	2/24/2010	NEO
Set up information and training sessions		2/24/2010	14	3/10/2010	NEO
Information and training sessions preparation		3/10/2010	14	3/24/2010	Contractor(s)
Information and training sessions		3/24/2010	28	4/21/2010	Contractor(s)/NEO
Set up roundtables		2/24/2010	14	3/10/2010	NEO
Roundtable preparation		3/10/2010	14	3/24/2010	Contractor(s)
Roundtable sessions		3/24/2010	28	4/21/2010	Contractor(s)/NEO
Review data and notes		3/30/2010	21	4/20/2010	Contractor(s)
Identify vulnerability and risk factors		3/30/2010	28	4/27/2010	Contractor(s)/NEO
Identify and review alternatives (e.g. smart grid)		4/27/2010	28	5/25/2010	Contractor(s)/NEO
Draft Plan		5/25/2010	112	9/14/2010	Contractor(s)
Edit and review format		9/14/2010	42	10/26/2010	NEO
Edit, make changes, final draft		10/26/2010	28	11/23/2010	Contractor(s)/NEO

Nebraska Energy Assurance Planning – Project Management Plan – October 13, 2009

Submit draft for NEO review		11/23/2010	7	11/30/2010	NEO
TASK 3b EA Plan Internal Review	2010-2011				
NEO review		11/30/2010	30	12/30/2010	NEO
Review edits incorporated into Plan		12/30/2010	28	1/27/2011	Contractor(s)
Final editing and format review		1/27/2011	17	2/13/2011	NEO/Contractor(s)
MILESTONE: EA Plan submitted to DOE		2/13/2011	1	2/14/2011	NEO
TASK 4a - Energy Supply Tracking Process	2010				
Tracking Process Plan outline created		2/15/2010	21	3/8/2010	Contractor(s)
Discuss Data Acquisition Issue with Stakeholders		3/8/2010	42	4/19/2010	Contractor(s)
Develop Tracking Plan		4/19/2010	40	5/29/2010	Contractor(s)/NEO
Internal NEO review and edit		5/29/2010	28	6/26/2010	NEO/Contractor(s)
NEO review		6/26/2010	48	8/13/2010	NEO
MILESTONE: Final edits and submission to DOE		8/13/2010	1	8/14/2010	Contractor(s)/NEO
TASK 4b - Energy Supply Disruption Tracking Process	2010				
Tracking Process Plan outline created		2/15/2010	21	3/8/2010	Contractor(s)
Discuss Data Acquisition Issue with Stakeholders		3/8/2010	42	4/19/2010	Contractor(s)
Develop Tracking Plan		4/19/2010	40	5/29/2010	Contractor(s)/NEO
Internal NEO review and edit		5/29/2010	28	6/26/2010	NEO/Contractor(s)
NEO review		6/26/2010	48	8/13/2010	NEO
MILESTONE: Final edits and submission to DOE		8/13/2010	1	8/14/2010	Contractor(s)/NEO
TASK 5a - Develop and Hold Intrastate Exercise	2010-2011				
Identify stakeholders to attend		8/15/2010	49	10/3/2010	NEO
Draft training materials		10/3/2010	56	11/28/2010	Contractor(s)
Set up training venue and logistics		11/28/2010	28	12/26/2010	NEO
Review training materials and scope of training		12/26/2010	37	2/1/2011	NEO
Hold Exercise		2/2/2011	7	2/9/2011	NEO/Contractor(s)
MILESTONE: Review results and Report to DOE		2/9/2011	7	9/13/2011	Contractor(s)/NEO
TASK 5b - Develop and Hold Interstate Training	2011-2012				
Identify/work with interstate participants		8/14/2011	100	11/22/2011	NEO

Nebraska Energy Assurance Planning – Project Management Plan – October 13, 2009

Coordinate interstate partners-approach/duties/logistics		11/22/2011	56	1/17/2012	NEO
Draft and review training materials		1/17/2012	14	1/31/2012	Contractor(s)
Participate in interstate exercise		1/31/2012	14	2/14/2012	NEO/Contractor(s)
MILESTONE: Review results and Report to DOE		2/14/2012	30	3/15/2012	Contractor(s)/NEO

Task 1- Project Management Plan

This PMP begins with discussions within the NEO. Contractors will work closely with NEO as each task is undertaken. Task 1 addresses this initial planning in order to provide overall management with adherence to reasonable time frames for project task completion. All tasks will be completed within the times required by the DOE with sufficient time to allow for thorough and timely internal review.

Task 2 – Workforce Development Plan

This task informs DOE about NEO plans to train its personnel and augment its staff to manage energy assurance responsibilities within the NEO. The components of the Workforce Development Plan (WDP) task are:

- NEO discusses hiring needs and parameters. Job requirements within the parameters provided by the State of Nebraska so that the jobs can be posted.
- NEO prepares an outline of the WDP for internal review. It includes a timeline for hiring new staff, and steps to train existing staff and new staff, particularly the EA Coordinator.
- NEO drafts a WDP for review by DOE. The draft WDP includes recommendations to train existing staff, hire additional staff, and post-hire training and related materials, as needed. The draft WDP provides information to DOE about project responsibilities and duties for existing and anticipated staff.
- Review of written plan completed by NEO.
- The WDP is submitted to DOE.
- NEO begins hiring process.

Task 3a – Energy Assurance Plan

This task is central to the entire Energy Assurance (EA) project. This task will ultimately form the basis for energy data management, on-going stakeholder training, and emergency resource allocation. The development of this task encompasses making contacts with state government and private stakeholders, and solidifying coordination and cooperation. Developing or updating the Plan also is a part of the training for existing NEO staff and new contractors hired in conjunction with the WDP. Major components are:

- Contractors begin statewide energy studies. This includes energy supply and consumption data, infrastructure and alternatives. Primary state energy profile information necessary for subsequent analysis is collected as part of this task. Data will be obtained for all forms of energy used in Nebraska including petroleum products (e.g., motor gasoline, distillate, and propane), natural gas, electricity, and alternatives.
- Contractors develop outline of the update for the EA Plan for NEO. The outline informs NEO and takes note of the requirement to develop a plan in coordination with the National Association of State Energy Officials-DOE State Energy Assurance Guidelines.
- NEO reviews outline.

- NEO sets up information and training sessions with stakeholders based on NEO identification of organizations and individuals within state agencies and other organizations and companies.
- Contractors prepare for information and training sessions.
- NEO and Contractors conduct information and training sessions with stakeholders. This entails information and training sessions with identified individuals, NEO, and the Contractors. These information and training sessions will become a part of training as noted in the WDP. Follow-up information and training sessions will be conducted if needed.
- NEO sets up roundtables with stakeholders based on NEO identification of organizations and individuals within state agencies and other organizations and companies.
- Contractors prepare for roundtables.
- NEO and Contractors conduct roundtables with stakeholders. This entails roundtables with identified individuals, NEO, and the Contractors. These roundtables will become a part of training as noted in the WDP. Follow-up roundtables will be conducted if needed. Roundtables will be the means used to acquire feedback from the energy industry to strengthen and expand State and local government energy assurance planning and resiliency efforts by incorporating response actions for new energy portfolios and Smart Grid applications.
- Contractors compile and review data.
- NEO and Contractors analyze data and evaluate vulnerability and risk factors. Included in the analysis are issues related to energy use patterns, geographical distinctions, external energy market factors and the impact of electronic factors such as system controls, cyber security, and independent service operator (ISO) connectivity.
- NEO and Contractors review the impact of energy alternatives including Smart Grid technology.
- Contractors draft EA Plan. The draft will include the primary state energy use description, information pertaining to vulnerability and risk, suggestions for data acquisition, and identification of impending energy problems. As a part of this task, the process for acquiring, updating and using data will be discussed.

The role of various stakeholders will be examined including public and private sector participants. Emphasis will be given to how other state agencies relate to issues under their jurisdiction including utility regulation and energy assurance management. The role of local jurisdictions and various industry councils will also be considered. Alternatives such as wind, solar, efficiency and especially, the potential use of Smart Grid technology will be discussed.

Finally, the Plan will contain a review of, and suggestions for, various mitigation measures the State may wish to take from public communications to highly regulated activities. Public communications will receive special focus because NEO is already responsible for this on energy matters. In addition to planning for severe energy emergencies, the Plan will emphasize Nebraska's policy to mitigate

severe energy emergency events instituting preemptive efforts at the first sign of a potential shortage or disruption.

- NEO reviews and edits.
- NEO and Contractors review edited draft, make changes, and draft final.

Task 3b – Energy Assurance Plan – Internal Stakeholder Review

- NEO begins review of the draft EA Plan.
- Suggestions from reviews are evaluated and incorporated, as appropriate, into the EA Plan.
- NEO and the Contractors review the final edited draft of the EA Plan.
- The NEO EA Coordinator undertakes any final edits and formatting.
- NEO submits the completed Nebraska EA Plan to DOE.

Task 4a – Develop Energy Supply Tracking Process

This task is conducted in parallel with Tasks 3a and 4b. This task will develop the routine tracking process.

- Contractors prepare an outline of a Tracking Process outline for NEO. Contractors discuss data acquisition issues with various stakeholders.
- Contractors discuss information retention and evaluation strategies with key stakeholders.
- NEO and Contractors develop a workable plan while seeking support from key stakeholders.
- Following an internal edit by NEO, Contractors will make agreed-upon changes.
- NEO reviews the proposed Tracking Process.
- Final edits by NEO and the Contractors will be followed by NEO's submission to DOE.

Task 4b – Develop Energy Supply Disruption Tracking Process

This task will accomplish two central goals in parallel with Task 3a. The first provides guidance for gathering real-time energy data during a shortage. The second collects, evaluates, and uses lessons learned from emergency events that, in fact, affect the State's energy consumption. In one sense, this task seems deceptively simple; in reality, it may be necessary to create a tracking process that works with what is possible in the energy market. While the types and sources of real-time – assurance-related – data are fairly well known, it may be challenging to garner cooperation and access to such data from certain stakeholders. It is anticipated that some private sector stakeholders might plead that such data is 1) proprietary and 2) difficult to furnish while personnel are carrying out emergency responsibilities.

This task not only needs to identify available sources of real-time data, it also requires educating stakeholders about the value of such data as well as devising ways to protect data sources while mitigating the effort and cost required to collect and share relevant data.

NEO will work with the Nebraska Emergency Management Agency to develop a system to share post-energy shortage event information. This task provides guidance for obtaining, evaluating, and utilizing such information. The steps for meeting both goals of this task include:

- Contractors prepare an outline of a Tracking Process outline for NEO. Contractors discuss data acquisition issues with various stakeholders.
- Contractors discuss post-event information retention and evaluation strategies with key stakeholders.
- NEO and Contractors develop a workable plan while seeking support from key stakeholders.
- Following an internal edit by NEO, Contractors make agreed-upon changes.
- NEO reviews the proposed Tracking Process.
- Final edits by NEO and the Contractors will be followed by NEO's submission to DOE.

Task 5a – Intrastate Energy Assurance Exercise

This task describes the steps for developing and conducting the first of a series of regular exercises that will serve as training sessions for Nebraska energy assurance stakeholders. The training follows the completion of the Nebraska State Energy Assurance Plan and is designed to accomplish three things:

- Familiarize Nebraska EA stakeholders with the updated EA Plan.
- Allow participants to interact and develop informal networking among stakeholders.
- Provide for discussion and an evaluation of potential energy shortage scenarios, and an examination of how state emergency planning in conjunction with the State Energy Assurance Plan will assist emergency responders in meeting their emergency management obligations.

Nebraska anticipates that participants in the exercise will provide feedback and information to guide future developments in policy, planning, and subsequent exercises.

It is anticipated that this task is held in coordination with the Nebraska Emergency Management Agency as well as other stakeholders. These stakeholders may include, but are not limited to, key state and local government agencies, representative energy consumers, energy industry organizational and company representatives, various interested observers, and out-of-state organizations and government officials.

Contractors will develop materials for this task in coordination with the NEO. Upon approval of the training materials, training will be held followed by a debriefing of the exercise. The debriefing may determine the course of further training and provide pointers for Nebraska's participation in the regional/interstate training exercise in Task 5b. Steps to be completed:

- Identify stakeholders to attend training.
- Draft training materials.
- Set-up training venue and logistics.
- Review training materials and scope of training offered.
- Conduct the training exercise.
- Debrief results and use for planning future training.

- NEO and the Contractors will prepare an after-action report and submit it to DOE.

Task 5b – Interstate Energy Assurance Exercise

The final task will take place in coordination with neighboring states. Nebraska will work closely with adjacent states to plan this task. Using lessons learned from the intra-state training exercise will guide planning for this task. The goal of this training task is to familiarize state stakeholders with counterparts in surrounding jurisdictions as well as identify, and work to resolve any conflicts and potentially unwanted consequences of actions taken within each jurisdiction. Ideally, subject to agreement among participating jurisdictions, this training may also include updates on managing regional energy infrastructure and activities, such as the Midwest Independent Transmission System Operator, regional liquids and gas delivery through pipelines and terminals in Nebraska, electric transmission, and gas and liquids storage and transportation. The training will also attempt to familiarize participants with energy interruption events that could affect all participating states simultaneously and thus require close coordination.

To accomplish these goals, this training requires coordination among EA Plans of participating states, as well as the establishment of ongoing communications and coordination among energy assurance personnel and allied stakeholders. Steps to carry out this task include:

- Identify potential interstate participants. Interstate coordination may include inviting participants from the National Association of State Energy Officials, the National Association of Regulatory Utility Commissions, officials of local jurisdictions within each state, private sector energy provider industry and association stakeholders and federal officials. This subtask will begin relatively early in the overall Energy Assurance project in order to provide ample time for contacting and discussing training options among jurisdictions. Travel may be required.
- Coordinate, per the above bullet, with interstate partners and determine approach and division of labor. This step may include selecting a lead jurisdiction, or coordinating body, to locate a suitable training venue and to make the necessary logistical arrangements for the exercise.
- Draft and review potential training materials, in coordination with participating jurisdictions, including developing updated energy data and information and preparing handouts.
- Participate in interstate exercise.
- Hold post-event debriefing to evaluate results and plan for next interstate exercise.
- NEO and the Contractors will prepare an after-action report and submit it to DOE.

Milestone Verification

Departmental oversight, specifically the Energy Assurance Coordinator, will be responsible for supervising the completion of reports to DOE.

4. Funding and Costing Profile (Budget)

Table 2 – Budget Tables
Project Cost Element Projection

Budget Category	Year 1 (August 2009 to July 2010)	Year 2 (August 2010 to July 2011)	Year 3 (August 2011 to July 2012)	Total
Personnel	12,901	14,405	9,524	36,830
Project Manager	9,724	10,686	6,518	26,928
Accountant II	3,177	3,720	3,005	9,902
Fringe Benefits	5,909	6,720	4,541	17,170
Project Manager	4,084	4,488	2,738	11,310
Accountant II	1,825	2,232	1,803	5,860
Room Rental	1,000	1,500	500	3,000
Equipment Rental	600	900	300	1,800
Accounting and Auditing	2,000	2,000	2,000	6,000
Contractual	80,500	111,000	104,500	296,000
Travel	250	550	2,035	2,835
Total Direct Charges	103,160	137,075	123,400	363,635
Indirect Charges				
Total	103,160	137,075	123,400	363,635

The purpose of the contracts is to hire contractors to revise the Nebraska Energy Office's Energy Assurance Plan, assist with the intrastate and interstate exercises, conduct statewide energy assessments, facilitate roundtable(s), moderate information and training session(s), develop and implement a process to track energy supply, and develop and implement a process to track the duration, response, restoration, and recovery time of energy supply disruption events.

The contractual cost estimate is based upon the agency's experience in acquiring similar services.

Personnel budgeted in the cost estimate include the Project Manager who will coordinate grant activities and the Accountant II who will monitor the budget and submit required ARRA financial reports.

The State of Nebraska's purchasing and contracting policies will be followed in all acquisitions associated with this grant.

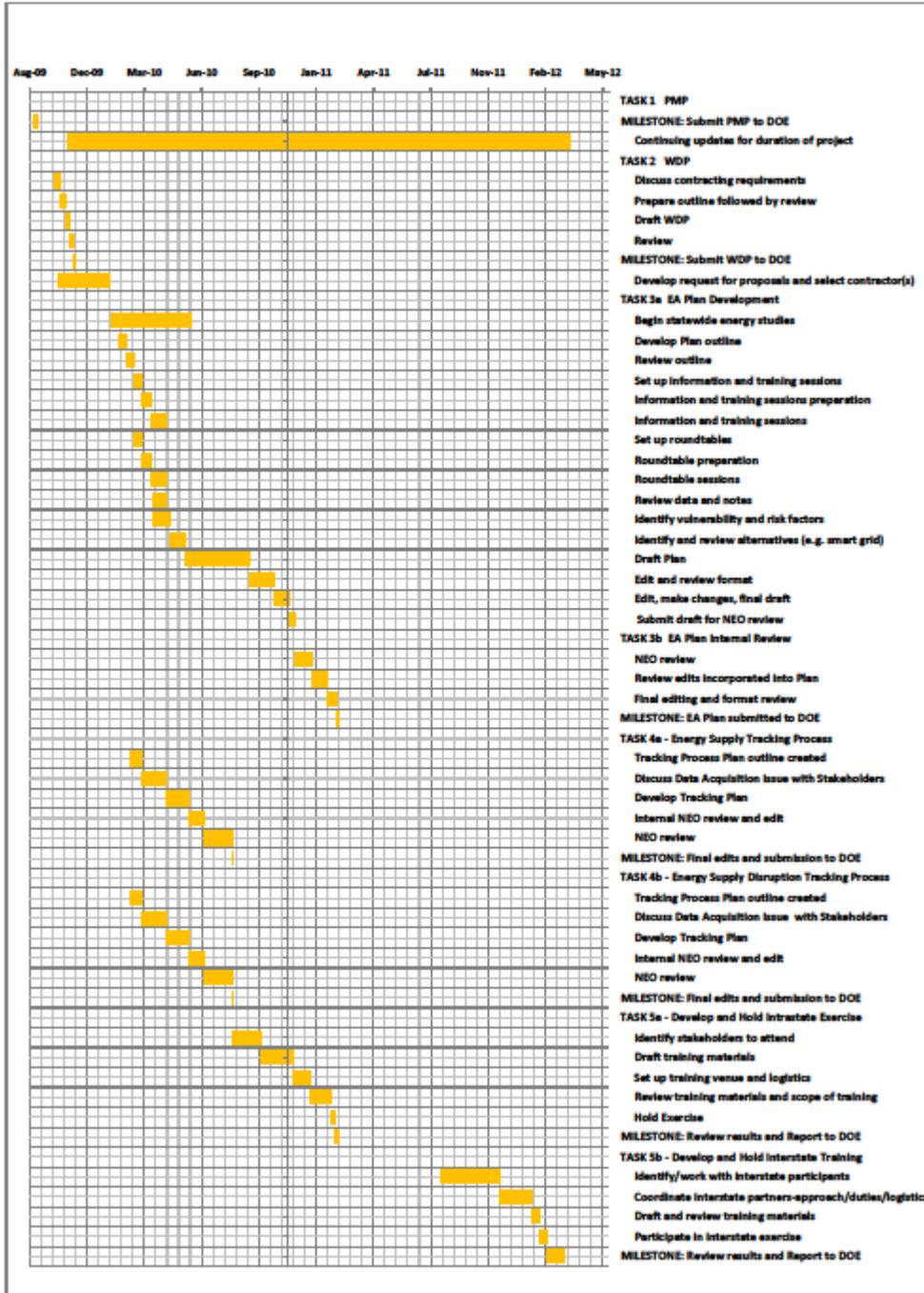
**Table 3 – Budget Tables
Project Monthly Cost Projection**

Monthly Spending Plan (Year 1)	
August	0
September	0
October	3,036
November	1,440
December	9,440
January	19,442
February	9,200
March	11,690
April	20,661
May	13,200
June	5,080
July	9,971
Total (\$s in thousands)	103,160
Monthly Spending Plan (Year 2)	
August	18,766
September	9,603
October	20,622
November	12,984
December	2,861
January	3,724
February	5,230
March	5,230
April	9,971
May	9,476
June	15,776
July	22,832
Total (\$s in thousands)	137,075

Monthly Spending Plan (Year 3)	
August	17,008
September	16,008
October	15,020
November	13,261
December	18,043
January	24,832
February	17,520
March	442
April	1266
May	
June	
July	
Total (\$s in thousands)	123,400

5. Project Timeline

Figure 1



6. Success Criteria

Criteria include:

- Number of energy assurance plans created or substantially revised.
- Number of jobs created within State government agencies for energy assurance planning and response capabilities.
- Number of energy assurance training sessions, workshops, and/or exercises conducted.
- Number of NEO staff members who understand the EA Plan and can relate its contents to their daily energy planning and management activities.
- Number of non-NEO emergency management-related personnel who are familiar with energy shortages as a significant component of broader state emergency planning and mitigation.
- Number of local jurisdiction officials who are familiar with Emergency Support Function 12.
- Number of private sector energy stakeholders who both understand, and exhibit a willingness to support, State efforts to manage and mitigate energy shortages as part of their energy assurance responsibilities.

Reporting

Reporting dates are provided in Table 4.

**Table 4 – Reporting Table
Project Reporting Schedule**

1st quarterly report: Progress on developing PMP and WDP	October 30, 2009
2nd quarterly report: Progress initiating required tasks	January 30, 2010
3rd quarterly report: Progress on EA Plan and Tracking Plan	April 30, 2010
4th quarterly report: Progress on EA Plan and Tracking Plan	July 30, 2010
5 th quarterly report: Progress on EA Plan	October 30, 2010
6 th quarterly report: Progress on Intrastate Training	January 30, 2011
7 th quarterly report: Results of Intrastate Training	April 30, 2011
8 th quarterly report: Progress of Interstate Training	July 30, 2011
9 th quarterly report: Results of Interstate Training	October 30, 2011
10 th quarterly report: Post project deliverable progress and further Plan changes	January 30, 2012
11 th quarterly report. Post project deliverable progress and further Plan changes	April 30, 2012
12 th quarterly report: Final Report	July 30, 2012

7. Agreement Statement of Project Objectives

DE-OE0000094

ATTACHMENT 2 -STATEMENT OF PROJECT OBJECTIVES (SOPO)

A. OBJECTIVES

The objectives of this initiative are to: 1) strengthen and expand State and local government energy assurance planning and resiliency efforts by incorporating response actions for new energy portfolios and Smart Grid applications; 2) create jobs, and 3) build in-house State and local government energy assurance expertise.

The initiative focuses on building regional energy assurance capability to allow the State to better coordinate and communicate statewide and with one another, on energy security, reliability, and emergency response issues.

B. SCOPE OF WORK

The following activities are addressed under this initiative:

- Create in-house expertise at the State level on energy assurance planning and resiliency, focusing on Smart Grid applications and vulnerabilities, critical infrastructure interdependencies, cyber security, energy supply systems, energy data analysis, and communications.
- Develop new, or refine existing, Energy Assurance Plans to incorporate response actions to new energy portfolios, including Smart Grid technologies.
- Revise appropriate State policies, procedures and practices to reflect the Energy Assurance Plans. States should append the Energy Assurance Plan to the State Energy Plan, as appropriate.
- Development and initiation of a process or mechanism for tracking the duration, response, restoration and recovery time of energy supply disruption events.
- Train appropriate personnel on energy infrastructure and supply systems and the content and execution of energy assurance plans.
- Conduct energy emergency exercises (intra and inter-state) to evaluate the effectiveness of the Energy Assurance Plans.

The results of the funding provided for the projects will be assessed according to the following performance metrics:

- Number of Energy Assurance Plans created or substantially revised
- Number of jobs created within State government agencies for energy assurance planning and response capabilities
- Number of energy assurance training sessions, workshops and/or exercises conducted
- Number of people trained

C. TASKS TO BE PERFORMED

Task 1.0 – Project Management Plan

The Recipient will prepare a Project Management Plan (PMP) in accordance with the provided PMP template that details the work elements required to manage and report on activities in accordance with the American Recovery and Reinvestment Act (ARRA) and grant requirements. This Plan will also document the 3-year plan and project budget for carrying out all Tasks and completing all Deliverables under this Grant. It is

anticipated that this document may be periodically revised during the performance period, but will at all times provide sufficient detail to plan, carry out and monitor all project activities.

Task 2.0 – Workforce Development Plan

The Recipient will prepare and follow a Workforce Development Plan that results in development of in-house expertise at the State level on energy assurance planning with an emphasis on Smart Grid applications and vulnerabilities, critical infrastructure interdependencies, cyber security, energy supply systems, energy data analysis, and communications. The Plan will address hiring, retaining, and training personnel in these areas.

Task 3.0 – Energy Assurance Planning

The Recipient will develop a new, or substantially refine its existing, Energy Assurance Plan to incorporate response actions for new energy portfolios, including Smart Grid technologies. The Energy Assurance Plan shall address, at a minimum, Smart Grid applications and vulnerabilities, critical infrastructure interdependencies, cyber security, energy supply systems, energy data analysis, and communications. Through Cooperative Agreement Number DE-FC26-07NT43264, NASEO, with DOE, has prepared the State Energy Assurance Guidelines, which may serve as a model for State Energy Offices in developing or revising the Energy Assurance plans under this initiative. (link: www.naseo.org/eaguidelines) The recipient will revise appropriate State policies, procedures and practices to reflect the State's Energy Assurance Plan. The State will append its Energy Assurance Plan to the State Energy Plan, as appropriate.

Task 4.0 – Energy Supply Disruption Tracking Process

The Recipient will initiate a process or mechanism for tracking the duration, response, restoration, and recovery time of energy supply disruption events.

Task 5.0 - Energy Assurance Exercise

The Recipient will develop a strategy to exercise its Energy Assurance Plan, simulating, through table-top exercises, energy emergency/disruptions, both within the state (including municipal and county governments as well as pertinent state agencies such as Public Utility Commissions and Emergency Management Offices) and on a multi-state or regional scale, incorporating local, state and federal agencies and industry as appropriate. The Recipient shall conduct, or participate in at least two exercises as described below

Subtask 5.1 – Conduct at least one intra-State training/exercise that includes players from State agencies, local governments, industry and Federal partners, as appropriate. The recipient shall prepare an exercise after-action report, which will result in actionable items and any necessary revisions/modifications to the Energy Assurance Plan.

Subtask 5.2 – Participate in and/or conduct at least one inter-State/Regional exercise that includes players from neighboring States, local governments, industry and Federal partners, as appropriate. The recipient shall prepare an exercise after-action report, which will result in actionable items and any necessary revision/modifications to the Energy Assurance Plan.

D. DELIVERABLES

Reports shall be submitted in accordance with the "Federal Assistance Reporting Checklist" and the instructions accompanying the checklist included as Attachment 3 to this agreement. In addition, the following deliverables, as well as the deliverables identified/described in the Project Management Plan, are required:

Nebraska Energy Assurance Planning – Project Management Plan – October 9, 2009

Deliverable 1.0 – Project Management Plan (Plan due 60 days after the award and revised as necessary throughout the performance period.)

Deliverable 2.0 – Workforce Development Plan (Plan due 90 days after the award and revised periodically if necessary throughout the performance period.)

Deliverable 3.0 – Energy Assurance Plan (The initial Energy Assurance Plan is due 18 months after the award and revised (if necessary) following the energy assurance exercises. A final Energy Assurance Plan shall be delivered at the completion of the performance period.)

Deliverable 4.0 – Documented process or procedure for tracking the duration, response, restoration, and recovery time of energy supply disruption events. (Due one year after the award.)

Deliverable 5.0 – Energy Assurance Exercise Summary and After-Action Report(s)

Deliverable 5.1 - The intra-state training/exercise(s) must be completed within 24 months after the award, with an after-action report delivered 30 days following the exercise.

Deliverable 5.2 - The inter-state/regional training/exercise(s) must be completed within 30 months after the award, with an after-action report delivered 30 days following the exercise.