

**NERC**

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

# Final 2014 Business Plan and Budget

August 14, 2013

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**RELIABILITY | ACCOUNTABILITY**



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## About NERC

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### Overview

The North American Electric Reliability Corporation (NERC) is a not-for-profit entity organized under the New Jersey Nonprofit Corporation Act. NERC's mission is to improve and ensure the reliability of the Bulk-Power System (BPS) in North America. NERC's area of responsibility spans the continental United States and Canada and the northern portion of Baja California, Mexico. Entities under NERC's jurisdiction are the users, owners, and operators of the bulk power system—a system that serves the needs of over 334 million people, includes installed electricity production capacity of approximately 1,200 gigawatts, operates 211,000 miles of high-voltage transmission, and is comprised of assets worth more than one trillion dollars.

The Federal Energy Regulatory Commission (FERC or Commission) certified NERC as the Electric Reliability Organization (ERO) within the United States to establish and enforce reliability standards for the United States portion of the BPS, pursuant to section 215 of the Federal Power Act. NERC is subject to regulatory oversight by FERC.

In Canada, NERC presently has memoranda of understanding with provincial authorities in Ontario, New Brunswick, Nova Scotia, Québec, Saskatchewan, and Alberta, and with the National Energy Board of Canada. NERC standards are mandatory and enforceable in Ontario and New Brunswick as a matter of provincial law. NERC has an agreement with Manitoba Hydro that makes reliability standards mandatory for that entity, and Manitoba has adopted legislation setting out a framework for standards to become mandatory for users, owners, and operators in the province. In addition, NERC has been designated as the “electric reliability organization” under Alberta's Transportation Regulation, and certain reliability standards have been approved in that jurisdiction; others are pending. NERC and the Northeast Power Coordinating Council (NPCC) have been recognized as standards-setting bodies by the Régie de l'énergie of Québec, and Québec has the framework in place for reliability standards to become mandatory. NERC standards are now mandatory in British Columbia and Nova Scotia.

### Membership and Governance

An 11-member Board of Trustees (Board) governs NERC (10 independent directors plus the CEO serving as the management trustee). The Board has formed several committees to facilitate its oversight of the organization in the areas of finance and audit, governance and human resources, compliance, standards oversight and technology, and nominations. A risk management and internal controls subcommittee of the Finance and Audit Committee supports corporate risk management and internal audit functions.

Membership in NERC is open to any person or entity that has an interest in the reliability of the North American BPS. Membership in NERC is voluntary and affords participants the opportunity to engage in the governance of the organization through election to the Member Representatives Committee (MRC). Nearly six hundred entities and individuals are members.

The MRC comprises 28 voting representatives elected from the 12 membership sectors. The MRC elects the independent trustees and, along with the Board, votes on amendments to the

Bylaws. The MRC also provides policy advice and recommendations to the Board on behalf of stakeholders with respect to annual budgets, business plans, and other matters pertinent to the purpose and operation of the organization.

## **Scope of Responsibilities**

As the ERO, NERC's primary responsibilities are leading the development, adoption, and improvement of mandatory reliability standards for the BPS in North America; monitoring, evaluating, and enforcing compliance with those reliability standards by the approximately 1,900 entities registered with NERC as BPS users, owners, and operators; and monitoring and assessing the reliability and adequacy of the BPS in North America. Collectively, the entities registered with NERC perform over 4,600 BPS reliability functions. NERC conducts near-term and long-term assessments of the reliability and future adequacy of the North American BPS; certifies BPS operators as having and maintaining the necessary knowledge and skills to perform their reliability responsibilities; and maintains situational awareness of events and conditions that may threaten the reliability of the BPS. NERC coordinates efforts to improve physical security and cybersecurity for the BPS of North America; conducts detailed analyses and investigations of system disturbances and unusual events to determine root causes, uncover lessons learned, and issue relevant findings as advisories, recommendations, and essential actions to the industry; and, based on lessons learned, identifies the potential need for new or modified reliability standards, improved compliance, or other initiatives.

## **Delegated Authorities**

In executing a portion of its responsibilities, NERC delegates authority to eight regional reliability entities (Regional Entities) to perform certain functions through delegation agreements. FERC has approved delegation agreements between NERC and the eight Regional Entities (Florida Reliability Coordinating Council, Midwest Reliability Organization, Northeast Power Coordinating Council, Inc., ReliabilityFirst Corporation, SERC Reliability Corporation, Southwest Power Pool Regional Entity, Texas Reliability Entity, Inc., and the Western Electricity Coordinating Council). These agreements describe the authority delegated to the Regional Entities in the United States to propose and enforce reliability standards within their geographic footprints. NERC expects Regional Entities, whose territories extend into Canadian provinces and Mexico, to perform equivalent functions in those jurisdictions.

## **Statutory and Regulatory Background**

NERC's authority as the ERO in the United States is based on Section 215 of the Federal Power Act as added by the Energy Policy Act of 2005<sup>1</sup> and the Commission's regulations and orders issued pursuant to Section 215. In Canada, NERC's authorities are established by the memoranda of understanding and regulations previously mentioned.

## **Funding**

Section 215 of the Federal Power Act and FERC regulations also specify procedures for NERC's funding in the United States. NERC's annual business plan and budget is subject to FERC approval in the United States. Once approved, assessments are allocated to load-serving entities on a net energy for load (NEL) basis. Equivalent funding mechanisms are provided in Canada, subject to the specific laws and regulations of each province.

The funding requirements for each Regional Entity are addressed separately in each Regional Entity's business plan and budget, which must be reviewed and approved by NERC and FERC in the United States. Assessments for the Regional Entity budgets are included in the overall NERC assessments to load-serving entities.

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<sup>1</sup>This was codified in section 215 of the Federal Power Act, 16 United States C. 824o.

# Introduction and Executive Summary

<b>TOTAL RESOURCES</b> (in whole dollars)				
	2014 Budget	U.S.	Canada	Mexico
Statutory FTEs	189.53			
Non-statutory FTEs				
<b>Total FTEs</b>	189.53			
Statutory Expenses	\$ 55,605,313			
Non-Statutory Expenses	\$ -			
<b>Total Expenses</b>	\$ 55,605,313			
Statutory Inc (Dec) in Fixed Assets	\$ 784,784			
Non-Statutory Inc (Dec) in Fixed Assets	\$ -			
<b>Total Inc (Dec) in Fixed Assets</b>	\$ 784,784			
Statutory Working Capital Requirement	\$ (1,660,724)			
Non-Statutory Working Capital Requirement				
<b>Total Working Capital Requirement</b>	\$ (1,660,724)			
<b>Proceeds from Financing Activities</b>	\$ (993,990)			
Total Statutory Funding Requirement	\$ 53,735,382			
Total Non-Statutory Funding Requirement	\$ -			
<b>Total Funding Requirement</b>	\$ 53,735,382			
<b>Statutory Funding Assessments</b>	\$ 51,401,382	\$ 46,708,699	\$ 4,554,567	\$ 138,116
<b>Non-Statutory Fees</b>				
NEL	4,476,669,439	3,949,655,760	515,406,761	11,606,918
NEL%	100.00%	88.23%	11.51%	0.26%

## Strategic Goals and Objectives

The 2014 business planning process commenced in the fourth quarter of 2012 with a collaborative review of the ERO's goals and objectives by NERC and Regional Entity senior executives. This was followed by a review of business planning assumptions, existing activities, and resources, in each case taking into consideration lessons learned, stakeholder feedback, and statutory and governmental requirements and directives. Efforts were made to identify the desired end state for each of the major goals over the next three-year planning period, significant gaps to achieving stated objectives, and activities that should be undertaken to close those gaps. NERC's Finance and Audit Committee and the Board also participated in strategic planning sessions to provide input in the development of the ERO's strategic goals, objectives, and business plan and budget.

The 2014–2016 planning initiative updated the [ERO Enterprise Strategic Plan](#) (Strategic Plan) and associated strategic goals and objectives in the areas of standards; compliance, registration

and certification; risks to reliability; and coordination and collaboration. A draft ERO Enterprise Strategic Plan was presented at the February 2013 meeting of the Board and posted for a 30-day public comment period. Written comments were received from a number of individuals and entities and posted on the company website. Input was also sought from the trade associations and an informal input group of MRC members, which was established by the MRC in August 2012 to help facilitate NERC's business planning and budgeting process. In response to these comments, management recommended certain modifications to the Strategic Plan. These modifications were reviewed and approved at the Board meeting on May 9, 2013. The following is a list of the specific goals and objectives set forth in the Strategic Plan.

## **Standards**

**Goal 1.** Develop clear, reasonable, and technically sound mandatory reliability standards in a timely and efficient manner. These standards establish threshold requirements for ensuring the BPS is planned, operated, and maintained in a manner that minimizes risks of cascading failures, avoids damage to major equipment, or limits interruptions of bulk power supply.

Objectives include:

- a. Standards are timely, clear, and responsive to reliability and security risks.
- b. Standards are practical to implement and cost-effective.

## **Compliance, Registration, and Certification**

**Goal 2.** Be a strong enforcement authority that is independent, without conflict of interest, objective, and fair. The ERO retains and refines its ability to use enforcement when warranted and impose penalties and sanctions commensurate with risk.

Objectives include:

- a. The ERO registers entities commensurate with risk to the BPS and ensures all key reliability entities are certified to have essential capabilities.
- b. The ERO holds industry accountable for violations that create serious risk to the BPS; resulting actions are timely and transparent to industry.
- c. The ERO monitors registered entities and standards requirements commensurate with the risk and role of each type of registered entity.

**Goal 3.** Promote a culture of compliance that is driven by a culture of reliability excellence and addresses reliability risks across the industry. The ERO works with industry to identify standards, procedures, practices, and controls to address reliability risks.

Objectives include:

- a. Industry has effective procedures and programs to monitor, detect, correct, report, and prevent compliance, reliability, and security issues.

- b. The ERO uses efficient processes and proportional exercise of discretion to verify that compliance objectives are met by industry.

## **Risks to Reliability**

**Goal 4.** Identify the most significant risks to reliability. The ERO identifies and prioritizes reliability risks, facilitates effective solutions and interventions, and monitors results.

Objectives include:

- a. Risks are identified and prioritized based on reliability impacts, cost and practicality assessments, projected resources, and emerging issues.
- b. Events and system performance are consistently analyzed for sequence, cause, and remediation to identify reliability risks and trends, and to inform standards, compliance, and other programs. Industry is well informed of system events, emerging trends, risk analysis, lessons learned, and expected actions.

**Goal 5.** Be accountable for mitigating reliability risks. The ERO works with industry stakeholders and experts to ensure the mitigation of known risks to reliability.

Objectives include:

- a. The ERO is tracking industry accountability for critical reliability and security recommendations.
- b. Industry is aware of and is effectively addressing security vulnerabilities and threats. Industry security posture is being evaluated and continuously improved. During crisis situations, the ERO facilitates sharing of information among industry, Regions, and government.

**Goal 6.** Promote a culture of reliability excellence. The ERO facilitates a learning environment throughout the industry through event causal analysis, communication of lessons learned, tracking of recommendations, and implementation of best practices.

Objectives include:

- a. ERO is a leading resource to industry and policy makers for reliability information.
- b. Reliability models and data accurately represent system behavior and are shared among reliability entities.

## **Coordination and Collaboration**

**Goal 7.** Improve transparency, consistency, quality, and timeliness of results; operate as a collaborative enterprise; and improve efficiencies and cost-effectiveness. ERO accomplishes this by working with the Regional Entities and registered entities to ensure effective coordination, collaboration, and process improvements. The ERO communicates expectations clearly and fosters collaboration to deliver important

results in advancing system reliability. The ERO engages the support and expertise of stakeholders, is an efficient steward of resources, and leverages information systems to create efficiencies and process controls.

Objectives include:

- a. The ERO acquires, engages, and retains highly qualified talent suited to the mission.
- b. The ERO's internal risks are understood and managed; ERO processes are effective, efficient, and continuously improved.

## Major Ongoing Activities

The following is a list of the major ongoing and new activities by strategic goal area that will be undertaken in 2014, followed by a discussion of activities that address new research initiatives, key strategic initiatives, and associated resource requirements.<sup>2</sup>

### Standards

- Continue addressing regulatory obligations for standards development and revisions as specified in regulatory directives.
- Complete standards revisions related to Paragraph 81, Phase 2 requirements.
- Meet targets in support of the three-year standards development plan.
- Integrate the plan from the 2013 independent expert review team into the standards development plan.
- Increase coordination with NERC's Compliance and Enforcement departments in integrating compliance considerations into standards development.
- Accelerate delivery of the number of standards that meet quality criteria and the results-based construct.
- Develop a BPS reliability risk profile to evaluate existing standards and continue the prioritized development of risk-based standards focused on key reliability outcomes.
- Facilitate industry transition to CIP Version 5 and minimize an unintended surge in violations.
- Develop methods to assess and manage cost-effectiveness (benefit) of new standards.
- Continue to support alignment between standards development and the Reliability Issues Steering Committee (RISC) priorities.

### Compliance, Registration, and Certification

- Continue to improve enforcement processing efficiency, including steps to ensure the sustainability and expandability of the Find, Fix, Track, and Report process.
- Finalize and implement the RAI enforcement strategy and deliver 2014 milestones.

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<sup>2</sup> See Section A for a discussion of other ongoing department activities, including activities currently underway in 2013.

- Focus on achieving better consistency in regional enforcement outcomes.
- Continue registered entity mapping activities to ensure that registry gaps, duplicative registration, and compliance monitoring are avoided.
- Continue to work to ensure registered entities understand their compliance obligations and how compliance will be assessed.
- Complete functional model review and registration needs assessment.
  - Develop common and consistent registration approach among Regions.
  - Develop recommendations to modify registration and certification process based on BPS risk.
- Complete Bulk Electric System (BES) Phase II exception process implementation.
- Reduce unnecessary compliance documentation while working to ensure registered entities are monitored in a cost-effective manner.
- Continuously assess the actively monitored list based on reliability trends, risks, and historical information to ensure that the compliance focus remains on the most critical reliability standards.
- Develop highly qualified and trained auditor, investigator, and enforcement staffs.
- Develop training resources for the ERO and industry, including materials related to the Reliability Assurance Initiative (RAI).
- Provide early and ongoing input into the standards development process.
- Provide ongoing oversight of Regional Entity compliance and enforcement activities.
- Develop metrics and incentives to improve trends in mitigation aging curve.
- Continue to identify the causes and trends of violations in enforcement cases.

### **Risk to Reliability**

- Issue reliability assessment reports, guidelines, recommendations, and alerts as needed.
- Prepare long-term and seasonal reliability assessments.
- Conduct special assessments addressing key reliability issues.
- Prepare an annual state of reliability report that analyzes BPS performance trends and provides insight and guidance to address key reliability aspects.
- Continue to work to address high-impact, low-frequency (HILF) issues, including effects of geomagnetic disturbance on the BES and vulnerability assessments.
- Provide oversight, analysis, and review of Generating, Transmission, and Demand Response Availability Data Systems (GADS, TADS, and DADS), along with the Spare Equipment Database.
- Strengthen data collection and validation processes by designing, creating, testing, and implementing data systems and management for reliability assessment and risk analysis.

- Provide quarterly updates on trends and measures of BES reliability.
- Develop a risk registry and a systematic prioritization process with the RISC.
- Develop control strategies and plans to address the highest priority existing or emerging risks to BES reliability.
- Develop a risk register to support BPS risk profile measurement and assessment of standards.
- Conduct major event investigations, analysis, and reporting of major findings and recommendations that will improve reliability.
- Support the development and implementation of NERC and Regional Entity (ERO Enterprise) software applications, which support common functions and are critical to advancing the quality and usefulness of reliability assessments and event analysis data.
- Develop structured approaches to evaluate and improve system models, analysis, and assessments.
- Improve the functionality and usability of the Electricity Sector -Information Sharing and Analysis Center (ES-ISAC) portal for registered entities.
- Develop a cybersecurity maturity model tool kit for industry to conduct cybersecurity self-assessments.
- Deliver important information to registered entities regarding critical infrastructure protection security threats, vulnerabilities, and lessons learned from subject matter experts, senior industry, and governmental representatives.
- Through security best-practice discussion forums, educate industry about reliability concerns and risk mitigation associated with emerging physical and cybersecurity threats.
- Continue to collaborate with government agencies in the United States and Canada to develop more timely dissemination of classified information regarding threats to the BPS in a form that can be provided to and used by the industry.
- Conduct security incident analysis and work with industry experts to evaluate, track, and identify lessons learned and security metrics that enhance the electricity sector's security posture.
- Continue to work with the Regional Entities to obtain and review information from registered entities regarding qualifying events and disturbances in order to advance awareness of events above a threshold level and facilitate analysis of root causes, risks to reliability, wide-area assessments, mitigation, and timely dissemination of information regarding events.
- Continue to support the System Operator Certification and continuing education programs, as well as provide training to support knowledge and skills development in standards, compliance, event analysis, registration, and other key areas.

## Coordination and Collaboration

- Continue to provide resources and support to the Board and Board committees, the MRC, Standards Committee, Compliance and Certification Committee, Planning Committee, Operating Committee, Critical Infrastructure Protection Committee, Electricity Sub-sector Coordinating Council (ESCC), Reliability Issues Steering Committee, and numerous ERO subcommittees and working groups.
- Continue to implement procedures, controls, processes, documentation, and systems to improve the efficiency of operations and control costs.
- Continue to work with Regional Entities to improve oversight and collaboration.
- Continue to enhance to ERO risk management tools and procedures.
- Develop a comprehensive technology roadmap for applications and infrastructure supporting ERO operations, including Regional Entity components.
- Continue to work collaboratively with the Regional Entities to advance the design and implementation of strategic ERO Enterprise IT applications and supporting infrastructure.
- Review and, where applicable, make recommendations for improvements to NERC and Regional Entity operating and working capital reserve policies and forecasting, including policies applicable to tracking and use of excess operating reserves.
- Evaluate and implement mechanisms to improve talent acquisition and employee retention.

## 2014 Key Business Planning Assumptions

As part of their annual business planning initiatives, NERC and the Regional Entities collaborate to form significant assumptions that should be considered when developing their respective business plans and budgets. For the 2014 business plans and budgets, these assumptions include, but are not limited to:

1. There will be continued industry participation to support key program areas, including but not limited to the standards and compliance process improvement initiatives.
2. External factors, including regulatory actions, may affect resource needs and allocation.
3. Critical infrastructure protection will continue to be a priority in the United States and Canada.
4. Compliance auditing will transition to be more reflective of a registered entity's reliability risk profile.
5. Significant investments will be required over the planning period to develop and implement program area and enterprise-wide applications to support common NERC and Regional Entity business needs and processes.

These assumptions also reflect the application of the Section 215 criteria discussed in the following section. A more complete list of the common assumptions is attached as **Exhibit A**.

## Application of Section 215 Criteria to Major Activities

In its order approving NERC's 2013 business plan and budget, the Federal Energy Regulatory Commission (FERC) required NERC to establish criteria for determining whether its proposed activities are eligible for funding under Section 215. In an order dated April 19, 2013, FERC approved NERC's proposed criteria, with certain modifications.<sup>3</sup> **Exhibit B** summarizes the major activities NERC proposes to undertake and the approved Section 215 criteria applicable to such activities.

As further described in Exhibit B, all of the major activities that NERC proposes to undertake in 2014 are within the Section 215 guidelines. In addition, as part of the business planning process, the Board requested policy input regarding the potential for funding support for the ESSC and the operation of the ES-ISAC outside of Section 215. Based on this feedback and the discussions at the May 2013 Board meeting, NERC is planning to continue Section 215 funding for the ES-ISAC in 2014. The NERC board of trustees is considering a proposal to move the ESSC outside of NERC. From a 2014 budget and funding standpoint, the cost of any company personnel and expenses to support the ESSC, as well as the costs of outside consulting support, will remain statutory.

Stakeholder feedback was also sought regarding the potential funding of the System Operator Certification and Continuing Education Program (SOCCED) activities outside of Section 215. The SOCCED programs are designed to ensure that personnel operating the BPS have the skills, training, and qualifications needed to operate the system reliably. NERC maintains the credentials required to work in system control centers across North America for over 6,000 system operators. The requirements of the SOCCED programs are encompassed in Sections 600 and 902 of the NERC Rules of Procedure, as well as in Article XII of the NERC Bylaws. NERC's system operator certification exam is designed to test specific knowledge of job skills and reliability standards. It also prepares operators to comply with requirements of reliability standards and appropriately operate the BPS during normal and emergency operations.

Certification exams are created by the Personnel Certification Governance Committee (PCGC), an industry group of operations experts, trainers, and supervisors. Under the PCGC oversight, the Examination Working Group periodically updates and publishes new exams. When an operator passes the certification exam, certification is maintained by completing NERC-approved continuing education courses and activities. The Personnel Subcommittee, composed of industry training experts, provides oversight of the Continuing Education program. SOCCED costs have been entirely or substantially funded through testing and certification fees, and a separate operating reserve has been established for the SOCCED program under NERC's Working Capital and Operating Reserve Policy. Based on the feedback received to date, the company is proposing to continue the current SOCCED funding approach in 2014.

## Overview of 2014 Funding Requirements

NERC's 2014 Business Plan and Budget reflects NERC's ongoing efforts to better define program area requirements and allocate resources to make more meaningful and demonstrable contributions to improvements to the reliability of the bulk power systems in

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<sup>3</sup> *North American Electric Reliability Corporation, Order on Compliance*, 143 FERC ¶ 61,052 (2013).

North America. Management has continued to enhance the quality and depth of information provided in the company's business plan and budget in order to improve transparency and stakeholder communications and understanding of the ERO's resources requirements.

The following sections of the 2014 Business Plan and Budget describe in detail the resources required in 2014 for NERC to continue to carry out its mission. The 2014 funding requirements reflect the costs to support current operations, including but not limited to: personnel costs based on projected 2013 year-end headcount, contracts for office space, software licensing, third-party data management, communication and other services to support current operations. Incremental funding requirements in 2014 are primarily driven by resources required to fund (1) geomagnetic disturbance (GMD) research; (2) consulting resources to support compliance and enforcement reform initiatives; (3) investments in technology and support services to improve cyber threat information sharing capabilities, preparedness, and mitigation strategies; and (4) investments in the development of software applications and infrastructure to facilitate improved business processes and efficiency and to reduce unnecessary costs on registered entities. The 2014 funding requirements for these items are partially offset by savings realized from a reduction in contractor and consulting costs tied to the completion, elimination, or reduction in the scope of various other program area initiatives.

Penalty funds received in 2013 and a reduction in NERC's working capital reserves will reduce NERC's 2014 assessments funding approximately \$1.5M (3.2%). After taking into account the application of NERC's policies regarding the allocation of United States penalty funds,<sup>4</sup> the allocation of certain compliance and enforcement costs,<sup>5</sup> and using 2012 net energy for load data, assessments will be approximately \$3.7M (8.5%) higher for U.S. entities, \$111.3k (2.5%) higher for Canadian entities, and \$13.4k (10.8%) higher for Mexican entities.

The 2014 proposed assessment increase represents a net increase of \$739k (1.5%) in assessments over the two-year period between 2013 and 2014.

NERC proposes to finance the cost of certain enterprise IT applications that are under development in 2013 and are slated to be developed in 2014, as well as finance the cost of certain hardware that supports internal and enterprise software applications. It is anticipated that the combination of NERC's strong credit and a favorable interest rate environment will allow these investments to be financed at attractive interest rates. This financing will place downward pressure on assessments in the near term and spread out the costs of each of these capital projects over three years, as opposed to expensing the entire development and infrastructure costs in the current year (2014). Additional details regarding this proposed financing are included in **Exhibit D**. The repayment of the projected principal and interest in connection with this financing has also been factored into the 2015 and 2016 budget projections discussed further below. Implementation of this approach is dependent on negotiation of acceptable, definitive terms and conditions of the financing agreements with lenders, NERC Board approval, and Commission approval of the projected principal repayment and interest schedule for the borrowings in NERC's budget and statutory assessments. Any

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<sup>4</sup> Accounting, Financial Statement and Budgetary Treatment of Penalties Imposed and Received for Violations of Reliability Standards, December 8, 2008

<sup>5</sup> Expanded Policy on allocation of Certain Compliance and Enforcement Costs, July 29, 2008

variation in projected compared to actual principal and interest payment obligations will be tracked and reported as part of the company's quarterly budget to actual variance report provided to the NERC Finance and Audit Committee, Board, and FERC.

Management is proposing to maintain operating reserves for known contingencies and unforeseen contingencies at the same level as in the 2013 budget, including a \$1M budget for known contingency reserves and \$1M budget for unforeseen contingency reserves. Known contingency reserves include potential funding of vegetation research related to the FAC-003 reliability standard for vegetation management and development of a reliability assessment database that will be used to conduct reliability risk assessments and analysis for resource planning and allocation, as well as industry advisories and alerts. The FAC-003 vegetation research was originally planned to commence in 2014 but has been deferred to 2015, with the potential to accelerate funding into 2014 subject to the availability of reserves. Further information regarding these two initiatives may be found under the Reliability Assessment and Performance Analysis department section of this business plan and budget. Based on an analysis of working capital and operating reserve levels and taking into account the forecasted year-end reserve balances, a total of \$1.2M in excess operating reserves is proposed to be applied to reduce 2014 assessments, as shown on Table B-1 in Section B.

Management has also prepared preliminary budget projections for 2015 and 2016. Further information regarding the assumptions underlying these projections may be found on pages 26–27.

## **2014 Cost of Current Operations and Additional Resource Requirements**

Management and the NERC Board take the efficiency and the cost of NERC's operations very seriously. NERC took the following steps to control costs and increase the efficiency of operations:

1. Established a formal working capital and operating reserve policy and controls.
2. Implemented policies and controls regarding the expenditure of funds approved for specific statutory purposes on unbudgeted activities.
3. Increased the detail and granularity of variance reporting, both monthly for operational purposes and quarterly for review with the Finance and Audit Committee, as well as in quarterly public postings and annual FERC filings.
4. Retained an outside consulting firm to conduct a comprehensive review of employee compensation and benefits and implemented revised policies governing compensation and benefits.
5. Implemented an ongoing top-to-bottom review of the entire organization to determine the particular skills and competencies that are required to perform the necessary tasks of each position in the organization.
6. Significantly reduced the company cost of employee benefits.
7. Implemented average salary increases below peer group average.

8. Implemented a workforce management system to track employee time by major activity.
9. Developed more robust policies and controls governing employee travel expenses.
10. Strengthened resource capabilities for Regional Entity oversight.
11. Established a risk management and internal controls framework and hired experienced personnel to implement it.
12. Developed and obtained FERC approval of written criteria governing statutory activities and applied these criteria to departmental activities in connection with the development of the business plan and budget.
13. Reviewed departmental activities to ensure alignment with goals and objectives contained in the approved Strategic Plan.
14. Eliminated funding of non-core activities including the Interchange Distribution Calculator (IDC) and related tools, and the North American Synchrophasor Initiative (NASPI).
15. Improved coordination and decision making with the Regional Entities.

With due regard to the foregoing, the projected 2014 revenue requirements reflect the revenues necessary to support the major departmental activities discussed on pages 10–13, including but not limited to the cost of personnel, meetings, travel, office space, information technology, and other costs necessary to support the essential functioning and governance of the corporation as detailed in the financial statements and supporting schedules. The projected cost of ongoing operations in 2014 reflects (1) average salary increases below industry average, (2) a personnel attrition factor, (3) continuation of 2013 reductions in medical and retirement benefits, (4) market increases in health care costs, and (5) the elimination of funding of the IDC and contractors and consultants to support NASPI.

Forecasted 2014 personnel costs include 2013 budgeted full-time employees (FTEs) plus five new positions required to support current operations. These positions include: (1) an engineer in the Reliability Assessment and Performance Analysis department to support risk management initiatives and associated technical analysis, (2) a shared administrative support position for the legal and enforcement departments (which are both based in the Washington, D.C. office and currently have limited administrative support), (3) a database analyst to assist in the management of the numerous databases necessary for ERO operations, (4) a webmaster to support the day-to-day maintenance of NERC's website and associated applications, which are used extensively to support both internal and external knowledge management and communications and (5) one additional employee to strengthen the operation of the ES-ISAC. NERC's 2014 cost of ongoing operations also includes the cost associated with support provided to the ESCC. NERC is utilizing a recently implemented workforce management system to track time associated with providing ESCC support. In the future, the company will have the ability to allocate costs to specific activities, such as ESCC support. Additional revenue requirements to further improve ES-ISAC operations and associated registered entity benefits are discussed in the next section.

NERC is projecting approximately \$53.5M in total operating expenses and capital expenditures to support current ongoing operations, which is approximately \$800.6k (1.5%) less than 2013.

NERC management has also prepared a projection of the cost of the additional resources required in 2014 to enable the company to (1) conduct GMD research in connection with recent FERC orders, (2) support key strategic initiatives, and (3) improve and expand ES-ISAC capabilities and performance. The following table sets forth the 2014 budget impact of these incremental resource requirements, followed by a more detailed discussion of these incremental resource needs.

2013 Budget		2014 Commitments - Inc(Dec)	Incremental Resources	Total 2014 Budget
\$ 31,298,405	Total Personnel Expense	\$ 2,761,249	\$ -	\$ 34,059,654
\$ 4,098,310	Total Meeting Expense	\$ (308,785)	\$ -	\$ 3,789,525
\$ 8,816,254	Contracts and Consultants	\$ (3,381,731)	\$ 1,394,450	\$ 6,828,973
\$ 8,251,187	Operating Expenses (excl depreciation)	\$ 198,968	\$ -	\$ 8,450,154
\$ 50,000	Non-Operating Expenses	-	94,000	\$ 144,000
\$ 1,772,100	Capital Expenditures	\$ (70,300)	\$ 1,415,990	\$ 3,117,790
\$ 54,286,256	Total Budget	\$ (800,600)	\$ 2,904,440	\$ 56,390,096

## Additional Research Related to Regulatory Matters

Recent regulatory requirements regarding vegetation clearances and vegetation management on public lands, as well as the potential impacts of geomagnetic disturbances (GMD), may impact resource requirements for 2014. These items are described below with estimated 2014 funding requirements.

### 1. Vegetation Research

The recent FERC order approving the FAC-003 reliability standard for vegetation management included an obligation to validate the technical foundation supporting the inclusion within the Gallet Equation of factors for the Minimum Vegetation Clearance Distance (MVCD). Significant industry support for the application of the Gallet Equation was a key factor in achieving approval for this standard. An estimated cost of \$500k for this research is supported by a draft statement of work prepared by Electric Power Research Institute (EPRI) that involves an approximately nine-to-fifteen-month period of effort and associated activity. Contractor support will be required to conduct the necessary research that provides the technical foundation supporting the use of the MVCD in the application of the vegetation management standard. Due to budget constraints NERC will be exploring potential sources of third party funding for all or a portion of the cost of this research, as well as considering deferring implementation of

this initiative until 2015 or phasing it in over a longer period and relying on operating reserves for any funding required in 2014.

The research plan is intended to provide empirical technical support for the application of the Gallet equation and the associated factors related to the MVCD. These empirical tests will involve actual flash-over distances between conductors and vegetation grown specifically for this purpose at the EPRI test facility in Lenox, Massachusetts. The research will evaluate flash distances in a carefully calibrated environment and thereby validate through data the actual application of the MVCD factors in the currently approved FAC-003 standard.

## 2. Vegetation Management on Public Lands

In the recent FERC order approving the FAC-003 reliability standard for vegetation management, the Commission directed NERC to ascertain the issues surrounding access for vegetation and related maintenance for transmission assets crossing public lands. FERC is concerned that issues arising from federal- and state-governed lands (e.g., Bureau of Land Management areas, national and state forests, etc.) restrict access to transmission assets crossing such lands and may potentially lead to a reliability risk for outages or delayed restoration. Consulting resources are required to develop a plan to gather technically valid information that would identify the nature and extent of such issues on public lands. The research plan as currently envisioned would be led by NERC and financially supported by existing industry groups, such as the EEI Vegetation Management Task Force. NERC does not anticipate having to provide direct financial support in 2014 for this research.

## 3. Reliability Effects of GMD

The continuing efforts of the HILF work to expand the technical foundation for understanding the potential impact of GMD will involve continuation of the GMD Task Force work and research through EPRI in 2014. The current 2013 funding level of \$250,000 is expected to be required in 2014, targeting overall completion by the end of the year. The current work centers around providing a suite of technically valid tools and operational measures and transformer modeling, along with coordinating work efforts at the National Oceanic and Atmospheric Administration and space weather entities to understand the potential ranges of geomagnetically induced currents from coronal mass ejections on the sun. The results will permit individual entities to conduct associated vulnerability assessments. Once the EPRI and industry efforts are completed, the task force can finalize the tool development and associated baseline information. The objective for 2014 is to complete associated research efforts and conduct an overall assessment of the vulnerability assembled in a report that provides an indication of the how these factors potentially affect reliability of the BPS in North America.

## **Additional Resources to Support Compliance and Enforcement Reform (Reliability Assurance) Initiatives**

During 2013 and consistent with the goals and objectives set forth in the Strategic Plan, NERC established a Reliability Assurance Initiative (RAI) as part of its stated objectives of ensuring BPS

reliability, improving the efficiency and effectiveness of NERC and Regional Entity compliance and enforcement operations, and reducing unnecessary costs to registered entities by focusing compliance oversight and enforcement resources on significant risks to reliability. Implementing the RAI program is a multiyear effort that involves compliance and enforcement process changes, development of new tools and training materials, and a variety of related efforts. These initiatives are specifically aimed at moving the ERO toward a culture of reliability through improved compliance monitoring and enforcement mechanisms. Moreover, these initiatives will also eliminate known problems with the current “zero-tolerance” processes that place unnecessary administrative burdens on registered entities and consume far too many NERC and Regional Entity resources.

The major RAI activities for 2013 include: (1) identifying and implementing process improvements to the self-reporting process; (2) implementing FFT enhancements; (3) developing an auditor handbook and checklist for use by compliance auditors; and, (4) initiating small prototype and pilot programs focused on developing entity risk assessments and developing processes for evaluating and testing internal controls. As further discussed under the Enforcement Department section of the 2014 Business Plan and Budget, the first two activities—self-reporting and FFT enhancements—seek to better align NERC and the Regional Entity enforcement processing activities with the level of risk the particular activity poses to the reliability of the BPS. These activities promote efficiencies for both the ERO Enterprise and registered entities by eliminating undue regulatory burdens, streamlining documentation and filing requirements, and substantially improving the processing of alleged violations and their companion mitigation plans. An audit handbook, which is being developed in 2013, will be utilized across the entire ERO by all compliance auditors and will support the audit processes outlined in the audit checklist. The audit handbook will address concerns voiced by registered entities, particularly those with operations in more than one Region, that differing audit practices exist in various Regions and among various audit teams within those Regions. Registered entities will benefit from the handbook because it will promote consistency in regional compliance audit practices, eliminating guesswork for entities in pre-audit preparations. Lastly, the prototypes and pilot programs will focus on how to best develop registered entity reliability risk assessment profiles and perform reviews and tests of internal controls. These pilots are an excellent means by which the newly developed tools and procedures can be tested and modified based upon actual results from the field, firsthand experiences, and lessons learned.

Three major activities that will build upon the framework and improvements implemented as a result of the ongoing 2013 RAI activities are planned for 2014: (1) developing a training program to support implementation of the common audit procedures developed in 2013; (2) assessment of the existing compliance, reporting, analysis tracking system (CRATS) and other compliance tools to support RAI activities; and (3) developing prototypes and pilot programs to support the development of registered entity reliability risk assessments and compliance monitoring scoping projects. These activities are necessary to implement the strategic reforms to the compliance monitoring and enforcement programs. The bulk of these activities will be resourced from NERC and Regional Entity staffs. However, as detailed below, certain activities require funding for an outside consultant with specialized industry expertise. Where appropriate, the plan will leverage volunteers from industry. For instance, a number of

prototypes and pilot programs will include testing operational aspects of the RAI activities with volunteer registered entities. This mix of resources will allow NERC to produce the RAI deliverables in a timely way, at an effective cost, and in a manner that ensures ERO Enterprise personnel will be equipped to execute the new processes and procedures in future years. NERC has budgeted \$400k for outside consulting resources to support these initiatives in 2014, are further described in Section A of the Business Plan and Budget, under Compliance Operations.

## **Additional Resources to Support Enterprise Software Applications and Infrastructure**

During 2013, considerable emphasis has been placed on consolidating applications determined to have similar business processes and functions across NERC and the Regional Entities. NERC and the Regional Entity Management Group deemed the bulk electric system exceptions process and event information data analysis to be ERO Enterprise in nature. Therefore, NERC and the Regional Entities undertook a concerted effort to gather business and functional requirements to build enterprise-wide applications supporting these processes that would culminate in an application package that would become operational in a dedicated data center facility. NERC and the Regional Entities will use these applications to perform required business functions, thereby reducing multiple disparate applications and databases into single, agreed-upon business applications.

The 2014 budget includes proposed incremental funding to support continuing multiyear undertaking to consolidate and manage ERO Enterprise applications into a reliable, centrally managed, dedicated hosting facility. This will require leveraging unique vendor capabilities to provide infrastructure services, security, back-up, and recovery that would otherwise require NERC and the Regional Entities to run, secure, and manage separate instances of the applications and databases, along with requirements to create connectivity between the multiple systems. Each enterprise application will be designed to offload the burden of multiple registrations by registered entities, reduce manual efforts by NERC and Regional Entity staff to manually process volumes of data, and significantly increase business intelligence and analytical capabilities.

During 2013, NERC and the Regional Entities developed a common software application to process BES exception requests, and are in the process of developing an application to facilitate the management, analysis and dissemination of information regarding events affecting BPS reliability. Another example is planned design and implementation of an enterprise application (the “RADS” application<sup>6</sup>) to replace the legacy reliability assessment database, which currently requires hundreds of NERC and Regional Entity man-hours to process millions of data elements to populate up to 27 individual spreadsheets that are manually processed in connection with preparation of the summer and winter seasonal assessments. The replacement RADS application will allow regional staffs to input data into forms that would automatically populate a central database for almost immediate creation of the data required for seasonal assessments, reducing manual workload and potential for error. The resulting efficiency gains will be used to redirect resources in support key reliability improvement initiatives.

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<sup>6</sup> The RADS application is presently budgeted for development in 2015 but may be accelerated into 2014, subject to the availability of funding from reduction in the cost of the development of a replacement Alerts applications, operating reserves and/or the capital financing program, which are further, discussed in Section A under the Situation Awareness and Information Technology departments, respectively.

This multiyear effort will also focus on a new centralized compliance application to replace the multiple applications used by NERC and the Regional Entities, as previously mentioned in connection with the Reliability Assurance Initiative. A centralized compliance application will provide multiple tangible benefits to include a secure, logically or physically segregated central database for management and reporting, and it would also reduce the number of system touch points required in today's environment to synchronize and manage the integrity of multiple databases. A new compliance application will create efficiencies and continue to foster process improvements by using the same tool by multiple compliance and enforcement staffs.

Each enterprise application will be designed through a collaborative approach with the Regional Entities and in such a manner as to facilitate business intelligence and analytic capability with the appropriate level of security. In addition to providing a more cohesive view of data across applications and databases by NERC and the Regional Entity staffs, the environment will incorporate design features that would allow the Regional Entities, along with the general public, access to reporting and analytics. It will be designed to facilitate dashboards and reporting either with anonymous access, or with enhanced feature functionality, upon proper vetting and approval.

The enterprise applications will be hosted and centrally managed from a dedicated state-of-the-art data center facility. The facility would incorporate all elements of infrastructure support to include system administration and help desk functions, security, monitoring and back-up, and recovery capability. A central hosted facility will achieve a single point of accountability, reduce security exposure by leveraging best-in-class security practices and technology, and standardize tools and technologies used amongst NERC and the Regional Entities.

The ERO Enterprise application and infrastructure plan and budget was developed as a multi-year strategic initiative. Projected costs over the 2014–2016 planning period are set forth in the detailed IT department description under the General and Administrative Program Area in Section A of the Business Plan and Budget. Management anticipates financing the development of these capital assets and spreading the cost out over several years to mitigate the impact on assessments and cash flow. Further details regarding the financing program are included in Exhibit D.

## **ES-ISAC Incremental Funding Needs**

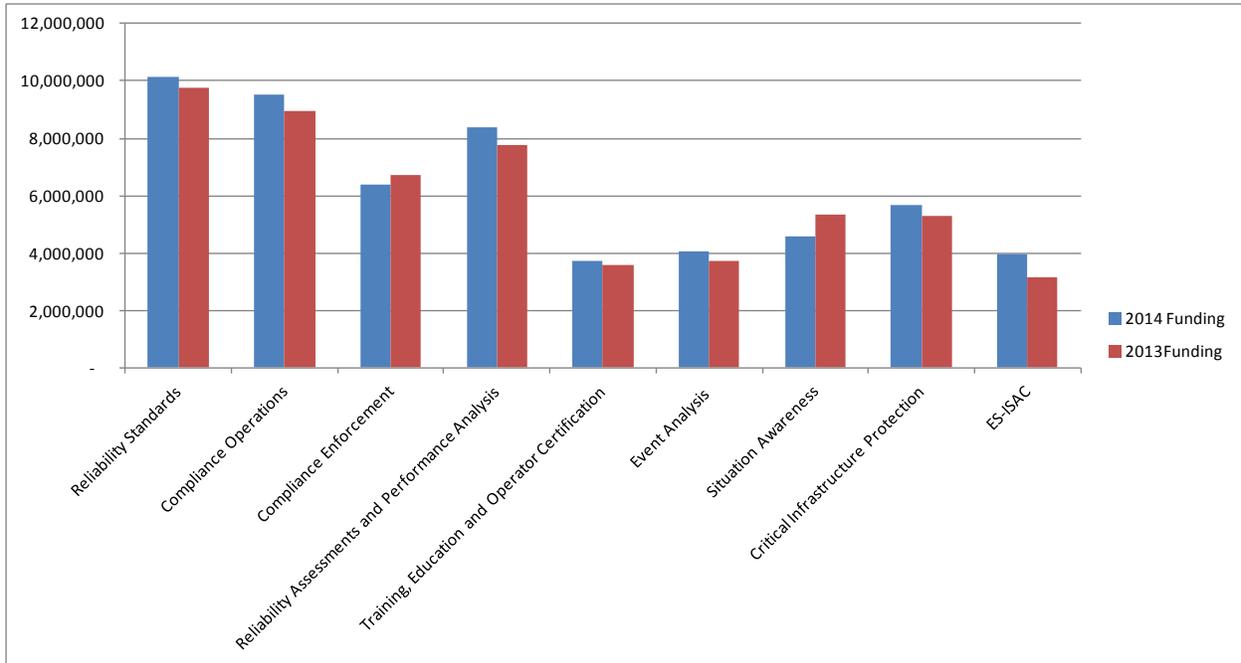
The resources currently devoted to supporting the ES-ISAC consist primarily of personnel and contractors who gather, analyze, and provide information regarding cyber threats to industry through a secure communications portal and the costs to operate and maintain that portal. By having access to information regarding threats (including threats faced by other sectors such as the financial and communications industries) and the ability to analyze the potential impact of these threats on the electric sector and rapidly share this information with industry, the security of the electricity sector is improved.

To keep pace with the growth and risk of cyber attacks and the associated need for timely and effective information sharing with industry and other sectors in order to mitigate potential significant BPS reliability risk, NERC's 2014 budget includes a significant increase in the tools and technologies devoted to supporting ES-ISAC. This additional resource support is in three

areas: (1) tools and technologies for improving the usability and functionality of the information-sharing portal to better allow the electric sector to receive and provide information to the ES-ISAC and to better allow the ES-ISAC to share information with other sector ISACs; (2) the preparation of a cyber risk preparedness toolkit to allow industry to conduct self-assessments of cyber risk preparedness; and (3) adding one staff position to increase analytical capabilities, portal monitoring, and information sharing and shift staffing on the National Cybersecurity and Communications Integration Center (NCCIC) floor. The additional cost in 2014 associated with improving the portal and information-sharing capabilities consists primarily of software licensing fees. The preparation of the cyber risk preparedness toolkit will reduce the projected ongoing costs for NERC to conduct individual cyber risk preparedness assessments for industry in the absence of industry having a tool to conduct these assessments.

The federal government has been piloting a new form of highly secure information sharing network and associated technology that can be utilized to identify, track, and deploy fixes to emerging cyber security threats. This project, a combination of what is known as the “Cyber Federated Model” (CFM) and “Cyber Risk Information Sharing Program” (CRISP), is at a point where the tools are ready to be commercialized. Federal funding provided to incubate this technology up to the point of commercialization is expected to be reduced or eliminated in 2014 and replaced by private sector sources of funding. NERC has not included any specific funding to support the commercialization of this portal and associated technology in 2014. The following table sets forth a 2013–2014 total budget (operating expenses plus fixed assets minus depreciation) comparison by department, followed by a bar chart comparison of funding by department.

Total Budget	Budget 2013	Budget 2014	Change	
			2014 Budget v 2013 Budget	% Change
Reliability Standards	9,775,088	10,133,290	358,202	3.7%
Compliance Operations	8,928,994	9,496,910	567,916	6.4%
Compliance Enforcement	6,725,004	6,406,833	(318,171)	-4.7%
Reliability Assessments and Performance Analysis	7,762,436	8,364,395	601,959	7.8%
Training, Education and Operator Certification	3,571,766	3,743,590	171,824	4.8%
Reliability Risk Management				
Event Analysis	3,738,430	4,041,940	303,510	8.1%
Situation Awareness	5,324,311	4,587,796	(736,515)	-13.8%
Critical Infrastructure Department				
Critical Infrastructure Protection	5,299,502	5,671,885	372,384	7.0%
ES-ISAC	3,160,725	3,943,457	782,731	24.8%
Total Budget	54,286,256	56,390,096	2,103,840	3.9%



The following chart presents a year-over-year comparison of FTEs by department and reflects 2013 personnel additions and interdepartmental transfers, attrition assumptions, and proposed 2014 personnel additions. It is followed by a statement of activities comparing the 2013 and proposed 2014 budget.

Total FTE's by Program Area	Budget 2013	Budget 2014*	Change from 2013 Budget
<b>STATUTORY</b>			
<b>Operational Programs</b>			
Reliability Standards	26.50	25.92	(0.58)
Compliance Operations	24.00	23.04	(0.96)
Compliance Enforcement	21.00	18.24	(2.76)
Reliability Assessments and Performance Analysis	18.75	18.99	0.24
Training, Education and Operator Certification	8.00	8.16	0.16
Event Analysis	9.50	9.60	0.10
Situation Awareness	6.50	6.24	(0.26)
Critical Infrastructure Protection	12.50	11.98	(0.52)
ES-ISAC	6.75	8.22	1.47
<b>Total FTEs Operational Programs</b>	<b>133.50</b>	<b>130.39</b>	<b>(3.11)</b>
<b>Administrative Programs</b>			
General & Administrative	8.00	10.56	2.56
Legal and Regulatory	14.00	15.15	1.15
Information Technology	16.75	18.07	1.32
Human Resources	3.00	2.88	(0.12)
Finance and Accounting	11.00	12.48	1.48
<b>Total FTEs Administrative Programs</b>	<b>52.75</b>	<b>59.14</b>	<b>6.39</b>
<b>Total FTEs</b>	<b>186.25</b>	<b>189.53</b>	<b>3.28</b>

\*Reflects 2013 additions and transfers between departments, and assumes 4% attrition in all programs

The complete NERC organizational chart is attached as **Appendix 1**.

Statement of Activities and Fixed Assets Expenditures							
2013 Budget & Projection, and 2014 Budget							
STATUTORY							
	2013	2013	Variance	2014	Variance	2014 Budget	Variance to
	Budget	Projection	2013 Projection	Budget	2014 Budget	Draft 2	Prior Draft
			v 2013 Budget		v 2013 Budget		Over(Under)
			Over(Under)		Over(Under)		Over(Under)
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ 47,604,156	\$ 47,604,156	\$ (0)	\$ 51,401,382	\$ 3,797,226	\$ 53,015,743	\$ (1,614,361)
Penalty Sanctions	2,512,500	2,512,500	-	290,000	(2,222,500)	290,000	-
<b>Total NERC Funding</b>	<b>\$ 50,116,656</b>	<b>\$ 50,116,656</b>	<b>\$ (0)</b>	<b>\$ 51,691,382</b>	<b>\$ 1,574,726</b>	<b>\$ 53,305,743</b>	<b>\$ (1,614,361)</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	1,680,000	1,680,000	-	1,620,000	(60,000)	1,620,000	-
Services & Software	-	57,000	57,000	50,000	50,000	50,000	-
Workshops	436,000	372,950	(63,050)	354,000	(82,000)	354,000	-
Interest	20,000	20,000	-	20,000	-	20,000	-
Miscellaneous	-	224	224	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 52,252,656</b>	<b>\$ 52,246,830</b>	<b>\$ (5,826)</b>	<b>\$ 53,735,382</b>	<b>\$ 1,482,726</b>	<b>\$ 55,349,743</b>	<b>\$ (1,614,361)</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 24,056,165	\$ 24,965,038	\$ 908,873	\$ 26,218,572	\$ 2,162,407	\$ 26,415,679	(197,107)
Payroll Taxes	1,459,710	1,473,809	14,099	1,570,954	111,244	1,582,500	(11,546)
Benefits	3,079,941	2,917,558	(162,383)	3,385,917	305,976	3,555,737	(169,820)
Retirement Costs	2,702,588	2,264,996	(437,592)	2,884,211	181,623	2,906,506	(22,295)
<b>Total Personnel Expenses</b>	<b>\$ 31,298,403</b>	<b>\$ 31,621,401</b>	<b>\$ 322,997</b>	<b>\$ 34,059,654</b>	<b>\$ 2,761,250</b>	<b>\$ 34,460,422</b>	<b>(400,768)</b>
<b>Meeting Expenses</b>							
Meetings	\$ 1,042,000	\$ 1,158,289	\$ 116,289	\$ 1,052,150	\$ 10,150	\$ 1,136,500	(84,350)
Travel	2,738,500	2,419,525	(318,975)	2,419,525	(318,975)	2,617,500	(197,975)
Conference Calls	317,810	323,850	6,040	317,851	41	233,500	84,351
<b>Total Meeting Expenses</b>	<b>\$ 4,098,310</b>	<b>\$ 3,901,664</b>	<b>\$ (196,646)</b>	<b>\$ 3,789,525</b>	<b>\$ (308,785)</b>	<b>\$ 3,987,500</b>	<b>(197,975)</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 8,816,254	\$ 8,140,646	\$ (675,608)	\$ 6,828,973	\$ (1,987,281)	\$ 8,172,879	(1,343,906)
Office Rent	2,756,840	2,695,217	(61,623)	2,617,300	(139,540)	2,617,300	-
Office Costs	3,181,515	3,488,179	306,664	3,506,074	324,559	3,531,074	(25,000)
Professional Services	2,291,331	2,369,743	78,412	2,290,280	(1,051)	2,290,280	-
Miscellaneous	21,500	19,250	(2,250)	36,500	15,000	36,500	-
Depreciation	1,579,801	1,859,008	279,207	2,333,006	753,205	2,333,006	-
<b>Total Operating Expenses</b>	<b>\$ 18,647,241</b>	<b>\$ 18,572,043</b>	<b>\$ (75,198)</b>	<b>\$ 17,612,133</b>	<b>\$ (1,035,108)</b>	<b>\$ 18,981,039</b>	<b>\$ (1,368,906)</b>
<b>Total Direct Expenses</b>	<b>\$ 54,043,954</b>	<b>\$ 54,095,108</b>	<b>\$ 51,153</b>	<b>\$ 55,461,313</b>	<b>\$ 1,417,358</b>	<b>\$ 57,428,961</b>	<b>\$ (1,967,649)</b>
<b>Indirect Expenses</b>	<b>\$ -</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ -</b>	<b>\$ 0</b>
<b>Other Non-Operating Expense:</b>	<b>\$ 50,000</b>	<b>\$ 128,060</b>	<b>\$ 78,060</b>	<b>\$ 144,000</b>	<b>\$ 94,000</b>	<b>\$ 144,000</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 54,093,954</b>	<b>\$ 54,223,168</b>	<b>\$ 129,213</b>	<b>\$ 55,605,313</b>	<b>\$ 1,511,358</b>	<b>\$ 57,572,961</b>	<b>\$ (1,967,649)</b>
<b>Change in Assets</b>	<b>\$ (1,841,298)</b>	<b>\$ (1,976,338)</b>	<b>\$ (135,039)</b>	<b>\$ (1,869,930)</b>	<b>\$ (28,631)</b>	<b>\$ (2,223,218)</b>	<b>353,288</b>
<b>Fixed Assets</b>							
Depreciation	\$ (1,579,801)	\$ (1,859,008)	(279,207)	\$ (2,333,006)	\$ (753,205)	\$ (2,333,006)	\$ -
Computer & Software CapEx	1,556,100	2,242,083	685,983	2,904,790	1,348,690	2,904,790	-
Furniture & Fixtures CapEx	-	340,788	340,788	-	-	-	-
Equipment CapEx	216,000	527,031	311,031	213,000	(3,000)	213,000	-
Leasehold Improvements	-	77,803	77,803	-	-	-	-
Allocation of Fixed Assets	\$ -	\$ 0	\$ 0	\$ -	\$ -	\$ -	\$ -
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>192,299</b>	<b>1,328,696</b>	<b>1,136,397</b>	<b>784,784</b>	<b>592,485</b>	<b>784,784</b>	<b>-</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 54,286,253</b>	<b>\$ 55,551,864</b>	<b>\$ 1,265,610</b>	<b>\$ 56,390,096</b>	<b>\$ 2,103,842</b>	<b>\$ 58,357,745</b>	<b>\$ (1,967,649)</b>
<b>FTEs</b>	<b>186.25</b>	<b>179.04</b>	<b>(7.21)</b>	<b>189.53</b>	<b>3.3</b>	<b>190.03</b>	<b>(0.50)</b>

## Projections for 2015–2016

Management has developed preliminary operating and fixed asset (capital) budget projections for 2015 and 2016. The following significant assumptions were included in these projections:

- No increase in FTEs above 2014 budgeted levels.
- An overall personnel expense increase of 3%, which is inclusive of salary increases, benefit and retirement costs.
- An increase of less than 5% in overall contractor and consulting expenses.
- Cost of ongoing IT operations and development of Enterprise IT applications as set forth in the IT section of the 2014 business plan and budget.
- No funding for additional ES-ISAC tools or incremental resource needs, pending further review and input from the ESCC.
- Principal and interest payments in connection with borrowing under the capital financing program to fund IT Enterprise software application development and IT hardware, as further described in the IT section and Exhibit D of the 2014 business plan and budget.

Based on these assumptions, management is projecting a 2.6% and 3.4% year-over-year increase in operating expenses for 2015 and 2016, respectively. Fixed Asset (Capital) Expenses are projected to increase by 78% in 2015 and decrease 33% in 2016. The combined effect of the projected increase in operating and capital expenses results in a projected average increase in assessments of 8.9% and 4.1% for 2015 and 2016, respectively. The projected higher percentage increase in assessments in 2015 is primarily due to (1) the projected IT expenditures, including the debt service associated with the amortization of the cost of IT Enterprise application development and hardware, (2) a loss of penalty fund offsets since penalty funds are not projected or taken into account in the forecast, and (3) elimination of the return of excess operating reserves which applied to reduce assessments in 2014. Management will be reviewing these projections in an effort to further refine and where possible reduce or defer costs in order to mitigate the impact on assessments. The future availability of penalty funds and any excess operating reserves, to the extent generated in 2014, will also be taken into account. In addition, the projected assessments for 2015 and 2016 will be further updated to reflect the actual interest rate and amortization schedule of the capital additions, which are authorized to be financed under the approved 2014, 2015, and 2016 budgets.

**Statement of Activities, Fixed Assets Expenditures and Change in Working Capital  
2014 Budget & Projected 2015 and 2016 Budgets**

	2014 Budget	2015 Projection	\$ Change 15 v 14	% Change 15 v 14	2016 Projection	\$ Change 16 v 15	% Change 16 v 15
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ 51,401,382	\$ 55,993,807	\$ 4,592,424	8.93%	\$ 58,371,961	\$ 2,378,155	4.1%
Penalty Sanctions	290,000	-	(290,000)	-100.00%	-	-	-
<b>Total NERC Funding</b>	<b>\$ 51,691,382</b>	<b>\$ 55,993,807</b>	<b>\$ 4,302,424</b>	<b>8.3%</b>	<b>\$ 58,371,961</b>	<b>\$ 2,378,155</b>	<b>4.1%</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	1,620,000	1,620,000	-	0.00%	1,620,000	-	0.0%
Services & Software	50,000	50,000	-	0.00%	50,000	-	0.0%
Workshops	354,000	309,000	(45,000)	-12.71%	309,000	-	0.0%
Interest	20,000	20,000	-	0.00%	20,000	-	0.0%
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 53,735,382</b>	<b>\$ 57,992,807</b>	<b>\$ 4,257,424</b>	<b>7.9%</b>	<b>\$ 60,370,961</b>	<b>\$ 2,378,155</b>	<b>4.1%</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 26,218,572	\$ 26,874,036	\$ 655,464	2.5%	\$ 27,545,887	\$ 671,851	2.5%
Payroll Taxes	1,570,954	1,610,228	39,274	2.5%	1,650,484	40,256	2.5%
Benefits	3,385,917	3,641,810	255,893	7.6%	3,923,292	281,482	7.7%
Retirement Costs	2,884,211	2,956,316	72,105	2.5%	3,030,224	73,908	2.5%
<b>Total Personnel Expenses</b>	<b>\$ 34,059,654</b>	<b>\$ 35,082,391</b>	<b>\$ 1,022,737</b>	<b>3.0%</b>	<b>\$ 36,149,887</b>	<b>\$ 1,067,496</b>	<b>3.0%</b>
<b>Meeting Expenses</b>							
Meetings	\$ 1,052,150	\$ 1,052,150	\$ -	0.0%	\$ 1,052,150	-	0.0%
Travel	2,419,525	2,419,525	-	0.0%	2,419,525	-	0.0%
Conference Calls	317,851	317,851	-	0.0%	317,851	-	0.0%
<b>Total Meeting Expenses</b>	<b>\$ 3,789,525</b>	<b>\$ 3,789,525</b>	<b>\$ -</b>	<b>0.0%</b>	<b>\$ 3,789,525</b>	<b>\$ -</b>	<b>0.0%</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 6,828,973	\$ 7,143,540	314,567	4.6%	\$ 7,336,172	192,632	2.7%
Office Rent	2,617,300	2,632,300	15,000	0.6%	2,657,300	25,000	0.9%
Office Costs	3,506,074	3,752,979	246,905	7.0%	3,752,979	0	0.0%
Professional Services	2,290,280	2,290,280	-	0.0%	2,290,280	-	0.0%
Miscellaneous	36,500	36,500	-	0.0%	36,500	-	0.0%
Depreciation	2,333,006	2,114,705	(218,301)	-9.4%	2,750,705	636,000	30.1%
<b>Total Operating Expenses</b>	<b>\$ 17,612,133</b>	<b>\$ 17,970,305</b>	<b>\$ 358,171</b>	<b>2.0%</b>	<b>\$ 18,823,937</b>	<b>\$ 853,632</b>	<b>4.8%</b>
<b>Total Direct Expenses</b>	<b>\$ 55,461,313</b>	<b>\$ 56,842,221</b>	<b>\$ 1,380,908</b>	<b>2.5%</b>	<b>\$ 58,763,349</b>	<b>\$ 1,921,128</b>	<b>3.4%</b>
<b>Indirect Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>
<b>Other Non-Operating Expenses</b>	<b>\$ 144,000</b>	<b>\$ 236,000</b>	<b>\$ 92,000</b>	<b>63.9%</b>	<b>247,000</b>	<b>11,000</b>	<b>4.7%</b>
<b>Total Expenses (B)</b>	<b>\$ 55,605,313</b>	<b>\$ 57,078,221</b>	<b>\$ 1,472,908</b>	<b>2.6%</b>	<b>\$ 59,010,349</b>	<b>1,932,128</b>	<b>3.4%</b>
<b>Change in Assets</b>	<b>\$ (1,869,930)</b>	<b>\$ 914,586</b>	<b>\$ 2,784,516</b>	<b>-148.9%</b>	<b>\$ 1,360,613</b>	<b>\$ 446,027</b>	<b>48.8%</b>
<b>Fixed Assets</b>							
Depreciation	\$ (2,333,006)	\$ (2,114,705)	\$ 218,301	-9.4%	\$ (2,750,705)	\$ (636,000)	30.1%
Computer & Software CapEx	2,904,790	5,017,500	2,112,710	72.7%	3,167,500	(1,850,000)	-36.9%
Furniture & Fixtures CapEx	-	-	-	-	-	-	-
Equipment CapEx	213,000	535,000	322,000	151.2%	535,000	-	0.0%
Leasehold Improvements	-	-	-	-	-	-	-
Allocation of Fixed Assets	-	-	-	-	-	-	-
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ 784,784</b>	<b>\$ 3,437,795</b>	<b>\$ 2,653,011</b>	<b>338.1%</b>	<b>\$ 951,795</b>	<b>\$ (2,486,000)</b>	<b>0.0%</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 56,390,096</b>	<b>\$ 60,516,015</b>	<b>\$ 4,125,919</b>	<b>7.3%</b>	<b>\$ 59,962,144</b>	<b>\$ (553,872)</b>	<b>-0.9%</b>
<b>FTEs</b>	<b>189.53</b>	<b>189.53</b>	<b>-</b>	<b>-</b>	<b>189.53</b>	<b>-</b>	<b>-</b>

## Section A — 2014 Business Plan and Budget Program Area and Department Detail

### Reliability Standards

Reliability Standards Program (in whole dollars)				2014 Budget - Prior Draft	Variance to Prior Draft Over(Under)
	2013 Budget	2014 Budget	Increase (Decrease)		
Total FTEs	26.50	25.92	(0.58)	25.92	-
Direct Expenses	\$ 5,134,738	\$ 5,150,854	\$ 16,116	\$ 5,154,757	\$ (3,903)
Indirect Expenses	\$ 4,581,241	\$ 4,872,999	\$ 291,758	\$ 4,996,937	\$ (123,938)
Other Non-Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ 59,109	\$ 143,517	\$ 84,408	\$ 142,968	\$ 549
<b>TOTAL BUDGET</b>	<b>\$ 9,775,088</b>	<b>\$ 10,167,369</b>	<b>\$ 392,280</b>	<b>\$ 10,294,662</b>	<b>\$ (127,293)</b>

### Background and Scope

The Reliability Standards Program carries out the ERO's statutory responsibility to develop, adopt, obtain approval of, and modify as and when appropriate, mandatory reliability standards (both continent-wide standards and regional reliability standards) for the reliable planning, operation and critical infrastructure protection of the North American BPS.

NERC's ANSI-accredited standards development process was reaccredited in 2013 and found to be open, balanced, and transparent. As part of the standard development process, industry technical experts scope, draft, and review the new or revised NERC Reliability Standards for approval by the industry ballot body, adoption by the Board, and filing with regulatory authorities in the United States and Canada.

The major activities undertaken by NERC's standards department include:

- 1. Delivering high-quality, continent-wide reliability standards:** NERC standards developers and other standards staff provide project management and leadership for informal standard development activities, facilitate drafting team activities, support drafting, assist the drafting teams in maintaining adherence to the development process as outlined in the Standard Processes Manual, and ensure that the quality of documents produced are appropriate for approval by industry and the Board.
- 2. Facilitating continent-wide industry engagement:** NERC manages the work of over 200 industry contributors who serve on the Standards Committee and subgroups, as well as informal development, standards drafting, interpretation, and other project teams for the development of NERC standards through the standards development program.
- 3. Conducting balloting, disseminating information, and supporting regulatory filings:** Through NERC's commenting and ANSI-accredited balloting process, industry consensus is built by engaging thousands of industry volunteers within hundreds of registered entities throughout North America who review, comment on, and approve the

standards products created by the standard drafting teams. The department also supports the filing of standards with regulatory authorities and provides support in connection with regulatory proceedings.

The standards program also provides a mechanism for the eight Regional Entities to process regional standards when reliability gaps are detected at the regional level. The NERC Standards staff supports regional standards development processes by providing technical advice, final quality review of regional standards, presentation to the Board, and preparation of regional standards materials for submission to the applicable regulatory authorities in the United States and Canada for adoption.

### **Key Standards Production Efforts Underway in 2013**

Several years ago NERC's standards department began laying the foundation to transition from the existing set of NERC standards to a clear, concise, and stable body of world-class, high-quality standards that ensure the reliability of the BPS. In 2013, the standards department is taking additional steps to address regulatory directives and conduct quality reviews of existing standards. These actions are vital to ensuring standards are focused on significant reliability risks and reducing regulatory uncertainty. The three major work streams include:

- **Existing Projects/Emerging Issues** – Ensuring projects that support either high-risk reliability issues or emerging reliability issues are initiated or remain on schedule.
- **Five Year Reviews** – Initiating the review of standards that were due for assessment and have not been revised in recent development projects.
- **Directives** – Addressing FERC directives.

In conjunction with these work streams, two major initiatives were created to ensure standards address reliability risks and to eliminate standards or requirements that do not significantly benefit reliability and create unnecessary compliance burdens on industry:

- **Paragraph 81 Initiative:** On March 15, 2012, the Commission issued an order on NERC's Find, Fix, Track and Report (FFT) program. In the order, NERC was invited to make a proposal to the Commission identifying specific standards or requirements that need to be revised or retired because of the lack of any meaningful benefit to BPS reliability.
- **Results-Based Standards Initiative:** Ensuring that standards are focused on required actions or results (the "what") and not necessarily on the methods by which to accomplish those actions or results (the "how").

These two initiatives were applied to each standard or group of standards within the three major work streams to ensure that requirements with little or no benefit to reliability are eliminated and all new or revised standards are results-based. It is expected that these initiatives will lead to a concise set of standards that have the necessary combination of risk-, performance-, and capability-based requirements to ensure BPS reliability.

Based on the recommendation of the Member Representatives Committee's Standards Process Improvement Group, in 2013 NERC also began piloting methods to measure cost-effectiveness

of standards under development. The goal of this work is to ensure that the standards development process produces standards that cost-effectively address reliability gaps.

Finally, a key departmental objective is to transform the existing set of standards to a world-class, results-based and stable body of standards that are truly focused on supporting BPS reliability. To set the foundation for this transformation, NERC formed a standards independent expert review panel to evaluate NERC's standards and associated requirements. This panel will rate each standard requirement's content and quality. Their report will include recommendations to retire or improve requirements and will form the basis for a roadmap to support the standards development plan and standards transformation.

### **2014 Goals and Deliverables**

In 2014, the Standards department resources will be focused on the following three areas:

- 1. Transforming NERC's standards to high-quality, world-class, results-based standards:** NERC will complete its foundational work by addressing remaining regulatory obligations specified in regulatory directives and outstanding Paragraph 81 Phase 2 requirements candidates. Based on the work from the standards independent expert review panel, the 2014–2016 Reliability Standards Development Plan will launch a standard transformation to world-class, results-based standards in steady state. This transformation is expected to take approximately three years.
- 2. Develop a BPS reliability risk profile:** In coordination with the Reliability Issues Steering Committee and the ERO's technical committees, the Standards department will develop an overall North American-wide reliability risk profile for the BPS. Existing standards will then be evaluated to identify any high-risk reliability gaps. Risk-based standard development will be further refined and prioritized to address high-risk reliability gaps.
- 3. Develop methods to assess and manage cost-effectiveness (benefit) of new standards:** Additional pilots to assess the cost-effectiveness of standards will be undertaken in order to lay the groundwork for an adoption of approaches to better inform the standards development process regarding the cost-effectiveness of alternative approaches to meeting reliability objectives.

### **Resource Requirements**

#### **Personnel**

As in prior years, industry engagement is vital to successful standards development. In 2014, industry subject matter expert engagement requirements will remain steady from 2013, as the remaining projects from 2013 finalize in the first quarter of 2014. The transformation of NERC standards to steady state will require additional industry engagement throughout 2014.

NERC Standards management is also continuously considering ways to improve the efficiency of standard development activities. In 2013, NERC gained regulatory approval of revisions to its Standard Processes Manual, which adopted changes consistent with ANSI requirements for standards development and provides the potential to shorten standards development time frames. Further, in late 2012, the NERC Standards department evaluated the 2012 organization and determined changes were required to refocus resources on the production of standards,

rather than the executing and monitoring process. In October, the department was realigned into three teams of standards developers and one team focused on information management.

No additional personnel are planned to be added to the Standards department in 2014. The 0.58 reduction in FTEs is due to the assumption of 4% attrition in all departments. However, an increase in departmental travel expense is expected, given the number of standards initiatives expected to be underway.

**Contractors and Consultants**

No contractor and consulting support is budgeted in 2014, representing a \$150k reduction from the 2013 budget.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital 2013 Budget & Projection, and 2014 Budget							
RELIABILITY STANDARDS							
	2013 Budget	2013 Projection	Variance 2013 Projection v 2013 Budget Over(Under)	2014 Budget	Variance 2014 Budget v 2013 Budget Over(Under)	2014 Budget Draft 2	Variance to Prior Draft Over(Under)
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ 9,156,330	\$ 9,156,330	\$ -	\$ 10,000,443	\$ 844,113	\$ 10,127,981	\$ (127,538)
Penalty Sanctions	510,788	510,788	-	58,951	(451,837)	58,720	230
<b>Total NERC Funding</b>	<b>\$ 9,667,118</b>	<b>\$ 9,667,118</b>	<b>\$ -</b>	<b>\$ 10,059,394</b>	<b>\$ 392,276</b>	<b>\$ 10,186,702</b>	<b>\$ (127,308)</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-
Workshops	104,000	104,000	-	104,000	-	104,000	-
Interest	3,970	4,224	254	3,976	6	3,961	15
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 9,775,088</b>	<b>\$ 9,775,342</b>	<b>\$ 254</b>	<b>\$ 10,167,369</b>	<b>\$ 392,281</b>	<b>\$ 10,294,662</b>	<b>\$ (127,293)</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 3,335,519	\$ 3,273,607	\$ (61,912)	\$ 3,308,688	\$ (26,831)	\$ 3,308,688	-
Payroll Taxes	213,052	206,812	(6,240)	210,130	(2,922)	210,130	-
Benefits	350,484	357,589	7,105	454,850	104,366	482,501	(27,651)
Retirement Costs	362,334	340,835	(21,499)	377,588	15,254	377,588	-
<b>Total Personnel Expenses</b>	<b>\$ 4,261,388</b>	<b>\$ 4,178,843</b>	<b>\$ (82,546)</b>	<b>\$ 4,351,256</b>	<b>\$ 89,867</b>	<b>\$ 4,378,907</b>	<b>(27,651)</b>
<b>Meeting Expenses</b>							
Meetings	\$ 164,000	\$ 224,000	\$ 60,000	\$ 185,000	\$ 21,000	\$ 185,000	-
Travel	372,500	400,000	27,500	400,000	27,500	425,000	(25,000)
Conference Calls	108,500	123,748	15,248	123,748	15,248	75,000	48,748
<b>Total Meeting Expenses</b>	<b>\$ 645,000</b>	<b>\$ 747,748</b>	<b>\$ 102,748</b>	<b>\$ 708,748</b>	<b>\$ 63,748</b>	<b>\$ 685,000</b>	<b>23,748</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 150,000	\$ 380,367	\$ 230,367	\$ -	\$ (150,000)	\$ -	-
Office Rent	-	-	-	-	-	-	-
Office Costs	77,850	84,314	6,464	90,350	12,500	90,350	-
Professional Services	-	-	-	-	-	-	-
Miscellaneous	500	700	200	500	-	500	-
Depreciation	-	2,883	2,883	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 228,350</b>	<b>\$ 468,264</b>	<b>\$ 239,914</b>	<b>\$ 90,850</b>	<b>\$ (137,500)</b>	<b>\$ 90,850</b>	<b>\$ -</b>
<b>Total Direct Expenses</b>	<b>\$ 5,134,738</b>	<b>\$ 5,394,855</b>	<b>\$ 260,116</b>	<b>\$ 5,150,854</b>	<b>\$ 16,115</b>	<b>\$ 5,154,757</b>	<b>\$ (3,903)</b>
<b>Indirect Expenses</b>	<b>\$ 4,581,241</b>	<b>\$ 5,070,006</b>	<b>\$ 488,765</b>	<b>\$ 4,872,999</b>	<b>\$ 291,758</b>	<b>\$ 4,996,937</b>	<b>\$ (123,938)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 9,715,979</b>	<b>\$ 10,464,861</b>	<b>\$ 748,881</b>	<b>\$ 10,023,853</b>	<b>\$ 307,873</b>	<b>\$ 10,151,694</b>	<b>\$ (127,841)</b>
<b>Change in Assets</b>	<b>\$ 59,109</b>	<b>\$ (689,520)</b>	<b>\$ (748,628)</b>	<b>\$ 143,517</b>	<b>\$ 84,409</b>	<b>\$ 142,968</b>	<b>548</b>
<b>Fixed Assets</b>							
Depreciation	\$ -	\$ (2,883)	\$ (2,883)	\$ -	\$ -	\$ -	\$ -
Computer & Software CapEx	-	-	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-	-	-
Allocation of Fixed Assets	\$ 59,109	43,250	(15,859)	143,517	84,408	142,968	548
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>59,109</b>	<b>40,366</b>	<b>(18,743)</b>	<b>143,517</b>	<b>84,408</b>	<b>142,968</b>	<b>548</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 9,775,088</b>	<b>\$ 10,505,228</b>	<b>\$ 730,139</b>	<b>\$ 10,167,369</b>	<b>\$ 392,280</b>	<b>\$ 10,294,662</b>	<b>\$ (127,293)</b>
<b>FTEs</b>	<b>26.50</b>	<b>26.25</b>	<b>(0.25)</b>	<b>25.92</b>	<b>(0.58)</b>	<b>25.92</b>	<b>0.00</b>

### Summary of Variances by Category – 2014 Budget Compared to the 2013 Budget

- Personnel** – Salaries and payroll tax expenses are projected to be lower in 2014 due to an estimated 4% attrition rate. Benefits are projected to be higher due to; (i) the higher cost per employee of employee benefits plans and, (ii) the allocation of benefit expenses that were budgeted in Human Resources in prior years, including education, training and relocation expenses. Retirement expense is projected to be higher in 2014 due to having all positions filled on January 1, 2014, compared to 2013, which included reductions in budgeted retirement expense related to eligibility due to the timing of hiring.

- **Meetings, Travel and Conferencing Expenses** – Increases in meetings and travel expenses are due to the number of standards initiatives expected in 2014. The projected increase in conferencing expense is based upon 2013 trends.
- **Consultants and Contracts** – There are no requirements for support from outside consultants for the Standards program in 2014.
- **Office Costs** – The increase is due to higher cellular and air card expenses.

## Compliance Monitoring and Enforcement and Organization Registration and Certification

The Compliance Monitoring and Enforcement and Organization Registration and Certification Program's purpose is to monitor, enforce, and ensure registered entity compliance with the ERO's mandatory standards. This program area includes oversight of the registration and certification of BPS users, owners, and operators and is broken down into two departments for operational and financial reporting purposes: (1) the Compliance Operations department, and (2) the Enforcement department.

### Compliance Operations Department

Compliance Operations (in whole dollars)				2014 Budget -Prior Draft	Variance to Prior Draft Over(Under)
2013 Budget	2014 Budget	Increase (Decrease)			
Total FTEs	24.00	23.04	(0.96)	23.04	-
Direct Expenses	\$ 4,787,043	\$ 5,037,321	\$ 250,279	\$ 5,404,168	\$ (366,847)
Indirect Expenses	\$ 4,149,048	\$ 4,331,554	\$ 182,506	\$ 4,441,722	\$ (110,168)
Other Non-Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ (7,098)	\$ 127,570	\$ 134,668	\$ 127,083	\$ 487
TOTAL BUDGET	\$ 8,928,994	\$ 9,496,446	\$ 567,454	\$ 9,672,973	\$ (176,527)

### Background and Scope

NERC's Compliance Operations department works collaboratively with the eight Regional Entities to ensure consistent and effective implementation of the Compliance Monitoring and Enforcement Program (CMEP).

The Compliance Operations department is responsible for the following major activities and functions:

- Consistent implementation of the risk-based compliance monitoring program, including registration and certification, for reliability improvements;
- ERO education programs that support industry compliance and the integration of risk assessment and internal controls;
- Development of minimum baseline monitoring requirements;
- Oversight of the Regional Entities' delegated compliance functions, including:
  - CMEP planning, implementation, and reporting,
  - Compliance operations and coordination, and
  - Auditor training;
- Development and maintenance of Reliability Standard Audit Worksheets (RSAWs); and
- Support for the Compliance and Certification Committee (CCC).

## 2014 Goals and Deliverables

### Reliability Assurance Initiative

During 2013, consistent with the goals and objectives set forth in the Strategic Plan, NERC established a Reliability Assurance Initiative (RAI) as part of its stated objectives of ensuring BPS reliability, improving the efficiency and effectiveness of NERC and Regional Entity compliance and enforcement operations, and reducing unnecessary costs to registered entities by focusing compliance oversight and enforcement resources on significant risks to reliability. Implementing the RAI program is a multiyear effort that involves compliance and enforcement process changes, development of new tools and training materials, and a variety of related efforts. These initiatives are specifically aimed at moving the ERO toward a culture of reliability through improved compliance monitoring and enforcement mechanisms. Moreover, these initiatives will also eliminate known problems with the current “zero-tolerance” processes that place unnecessary administrative burdens on registered entities and consume far too many NERC and Regional Entity resources.

The major RAI activities for 2013 include: (1) identifying and implementing process improvements to the self-reporting process; (2) implementing FFT enhancements; (3) developing an auditor handbook and checklist for use by compliance auditors; and (4) initiating small prototype and pilot programs focused on developing entity risk assessments and developing processes for evaluating and testing internal controls. As further discussed under the Enforcement Department section of the 2014 Business Plan and Budget, the first two activities—self-reporting and FFT enhancements—seek to better align NERC and the Regional Entity enforcement processing activities with the level of risk the particular activity poses to the reliability of the BPS. These activities promote efficiencies for both the ERO Enterprise and registered entities by eliminating undue regulatory burdens, streamlining documentation and filing requirements, and substantially improving the processing of alleged violations and their companion mitigation plans.

An audit handbook, which is being developed in 2013, will be utilized across the entire ERO by all compliance auditors and will support the audit processes outlined in the audit checklist. The audit handbook will address concerns voiced by registered entities (particularly those with operations in more than one region) that differing audit practices exist in various regions and among various audit teams within those regions. Registered entities will benefit from the handbook because it will promote consistency in regional compliance audit practices, eliminating guesswork for entities in pre-audit preparations. Lastly, the prototypes and pilot programs will focus on how to best develop registered entity reliability risk assessment profiles and perform reviews and tests of internal controls. These pilots are an excellent means by which the newly developed tools and procedures can be tested and modified based upon actual results from the field, firsthand experiences, and lessons learned.

Three major activities are planned for 2014 that will build upon the framework and improvements implemented as a result of the ongoing RAI activities in 2013. These activities include: (1) developing a training program to support implementation of the common audit procedures developed in 2013; (2) assessing the existing compliance, reporting, analysis tracking system (CRATS) and other compliance tools to support RAI activities; and (3)

developing prototypes and pilot programs to support the development of registered entity reliability risk assessments and compliance monitoring scoping projects. These activities are necessary to implement the strategic reforms to the compliance monitoring and enforcement program. The bulk of these activities will be resourced with staff from NERC and the Regional Entities. However, as detailed below, certain activities require funding for an outside consultant with specialized industry expertise or experience. Where appropriate, the plan will leverage volunteers from industry. For instance, a number of prototypes and pilot programs will include testing operational aspects of the RAI activities with volunteer registered entities. This mix of resources will allow NERC to deliver the RAI deliverables in a timely way, at an effective cost, and in a manner that ensures ERO Enterprise personnel will be equipped to execute the new processes and procedures in future years. The details regarding the 2014 initiatives and contractor and consulting resources are described below.

(1) Developing a training program to support implementation of common audit procedures

The Compliance Operations department responsibilities include supporting the development of highly qualified and trained compliance operations and auditing staffs at both NERC and the Regional Entities by ensuring the proper qualifications of personnel for auditing and other essential compliance roles and providing proper training. A training program is also necessary to support the implementation of compliance monitoring and enforcement activities related to RAI. NERC will work directly with the Regional Entities to develop proper implementation and integration of the tools and processes developed during 2013, specifically the RAI Standardized Compliance Auditor Handbook and Checklist, and also incorporate lessons learned from the pilots. This training is essential for ensuring that all Regions are consistently applying the procedures and methodologies identified in the audit handbook. Additionally, the training program will address any other auditor needs associated with RAI improvements to the Compliance Monitoring and Enforcement Program (CMEP), including redesigned compliance communication tools. Another key component of the training program will focus on implementing changes related to enforcement processing, specifically changes to the self-reporting process and enhancements to the FFT process. This program will be developed in collaboration with the Regions and coordinated by NERC. External resources are needed to assist in developing these materials in time so they can be delivered throughout 2014. The 2014 budget for external consulting support for these training-related activities is \$150k, with another \$150k projected in 2015.

This training will provide a significant benefit to registered entities, because it will promote consistency of approach in the audit practices utilized by the regional audit teams. Regional Entity audit staffs will be trained on the proper practices for use by their auditor teams, which will promote audit consistency in both approach and performance, and thereby benefit registered entities. The training will address topics such as the proper timing for document requests, the types of documentation requested, the quality and level of detail necessary for various types of acceptable evidence, and the ability of the entity to present alternative forms of evidence to exhibit compliance. Setting clear expectations for registered entities regarding audit practices and procedures should also allow registered entities to increase the efficiency and effectiveness of their pre-audit preparation.

(2) Assessing existing compliance tools that support compliance and enforcement operations

One key RAI activity for 2014 is the assessment and development of the ERO's Compliance Reporting and Tracking System (CRATS) and other available information systems and tools that are necessary to support the implementation and management of risk-based compliance monitoring and enforcement activities across NERC and the Regional Entities. The current CRATS software application is used to manage compliance and enforcement information through a combination of: (1) SharePoint for physical document retention, (2) a violation-tracking database with a translator, and (3) two different database applications. As described below, the capabilities of the current system will not support the compliance and enforcement process improvements that are contemplated under the Strategic Plan and instead will be designed and implemented through the RAI. The improvements in the self-reporting process and FFT enhancements will result in changes in compliance and enforcement data, retention requirements, and analysis, which will require changes to the supporting information systems and database management capabilities within CRATS.

Resources are needed to assess and make enhancements to the CRATS program or develop a replacement application. Outside consulting resources will be required to support this work. The major undertakings requiring consulting support in 2014 will include:

- A comprehensive assessment of the CRATS application and other compliance and enforcement platforms currently in use by the Regional Entities.
- Identification of the data and analytic requirements needed to support the risk assessment and processing requirements associated with RAI.
- Identification of how and the extent to which CRATS and any Regional Entity applications can be utilized and incorporated into the newly developed enforcement processing activities, including contemplated changes in self-reporting and FFT enhancements. These tools must ensure data integrity and accuracy to allow for effective oversight, as well as be flexible enough to accommodate possible segregation of matters not pursued through enforcement and streamlined reporting requirements.
- Recommendations regarding the development of an ERO-wide compliance information management and reporting system, including identification of the best platform to support this system.

Consultants in 2014 will focus on defining the business requirements for the tools needed to enable the RAI-related changes. These requirements and recommendations will be used to guide future ERO Enterprise applications development, which is anticipated beginning in 2015. \$250k has been budgeted for these external consulting resource needs in 2014.

(3) Assessing reliability risks and scoping compliance monitoring

In 2014, NERC and the Regional Entities will develop new prototype audit processes based on lessons learned from the 2013 pilots. This work will include an analysis of the results of the 2013 pilots, refining assessments of risk in the determination of audit scoping, and designing a second wave of pilots to test these updated procedures.

Lessons learned from the 2013 pilot programs will be shared with registered entities so they can be incorporated into their respective risk assessments. Additionally, during 2014 an industry team working with NERC and the Regional Entities will develop guidance documents on internal controls for use by registered entities. As part of the development of these guidance documents, the team will prepare scoping materials regarding how a registered entity's internal controls could be assessed and tested to provide a reasonable assurance of compliance with applicable standards. This information will then be utilized to develop and document a methodology that can be provided to the registered entities for use in developing their internal control programs.

The core concept of risk-based compliance monitoring is to provide guidance to Regional Entities regarding how to appropriately scope compliance monitoring activities and methods (frequency and scope of standards to be monitored) based on each entity's potential impact to the BPS. Through continued refinement of the risk-based compliance monitoring program, NERC seeks to ensure that registered entities are monitored in a cost-effective manner. Registered entities will also benefit from these activities since the development of this methodology will take into account differences in registered entity size and the differing levels of risk posed to the bulk power system and will provide the appropriate scoping of audits. The emphasis on internal controls will also benefit registered entities by influencing the type of compliance approach used and the amount of monitoring deemed necessary to establish a reasonable assurance of compliance. Enhanced compliance monitoring approaches and properly scoped audits translate into reduced resources expended and other compliance-related savings for registered entities.

NERC's 2014 budget does not include funding for outside consultants to support the development of these scoping materials in 2014; instead, NERC believes this work will be undertaken by internal resources with industry support.

### ***Registration Efficiencies***

Throughout 2014, the Compliance Operations department, in coordination with the Regional Entities, will continue registered entity mapping activities to ensure the registry criteria is accurate and that gaps in and duplication of registration and compliance monitoring do not occur. NERC takes its obligation seriously to ensure that all entities that should be registered are accounted for.

Part of this effort includes enabling the registration process to be flexible and cost-effective. This is one way to increase the likelihood that applicable entities of all sizes and resource levels are able to become registered. Having appropriate registration is critical to compliance monitoring activities and enforcement activities. Elimination of duplicative or concurrent registration equates to better use of resources at both the registered entity level in the implementation of compliance programs, and at the Regional level in regard to overall compliance monitoring efforts.

***Ensure Industry Understanding of Compliance Requirements, Reduce Unnecessary Compliance Documentation, and Support Standards Development***

The Compliance Operations department will continue efforts to ensure that all registered entities understand their compliance obligations and how compliance will be assessed. Compliance department staff will continue its work in reducing the variety of compliance documents currently produced and revising the RSAW tool to be more effective and less burdensome. An RSAW must provide sufficient information to assist auditors in assessing compliance; as well, an entity should be able to utilize an RSAW as a tool to measure its compliance and prepare for an audit.

Compliance staff will provide compliance and enforcement information, statistics, and perspectives to standard drafting teams to foster the development of standards that provide an increased reliability benefit and clarify compliance risks. Compliance department staff will continue its collaboration with industry and Standards department staff early in the standards development process by providing draft RSA guidance, including information on how compliance with draft standards will be determined, as well as their views regarding the auditability and enforceability of the draft standards. This will better ensure that an RSAW serves as a tool in the auditing process and is not used or viewed as a tool to expand or modify standards requirements. After the Board approves a reliability standard and before the standard's effective date, NERC will conduct compliance trials to provide auditors and industry clear expectations of compliance.

NERC's goal is for registered entities to have effective compliance programs and internal controls. As discussed in connection with the RAI, greater consideration of internal controls in the compliance monitoring program is a proactive and forward-looking method of supporting reliability. NERC, the Regional Entities, and industry collaborated to improve the risk-based compliance monitoring program. The result is an Entity Impact Evaluation template that will support a consistent, risk-based approach to how registered entities can be assessed and how compliance monitoring activities may be scoped. As this component of the risk-based compliance monitoring program matures, NERC will rely on industry volunteers for participation in its development.

***Regional Entity Audit Oversight***

Compliance Operations department staff will oversee Regional Entity audits and conduct Key Reliability Standard Spot Checks.

***Resource Requirements***

**Personnel**

The Compliance Operations department is not proposing the addition of staff in 2014. The 0.96 reduction in FTEs is due to the assumption of 4% attrition in all departments and the transfer of 1.0 FTE to another department in 2013.

**Contractors and Consultants**

NERC has budgeted a total of \$400k in contractor and consulting support for the RAI in 2014. This includes \$150k for outside consulting support for the development of auditor training materials and \$250k for outside consulting support to assist in the assessment of the existing

software application supporting compliance, registration, and enforcement operations. It also assistance on defining the business requirements to update or replace the existing application, with development and funding of the replacement application to be undertaken in 2015.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital 2013 Budget & Projection, and 2014 Budget							
COMPLIANCE OPERATIONS, INVESTIGATIONS and ORGANIZATION REGISTRATION and CERTIFICATION							
	2013 Budget	2013 Projection	Variance 2013 Projection v 2013 Budget Over(Under)	2014 Budget	Variance 2014 Budget v 2013 Budget Over(Under)	2014 Budget Draft 2	Variance to Prior Draft Over(Under)
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ 8,422,798	\$ 8,422,798	\$ (0)	\$ 9,400,511	\$ 977,713	\$ 9,577,256	\$ (176,745)
Penalty Sanctions	462,601	\$ 462,601	-	52,401	(410,200)	52,196	205
<b>Total NERC Funding</b>	<b>\$ 8,885,399</b>	<b>\$ 8,885,399</b>	<b>\$ (0)</b>	<b>\$ 9,452,912</b>	<b>\$ 567,513</b>	<b>\$ 9,629,452</b>	<b>\$ (176,541)</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-
Workshops	40,000	20,000	(20,000)	40,000	-	40,000	-
Interest	3,596	3,760	164	3,534	(62)	3,521	13
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 8,928,994</b>	<b>\$ 8,909,159</b>	<b>\$ (19,836)</b>	<b>\$ 9,496,446</b>	<b>\$ 567,451</b>	<b>\$ 9,672,973</b>	<b>\$ (176,527)</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 3,202,041	\$ 3,307,335	\$ 105,294	\$ 3,192,809	\$ (9,232)	\$ 3,192,809	-
Payroll Taxes	202,103	209,693	7,590	202,068	(35)	202,068	-
Benefits	325,579	386,563	60,984	404,311	78,732	428,890	(24,579)
Retirement Costs	368,031	327,522	(40,509)	364,901	(3,130)	364,901	-
<b>Total Personnel Expenses</b>	<b>\$ 4,097,754</b>	<b>\$ 4,231,113</b>	<b>\$ 133,359</b>	<b>\$ 4,164,089</b>	<b>\$ 66,335</b>	<b>\$ 4,188,668</b>	<b>(24,579)</b>
<b>Meeting Expenses</b>							
Meetings	\$ 80,000	\$ 60,000	\$ (20,000)	\$ 70,000	\$ (10,000)	\$ 70,000	-
Travel	440,500	312,657	(127,843)	312,657	(127,843)	367,500	(54,843)
Conference Calls	34,235	16,574	(17,661)	16,574	(17,661)	4,000	12,574
<b>Total Meeting Expenses</b>	<b>\$ 554,735</b>	<b>\$ 389,232</b>	<b>\$ (165,503)</b>	<b>\$ 399,232</b>	<b>\$ (155,503)</b>	<b>\$ 441,500</b>	<b>(42,268)</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ -	\$ 60,000	\$ 60,000	\$ 400,000	\$ 400,000	\$ 400,000	-
Office Rent	-	-	-	-	-	-	-
Office Costs	73,424	71,713	(1,711)	73,500	76	73,500	-
Professional Services	-	7,600	7,600	-	-	-	-
Miscellaneous	500	100	(400)	500	-	500	-
Depreciation	60,630	64,869	4,239	-	(60,630)	-	-
<b>Total Operating Expenses</b>	<b>\$ 134,554</b>	<b>\$ 204,282</b>	<b>\$ 69,728</b>	<b>\$ 474,000</b>	<b>\$ 339,446</b>	<b>\$ 474,000</b>	<b>\$ -</b>
<b>Total Direct Expenses</b>	<b>\$ 4,787,043</b>	<b>\$ 4,824,626</b>	<b>\$ 37,583</b>	<b>\$ 5,037,321</b>	<b>\$ 250,278</b>	<b>\$ 5,104,168</b>	<b>\$ (66,847)</b>
<b>Indirect Expenses</b>	<b>\$ 4,149,048</b>	<b>\$ 4,513,754</b>	<b>\$ 364,706</b>	<b>\$ 4,331,554</b>	<b>\$ 182,506</b>	<b>\$ 4,441,722</b>	<b>\$ (110,167)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 8,936,092</b>	<b>\$ 9,338,381</b>	<b>\$ 402,290</b>	<b>\$ 9,368,875</b>	<b>\$ 432,784</b>	<b>\$ 9,545,890</b>	<b>\$ (177,014)</b>
<b>Change in Assets</b>	<b>\$ (7,098)</b>	<b>\$ (429,222)</b>	<b>\$ (422,126)</b>	<b>\$ 127,570</b>	<b>\$ 134,666</b>	<b>\$ 127,083</b>	<b>487</b>
<b>Fixed Assets</b>							
Depreciation	(60,630)	(64,869)	(4,239)	-	60,630	-	-
Computer & Software CapEx	-	-	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	0	-	-
Equipment CapEx	-	-	-	-	0	-	-
Leasehold Improvements	-	-	-	-	0	-	-
Allocation of Fixed Assets	\$ 53,532	\$ 38,505	(15,027)	127,570	74,038	\$ 127,083	487
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>\$ (7,098)</b>	<b>\$ (26,364)</b>	<b>\$ (19,266)</b>	<b>\$ 127,570</b>	<b>\$ 134,668</b>	<b>\$ 127,083</b>	<b>\$ 487</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 8,928,994</b>	<b>\$ 9,312,016</b>	<b>\$ 383,023</b>	<b>\$ 9,496,446</b>	<b>\$ 567,453</b>	<b>\$ 9,672,973</b>	<b>\$ (176,527)</b>
<b>FTEs</b>	<b>24.00</b>	<b>23.37</b>	<b>(0.63)</b>	<b>23.04</b>	<b>(0.96)</b>	<b>23.04</b>	<b>-</b>

### Summary of Variances by Category – 2014 Budget Compared to the 2013 Budget

- **Personnel** – Salaries, payroll tax and retirement expenses are projected to be lower in 2014 due to an estimated 4% attrition rate. Benefits are projected to be higher due to; (i) the higher cost per employee of employee benefits plans and, (ii) the allocation of

benefit expenses that were budgeted in Human Resources in prior years, including education, training and relocation expenses.

- **Meetings, Travel and Conferencing Expenses** – Meetings, travel and conferencing expenses are expected to be lower in 2014 based upon trending of actual expenses in 2013 and the reduction in FTEs.
- **Consultants and Contracts** – The increase is related to the reliability assurance initiative, for the development of a training program and the assessment of enhancements to the CRATS program or the development of a replacement application as described above.

## Compliance Enforcement Department

Compliance Enforcement (in whole dollars)			Increase (Decrease)	2014 Budget -Prior Draft	Variance to Prior Draft Over(Under)
2013 Budget	2014 Budget				
Total FTEs	21.00	18.24	(2.76)	18.24	-
Direct Expenses	\$ 3,047,746	\$ 2,864,951	\$ (182,794)	\$ 2,920,530	\$ (55,579)
Indirect Expenses	\$ 3,630,417	\$ 3,429,147	\$ (201,270)	\$ 3,516,363	\$ (87,216)
Other Non-Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ 46,841	\$ 100,993	\$ 54,152	\$ 100,607	\$ 386
<b>TOTAL BUDGET</b>	<b>\$ 6,725,004</b>	<b>\$ 6,395,091</b>	<b>\$ (329,912)</b>	<b>\$ 6,537,500</b>	<b>\$ (142,409)</b>

### Background and Scope

The Compliance Enforcement department is responsible for overseeing enforcement processes, the application of penalties or sanctions, and activities to mitigate and prevent recurrence of remediated issues or confirmed violations of ERO standards.

A priority for this department is to ensure noncompliance is timely mitigated while at the same time focusing both NERC and Regional Entity enforcement resources on the matters that have the greatest impact on BPS reliability.

NERC's Compliance Enforcement department performs its responsibilities through:

- Monitoring Regional Entities' enforcement processes to ensure due process, to identify best practices and process efficiency opportunities, and to promote consistency among Regional Entities' business practices;
- Collecting and analyzing compliance enforcement and violation data and trends to assist with the identification of emerging risks and to help inform the development of enforcement policy and processes;
- Filing notices of penalty and other submittals associated with violations discovered through Regional Entity compliance, enforcement, and monitoring activities;
- Processing and filing notices of penalty and other submittals associated with violations discovered through NERC-led investigations and audits; and
- Docketing possible violations coming into the NERC enforcement program.

### 2014 Goals and Deliverables

#### ***Relationship to the Reliability Assurance Initiative (RAI) and expansion of the Find, Fix, Track and Report (FFT) program***

As previously stated, RAI was launched to identify and implement changes that enhance the effectiveness of the ERO enterprise's compliance monitoring and enforcement and reduce unnecessary burdens and costs on registered entities. Activities associated with the expansion of the FFT program are being conducted within the umbrella of the RAI program as priority projects.

Throughout the remainder of 2013 and into 2014, NERC's Enforcement department will continue to focus efforts on ensuring the sustainability and expandability of the FFT process. In addition to ongoing efforts aimed at addressing the consistency in application of CMEP program and documentation requirements, NERC and the Regional Entities will also work to implement the incremental enhancements proposed to FERC in NERC's March 15, 2013 FFT filing upon receipt of the necessary approvals.

Through FFT, NERC and the Regional Entities are also working on identifying opportunities for efficiencies in the processing of minimal risk issues found at audits. This project is being developed under the RAI umbrella but has its own timelines and milestones and is independent of other aspects of the RAI program. NERC expects to conduct one or more pilots in the fourth quarter of 2013 and will continue to test additional process improvements during 2014.

Another priority project under the RAI umbrella is the identification of improvements to the self-report process. Among other things, this project is considering changes to how the information associated with minimal risk issues flows from the registered entity to the Regional Entity to NERC. NERC expects to implement pilots to test process improvements beginning in the fourth quarter of 2013 and continuing during 2014.

Finally, the RAI program includes a project to develop guidelines for exercising greater discretion in identifying when noncompliance requires formal enforcement action. The assessment phase of this project is expected to go through the end of 2013 and continue in 2014.

### ***Violation Trend Analysis***

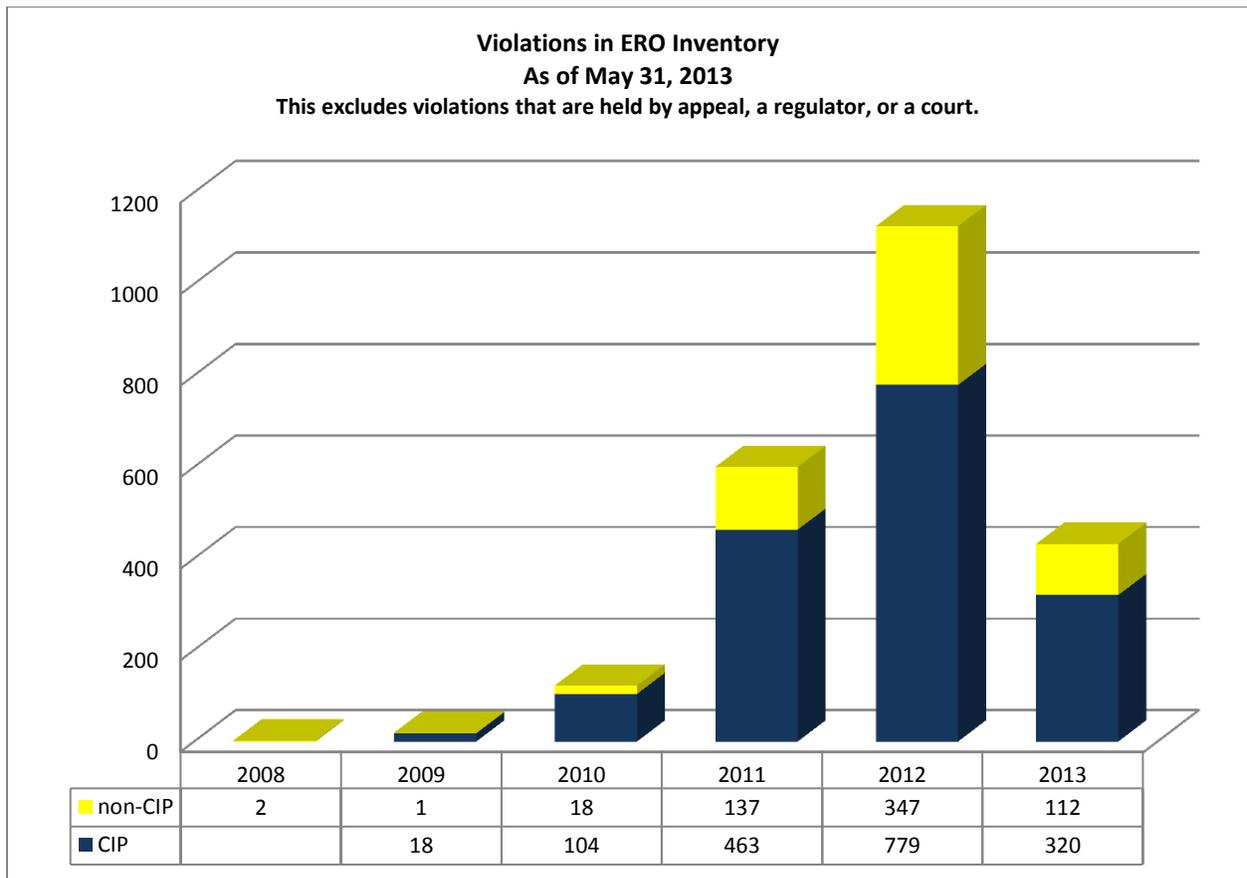
The Enforcement department continues to analyze the violations and processing information to identify trends and emerging risks and to gain insight into the effectiveness of NERC and the Regional Entities' processes and programs. The analysis is utilized in the development of enforcement policy and processes. In addition, the analysis is used to provide feedback to other departments, such as Standards. NERC's Enforcement department works in close collaboration with other NERC departments to leverage analytics as a risk management and resource allocation tool.

### ***Reduction of Outstanding Caseload and Increased Processing Efficiencies***

Throughout 2014, NERC's Enforcement department will continue to identify processing efficiencies to guide enhancements in enforcement activities and remain focused on issues that reduce BPS reliability risk.

Timely processing of violations will be another area of focus, particularly those that pose greater BPS risk and can provide lessons learned to industry. Early dissemination of violation information to registered entities will enable them to learn from prior events and violations so they may take preventative actions to eliminate similar risks.

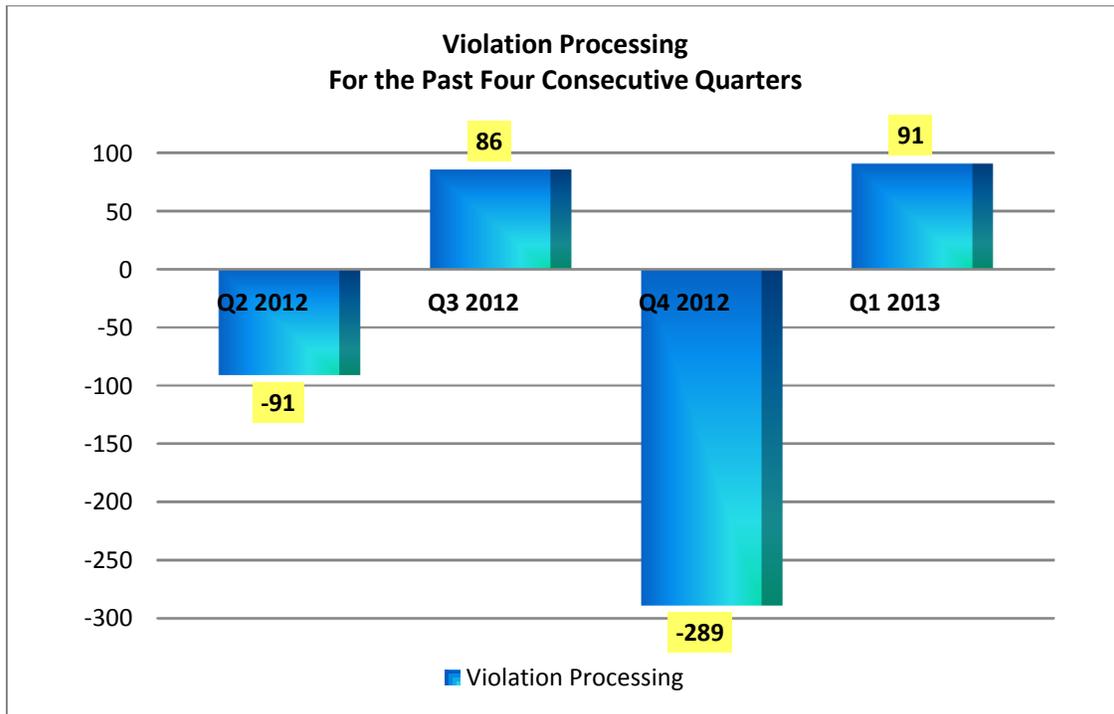
As of May 31, 2013, NERC's Enforcement department reduced the number of active violations discovered prior to January 1, 2012 (those that are not held by appeal, a regulator, or a court), by 46%.



The Enforcement department continues to work with the Regional Entities to significantly reduce this prior caseload by closing the possible violations and providing information on prior violations to registered entities throughout the remainder of 2013 and in 2014.

The following chart shows the processing rates for the past four consecutive quarters. It includes both filed and dismissed violations and shows the number of incoming violations (fewer violations filed or dismissed) that required processing during the given quarter.

## Violation Processing Within 12 Months



### Resource Requirements

#### *Personnel*

No additional Enforcement personnel are being proposed in 2014. The 2.76 reduction in FTEs is due to the assumption of 4% attrition in all departments and due to the transfer of 2.0 FTEs to other departments in 2013.

#### *Contractor Expenses*

The cost for outside consulting assistance to conduct an assessment of the software application supporting the department’s compliance reporting, analysis, and tracking needs has been budgeted under the Compliance Operations department.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital 2013 Budget & Projection, and 2014 Budget							
COMPLIANCE ENFORCEMENT							
	2013	2013	Variance	2014	Variance	2014 Budget	Variance to
	Budget	Projection	2013 Projection	Budget	2014 Budget	2014 Budget	Prior Draft
			v 2013 Budget		v 2013 Budget	Draft 2	Over(Under)
			Over(Under)		Over(Under)		
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ 6,317,083	\$ 6,317,083	\$ (0)	\$ 6,350,810	\$ 33,727	\$ 6,493,392	\$ (142,582)
Penalty Sanctions	404,776	404,775		41,484	(363,292)	41,322	162
<b>Total NERC Funding</b>	<b>\$ 6,721,858</b>	<b>\$ 6,721,858</b>	<b>\$ (0)</b>	<b>\$ 6,392,293</b>	<b>\$ (329,566)</b>	<b>\$ 6,534,713</b>	<b>\$ (142,420)</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-
Workshops	-	-	-	-	-	-	-
Interest	3,146	2,711	(435)	2,798	(348)	2,787	11
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 6,725,004</b>	<b>\$ 6,724,569</b>	<b>\$ (435)</b>	<b>\$ 6,395,091</b>	<b>\$ (329,914)</b>	<b>\$ 6,537,500</b>	<b>\$ (142,409)</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 2,152,370	\$ 1,909,732	\$ (242,638)	\$ 2,043,427	\$ (108,943)	\$ 2,043,427	-
Payroll Taxes	140,794	121,393	(19,401)	132,855	(7,939)	132,855	-
Benefits	274,883	224,621	(50,262)	320,080	45,197	339,538	(19,458)
Retirement Costs	247,200	202,884	(44,316)	234,210	(12,990)	234,210	-
<b>Total Personnel Expenses</b>	<b>\$ 2,815,246</b>	<b>\$ 2,458,630</b>	<b>\$ (356,617)</b>	<b>\$ 2,730,572</b>	<b>\$ (84,675)</b>	<b>\$ 2,750,030</b>	<b>(19,458)</b>
<b>Meeting Expenses</b>							
Meetings	\$ 5,000	\$ 5,000	\$ -	\$ 2,500	\$ (2,500)	\$ 2,500	-
Travel	186,000	85,298	(100,702)	85,298	(100,702)	120,000	(34,702)
Conference Calls	-	5,081	5,081	5,081	5,081	6,500	(1,419)
<b>Total Meeting Expenses</b>	<b>\$ 191,000</b>	<b>\$ 95,379</b>	<b>\$ (95,621)</b>	<b>\$ 92,879</b>	<b>\$ (98,121)</b>	<b>\$ 129,000</b>	<b>(36,121)</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Office Rent	-	-	-	-	-	-	-
Office Costs	41,000	34,774	(6,226)	41,000	-	41,000	-
Professional Services	-	480	480	-	-	-	-
Miscellaneous	500	100	(400)	500	-	500	-
Depreciation	-	2,724	2,724	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 41,500</b>	<b>\$ 38,078</b>	<b>\$ (3,422)</b>	<b>\$ 41,500</b>	<b>\$ -</b>	<b>\$ 41,500</b>	<b>\$ -</b>
<b>Total Direct Expenses</b>	<b>\$ 3,047,746</b>	<b>\$ 2,592,087</b>	<b>\$ (455,660)</b>	<b>\$ 2,864,951</b>	<b>\$ (182,796)</b>	<b>\$ 2,920,530</b>	<b>\$ (55,579)</b>
<b>Indirect Expenses</b>	<b>\$ 3,630,417</b>	<b>\$ 3,254,461</b>	<b>\$ (375,956)</b>	<b>\$ 3,429,147</b>	<b>\$ (201,270)</b>	<b>\$ 3,516,363</b>	<b>\$ (87,216)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>-</b>					
<b>Total Expenses (B)</b>	<b>\$ 6,678,163</b>	<b>\$ 5,846,548</b>	<b>\$ (831,616)</b>	<b>\$ 6,294,098</b>	<b>\$ (384,066)</b>	<b>\$ 6,436,893</b>	<b>\$ (142,795)</b>
<b>Change in Assets</b>	<b>\$ 46,841</b>	<b>\$ 878,021</b>	<b>\$ 831,181</b>	<b>\$ 100,993</b>	<b>\$ 54,152</b>	<b>\$ 100,607</b>	<b>386</b>
<b>Fixed Assets</b>							
Depreciation	-	(2,724)	(2,724)	-	-	-	-
Computer & Software CapEx	-	2,199	2,199	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	0	-	-
Equipment CapEx	-	-	-	-	0	-	-
Leasehold Improvements	-	-	-	-	0	-	-
Allocation of Fixed Assets	\$ 46,841	\$ 27,762	(19,079)	100,993	54,152	\$ 100,607	386
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>\$ 46,841</b>	<b>\$ 27,237</b>	<b>\$ (19,604)</b>	<b>\$ 100,993</b>	<b>\$ 54,152</b>	<b>\$ 100,607</b>	<b>\$ 386</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 6,725,004</b>	<b>\$ 5,873,785</b>	<b>\$ (851,220)</b>	<b>\$ 6,395,091</b>	<b>\$ (329,914)</b>	<b>\$ 6,537,500</b>	<b>\$ (142,409)</b>
<b>FTEs</b>	<b>21.00</b>	<b>16.85</b>	<b>(4.15)</b>	<b>18.24</b>	<b>(2.76)</b>	<b>18.24</b>	<b>-</b>

### Summary of Variances by Category – 2014 Budget Compared to the 2013 Budget

- Personnel** – Salaries, payroll tax and retirement expenses are projected to be lower in 2014 due to the reduction in the number of FTEs and due to an estimated 4% attrition rate. Benefits are projected to be higher due to; (i) the higher cost per employee of employee benefits plans and, (ii) the allocation of benefit expenses that were budgeted in Human Resources in prior years, including education, training and relocation expenses.

- **Travel** – Travel expenses are expected to be lower in 2014 based upon trending of actual expenses in 2013 and the reduction in FTEs.

## Reliability Assessment and Performance Analysis

Reliability Assessments and Performance Analysis (in whole dollars)				2014 Budget -Prior Draft	Variance to Prior Draft Over(Under)
	2013 Budget	2014 Budget	Increase (Decrease)		
Total FTEs	18.75	18.99	0.24	18.99	-
Direct Expenses	\$ 4,516,620	\$ 4,903,304	\$ 386,684	\$ 5,542,330	\$ (639,026)
Indirect Expenses	\$ 3,241,444	\$ 3,570,148	\$ 328,704	\$ 3,660,950	\$ (90,802)
Other Non-Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ 4,372	\$ (122,854)	\$ (127,226)	\$ (123,256)	\$ 402
<b>TOTAL BUDGET</b>	<b>\$ 7,762,436</b>	<b>\$ 8,350,598</b>	<b>\$ 588,161</b>	<b>\$ 9,080,025</b>	<b>\$ (729,427)</b>

### Background and Scope

NERC's Reliability Assessments and Performance Analysis (RAPA) program and department carries out the ERO's statutory responsibility to conduct assessments of the reliability and adequacy of the BPS in North America. RAPA also identifies reliability performance issues and areas of concern (including equipment performance and reliability issues) for consideration in the development of new mandatory reliability standards, the modification of existing standards as part of the Reliability Standards Development Program, or other initiatives that enhance overall reliability.

A comprehensive understanding of the complexity of the changing BPS is key to developing effective approaches for achieving reliability. RAPA develops a solid technical framework and understanding of the reliability risks facing the industry and utilizes those insights to communicate guidance and information to entities across North America to enhance reliability. RAPA does this through its own engineering and analysis efforts, as well as through marshaling stakeholder resources with subject matter expertise.

## Key Focus Areas

RAPA focuses its efforts in four key areas:

### (1) Reliability Assessment

Reliability assessments provide a technical platform for important policy discussions on challenges facing the interconnected North American BPS. Each year, NERC is responsible for independently assessing and reporting on the overall reliability, adequacy, and associated risks that could impact the upcoming summer and winter seasons and the long-term, 10-year period. As emerging risks and potential impacts to reliability are identified, RAPA conducts special and identifies remedial actions that may be warranted. RAPA's assessments are founded on solid engineering through collaborative and consensus-based approach.

By identifying and quantifying emerging reliability issues, NERC is able to provide risk-informed recommendations and support a learning environment for industry to pursue improved reliability performance. These recommendations, along with the associated technical analysis, provide the basis for actionable enhancements to resource and transmission planning methods, planning and operating guidelines, and NERC Reliability Standards.

Key assessments include:

- Long-Term Reliability Assessment
- Summer and Winter Reliability Assessments
- Special and Scenario Reliability Assessments

Additionally, RAPA coordinates forecast reliability data between planning areas, the eight Regional Entities, and governmental organizations through the Electricity Supply and Demand Database.

### (2) Performance Analysis

The Performance Analysis group identifies and tracks key reliability risk indicators to benchmark reliability performance and measure reliability improvements. With this information, the group provides the framework for insights and guidance about emerging trends and associated actions that may be warranted. This includes assessing available event analysis results, incident severity measures, and compliance performance results; developing guidelines for acceptable metrics, and maintaining a performance metrics dashboard on the NERC website.

The key trends, findings, and recommendations from risk performance analysis serve as technical input to the ERO's reliability standards and project prioritization, compliance process improvements, event analyses, reliability assessment, and critical infrastructure protection efforts. This analysis of BPS performance not only provides an industry reference for historical BPS reliability, but it also offers analytical insights across the enterprise that leads toward industry action and enables the discovery and prioritization

of specific actionable risk control steps. These analyses and results are summarized in the annual *State of Reliability Report*, which provides guidance and recommendations that will lead to enhanced bulk system reliability.

(3) Reliability Risk Analysis and Control

A comprehensive understanding of complex interdependencies and their wide-ranging impacts affecting the reliability of the BPS requires deliberate and methodical risk analysis and control strategies. A robust approach that effectively identifies emerging reliability risks and seeks to address them is essential for ensuring NERC's effectiveness and enhancing the reliability of the BPS.

RAPA works with industry leaders to create a reliability strategy that is relevant, timely, and effective at addressing the most important reliability risks. This effort includes understanding key information identified through analysis and assessment efforts; extracting and prioritizing the associated reliability risks from that information; sharing and integrating those risk analysis insights across the ERO enterprise; and translating that knowledge into actionable guidance and recommendations for NERC management, the Board, and industry entities.

This offers stakeholders an open and transparent approach for the development of NERC's reliability strategy, ultimately ensuring the ERO is accountable to industry, regulators, and the public at large.

(4) Reliability Initiatives and System Analysis

A deep understanding of the technical performance behavior of the North American grid provides a sound technical foundation for identifying those crucial aspects of grid performance that are important to sustaining overall reliability. This understaffing is achieved through a comprehensive evaluation and testing of BPS behavior through forensic analysis of system disturbances and analytic simulations. Methodically comparing actual system behavior to the results of analytical power-flow and dynamics simulations provides the essential confidence and credibility to guide recommendations and insights that enhance system performance and reliability. These insights establish the framework and foundation for predictive results that lead to effective operating strategies and recommendations that serve to maintain reliability.

Based on NERC and industry priorities, and to meet business-planning goals, several issues and initiatives will not be pursued in 2014. Probabilistic analysis of reserve margins for NERC's Long-Term Reliability Assessment will be completed every two years rather than annually (none in 2013); the smart grid follow-on work plan will be addressed sometime after 2014; and wind generator availability information (GADS) will be re-programmed to the 2014–2015 timeframe. In 2014, RAPA will refine the composition of NERC's annual *State of Reliability Report* to reflect Post-Seasonal Reliability Review, insights from analysis of transmission, generator and demand response data systems (TADS, GADS, and DADS), and integration of event analysis and misoperations.

Further, RAPA will continue to work closely with other organizations, including, but not limited to, the Electric Power Research Institute (EPRI), Institute of Electrical and Electronic Engineers (IEEE), the North American Transmission Forum (NATF), the North American Generation Forum (NAGF), and Canadian Electricity Association (CEA). RAPA collaborates with these groups on a number of fronts, including geomagnetic disturbance (GMD), vegetation management, TADS, GADS, and variable generation integration. RAPA will continue working with the Interstate Natural Gas Association of America (INGAA) and the Natural Gas Supply Associations (NGSA) regarding studies pertaining to the interdependency of gas and electric systems.

### **Bulk Electric System (BES) Implementation**

During 2013, the RAPA department has been closely involved in the development of a revised definition of the BES. RAPA has also been working closely with the Regional Entities to develop a software application to manage the implementation of the BES definition and exception process, by which a registered entity submits self-determined notifications or requests for exception of certain assets and systems from the BES. The associated business processes and guidance supporting the implementation are important elements aligned with the development of the BES tool that utilize an enterprise PMO approach to ensure effective implementation. The BES tool and its functionality for Regions, registered entities, and NERC has been structured to conform to provisions of the Order 773 and 773-A directives and requirements.

### **2014 Goals and Deliverables**

- Issue reliability assessment reports, guidelines, recommendations, and alerts as needed.
  - One 10-year Long-Term Reliability Assessment.
  - Two seasonal assessments: Summer and Winter.
  - Reliability assessment report on geomagnetic disturbance (GMD) BES effects and vulnerability assessment.
  - One additional special focused assessment addressing key aspects of reliability issues, such as:
    - Variable generation penetration reliability impacts
    - Planning assumptions related to major one-in-a-hundred-year storms
    - Reliability risks associated with a diverse and changing resource mix
  - One annual State of Reliability Report.
  - Oversight of Generating, Transmission, and Demand Response Availability Data Systems (GADS, TADS, and DADS), along with reliability metrics, misoperations, and the Spare Equipment Database.
  - Strengthen data collection and validation processes by designing, creating, testing, and implementing data checking systems for reliability assessment, system analysis, and risk analysis.
  - Provide periodic updates on trends and measures of BPS reliability.

- Develop a risk registry and a systematic prioritization process consistent with the Reliability Issues Steering Committee (RISC) framework and support BPS risk profile measurement and assessment of standards.
- Develop risk control strategies and plans across the organization to address the highest priority existing or emerging risks to BPS reliability, and explicitly measure the results.
- Support NERC Reliability Standard development and response to FERC directives by providing technical and system analysis expertise.
- Support the technical foundation development for reliability standards to address deficiencies or needs revealed by reliability assessments and performance analysis.
- Provide support and leadership to the Planning Committee, and Standing Committees' subcommittees, working groups, and task forces serving the Standing Committees.
- Develop a structured approach to evaluate and improve system models, model validation, system analysis, and assessments.
- Assist in the development of approaches to registration and maintenance of the actively monitored list based on reliability trends, risks, and historical information to ensure that the compliance focus remains on the most critical entities and associated reliability standards.
- Conduct major event investigations, analysis, and reporting of major findings and recommendations that will improve reliability.
- Build and sustain an enterprise reliability assessment and performance analysis team that encompasses risk-informed approaches and structured methodology to identify and address reliability risks.
- Implement effective oversight and tracking of various technical aspects of reliability, including frequency response performance, application of TPL footnote b adoption, and root cause applications to assessment and analyses.

## **Resource Requirements**

### **Personnel**

The 2014 budget includes the addition of an engineer in RAPA to support risk management initiatives and technical analysis. The 0.24 increase in FTEs reflects the timing of hiring and the assumption of 4% attrition in all departments.

### **Contractor Expenses**

The total contractor and consultant expenses for the department are projected at \$638.1k, representing an approximate \$46.9k decrease over the 2013 budget. The 2014 contractor and consulting resources are described below and are grouped into four categories: (1) Research and Initiative Implementation, Tracking, and Reporting, (2) Special and Long-Term Assessments and State of Reliability Analysis, (3) Licensing and Support of Existing Databases, and (4) Application Development. Exhibit B shows the specific amount of 2014 contractor and consulting funding in a complete list for all NERC departments, compared to 2013 budgeted amounts.

(1) Research and Initiative Implementation, Tracking, and Reporting

2014 resource requirements include those in connection with recent regulatory developments regarding vegetation clearances and vegetation management on public lands, as well as the potential impacts of geomagnetic disturbances (GMD). Each of these items is described further below.

a. Vegetation Research:

The recent FERC order approving the FAC-003 reliability standard for vegetation management included an obligation to validate the technical foundation supporting the inclusion within the Gallet Equation of factors for the Minimum Vegetation Clearance Distance (MVCD). Significant industry support for the application of the Gallet Equation was a key factor in achieving approval for this standard. Contractor support is required to conduct the necessary research for the technical foundation supporting the use of the MVCD in the application of the vegetation management standard. This research is supported by a draft statement of work prepared by Electric Power Research Institute (EPRI) that involves approximately a nine-to-fifteen-month period of effort and associated activity and ultimately leads to a final report targeted for release in 2015.

The research plan is intended to provide empirical technical support for the application of the Gallet Equation and the associated factors related to the MVCD. These empirical tests will involve actual flash-over distances between conductors and vegetation grown specifically for this purpose at the EPRI test facility in Lenox, Massachusetts. The research will evaluate such flash distances in a carefully calibrated environment and thereby validate the actual application of the MVCD factors in the currently approved FAC-003 standard.

Subject to the availability of funding in 2013, the proposed schedule involves validating the research plan by the end of the third quarter 2013 and beginning the initial work in the fourth quarter, with the bulk of the research effort in 2014. The final report is planned for the first half of 2015, and periodic status reports will be provided to interested stakeholders and regulatory authorities.

b. Vegetation Management on Public Lands:

The recent FERC order approving the FAC-003 reliability standard for vegetation management directed NERC to ascertain the issues surrounding access for vegetation and related maintenance for transmission assets crossing public lands. FERC is concerned that issues arising from federal- and state-governed lands (e.g., Bureau of Land Management areas, national and state forests, etc.) restrict access to transmission assets crossing such lands and may potentially lead to a reliability risk for outages or delayed restoration. Consulting resources will be utilized to develop a plan to gather technically valid information that would identify the nature and extent of such issues on public lands. The research plan as currently envisioned would work through existing industry groups to formulate and validate the information into a report submitted to FERC that advises on the range of issues encountered and, as warranted, the potential means to address such issues.

c. Reliability Effects of GMD Vulnerability Assessment:

The continuing efforts of the high-impact, low-frequency (HILF) work to expand the technical foundation for understanding the potential impact of GMD will involve continuation of the GMD Task Force work and research through EPRI in 2014. The current 2013 funding level of \$250k is expected to be required in 2014, and overall completion is targeted for the end of the year. The current work centers around providing a suite of technically valid tools and operational measures and transformer modeling, along with coordinating work efforts at the National Oceanic and Atmospheric Administration and space weather entities to understand the potential ranges of geomagnetically induced currents from coronal mass ejections on the sun. The results will permit individual entities to conduct associated vulnerability assessments. Once the EPRI and industry efforts are completed, the task force can then finalize the tool development and associated baseline information. The objective for 2014 is to complete associated research efforts, conduct an overall assessment of the vulnerability, and assemble a report that indicates how these factors potentially affect reliability of the BPS in North America.

(2) Special and Long-Term Assessments and State of Reliability Analysis

a. Scenario Consultant—Addressing Standing and Emerging Issues:

NERC will continue to develop ad hoc special and scenario assessments, which are developed through RISC and Board initiatives and which are informed by the emerging issues process currently established in the LTRA.<sup>7</sup> Scenario assessments provide detailed quantitative and qualitative analyses that stress the reference planning case of the North American BPS. Scenario analysis can indicate the relative sensitivity of the reference case to changes in pre-specified conditions and may provide insight into regional reliability risks. Based on input from RISC, as well as insights from assessments and analyses, industry is generally supportive of further analysis regarding BPS reliability. Scenario assessments may also be prompted by input from policy and legislative initiatives that NERC would undertake to provide the solid technical framework and foundation for policy decisions and guidance.

(3) Licensing and support of existing databases

The 2014 RAPA contractor and consulting budget also includes the costs to license and maintain the metrics collection, analysis, and display tools, as well as the generator availability data system, transmission availability data system, demand side management assessment database, and spare equipment database.

a. Metrics Data Collection, Analysis, and Display Tools – Enhancements and Maintenance:

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<sup>7</sup> Special Assessments are ad hoc assessments focused on specific industry issues (emerging or standing). For these assessments, detailed quantitative and qualitative analysis, beyond what is included in the annual long-term and seasonal reliability assessments, is examined. These reports are generally published separately from the annual long-term and seasonal reliability assessments.

Scenario Assessments are ad hoc assessments focused on specific, hypothetical industry conditions. For these assessments, detailed quantitative and qualitative analyses are performed that stress the Reference Case. Scenario assessments will be included as part of the annual long-term and seasonal reliability assessments to provide a sensitivity of potential outcomes.

This application collects, records, and retrieves reliability metric information that quantifies characteristics of adequate levels of reliability. The metric trends and performance analyses serve as technical input to reliability standards and project prioritization, compliance process improvement, event analysis, reliability assessment, and critical infrastructure protection. The dashboard displays dynamic performance trends and risk-based index curves on the NERC public website. Charts are interactive, and viewers can search specific supporting information through multilevel drilldown features with simple and direct access.

b. GADS/TADS/DADS/SED

- **Generation Availability Data System (GADS) – Enhancements and Maintenance:**  
This tool collects, records, and retrieves operating information on power plant availability, including event, performance, and design data. The information is used to support equipment reliability and availability analyses, as well as risk-informed decision making, including the reliability and adequacy of the BPS and the potential need for development of new or modified reliability standards.
- **Transmission Availability Data System (TADS) – Enhancements and Maintenance:**  
This tool collects, records, and retrieves information used to measure transmission availability and performance. This data is important for assessing the reliability and adequacy of the BPS and can also provide information that indicates trends and insights into the need for developing reliability standards or other risk control strategies. The data reporting tool collects information about the transmission lines and transformers operating above 200 kV, including outage details and cause codes.
- **Demand Response Availability Data System (DADS) – Enhancements and Maintenance:**  
This tool collects demand response enrollment and event information to measure its performance, including its contribution to improved reliability. This provides industry a consistent basis for projecting contributions of dispatchable and non-dispatchable demand response to support resource projections and operational reliability. The data is also important for assessing the reliability and adequacy of the BPS and can provide information that indicates the need to develop new or modified reliability standards.
- **Spare Equipment Database (SED) – Enhancements and Maintenance:**  
This tool collects and tracks spare long-lead time transformer information used to strengthen industry resiliency in order to withstand a significant event that damages large amounts of long-lead-time equipment. The database provides industry a vital tool of communication and coordination for tracking spare equipment. This ability will be extremely helpful in the aftermath of a HILF event, such as coordinated attack or extreme weather.

(4) Software application development

a. Replacement for pc-GAR:

Many years ago, NERC developed pc-GAR, a legacy software application, to provide industry and vendors restricted access to limited GADS information for benchmarking and other reliability improvement initiatives. NERC developed it when the provision of generator data was voluntary. In exchange for providing this data, companies received a restricted license for access to certain summary data from the system. Some generator major equipment vendors have also requested and been granted restricted licenses for access to this data in order to benchmark and improve their equipment.

Historically, NERC charged nominal license fees to help defray a portion of the costs of operating, maintaining, and administering this complex legacy software. In response to its 2013 business plan and budget (in which NERC expressed the intent to discontinue the licensing of this software and data availability), NERC received comments from industry expressing a strong desire for continuing access so that they could continue to undertake the reliability assessment and improvement activities generally described above. NERC management considered transferring the licensing of the software to a third party but felt that it was important to retain control of the licensing in order to ensure the protection of confidential information. NERC expects to commence development of a replacement software application in 2013 and therefore no specific funding is included in the 2014 business plan and budget for this activity. However, given that this work has not yet been completed the possibility exists that funding from reserves may be required in 2014, subject to the availability of reserves and other funding priorities.

b. Reliability Assessment Data System (RADS):

NERC's seasonal and long-term reliability assessments provide an independent view of the reliability of the North American BPS while identifying trends, emerging issues, and potential concerns. Assessments also provide seasonal resource adequacy and operating reliability, as well as an overview of projected electricity demand growth. The Regional Entities provide data and other information requested by NERC in support of the preparation of the annual long-term and seasonal assessments. The data from these efforts is then used to coordinate forecast reliability data between planning areas, the eight Regional Entities, and governmental organizations. NERC is bound by a memorandum of understanding with the Energy Information Administration to submit this data on behalf of the industry in an effort to eliminate duplicative reporting.

NERC has been collecting reliability assessment information from the Regional Entities using up to 27 Microsoft Excel spreadsheets. The purpose of the RADS applications is to facilitate the collection of regional demand, capacity, and transmission data to quantify and analyze the reliability of the BPS in a standard, consistent, transparent method. RADS will substantially improve the accuracy and completeness of this data, while enabling it to be leveraged by all users of NERC

data—including registered entities.<sup>8</sup> More importantly, RADS will benefit registered entities by creating a more efficient data collection process for those who submit data to NERC. Increased efficiency and accuracy, driven by the validation features of the system, will allow for extension of existing deadlines, which in turn gives registered entities additional time to provide data to their respective Regional Entities.

While the intent of Phase I of the project is to facilitate this data collection effort at the Assessment Area level,<sup>9</sup> future phases of the project are intended to capture data from registered entities in one location. Currently, registered entities must submit data to the Regional Entities in a variety of formats. The Regional Entities must then provide data to NERC through a different mechanism. The end state of RADS incorporates a fully integrated model that utilizes a common system for the entire ERO.

RADS will provide enhanced analytics that facilitate cross-system intelligence. For example, data provided within the GADS and TADS information systems can be used to fulfill some of the data requirements needed for assessments. Additionally, because of the forward-looking nature of the data provided within RADS, the projections can be used to provide information applicable to registration. These are only some of the examples of how RADS can provide risk-informed information to support other functions of the ERO.

The commencement of the development of RADS is currently slated for 2015. NERC is also planning to finance the development of the RADS application as part of the capital financing program described in Exhibit D. The company may advance the initiation of the development of RADS into 2014, subject to availability of funding from operating reserves to cover 2014 financing costs and the receipt of necessary corporate authorizations and review by the Standards Oversight and Technology Committee.

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<sup>8</sup> The use of NERC reliability assessment data across the industry is extensive. The Electricity Supply and Demand Database (ES&D)—which is a product of the reliability assessment process—is downloaded over 300 times each year by various organizations, including Registered Entities, governmental organizations, government labs, academic institutions, and other researchers.

<sup>9</sup> Assessment Areas are defined as the Registered Planning Coordinator Entities or groups of Registered Planning Coordinator Entities

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>							
<b>2013 Budget &amp; Projection, and 2014 Budget</b>							
<b>RELIABILITY ASSESSMENTS and PERFORMANCE ANALYSIS</b>							
	2013	2013	Variance	2014	Variance	2014 Budget	Variance to
Funding	Budget	Projection	v 2013 Budget	Budget	v 2013 Budget	Draft 2	Prior Draft
			Over(Under)		Over(Under)		Over(Under)
<b>ERO Funding</b>							
NERC Assessments	\$ 7,358,220	\$ 7,358,220	\$ -	\$ 8,214,496	\$ 856,276	\$ 8,944,102	\$ (729,606)
Penalty Sanctions	361,407	361,407	-	43,190	(318,217)	43,021	169
<b>Total NERC Funding</b>	<b>\$ 7,719,627</b>	<b>\$ 7,719,627</b>	<b>\$ -</b>	<b>\$ 8,257,686</b>	<b>\$ 538,059</b>	<b>\$ 8,987,123</b>	<b>\$ (729,437)</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-
Services & Software	-	50,000	50,000	50,000	50,000	50,000	-
Workshops	40,000	40,000	-	40,000	-	40,000	-
Interest	2,809	2,780	(29)	2,913	104	2,902	11
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 7,762,436</b>	<b>\$ 7,812,407</b>	<b>\$ 49,971</b>	<b>\$ 8,350,598</b>	<b>\$ 588,162</b>	<b>\$ 9,080,025</b>	<b>\$ (729,426)</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 2,429,590	\$ 2,366,832	\$ (62,758)	\$ 2,604,058	\$ 174,468	\$ 2,604,058	-
Payroll Taxes	150,215	140,690	(9,525)	159,156	8,941	159,156	-
Benefits	262,762	254,223	(8,539)	333,241	70,479	344,217	(10,976)
Retirement Costs	269,736	220,455	(49,281)	294,179	24,443	294,179	-
<b>Total Personnel Expenses</b>	<b>\$ 3,112,303</b>	<b>\$ 2,982,200</b>	<b>\$ (130,103)</b>	<b>\$ 3,390,634</b>	<b>\$ 278,331</b>	<b>\$ 3,401,610</b>	<b>(10,976)</b>
<b>Meeting Expenses</b>							
Meetings	\$ 78,000	\$ 78,000	\$ -	\$ 90,000	\$ 12,000	\$ 90,000	-
Travel	410,000	385,000	(25,000)	385,000	(25,000)	410,000	(25,000)
Conference Calls	31,950	31,950	-	31,950	-	35,000	(3,050)
<b>Total Meeting Expenses</b>	<b>\$ 519,950</b>	<b>\$ 494,950</b>	<b>\$ (25,000)</b>	<b>\$ 506,950</b>	<b>\$ (13,000)</b>	<b>\$ 535,000</b>	<b>(28,050)</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 685,000	\$ 735,764	\$ 50,764	\$ 638,085	\$ (46,915)	\$ 1,238,085	(600,000)
Office Rent	-	-	-	-	-	-	-
Office Costs	161,416	126,210	(35,206)	139,135	(22,281)	139,135	-
Professional Services	-	468	468	-	-	-	-
Miscellaneous	500	500	-	500	-	500	-
Depreciation	37,450	160,057	122,607	228,000	190,550	228,000	-
<b>Total Operating Expenses</b>	<b>\$ 884,366</b>	<b>\$ 1,022,999</b>	<b>\$ 138,633</b>	<b>\$ 1,005,720</b>	<b>\$ 121,354</b>	<b>\$ 1,605,720</b>	<b>\$ (600,000)</b>
<b>Total Direct Expenses</b>	<b>\$ 4,516,620</b>	<b>\$ 4,500,149</b>	<b>\$ (16,470)</b>	<b>\$ 4,903,304</b>	<b>\$ 386,685</b>	<b>\$ 5,542,330</b>	<b>\$ (639,026)</b>
<b>Indirect Expenses</b>	<b>\$ 3,241,444</b>	<b>\$ 3,337,513</b>	<b>\$ 96,069</b>	<b>\$ 3,570,148</b>	<b>\$ 328,704</b>	<b>\$ 3,660,950</b>	<b>\$ (90,802)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>						
<b>Total Expenses (B)</b>	<b>\$ 7,758,064</b>	<b>\$ 7,837,662</b>	<b>\$ 79,599</b>	<b>\$ 8,473,452</b>	<b>\$ 715,389</b>	<b>\$ 9,203,280</b>	<b>\$ (729,828)</b>
<b>Change in Assets</b>	<b>\$ 4,372</b>	<b>\$ (25,254)</b>	<b>\$ (29,627)</b>	<b>\$ (122,854)</b>	<b>\$ (127,227)</b>	<b>\$ (123,256)</b>	<b>402</b>
<b>Fixed Assets</b>							
Depreciation	(37,450)	(160,057)	(122,607)	(228,000)	(190,550)	(228,000)	-
Computer & Software CapEx	-	780,326	780,326	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-	-	-
Allocation of Fixed Assets	\$ 41,822	\$ 28,471	\$ (13,351)	105,146	\$ 63,324	\$ 104,744	402
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>\$ 4,372</b>	<b>\$ 648,740</b>	<b>\$ 644,368</b>	<b>\$ (122,854)</b>	<b>\$ (127,226)</b>	<b>\$ (123,256)</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 7,762,436</b>	<b>\$ 8,486,402</b>	<b>\$ 723,967</b>	<b>\$ 8,350,598</b>	<b>\$ 588,163</b>	<b>\$ 9,080,025</b>	<b>\$ (729,426)</b>
<b>FTEs</b>	<b>18.75</b>	<b>17.28</b>	<b>(1.47)</b>	<b>18.99</b>	<b>0.24</b>	<b>18.99</b>	<b>-</b>

### Summary of Variances by Category – 2014 Budget Compared to the 2013 Budget

- Personnel** – All personnel related expenses are projected to increase in 2014 due to the increase in the number of FTEs and due to higher average salary expense per FTE in this program. Salaries, payroll tax and retirement expenses were offset by the 4% attrition rate, which was applied to all departments. Benefits are projected to increase at a higher rate than other personnel expenses due to; (i) the higher cost per employee of employee benefits plans and, (ii) the allocation of benefit expenses that were budgeted

in Human Resources in prior years, including education, training and relocation expenses.

- **Travel** – Travel expenses are expected to be lower in 2014 based upon trending of actual expenses in 2013 and the reduction in FTEs.
- **Office Costs** – The reduction in office costs is based upon trending of actual expenses in 2013.

## Reliability Risk Management

NERC's Reliability Risk Management (RRM) group carries out the ERO's statutory responsibility to perform assessments (including real-time or near-real-time assessments) of the reliability and adequacy of the BPS, including identifying potential issues of concern relating to system, equipment, entity, and human performance that may indicate the possible need to develop new or modified reliability standards. RRM has four primary functions and two departments: the Situation Awareness Department and the Event Analysis Department. The four primary functions include: (1) BPS awareness; (2) event analysis and determination of root and contributing causes; (3) assessment of human performance challenges that affect BPS reliability and identification of improvement opportunities; and (4) support of the NERC Operating Committee. The functions and resources of this group are directly focused on proactive awareness of BPS conditions and all events over a threshold of impact. RRM analyzes events, addresses the most significant risks to BPS reliability, and ensures that industry is well informed of system events, emerging trends, risk analysis, and lessons learned. Through performing these functions, RRM may also identify areas in which new or enhanced compliance monitoring and enforcement initiatives are warranted, pursuant to the ERO's statutory responsibility to monitor, enforce and achieve compliance with mandatory reliability standards.

### Situation Awareness Department

Situation Awareness (in whole dollars)			Increase (Decrease)	2014 Budget - Prior Draft	Variance to Prior Draft Over(Under)
2013 Budget	2014 Budget				
Total FTEs	6.50	6.24	(0.26)	6.24	-
Direct Expenses	\$ 4,193,507	\$ 2,891,092	\$ (1,302,415)	\$ 3,009,571	\$ (118,479)
Indirect Expenses	\$ 1,123,701	\$ 1,173,129	\$ 49,428	\$ 1,202,966	\$ (29,837)
Other Non-Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	7,103	519,043	511,940	518,911	132
<b>TOTAL BUDGET</b>	<b>\$ 5,324,311</b>	<b>\$ 4,583,264</b>	<b>\$ (741,047)</b>	<b>\$ 4,731,448</b>	<b>\$ (148,184)</b>

### Background and Scope

The Situation Awareness department works with registered entities to monitor present conditions on the high-voltage transmission lines, associated substations, and large generators using various software tools and applications. NERC communicates and coordinates with Regional and registered entities to notify them of various types of disturbances (hurricanes, tornados, earthquakes, solar flares from the sun, etc.) that could negatively impact their ability to deliver power to homes and businesses. Additionally, when significant BPS disturbances occur, NERC facilitates the coordination of communication between registered entities and applicable governmental authorities.

In 2013, the Interchange Distribution Calculator and several related reliability tools that had been funded and managed by NERC were successfully transitioned to industry sponsorship. Based on the successful commercialization, deployment, and transition to private sector support of synchrophasor technology, NERC will end its direct funding and sponsorship of the North American Synchrophasor Initiative at the end of 2013. As a result of these successful

transitions, together with the transition from development to operation and maintenance of the SAFNR software application used for Situation Awareness monitoring, NERC's budget and funding requirements to support Situation Awareness will be reduced by over \$1.2 million in 2014 compared to 2013.

The 2014 Situation Awareness budget will continue to include funding for the ongoing maintenance and support of several tools used to support ERO operations. The specific 2014 budget for each of these tools is set forth in Exhibit C, together with a comparison to 2013 budgeted amounts. These tools are described below.

- **Automated Reliability Reports** — This tool produces daily and monthly summaries of historical load generation resource adequacy and control performance for the three interconnections. This tool is used to monitor frequency response and perform trending analysis. This tool relies on data supplied to the Resource Adequacy Tool. The funding included in the 2014 budget is based on 2013 actual expenditures, which were not budgeted as a separate line item in 2013.
- **Resource Adequacy (ACE Frequency) Tool** — This software application provides continuous monitoring of key resource adequacy performance metrics, including pre-established thresholds and limits defined in standards. It alerts Reliability Coordinators and resource subcommittees to conditions resulting critical inadequacies, such as major tie error, inaccurate load forecast, and inadequate frequency response.
- **Inadvertent Interchange** — This tool facilitates the entering of monthly scheduling data and submittal of monthly inadvertent performance standards reports to NERC. It also assists in the monitoring and resolution of reliability issues originated by inadvertent interchange imbalances.
- **AIE Monitoring Tool** — This is an automatic data collection tool for post-analysis of frequency excursions. It is used in major system disturbances as part of the frequency response analysis.
- **Frequency Monitoring and Analysis Tool** — This tool detects frequency events and captures key frequency response information for each interconnection.
- **Intelligent Alarms Tool** — This tool detects short-term and long-term frequency deviations using data transmitted to NERC by the Balancing Authorities. When coupled with the FNet<sup>10</sup> and Frequency Monitoring and Analysis tools, this tool allows immediate differentiation of the cause of a frequency deviation—a generator trip or a scheduling error.
- **Secure Alerts System** — This software application notifies industry of critical or impending reliability and security threats to assist entities in taking preemptive or precautionary measures. The existing alerts tool is cumbersome to use, is not integrated with other NERC reliability information systems, and has a number of other limitations that reduce its usefulness as a tool to rapidly disseminate important reliability

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<sup>10</sup> **FNet** — Operated by the [Power Information Technology Laboratory](#) at the [University of Tennessee](#), FNET is a low-cost, quickly deployable GPS-synchronized wide-area frequency measurement network. High dynamic accuracy Frequency Disturbance Recorders (FDRs) are used to measure the frequency, phase angle, and voltage of the power system at ordinary 120 V outlets. The measurement data are continuously transmitted via the internet to the FNET servers hosted at the University of Tennessee and [Virginia Tech](#).

information to industry. In 2013, NERC issued a request for proposals and selected a vendor to develop a replacement software application. The 2014 fixed asset budget includes the projected costs to complete the development of this replacement. The projected annual maintenance costs for this replacement are included in the 2014 contract and consultant budget.

- **NERCnet (Frame Relay Contract)** – The Interconnection Security Network (ISN), or NERCnet, was established to facilitate the exchange of power system operational data between Reliability Coordinators, Transmission Operators, and Balancing Authorities for the purpose of power system security analysis. This network is a collection of nodes that communicate over a secure network to exchange data related to real-time power system-related data operations. NERC initiated a project in 2013 to conduct an orderly transition of the NERCnet network to a telecommunications management and service provider that will assume operational responsibility for the network, including invoicing and support. At that time, NERC will become a user of the service but no longer have operational responsibility for the network. NERC budgeted an estimated \$400k in cost for its use of the replacement network in 2014, which represents an increase of \$100k over the 2013 budget.

#### **2014 Goals and Deliverables**

The department will continue to work with the Regional Entities to obtain and review information from registered entities regarding qualifying events and disturbances, as outlined in the ERO Event Analysis Process. These reports are reviewed to verify the accuracy of information, as well as to ensure they include the information necessary for categorizing and cause coding events.

The department's 2014 goals and deliverables include:

- Ensure that the ERO is aware of all BPS events above a threshold of impact.
- Ensure the sharing of information and data to facilitate wide area situational awareness.
- Reduce the need for NERC Situation Awareness staff engagement with RCs and Regional Entities when events occur or when reliability threats are identified.
- During crisis situations, facilitate the exchange of information among industry, Regions, and government.
- Keep the industry informed of emerging reliability threats and risks to the BPS, including any expected actions.
- Enhance tracking of notification of expected actions in response to emerging actions to promote greater industry accountability.
- Issue timely updates regarding progress toward resolving issues identified in Recommendations and Essential Actions.

## Resource Requirements

### Personnel

No additional personnel are projected for the Situation Awareness Department in 2014. The reduction of 0.26 FTEs is due to the assumption of 4% attrition in all departments.

### Contractor Expenses

The overall funding of approximately \$1,289,000 for contractors and consultants to support the Situation Awareness department in 2014 is approximately \$1,454,000 below 2013 budget levels. The detailed 2014 contractor and consulting budget for the Situation Awareness department is set forth in Exhibit C, together with a comparison to 2013 budgeted amounts.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital							
2013 Budget & Projection, and 2014 Budget							
SITUATION AWARENESS							
	2013 Budget	2013 Projection	Variance 2013 Projection v 2013 Budget Over(Under)	2014 Budget	Variance 2014 Budget v 2013 Budget Over(Under)	2014 Budget Draft 2	Variance to Prior Draft Over(Under)
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ 5,093,049	\$ 6,974,096	\$ 1,881,047	\$ 4,493,115	\$ (599,934)	\$ 4,641,358	\$ (148,242)
Penalty Sanctions	125,288	125,288	0	14,192	(111,096)	14,136	55
<b>Total NERC Funding</b>	<b>\$ 5,218,337</b>	<b>\$ 7,099,384</b>	<b>\$ 1,881,047</b>	<b>\$ 4,507,307</b>	<b>\$ (711,030)</b>	<b>\$ 4,655,494</b>	<b>\$ (148,187)</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-
Services & Software	-	7,000	7,000	-	-	-	-
Workshops	105,000	75,850	(29,150)	75,000	(30,000)	75,000	-
Interest	974	3,902	2,928	957	(17)	953	4
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 5,324,311</b>	<b>\$ 7,186,136</b>	<b>\$ 1,861,825</b>	<b>\$ 4,583,264</b>	<b>\$ (741,047)</b>	<b>\$ 4,731,448</b>	<b>\$ (148,183)</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 856,927	\$ 710,617	\$ (146,310)	\$ 915,216	\$ 58,289	\$ 915,216	-
Payroll Taxes	56,925	47,650	(9,275)	60,207	3,282	60,207	-
Benefits	87,659	93,117	5,458	109,501	21,842	125,093	(15,592)
Retirement Costs	98,496	50,901	(47,595)	104,293	5,797	104,293	-
<b>Total Personnel Expenses</b>	<b>\$ 1,100,007</b>	<b>\$ 902,285</b>	<b>\$ (197,722)</b>	<b>\$ 1,189,217</b>	<b>\$ 89,210</b>	<b>\$ 1,204,809</b>	<b>(15,592)</b>
<b>Meeting Expenses</b>							
Meetings	\$ 198,000	\$ 110,331	\$ (87,669)	\$ 171,000	\$ (27,000)	\$ 171,000	-
Travel	72,500	28,020	(44,480)	28,020	(44,480)	30,000	(1,980)
Conference Calls	24,175	5,000	(19,175)	4,000	(20,175)	5,000	(1,000)
<b>Total Meeting Expenses</b>	<b>\$ 294,675</b>	<b>\$ 143,351</b>	<b>\$ (151,324)</b>	<b>\$ 203,020</b>	<b>\$ (91,655)</b>	<b>\$ 206,000</b>	<b>(2,980)</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 2,743,180	\$ 2,644,605	\$ (98,575)	\$ 1,289,108	\$ (1,454,072)	\$ 1,389,014	(99,906)
Office Rent	-	-	-	-	-	-	-
Office Costs	47,750	43,088	(4,662)	47,750	-	47,750	-
Professional Services	-	180	180	-	-	-	-
Miscellaneous	500	500	-	500	-	500	-
Depreciation	7,395	4,465	(2,930)	161,498	154,103	161,498	-
<b>Total Operating Expenses</b>	<b>\$ 2,798,825</b>	<b>\$ 2,692,838</b>	<b>\$ (105,987)</b>	<b>\$ 1,498,856</b>	<b>\$ (1,299,970)</b>	<b>\$ 1,598,762</b>	<b>\$ (99,906)</b>
<b>Total Direct Expenses</b>	<b>\$ 4,193,507</b>	<b>\$ 3,738,474</b>	<b>\$ (455,033)</b>	<b>\$ 2,891,092</b>	<b>\$ (1,302,415)</b>	<b>\$ 3,009,571</b>	<b>\$ (118,478)</b>
<b>Indirect Expenses</b>	<b>\$ 1,123,701</b>	<b>\$ 1,002,413</b>	<b>\$ (121,288)</b>	<b>\$ 1,173,129</b>	<b>\$ 49,428</b>	<b>\$ 1,202,966</b>	<b>\$ (29,837)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 5,317,208</b>	<b>\$ 4,740,887</b>	<b>\$ (576,321)</b>	<b>\$ 4,064,222</b>	<b>\$ (1,252,986)</b>	<b>\$ 4,212,537</b>	<b>\$ (148,315)</b>
<b>Change in Assets</b>	<b>\$ 7,103</b>	<b>\$ 2,445,249</b>	<b>\$ 2,438,146</b>	<b>\$ 519,043</b>	<b>\$ 511,940</b>	<b>\$ 518,911</b>	<b>132</b>
<b>Fixed Assets</b>							
Depreciation	(7,395)	(4,465)	2,930	(161,498)	(154,103)	(161,498)	-
Computer & Software CapEx	-	-	-	645,990	645,990	645,990	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-	-	-
Allocation of Fixed Assets	\$ 14,498	\$ 8,551	(5,947)	34,550	20,052	34,418	132
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>\$ 7,103</b>	<b>\$ 4,086</b>	<b>\$ (3,017)</b>	<b>\$ 519,043</b>	<b>\$ 511,940</b>	<b>\$ 518,911</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 5,324,311</b>	<b>\$ 4,744,973</b>	<b>\$ (579,338)</b>	<b>\$ 4,583,264</b>	<b>\$ (741,047)</b>	<b>\$ 4,731,448</b>	<b>\$ (148,183)</b>
<b>FTEs</b>	<b>6.50</b>	<b>5.19</b>	<b>(1.31)</b>	<b>6.24</b>	<b>(0.26)</b>	<b>6.24</b>	<b>-</b>

## Summary of Variances by Category – 2014 Budget Compared to the 2013 Budget

- Personnel** – All personnel related expenses are projected to increase in 2014 due to higher average salary expense per FTE in this program. Salaries, payroll tax and retirement expenses were offset by the 4% attrition rate, which was applied to all departments. Benefits are projected to increase at a higher rate than other personnel expenses due to; (i) the higher cost per employee of employee benefits plans and, (ii) the allocation of benefit expenses that were budgeted in Human Resources in prior years, including education, training and relocation expenses.
- Meetings, Travel and Conferencing** – These expenses are expected to be lower in 2014 based upon trending of actual expenses in 2013.
- Consultants and Contracts** – The reduction in consultant and contract expense is due to; (i) the transitioning of the IDC and synchrophasor contracts to industry sponsorship as described above; (ii) reduced cost of the current secure alerts application; and (iii) reduced cost of SAFNR.
- Fixed Assets** – The \$646.0k increase is related to the replacement of the secure alerts software application described above.

## Event Analysis Department

	Event Analysis (in whole dollars)			2014 Budget -Prior Draft	Variance to Prior Draft Over(Under)
	2013 Budget	2014 Budget	Increase (Decrease)		
Total FTEs	9.50	9.60	0.10	9.60	-
Direct Expenses	\$ 2,074,908	\$ 2,384,069	\$ 309,162	\$ 2,477,486	\$ (93,417)
Indirect Expenses	\$ 1,642,332	\$ 1,804,814	\$ 162,482	\$ 1,850,717	\$ (45,903)
Other Non-Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ 21,190	\$ (140,512)	\$ (161,702)	\$ (140,715)	\$ 203
<b>TOTAL BUDGET</b>	<b>\$ 3,738,430</b>	<b>\$ 4,048,371</b>	<b>\$ 309,941</b>	<b>\$ 4,187,488</b>	<b>\$ (139,117)</b>

## Background and Scope

The Event Analysis Department is critical to supporting the ERO's reliability goals through its work to evaluate BPS events. Event Analysis undertakes appropriate levels of analysis to determine the causes of the events, promptly assure tracking of corrective actions to prevent recurrence, and provide lessons learned to the industry. This department manages all NERC activities with respect to event analysis, assuring consistent, timely, and coordinated results. The group ensures that reporting and analysis are consistent to allow wide area assessment of trends and risks; all reportable events are analyzed for sequence of events, root cause, risk to reliability, and mitigation; and the industry is well informed of system events, emerging trends, risk analysis, lessons learned, and expected actions. The event investigation group is responsible for reviewing formal complaints and conducting non-public compliance investigations, as well as assisting in the review of registered entity compliance assessments to verify that compliance gaps are assessed in all reportable events. The event investigation group supports NERC's statutory responsibility of developing reliability standards and assessing the

reliability and adequacy of the BPS, as well as monitoring and enforcing compliance with mandatory reliability standards.<sup>11</sup>

Resources within this group also focus on identifying human error risks and those precursory factors that allow human error to impact system reliability. The group educates industry regarding those risks, precursors, and mitigation methods. These resources also support compliance and standards training initiatives, as well as trending and analysis to identify emerging reliability risks to the BPS. These efforts are conducted in collaboration with industry human performance projects, including the Western Electricity Coordinating Council's (WECC's) Human Performance Working Group, the North American Transmission Forum's (NATF's) Human Performance Group, and the Electric Power Research Institute.

### **Development of Events Information Data System**

The Event Analysis and RAPA departments are currently working closely with the Regional Entities to develop a new software application called the Events Information Data System (EIDS). The purpose of EIDS is to create an ERO-wide, robust tool to collect, analyze, and report detailed information regarding events that impact the reliability of the BPS in North America. The EIDS tool will provide registered entities a single entry point for data to meet several requirements, thus reducing redundant processes, reporting, and data reconciliation. The EIDS tool will also create a platform by which registered entity users can submit and track event reports in one place and receive status and feedback updates directly from the ERO. Further, to support the ERO in performance assessment and risk cluster identifications, it is vital that this tool connect with other ERO reliability data sources (e.g., TADS, GADS, and reliability metrics) for determining accurate and complete risk trends and improving consistency and efficiency of data checking and validation. Future enhancements among these applications will encompass connectivity with other data sources (e.g., TADS and GADS) and metrics development. This platform will also provide a venue for actively sharing these reliability trends. Funding for the initial development of the EIDS application was included in the 2013 budget. The insights and analyses that emerge from the application of the EIDS system—particularly once integrated and aligned with the other NERC database systems such as TADS and GADS—should provide a foundation for gaining a better understanding of the risk-informed trends, recommendations, and guidance necessary to align reliability objectives and priorities as contemplated by the RISC. See Exhibit D for a further discussion of the Enterprise IT financing program and projected amortization schedule and financing of EIDS development costs.

### **2014 Goals and Deliverables**

- Work with the Regional Entities to obtain and review information from registered entities regarding qualifying events and disturbances in order to advance awareness of events above a threshold level; facilitate analysis of root causes, risks to reliability, wide area assessments, and mitigation; and disseminate information regarding events in a timely manner.
- Ensure that all reportable events are analyzed for sequence of events, root cause, risk to reliability, and mitigation.

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<sup>11</sup> See NERC Rules of Procedure sections 807-808 and Appendix 8, as well as Section 400 and Appendix 4C.

- Refine risk-based methodologies to support more effective and efficient identification of reliability risks, including the use of more sophisticated cause codes for analysis.
- Ensure consistency in reporting and analysis to support wide area assessments of significant reliability trends and risks.
- Issue reliability recommendations and alerts as needed.
- Track industry accountability for critical reliability recommendations.
- Ensure that industry is well informed of system events, emerging trends, risk analysis, lessons learned, and expected actions.
- Conduct major event investigations, analysis, and reporting of major findings and recommendations that will improve reliability.
- Advance the quality and usefulness of reliability assessments and event analysis data.

### **Resource Requirements**

#### ***Personnel***

No additional personnel are planned to be added to the Event Analysis department in 2014. The 0.10 additional FTE is due to the transfer of 0.5 FTEs from another department in 2013, offset by the assumption of 4% attrition in all departments.

#### ***Contractor Expenses***

No consulting and contractor support is required for Event Analysis in 2014.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>							
<b>2013 Budget &amp; Projection, and 2014 Budget</b>							
<b>EVENT ANALYSIS</b>							
	<b>2013</b>	<b>2013</b>	<b>Variance</b>		<b>Variance</b>		<b>Variance to</b>
	<b>Budget</b>	<b>Projection</b>	<b>v 2013 Budget</b>	<b>2014</b>	<b>v 2013 Budget</b>	<b>2014 Budget</b>	<b>Prior Draft</b>
			<b>Over(Under)</b>	<b>Budget</b>	<b>Over(Under)</b>	<b>Draft 2</b>	<b>Over(Under)</b>
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ 3,501,894	\$ 3,501,893	\$ (1)	\$ 3,975,065	\$ 473,171	\$ 4,114,272	\$ (139,208)
Penalty Sanctions	183,113	183,113		21,834	(161,279)	21,748	85
<b>Total NERC Funding</b>	<b>\$ 3,685,006</b>	<b>\$ 3,685,006</b>	<b>\$ (1)</b>	<b>\$ 3,996,898</b>	<b>\$ 311,891</b>	<b>\$ 4,136,021</b>	<b>\$ (139,123)</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-
Workshops	52,000	38,100	(13,900)	50,000	(2,000)	50,000	-
Interest	1,423	1,522	99	1,473	50	1,467	6
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 3,738,430</b>	<b>\$ 3,724,628</b>	<b>\$ (13,802)</b>	<b>\$ 4,048,371</b>	<b>\$ 309,941</b>	<b>\$ 4,187,488</b>	<b>\$ (139,117)</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 1,340,677	\$ 1,389,096	\$ 48,419	\$ 1,470,290	\$ 129,613	\$ 1,470,290	-
Payroll Taxes	82,107	84,717	2,610	91,480	9,373	91,480	-
Benefits	125,335	130,341	5,006	168,463	43,128	178,744	(10,281)
Retirement Costs	153,189	143,538	(9,651)	167,286	14,097	167,286	-
<b>Total Personnel Expenses</b>	<b>\$ 1,701,309</b>	<b>\$ 1,747,692</b>	<b>\$ 46,384</b>	<b>\$ 1,897,519</b>	<b>\$ 196,211</b>	<b>\$ 1,907,800</b>	<b>(10,281)</b>
<b>Meeting Expenses</b>							
Meetings	\$ 62,000	\$ 99,559	\$ 37,559	\$ 67,000	\$ 5,000	\$ 67,000	-
Travel	155,000	155,000	-	155,000	-	175,000	(20,000)
Conference Calls	-	32,864	32,864	31,864	31,864	20,000	11,864
<b>Total Meeting Expenses</b>	<b>\$ 217,000</b>	<b>\$ 287,423</b>	<b>\$ 70,423</b>	<b>\$ 253,864</b>	<b>\$ 36,864</b>	<b>\$ 262,000</b>	<b>(8,136)</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 120,000	\$ 48,000	\$ (72,000)	\$ -	\$ (120,000)	\$ 75,000	(75,000)
Office Rent	-	-	-	-	-	-	-
Office Costs	36,100	34,613	(1,487)	38,519	2,419	38,519	-
Professional Services	-	432	432	-	-	-	-
Miscellaneous	500	100	(400)	500	-	500	-
Depreciation	-	704	704	193,667	193,667	193,667	-
<b>Total Operating Expenses</b>	<b>\$ 156,600</b>	<b>\$ 83,849</b>	<b>\$ (72,751)</b>	<b>\$ 232,686</b>	<b>\$ 76,086</b>	<b>\$ 307,686</b>	<b>\$ (75,000)</b>
<b>Total Direct Expenses</b>	<b>\$ 2,074,908</b>	<b>\$ 2,118,964</b>	<b>\$ 44,056</b>	<b>\$ 2,384,069</b>	<b>\$ 309,161</b>	<b>\$ 2,477,486</b>	<b>\$ (93,417)</b>
<b>Indirect Expenses</b>	<b>\$ 1,642,332</b>	<b>\$ 1,827,134</b>	<b>\$ 184,802</b>	<b>\$ 1,804,814</b>	<b>\$ 162,482</b>	<b>\$ 1,850,717</b>	<b>\$ (45,903)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 3,717,240</b>	<b>\$ 3,946,098</b>	<b>\$ 228,858</b>	<b>\$ 4,188,883</b>	<b>\$ 471,643</b>	<b>\$ 4,328,203</b>	<b>\$ (139,320)</b>
<b>Change in Assets</b>	<b>\$ 21,190</b>	<b>\$ (221,470)</b>	<b>\$ (242,660)</b>	<b>\$ (140,512)</b>	<b>\$ (161,702)</b>	<b>\$ (140,715)</b>	<b>203</b>
<b>Fixed Assets</b>							
Depreciation	-	(704)	(704)	(193,667)	(193,667)	(193,667)	-
Computer & Software CapEx	-	581,000	581,000	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-	-	-
Allocation of Fixed Assets	\$ 21,190	\$ 15,586	(5,604)	53,154	31,964	\$ 52,951	203
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ 21,190</b>	<b>\$ 595,882</b>	<b>\$ 574,692</b>	<b>\$ (140,512)</b>	<b>\$ (161,702)</b>	<b>\$ (140,715)</b>	<b>\$ 203</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 3,738,430</b>	<b>\$ 4,541,980</b>	<b>\$ 803,550</b>	<b>\$ 4,048,371</b>	<b>\$ 309,941</b>	<b>\$ 4,187,488</b>	<b>\$ (139,117)</b>
<b>FTEs</b>	<b>9.50</b>	<b>9.46</b>	<b>(0.04)</b>	<b>9.60</b>	<b>0.10</b>	<b>9.60</b>	<b>-</b>

### Summary of Variances by Category – 2014 Budget Compared to the 2013 Budget

- Personnel** – All personnel related expenses are projected to increase in 2014 due to a slight increase in FTEs and due to higher average salary expense per FTE in this program. Salaries, payroll tax and retirement expenses were offset by the 4% attrition rate, which was applied to all departments. Benefits are projected to increase at a higher rate than other personnel expenses due to; (i) the higher cost per employee of employee benefits plans and, (ii) the allocation of benefit expenses that were budgeted in Human Resources in prior years, including education, training and relocation expenses.

- **Conferencing Expenses** – Conferencing expenses for this department were not separately tracked prior to 2013. The 2014 budget is generally based upon trending of actual expenses in 2013.
- **Consultants and Contracts** – Support from outside consultants and contractors is not required in 2014.

## Critical Infrastructure Protection

Critical Infrastructure Department (in whole dollars)				2014 Budget - Prior Draft	Variance to Prior Draft Over(Under)
	2013 Budget	2014 Budget	Increase (Decrease)		
Total FTEs	12.50	12.48	(0.02)	12.48	-
Direct Expenses	\$ 3,110,661	\$ 3,257,012	\$ 146,351	\$ 3,315,465	\$ (58,453)
Indirect Expenses	\$ 2,145,903	\$ 2,299,170	\$ 153,267	\$ 2,360,591	\$ (61,421)
Other Non-Operating Expenses	\$ -	\$ -	\$ -		\$ -
Inc(Dec) in Fixed Assets	\$ 42,937	\$ 111,846	\$ 68,909	\$ 114,176	\$ (2,330)
<b>TOTAL BUDGET</b>	<b>\$ 5,299,501</b>	<b>\$ 5,668,027</b>	<b>\$ 368,526</b>	<b>\$ 5,790,232</b>	<b>\$ (122,205)</b>

### Background and Scope

NERC's Critical Infrastructure Protection resources support the development and administration of critical infrastructure standards, CMEP oversight, critical infrastructure and cyber information sharing, incident analysis, risk assessment, and coordination between industry and governmental entities. These resources also provide staff-level support for several industry-led activities and organizations,<sup>12</sup> including the following:

- Critical Infrastructure Protection Committee, an industry-led committee comprised of industry experts in the areas of cybersecurity, physical security, and operational security; and
- Electricity Sub-sector Coordinating Council (ESCC), which works closely with the federal government to identify and discuss critical infrastructure protection concepts, processes, and resources, as well as facilitate information sharing regarding cyber vulnerabilities and threats.

### 2014 Goals and Deliverables

2014 goals and deliverables include:

- Support CIP standards development and implementation through outreach presentations, webinars, and other training opportunities.
- Support the compliance and enforcement process improvement initiatives (e.g., RAI), including but not limited to improvements in audit consistency, risk-based audit approaches and auditor training.
- Through the operation of the ES-ISAC, provide rapid dissemination of cyber threat, vulnerability information, and mitigation strategies to industry, including the dissemination of information derived from classified sources.
- Conduct security incident analyses and work with industry experts to evaluate, track, and identify lessons learned and security metrics that enhance the sector's security posture.

<sup>12</sup> Critical Infrastructure Protection Resources also participate in other industry-led groups, such as the Cross-Sector Cyber Security Working Group, the Industrial Control Systems Joint Working Group, and the Partnership for Infrastructure Security.

- Conduct Cyber Risk Preparedness Assessments (CRPA) and sufficiency reviews and develop CRPA tools for industry to conduct self-assessments.
- Contribute technical expertise to establish a NERC enterprise-wide cause-coding effort designed to inform sector risk-based analytics.

### ESCC Support

The ESCC was established to provide the federal government a forum for coordinating with the electricity sector on critical infrastructure protection matters. Since May 2010, the ESCC has been composed of executive-level members who broadly represent industry stakeholders to provide strategic and policy-level guidance on critical infrastructure security and reliability resilience. NERC supports the ESCC by providing executive involvement, expert input and advice, coordination with stakeholders, and secretariat support. The vast majority of this support is provided by utilizing internal resources. Outside contractor support has historically been utilized to supplement internal resources. In 2014, \$190k has been budgeted for this external consulting support, which is an increase of \$60k over the 2013 budget.

### Resource Requirements

#### Personnel

No additional personnel are planned to be added to the Critical Infrastructure department in 2014. The 0.02 reduction in FTEs is the assumption of 4% attrition in all departments. ES-ISAC personnel additions are discussed in the next section.

Contractors- contractor expense for ESSC support is projected to increase by \$60k over 2013, as discussed above.

### Electricity Sector Information Sharing and Analysis Center (ES-ISAC)

	ES-ISAC (in whole dollars)			2014 Budget - Prior Draft	Variance to Prior Draft Over(Under)
	2013 Budget	2014 Budget	Increase (Decrease)		
Total FTEs	6.75	7.72	0.97	8.22	(0.50)
Direct Expenses	\$ 1,978,746	\$ 2,444,997	\$ 466,251	\$ 2,646,858	\$ (201,861)
Indirect Expenses	\$ 1,181,979	\$ 1,498,460	\$ 316,481	\$ 1,630,018	\$ (131,558)
Other Non-Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ -	\$ -	\$ -	\$ -	\$ -
<b>TOTAL BUDGET</b>	<b>\$ 3,160,725</b>	<b>\$ 3,943,457</b>	<b>\$ 782,732</b>	<b>\$ 4,276,876</b>	<b>\$ (333,419)</b>

The ES-ISAC was formed in 1998 when the U.S. Secretary of Energy requested that NERC serve as the ISAC<sup>13</sup> for the electricity sub-sector.<sup>14</sup> ES-ISAC's primary function is the rapid and secure

<sup>13</sup> The Information Security Analysis Center (ISAC) construct was conceived and operates under US Government authorities derived from Presidential Decision Directive 63, which was signed in 1998. The ISACs focus specifically on information sharing, analytics and sector activities directly related to the protection of critical infrastructure.

<sup>14</sup> Subsequent administrations have sought to continue and strengthen information sharing in other sectors by establishing other sector-specific ISACs. In 2013, the Department of Energy (DOE) again reaffirmed its desire for NERC to continue to operate the ES-ISAC.

sharing of information with the electric industry and governmental entities regarding real and potential cyber-related threats to the electricity sector, as well as methods and tools to avoid or mitigate the potential impact from these threats.

The ES-ISAC gathers information from the disparate electricity industry participants about security-related events, disturbances, and off-normal occurrences within the electricity sub-sector and shares that information with its partners in the government. In turn, the government provides information regarding risks, threats, and warnings to the ES-ISAC, which then disseminates that information throughout the electricity sub-sector.

In general, the ES-ISAC supports two functions, information sharing and analytics, which are vitally important to all other critical infrastructures and key resource sectors that have active ISACs. The ES-ISAC is a founding member of the National Council of ISACs and participates in daily coordination with its members to ensure effective collaboration and communication. This close coordination is essential to addressing critical infrastructure protection and resilience within each sector, as well as the important interdependencies that exist among sectors.

The ES-ISAC develops alerts and notifications for distribution to registered entities. The ES-ISAC also utilizes its secure, private information-sharing portal to receive voluntary reports from industry members. This portal is designed with the unique ability to receive unattributed reports in order to increase information reporting.

The ES-ISAC also maintains a seat on the operations floor of the National Cybersecurity and Communications Integration Center (NCCIC) within the Department of Homeland Security (DHS). This operations center is the hub for real-time, classified threat and vulnerability work, and the ES-ISAC serves a central private sector role in this operation. The NCCIC operations floor is where ES-ISAC personnel holding the appropriate security clearances analyze the threat and vulnerability component provided by the intelligence community and make initial determinations of potential BPS impacts. The ES-ISAC maintains other information-sharing relationships throughout the U.S. and Canadian governments, including DOE, Canadian Secret Intelligence Service, and the U.S. Department of Defense. The ES-ISAC also coordinates information sharing with similar agencies in Australia, New Zealand, and the United Kingdom.

The resources currently devoted to supporting the ES-ISAC are contained and budgeted in a separate department. These resources consist primarily of personnel and contractors who gather, analyze, and provide information regarding cyber threats to industry through a secure communications portal and the costs to operate and maintain that portal. Having access to information regarding threats (including threats faced by other sectors, such as the financial and communications industries) and the ability to analyze the potential impact of these threats on the electric sector and rapidly share this information with industry enables the ES-ISAC to improve the security of the electricity sector.

To keep pace with the growth and risk of cyber attacks and the associated need for information sharing with other sectors and industry in order to mitigate potential significant BPS reliability risk, NERC's 2014 budget includes a significant increase in the resources devoted to supporting ES-ISAC. This additional resource support is in three areas: (1) improving the usability and

functionality of the information-sharing portal, (2) the preparation of a cyber risk preparedness toolkit to allow industry to conduct self-assessments of cyber risk preparedness, and (3) adding personnel to increase analytical capabilities, portal monitoring, and information sharing and shift staffing on the NCIC floor. The additional cost in 2014 associated with improving the portal and information-sharing capabilities consists primarily of software licensing fees. The cyber risk preparedness toolkit will reduce NERC's projected ongoing costs for conducting individual cyber risk preparedness assessments for industry.

The federal government has been piloting a new form of highly secure information sharing network and associated technology that can be utilized to identify, track, and deploy fixes to emerging cybersecurity threats. This project, a combination of the "Cyber Federated Model" and "Cyber Risk Information Sharing Program," is at a point where the tools are ready to be commercialized. Federal funding provided to incubate this technology to the point of commercialization is expected to be reduced or eliminated in 2014 and be replaced by private sector sources of funding. NERC has not included any specific funding to support the commercialization of this portal and associated technology in 2014. NERC has not provided and funding for CFM or CRISP in its 2014 budget.

## **Resource Requirements**

### ***Personnel***

The increase of 0.97 FTEs includes the assumption of 4% attrition in all departments and the timing of hiring 1.0 additional staff position in 2014.

### ***Contractors, Technology, and Tool Expenses***

The 2014 contractor and consulting budget for ES-ISAC is approximately \$786.5k, which represents an increase of approximately \$331.5k over the 2013 budget. This includes funding for existing and added tools and technology. The line-by-line budget detail is set forth in Exhibit C. A discussion of the specific nature and need for these resources follows.

### **Portal Enhancement**

The ES-ISAC communication portal capabilities include: publishing alerts and other informational products, exchanging threat indicator information, and providing self-service access to user security awareness services. The present platform is cumbersome for registered entities to use and has limited flexibility to support additional functionality, such as tighter integration with other ISACs and different types of collaboration support. The National Council of ISACs recently informed NERC of a program that could more fully integrate the ES-ISAC's existing information-sharing platform with other formal ISACs, as well as significantly expand the portal capabilities, functionality, and capacity. This integration will be accomplished through an arrangement between NERC, Microsoft, and Cyber IQ Services (CIQS), which will then maintain ES-ISAC's portal in a cloud-based, secure platform solution. This portal will facilitate direct data exchange with other ISACs and government partners. The portal will also support the ES-ISAC analysts in their information analysis functions and tie the ES-ISAC analysts with their counterparts in other sectors and national laboratories. The 2014 cost of the CIQS portal integration is \$250k, which is a \$160k increase over the 2013 portal budget.

### **Intelligence Reporting Services**

ES-ISAC analytic personnel maintain a detailed understanding of emerging vulnerabilities and threats within the broad industrial control systems community, as well as within the more focused BPS community. To support this intelligence role, the ES-ISAC budget includes the costs of a contract for intelligence services from a specialized security information service provider that focuses closely on the electricity sub-sector and has a working relationship with DOE's Idaho National Laboratory. These reporting services include weekly, quarterly, and annual news in the industrial controls systems (ICS) and security space, along with expert guidance, opinion, and sourced material. This service gives ES-ISAC staff increased understanding of continuing trends, breaking news, and implications to the BPS, which they utilize to keep registered entities informed of emerging BPS risks through alerts and esisac.com security postings. The 2014 budget for these services is \$42k, a \$2k increase over 2013.

### **Cyber Risk Preparedness Assessments (CRPA)**

The CRPA is a program that assesses the cybersecurity capabilities of registered entities through facilitated tabletop exercises. Conducting these assessments allows the ES-ISAC to gain a better understanding of industry capabilities, identify key sector level areas for improvement, and share best practices across the industry. Through the CRPA, participants gain an improved understanding of their cybersecurity programs and capabilities. The CRPA allows them to identify areas for improvement and enhance their abilities to respond to and recover from cyber events. The CRPA also educates participants through defined deliverables and best practices. The CRPA incorporates many Electricity Subsector Cybersecurity Capability Maturity Model practices, which allows the participating organization to assess its cybersecurity program and use the CRPA to validate its assessment. The ES-ISAC is developing a CRPA "kit" for entities to use to develop and run their own CRPAs. This kit will allow more sector members to leverage the CRPA methodology, which will have a more significant impact on overall sector preparedness. ES-ISAC staff will host training and education sessions on the kit to accelerate adoption of the methodology across the sector and move the program toward self-sustainment within the industry. To accommodate more CRPA engagements and to develop a complete kit for use by industry partners, the contractor and consulting budget to support these activities will be increased from \$150k in 2013 to \$200k in 2014. Commencing in 2015, the ES-ISAC will conduct only one or two strategic CRPA engagements, with the expectation that industry will engage in the program through the kits. The 2015 budget for this activity is expected to remain at a minimal level to aggregate results across the sector, support ongoing development of best practices and information sharing, and promote continued adoption of the methodology.

### **Aurora Webinars and Technical Support**

In late 2006, a significant supply chain vulnerability was discovered in digital protective control devices that protect generators and motors in use throughout the BPS. This vulnerability, named the Aurora Vulnerability, demonstrated a remote exploit that led to the destruction of a small generator as a proof of concept attack in early 2007. In June of 2007, NERC released a Level 1 Industry Advisory that specified actions that entities could take to help prevent exploitation. In October 2010, NERC released a second Aurora Alert, this time a Level 2 Recommendation to Industry. This second release also triggered a substantial increase in NERC's effort to close this vulnerability gap, and it required entities to report every six months until they closed the alert actions. Prior to each required reporting period, the ES-ISAC holds

three webinars to provide BPS entities who are still working on their Aurora mitigations an opportunity to interact with the original authors and researchers who discovered the Aurora vulnerability. The ES-ISAC anticipates supporting two sets of three webinars each until at least 2017. \$30k is budgeted to support this activity in 2014, which is a \$15k increase over 2013.

### **Secure Bidirectional Communications**

Certain emergent security situations may require the ES-ISAC to quickly transmit secure information from the ES-ISAC to DHS's NCCIC, DOE and its National Laboratories, and among different registered entities. DOE recently developed the Contested Operational Network for Reporting and Defense (CONRAD) system for its own internal communications, which is now available for the ES-ISAC's use. The CONRAD system is an "out-of-band" network that ES-ISAC cyber analysts will use to communicate with their peers. The CONRAD system implements a specific network architecture that is separate from all regular site enterprise networks like Voice over Internet Protocol, normal email, web-based applications, and standard telephony. The CONRAD deployment is a fee-based contract that costs \$8k every three years per network interface device; each location that participates in CONRAD requires a Network interface device. For the initial 2014 deployment of 20 devices, the cost is \$20k and is a slight reduction in cost compared to the 2013 budget. NERC will utilize one device and make the remaining 19 devices available to a limited number of other registered entities on a priority basis.

### **Cyber Awareness Monitoring**

A new class of cyber intelligence tools that collects and analyzes information and then alerts the user about selected threats is emerging in the marketplace. This collection and analysis goes beyond the individual organization's network perimeter and gives organizations like the ES-ISAC visibility across the entire industrial sector. Key global internet infrastructure data sources are combined with advanced visual analysis tools that provide ES-ISAC staff with enhanced analytic capabilities. The ES-ISAC currently licenses cyber awareness and continuous monitoring tools and services, including third party services, which provide real-time internet communications visibility and analytics. During 2012 and 2013, the ES-ISAC worked with a vendor to develop a specific software visualization application that allows ES-ISAC staff to monitor malware and threats, as well as the general health of BPS entities. ES-ISAC staff can then alert individual entities to problems. In 2013, the ES-ISAC portal will begin to provide individual asset owners a customized view of their asset networks. This view will provide the asset owner with insight into the organization's general network hygiene and highlight any significant network activity of concern. The 2014 cost for the software application and services is budgeted at \$152,700, an increase of \$92.7k from 2013.

### **Attack Tree Threat Modeling**

Attack trees are hierarchical, graphical diagrams that show how low-level hostile activities interact and combine to achieve an adversary's objectives—usually with negative consequences for the victim of the attack. ES-ISAC staff has been working with a vendor that developed an advanced attack tree-based threat risk assessment tool to discover which weaknesses are most likely to be used by attackers within a particular network. This tool provides the capability to pose "what-if" attack scenarios and threat modeling against the BPS. The risk management process is enhanced by review of data regarding attack scenarios. The ES-ISAC team applies its knowledge of this data during emergent situations and compares what-if scenarios to the real-

time data feeds. It then alerts industry participants regarding potential emerging threats. The 2014 budgeted cost for this tool and supporting services is \$7.5k, which is consistent with the 2013 budget. This cost is budgeted under Office Costs as a software maintenance expense.

### **Software Integration Support and BPS Mapping Services**

The ES-ISAC operations center includes monitors used to display intelligence information provided from various software applications. Software integration services are routinely required from vendors providing existing and new software applications. Additional software must be licensed and maintained to display and integrate BPS maps that have cyber intelligence information. The 2014 budget for software integration support and BPS mapping is \$89,250, an increase of \$6,750 from the 2013 budget. A portion of these costs are budgeted under Office Costs as software maintenance expenses.

### **Analyst Workbench**

A strong technical analytic capability is needed to develop baselines and identify patterns and understandings of potential cyber related threats. The analyst workbench toolset maintains historical information and allows a team to use and deliver consistent and repeatable analysis in both an operational (during an event) as well as nonoperational capacity. The analyst workbench will also offer stand-alone functionality for assessing and understanding cyber events. This workbench will include a threat database for historical correlation and various tools for network and host-based analysis of malicious software. The 2014 budget to support this activity is \$30,000 and includes funding for information services and software tools. This is consistent with the 2013 budget.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital							
2013 Budget & Projection, and 2014 Budget							
CRITICAL INFRASTRUCTURE DEPARTMENT & ES-ISAC							
	2013	2013	Variance	2014	Variance	2014 Budget	Variance to
	Budget	Projection	v 2013 Budget	Budget	v 2013 Budget	Draft 2	Prior Draft
			Over(Under)		Over(Under)		Over(Under)
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ 7,991,299	\$ 7,396,148	\$ (595,151)	\$ 9,517,444	\$ 1,526,145	\$ 9,972,051	\$ (454,606)
Penalty Sanctions	371,044	371,044	(0)	45,941	(325,103)	46,895	(953)
<b>Total NERC Funding</b>	<b>\$ 8,362,343</b>	<b>\$ 7,767,192</b>	<b>\$ (595,151)</b>	<b>\$ 9,563,386</b>	<b>\$ 1,201,043</b>	<b>\$ 10,018,946</b>	<b>\$ (455,560)</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-
Workshops	95,000	95,000	-	45,000	(50,000)	45,000	-
Interest	2,884	-	(2,884)	3,098	214	3,163	(65)
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 8,460,227</b>	<b>\$ 7,862,192</b>	<b>\$ (598,035)</b>	<b>\$ 9,611,484</b>	<b>\$ 1,151,257</b>	<b>\$ 10,067,108</b>	<b>\$ (455,624)</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 2,853,871	\$ 2,844,383	\$ (9,488)	\$ 3,220,485	\$ 366,614	\$ 3,307,057	(86,572)
Payroll Taxes	172,586	169,015	(3,571)	191,249	18,663	196,294	(5,045)
Benefits	250,885	294,325	43,440	354,474	103,589	385,331	(30,857)
Retirement Costs	312,315	283,938	(28,377)	366,598	54,283	376,441	(9,843)
<b>Total Personnel Expenses</b>	<b>\$ 3,589,657</b>	<b>\$ 3,591,661</b>	<b>\$ 2,004</b>	<b>\$ 4,132,806</b>	<b>\$ 543,149</b>	<b>\$ 4,265,123</b>	<b>(132,317)</b>
<b>Meeting Expenses</b>							
Meetings	\$ 145,000	\$ 156,168	\$ 11,168	\$ 145,000	\$ -	\$ 145,000	-
Travel	420,000	328,428	(91,572)	328,428	(91,572)	330,000	(1,572)
Conference Calls	24,000	32,574	8,574	32,574	8,574	25,000	7,574
<b>Total Meeting Expenses</b>	<b>\$ 589,000</b>	<b>\$ 517,171</b>	<b>\$ (71,829)</b>	<b>\$ 506,003</b>	<b>\$ (82,997)</b>	<b>\$ 500,000</b>	<b>6,003</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 785,000	\$ 785,000	\$ -	\$ 976,450	\$ 191,450	\$ 1,110,450	(134,000)
Office Rent	-	-	-	-	-	-	-
Office Costs	125,250	126,975	1,725	86,250	(39,000)	86,250	-
Professional Services	-	480	480	-	-	-	-
Miscellaneous	500	500	-	500	-	500	-
Depreciation	-	16,425	16,425	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 910,750</b>	<b>\$ 929,379</b>	<b>\$ 18,629</b>	<b>\$ 1,063,200</b>	<b>\$ 152,450</b>	<b>\$ 1,197,200</b>	<b>(134,000)</b>
<b>Total Direct Expenses</b>	<b>\$ 5,089,407</b>	<b>\$ 5,038,211</b>	<b>\$ (51,196)</b>	<b>\$ 5,702,009</b>	<b>\$ 612,602</b>	<b>\$ 5,962,323</b>	<b>(260,314)</b>
<b>Indirect Expenses</b>	<b>\$ 3,327,882</b>	<b>\$ 3,501,684</b>	<b>\$ 173,802</b>	<b>\$ 3,797,630</b>	<b>\$ 469,748</b>	<b>\$ 3,990,609</b>	<b>(192,979)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>-</b>					
<b>Total Expenses (B)</b>	<b>\$ 8,417,290</b>	<b>\$ 8,539,895</b>	<b>\$ 122,606</b>	<b>\$ 9,499,639</b>	<b>\$ 1,082,350</b>	<b>\$ 9,952,932</b>	<b>(453,294)</b>
<b>Change in Assets</b>	<b>\$ 42,937</b>	<b>\$ (677,703)</b>	<b>\$ (720,641)</b>	<b>\$ 111,846</b>	<b>\$ 68,908</b>	<b>\$ 114,176</b>	<b>(2,331)</b>
<b>Fixed Assets</b>							
Depreciation	-	(16,425)	(16,425)	-	-	-	-
Computer & Software CapEx	-	-	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-	-	-
Allocation of Fixed Assets	\$ 42,937	\$ 29,871	(13,066)	111,846	68,909	114,176	(2,331)
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>\$ 42,937</b>	<b>\$ 13,447</b>	<b>\$ (29,490)</b>	<b>\$ 111,846</b>	<b>\$ 68,909</b>	<b>\$ 114,176</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 8,460,227</b>	<b>\$ 8,553,342</b>	<b>\$ 93,116</b>	<b>\$ 9,611,484</b>	<b>\$ 1,151,258</b>	<b>\$ 10,067,108</b>	<b>(455,624)</b>
<b>FTEs</b>	<b>19.25</b>	<b>18.13</b>	<b>(1.12)</b>	<b>20.20</b>	<b>0.95</b>	<b>20.70</b>	<b>(0.50)</b>

### Summary of Variances by Category – 2014 Budget Compared to the 2013 Budget

- Personnel** – All personnel related expenses are projected to increase in 2014 due to an increase in FTEs and due to higher average salary expense per FTE in this program. Salaries, payroll tax and retirement expenses were offset by the 4% attrition rate, which was applied to all departments. Benefits are projected to increase at a higher rate than other personnel expenses due to; (i) the higher cost per employee of employee benefits plans and, (ii) the allocation of benefit expenses that were budgeted in Human Resources in prior years, including education, training and relocation expenses.
- Travel and Conferencing Expenses** – The reduction in 2014 projected travel expense and the increase in 2014 projected conferencing expenses are based upon trending of actual expenses in 2013.

- **Consultants and Contracts** – The increase in consultant and contract expense, as explained above, is also set forth in Exhibit C.
- **Office Costs** – The reduction in 2014 projected expense is due to the transfer of costs associated with intelligence reporting services from office costs to consultant and contract costs.

## Training, Education, and Operator Certification

Training, Education and Operator Certification (in whole dollars)				2014 Budget -Prior Draft	Variance to Prior Draft Over(Under)
	2013 Budget	2014 Budget	Increase (Decrease)		
Total FTEs	8.00	8.16	0.16	8.16	-
Direct Expenses	\$ 2,170,906	\$ 2,158,199	\$ (12,707)	\$ 2,168,423	\$ (10,224)
Indirect Expenses	\$ 1,383,017	\$ 1,534,092	\$ 151,075	\$ 1,573,110	\$ (39,018)
Other Non-Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ 17,844	\$ 45,181	\$ 27,337	\$ 45,009	\$ 172
<b>TOTAL BUDGET</b>	<b>\$ 3,571,768</b>	<b>\$ 3,737,472</b>	<b>\$ 165,705</b>	<b>\$ 3,786,541</b>	<b>\$ (49,069)</b>

### Background and Scope

NERC's Training and Education Program provides oversight and coordination of the delivery of training programs that support the ERO's statutory responsibilities. This program provides training to NERC and Regional Entity staff members, including compliance auditors, relating to their job responsibilities. It also provides training and education to industry participants on the requirements of reliability standards and the compliance monitoring and enforcement process. Further, this program provides training to industry participants on the reliability standards development process, thereby helping to support the more efficient and effective development of mandatory reliability standards. The Training and Education Program supports NERC's statutory ERO responsibilities to develop, adopt, and obtain approval of reliability standards and to monitor, enforce, and achieve compliance with the mandatory standards. Section 901 of the NERC Rules of Procedure addresses the Training and Education Program's activities in these areas.

The Training and Education Program also supports NERC's System Operator Certification and Continuing Education (SOCCED) programs, which ensure that personnel operating the BPS have the skills, training, and qualifications needed to operate the system reliably. NERC maintains the credentials required to work in system control centers across North America for over 6,000 system operators. NERC's system operator certification exam is designed to test specific knowledge of job skills and reliability standards. It also prepares operators for complying with requirements of reliability standards and appropriately operate the BPS during normal and emergency operations. Certification exams are created by the Personnel Certification Governance Committee, an industry group of operations experts, trainers, and supervisors. Under the PCGC oversight, the Examination Working Group periodically updates and publishes new exams. Once an operator passes the certification exam, certification is maintained by completing NERC-approved continuing education courses and activities. The Personnel Subcommittee, composed of industry training experts, provides oversight of the Continuing Education program.

### 2014 Goals and Deliverables

In response to stakeholder and Regional Entity feedback, training and education opportunities will be further expanded and focused for registered entities, NERC, and Regional Entities. For registered entities, this training and education will focus on objectives related to various

reliability standards, including standards compliance and emerging cyber-related issues potentially affecting BPS reliability. For NERC and Regional Entity staff, the training and education will focus on consistent audit and investigation techniques and standards compliance reviews, including the RAI, FFT, and other improvements in compliance and enforcement practices. NERC will continue to offer training in auditor skills to promote continued development of auditing expertise. NERC will leverage information technology systems to better deliver and share common training products and information with Regional and registered entities. Other training will focus on knowledge and skills development in a number of key areas, including:

- Critical Infrastructure Protection standards information,
- Development and implementation of clear and technically sound reliability standards,
- Key lessons learned and trends from events,
- Identified themes from trending and common cause analyses,
- Risk-based assessment methods,
- Effective compliance cultures with practices, procedures and controls to address reliability risks,
- Effective root, apparent and common cause analysis methods,
- Quality improvement of registered entity self-reporting and self-certification,
- Currently monitored standards,
- Entity registration process, issues, and alternatives,
- Human performance fundamentals, and
- Systematic approach to training.

NERC will continue to provide learning opportunities through workshops hosted by the Regional Entities. NERC will also host workshops, webinars, and training courses, as well as use vendors to develop training modules and supplement internal training resources. The Training and Education group will also continue to advance and improve the skills of NERC's operating staff. NERC's Human Resources department will continue to budget and manage the delivery of more traditional corporate employee training and continuing education programs.

## **Resource Requirements**

### ***Personnel***

No additional personnel are budgeted for 2014. The increase of 0.16 FTEs is due to the transfer of 0.5 FTEs in 2013 from another department and the 4% attrition assumption in all departments.

### ***Contractor Expenses***

The total proposed consulting and contractor expenses of approximately \$849k in 2014 is consistent with the 2013 budget.

Further detail in support of the proposed 2014 contractor and consulting budget to support Training, Education, and Operator Certification is set forth in Exhibit C, which includes a comparison to 2013 budgeted amounts. The primary areas of contractor and consulting support include:

- Testing services to develop, administer, proctor, score, and support system operator certification exams across North America.
- Ongoing hosting and maintenance fees for the SOCCED database.
- Improvements to the SOCCED database described above.
- Supplemental support to Continuing Education Review Panel industry volunteers to review and audit over 2,500 individual learning activities and provider applications received each year.<sup>15</sup>
- Audit team leader soft skills training delivered by certified NERC staff or consultants to support effective dialogue and communications between audit teams and registered entities provided quarterly using vendor-licensed materials.
- Vendor supported BPS technical training for select NERC staff, including auditors, technical and support staff.
- Auditor training by recognized auditing specialists for NERC and Regional Entity staff to promote continued development of compliance staff.
- Web-based training development for ERO staff and industry, including standards applications, risk assessment training, industry human performance fundamentals, and BPS events lessons learned.

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<sup>15</sup> Review and approval of learning activity applications results in over 400,000 hours of continuing education per year for the industry's certified system operators.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>							
<b>2013 Budget &amp; Projection, and 2014 Budget</b>							
<b>TRAINING, EDUCATION and OPERATOR CERTIFICATION</b>							
	2013	2013	Variance	2014	Variance	2014 Budget	Variance to
	Budget	Projection	2013 Projection	Budget	2014 Budget	Draft 2	Prior Draft
			v 2013 Budget		v 2013 Budget		Over(Under)
			Over(Under)		Over(Under)		Over(Under)
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ 1,449,793	\$ 1,449,793	\$ -	\$ 1,665,959	\$ 216,166	\$ 1,697,796	\$ (31,837)
Penalty Sanctions	93,484	93,484	\$ -	12,008	(81,476)	11,962	47
<b>Total NERC Funding</b>	<b>\$ 1,543,277</b>	<b>\$ 1,543,277</b>	<b>\$ -</b>	<b>\$ 1,677,968</b>	<b>\$ 134,691</b>	<b>\$ 1,709,758</b>	<b>\$ (31,790)</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	1,680,000	1,680,000	-	1,620,000	(60,000)	1,620,000	-
Services & Software	-	-	-	-	-	-	-
Workshops	-	-	-	-	-	-	-
Interest	1,199	1,250	51	1,252	53	1,247	5
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 3,224,476</b>	<b>\$ 3,224,527</b>	<b>\$ 51</b>	<b>\$ 3,299,220</b>	<b>\$ 74,744</b>	<b>\$ 3,331,005</b>	<b>\$ (31,785)</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 837,645	\$ 810,923	\$ (26,722)	\$ 806,116	\$ (31,529)	\$ 806,116	-
Payroll Taxes	54,087	56,906	2,819	56,919	2,832	56,919	-
Benefits	112,397	116,999	4,602	143,194	30,797	151,918	(8,724)
Retirement Costs	94,203	74,618	(19,585)	91,840	(2,363)	91,840	-
<b>Total Personnel Expenses</b>	<b>\$ 1,098,332</b>	<b>\$ 1,059,446</b>	<b>\$ (38,886)</b>	<b>\$ 1,098,069</b>	<b>\$ (263)</b>	<b>\$ 1,106,793</b>	<b>(8,274)</b>
<b>Meeting Expenses</b>							
Meetings	\$ 30,000	\$ 30,000	\$ -	\$ 36,000	\$ 6,000	\$ 36,000	-
Travel	70,000	51,000	(19,000)	51,000	(19,000)	51,000	-
Conference Calls	27,000	27,500	500	25,500	(1,500)	27,000	(1,500)
<b>Total Meeting Expenses</b>	<b>\$ 127,000</b>	<b>\$ 108,500</b>	<b>\$ (18,500)</b>	<b>\$ 112,500</b>	<b>\$ (14,500)</b>	<b>\$ 114,000</b>	<b>(1,500)</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 848,574	\$ 735,844	\$ (112,730)	\$ 848,830	\$ 256	\$ 848,830	-
Office Rent	-	-	-	-	-	-	-
Office Costs	96,500	88,800	(7,700)	98,300	1,800	98,300	-
Professional Services	-	432	432	-	-	-	-
Miscellaneous	500	150	(350)	500	-	500	-
Depreciation	-	-	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 945,574</b>	<b>\$ 825,226</b>	<b>\$ (120,348)</b>	<b>\$ 947,630</b>	<b>\$ 2,056</b>	<b>\$ 947,630</b>	<b>\$ -</b>
<b>Total Direct Expenses</b>	<b>\$ 2,170,906</b>	<b>\$ 1,993,172</b>	<b>\$ (177,734)</b>	<b>\$ 2,158,199</b>	<b>\$ (12,707)</b>	<b>\$ 2,168,423</b>	<b>\$ (10,224)</b>
<b>Indirect Expenses</b>	<b>\$ 1,383,017</b>	<b>\$ 1,500,722</b>	<b>\$ 117,705</b>	<b>\$ 1,534,092</b>	<b>\$ 151,075</b>	<b>\$ 1,573,110</b>	<b>\$ (39,018)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 3,553,922</b>	<b>\$ 3,493,894</b>	<b>\$ (60,029)</b>	<b>\$ 3,692,291</b>	<b>\$ 138,368</b>	<b>\$ 3,741,533</b>	<b>\$ (49,242)</b>
<b>Change in Assets</b>	<b>\$ (329,446)</b>	<b>\$ (269,366)</b>	<b>\$ 60,081</b>	<b>\$ (393,072)</b>	<b>\$ (63,625)</b>	<b>\$ (410,528)</b>	<b>17,456</b>
<b>Fixed Assets</b>							
Depreciation	-	-	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-
Equipment CapEx	-	25,000	25,000	-	-	-	-
Leasehold Improvements	-	-	-	-	-	-	-
Allocation of Fixed Assets	\$ 17,844	\$ 12,802	(5,042)	45,181	\$ 27,337	\$ 45,009	173
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ 17,844</b>	<b>\$ 37,802</b>	<b>\$ 19,958</b>	<b>\$ 45,181</b>	<b>\$ 27,337</b>	<b>\$ 45,009</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 3,571,766</b>	<b>\$ 3,531,696</b>	<b>\$ (40,071)</b>	<b>\$ 3,737,472</b>	<b>\$ 165,705</b>	<b>\$ 3,786,541</b>	<b>\$ (49,069)</b>
<b>FTEs</b>	<b>8.00</b>	<b>7.77</b>	<b>(0.23)</b>	<b>8.16</b>	<b>0.16</b>	<b>8.16</b>	<b>-</b>

### Summary of Variances by Category – 2014 Budget Compared to the 2013 Budget

- Personnel** – Salaries expense is projected to decrease in 2014 due to a decrease in the average salary expense per FTE in this program. Benefits are projected to increase at a higher rate than other personnel expenses due to; (i) the higher cost per employee of employee benefits plans and, (ii) the allocation of benefit expenses that were budgeted in Human Resources in prior years, including education, training and relocation expenses.
- Meetings and Travel Expenses** – Meetings expense is projected to increase in 2014 primarily due to additional meeting costs for the Operator Certification program, which is totally funded by fees charged for system operator certification exams and certificate

renewals. The reduction in travel expense for 2014 is based upon trending of 2013 actual costs.

## Administrative Services

Administrative Services (in whole dollars)					
	2013 Budget	2014 Budget	Increase (Decrease)	2014 Budget - Prior Draft	Variance to Prior Draft Over(Under)
Total FTEs	52.75	59.14	6.39	59.14	-
Total Direct Expenses	\$ 23,079,081	\$ 24,513,515	\$ 1,434,434	\$ 25,233,374	\$ (719,859)
Inc(Dec) in Fixed Assets	\$ 297,774	\$ 721,958	\$ 424,184	\$ 721,958	\$ (0)

### Program Scope and Functional Description

NERC's Administrative Services area includes the budget for all business and administrative functions of the organization, including (1) technical committees and member forums; (2) General and Administrative, which includes Board fees and expenses, the president and chief executive officer and support staff, communications and governmental affairs, and office rent; (3) Legal and Regulatory; (4) Information Technology; (5) Human Resources; (6) Finance and Accounting; and (7) general administrative expenses necessary to support program area activities. These functions are necessary to the existence and functioning of the organization and support the performance of NERC's ERO statutory activities. The costs of the Administrative Services functions are allocated to the five statutory programs as indirect expenses. The resource requirements and comparative budget information for each of these functions is described further below.

### Technical Committees and Members' Forum Program

While NERC management and staff will continue to interact with and support numerous reliability-related forums (e.g., the North American Transmission Forum and Generator Forum), NERC's 2014 budget does not contain specific funding for any forum activities.

### General and Administrative

General and Administrative (in whole dollars)					
	2013 Budget	2014 Budget	Increase (Decrease)	2014 Budget - Prior Draft	Variance to Prior Draft Over(Under)
Total FTEs	8.00	10.56	2.56	10.56	-
Total Direct Expenses	\$ 7,325,556	\$ 8,171,736	\$ 846,180	8,240,813	(69,077)
Inc(Dec) in Fixed Assets	\$ (350,526)	\$ (419,399)	\$ (68,873)	(419,399)	-

### Background and Scope

The General and Administrative area is responsible for the administration and general management of the organization. Expenses allocated in this area include office rent; personnel and related costs of the CEO, the COO, the CEO's executive assistant, communications and public relations staff; and costs related to the Board. No additional personnel are budgeted for 2014. The increase of 2.56 FTEs is due to 2013 additions and transfers from other departments and includes the assumption of 4% attrition.

The following table details the Board costs included in the total costs of the General and Administrative area.

Board of Trustee Expenses	Budget 2013	Projection 2013	Budget 2014	2014 v 2013 Budget	Variance %
<b>Meetings and Travel Expenses</b>					
Quarterly Board Meetings	\$ 234,000	\$ 284,000	\$ 234,000	\$ -	
Trustee Travel	155,000	155,000	155,000	-	
<b>Total Board of Trustees Meetings and Travel Expenses</b>	<b>389,000</b>	<b>439,000</b>	<b>389,000</b>	-	
<b>Professional Services</b>					
Independent Trustee Fees	980,000	980,000	1,000,000	20,000	
Trustee Search Fees	-	-	70,000	70,000	
<b>Total Board of Trustee Professional Services Expenses</b>	<b>980,000</b>	<b>980,000</b>	<b>1,070,000</b>	<b>90,000</b>	
<b>Total Board of Trustee Expenses</b>	<b>\$ 1,369,000</b>	<b>\$ 1,419,000</b>	<b>\$ 1,459,000</b>	<b>\$ 90,000</b>	<b>6.57%</b>

The 2014 Miscellaneous Expense budget is \$36,500, an increase of \$15k from 2013. This budget is intended to cover the cost of (1) token gifts to retiring employees, condolence flowers in the event of a death in the family member of an employee, and similar types of miscellaneous expenses (\$6.5k); (2) funds to support Community Responsibility and Employee Engagement Committee activities (\$10k); (3) departmental and company team-building activities and employee rewards and recognition expenses that are not otherwise included in personnel expense (\$10k); and (4) year-end employee holiday meal expenses (\$10k).

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>							
<b>2013 Budget &amp; Projection, and 2014 Budget</b>							
<b>GENERAL and ADMINISTRATIVE</b>							
	2013 Budget	2013 Projection	Variance 2013 Projection v 2013 Budget Over(Under)	2014 Budget	Variance 2014 Budget v 2013 Budget Over(Under)	2014 Budget Draft 2	Variance to Prior Draft Over(Under)
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ (1,686,309)	\$ (1,686,309)	\$ -	\$ (2,216,461)	\$ (530,152)	\$ (2,552,465)	\$ 336,004
Penalty Sanctions	-	-	-	-	-	-	-
<b>Total NERC Funding</b>	<b>\$ (1,686,309)</b>	<b>\$ (1,686,309)</b>	<b>\$ -</b>	<b>\$ (2,216,461)</b>	<b>\$ (530,152)</b>	<b>\$ (2,552,465)</b>	<b>\$ 336,004</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-
Workshops	-	-	-	-	-	-	-
Interest	-	-	-	-	-	-	-
Miscellaneous	-	224	224	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ (1,686,309)</b>	<b>\$ (1,686,085)</b>	<b>\$ 224</b>	<b>\$ (2,216,461)</b>	<b>\$ (530,152)</b>	<b>\$ (2,552,465)</b>	<b>\$ 336,004</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 1,342,080	\$ 2,266,210	\$ 924,130	\$ 2,031,740	\$ 689,660	\$ 2,031,740	-
Payroll Taxes	60,640	99,559	38,919	89,250	28,610	89,250	-
Benefits	156,238	260,072	103,834	245,309	89,071	196,574	48,735
Retirement Costs	175,179	45,248	(129,931)	158,550	(16,629)	158,550	-
<b>Total Personnel Expenses</b>	<b>\$ 1,734,136</b>	<b>\$ 2,671,089</b>	<b>\$ 936,952</b>	<b>\$ 2,524,849</b>	<b>\$ 790,712</b>	<b>\$ 2,476,114</b>	<b>48,735</b>
<b>Meeting Expenses</b>							
Meetings	\$ 260,000	\$ 366,500	\$ 106,500	\$ 268,000	\$ 8,000	\$ 348,000	(80,000)
Travel	322,000	421,482	99,482	421,482	99,482	452,000	(30,518)
Conference Calls	57,500	24,206	(33,294)	24,206	(33,294)	21,500	2,706
<b>Total Meeting Expenses</b>	<b>\$ 639,500</b>	<b>\$ 812,188</b>	<b>\$ 172,688</b>	<b>\$ 713,688</b>	<b>\$ 74,188</b>	<b>\$ 821,500</b>	<b>(107,812)</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 150,000	\$ 39,223	\$ (110,777)	\$ 75,000	\$ (75,000)	\$ 175,000	(100,000)
Office Rent	2,756,840	2,695,217	(61,623)	2,617,300	(139,540)	2,617,300	-
Office Costs	507,000	516,228	9,228	502,000	(5,000)	502,000	-
Professional Services	1,132,053	1,154,700	22,647	1,170,000	37,947	1,080,000	90,000
Miscellaneous	5,500	5,000	(500)	5,500	-	5,500	-
Depreciation	350,526	418,620	68,094	419,399	68,873	419,399	-
<b>Total Operating Expenses</b>	<b>\$ 4,901,919</b>	<b>\$ 4,828,988</b>	<b>\$ (72,931)</b>	<b>\$ 4,789,199</b>	<b>\$ (112,720)</b>	<b>\$ 4,799,199</b>	<b>\$ (10,000)</b>
<b>Total Direct Expenses</b>	<b>\$ 7,275,556</b>	<b>\$ 8,312,265</b>	<b>\$ 1,036,709</b>	<b>\$ 8,027,736</b>	<b>\$ 752,180</b>	<b>\$ 8,096,813</b>	<b>\$ (69,077)</b>
<b>Indirect Expenses</b>	<b>\$ (7,325,556)</b>	<b>\$ (8,370,037)</b>	<b>\$ (1,044,481)</b>	<b>\$ (8,171,736)</b>	<b>\$ (846,180)</b>	<b>\$ (8,240,813)</b>	<b>\$ 69,077</b>
<b>Other Non-Operating Expenses</b>	<b>\$ 50,000</b>	<b>\$ 57,995</b>	<b>\$ 7,995</b>	<b>\$ 144,000</b>	<b>\$ 94,000</b>	<b>\$ 144,000</b>	<b>-</b>
<b>Total Expenses (B)</b>	<b>\$ -</b>	<b>\$ 224</b>	<b>\$ 224</b>	<b>\$ -</b>	<b>\$ 0</b>	<b>\$ -</b>	<b>\$ 0</b>
<b>Change in Assets</b>	<b>\$ (1,686,309)</b>	<b>\$ (1,686,309)</b>	<b>\$ (0)</b>	<b>\$ (2,216,461)</b>	<b>\$ (530,152)</b>	<b>\$ (2,552,465)</b>	<b>336,004</b>
<b>Fixed Assets</b>							
Depreciation	(350,526)	(418,620)	(68,094)	(419,399)	(68,873)	(419,399)	-
Computer & Software CapEx	-	-	-	-	-	-	-
Furniture & Fixtures CapEx	-	340,788	340,788	-	-	-	-
Equipment CapEx	-	-	-	-	-	-	-
Leasehold Improvements	-	77,803	77,803	-	-	-	-
Allocation of Fixed Assets	\$ 350,526	\$ (2,169)	(352,695)	419,399	68,873	419,399	-
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>\$ -</b>	<b>\$ (2,199)</b>	<b>\$ (2,199)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ -</b>	<b>\$ (1,975)</b>	<b>\$ (1,975)</b>	<b>\$ -</b>	<b>\$ 0</b>	<b>\$ -</b>	<b>\$ -</b>
<b>FTEs</b>	<b>8.00</b>	<b>11.06</b>	<b>3.06</b>	<b>10.56</b>	<b>2.56</b>	<b>10.56</b>	<b>-</b>

### Summary of Variances by Category – 2014 Budget Compared to the 2013 Budget

- Personnel** – Salaries and payroll tax expenses are projected to increase in 2014 due to primarily to the increase in FTEs. Benefits are projected to increase at a higher rate than other personnel expenses due to; (i) the higher cost per employee of employee benefits plans and, (ii) the allocation of benefit expenses that were budgeted in Human Resources in prior years, including education, training and relocation expenses. Retirement costs are projected to decrease in 2014 due to the assumed forfeiture of unvested funds related to personnel attrition.

- **Travel and Conferencing Expenses** – The increase in travel expense and the decrease in conferencing expenses for 2014 are based upon trending of 2013 actual costs.
- **Consultants and Contracts** – The decrease in 2014 is due to the reduction in the projected cost of outside consulting to support communications.
- **Professional Services** – The increase is due to a slight increase in Trustee compensation and due to the addition of search fees for replacement of one trustee whose term expires in February 2015.

## Legal and Regulatory

Legal and Regulatory (in whole dollars)			Increase (Decrease)	2014 Budget - Prior Draft	Variance to Prior Draft Over(Under)
2013 Budget	2014 Budget				
Total FTEs	14.00	15.15	1.15	15.15	-
Total Direct Expenses	\$ 4,045,729	\$ 4,298,813	\$ 253,084	4,400,021	(101,208)
Inc(Dec) in Fixed Assets	\$ -	\$ -	\$ -		-

### Background and Scope

The Legal and Regulatory department's workload is largely derivative of and supports the work of several key NERC program areas. Increasing demands are being placed on this group from three primary areas: Compliance Operations, Investigations, and Standards. In addition, this department is also responsible for providing a wide range of legal support to the NERC management team regarding antitrust, corporate, commercial, insurance, contract, employment, real estate, copyright, tax, legislation, and other legal matters. This department is also extensively involved with the work required to complete the Five-Year ERO Performance Assessment, as well as legal and regulatory matters that arise in connection with the delegation agreements with the Regional Entities, including proposed amendments to those agreements. The legal and regulatory needs of the ERO are both demanding and increasingly more complex.

### Resource Requirements

One FTE will be added to provide additional administrative support for the Legal and Enforcement departments. The increase of 1.15 FTEs includes the one FTE addition planned in 2014, the transfer of one FTE in 2013 from another department, and the assumption of 4% attrition in 2014.

Outside law firms and consultants supporting this area are budgeted and tracked as Professional Services. The Professional Services budget is \$760k for 2014, a decrease of \$190k from the 2013 budget. The Professional Services budget includes outside legal fees to support the completion of the Five-Year ERO Performance Assessment in 2014.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>							
<b>2013 Budget &amp; Projection, and 2014 Budget</b>							
<b>LEGAL and REGULATORY</b>							
	2013 Budget	2013 Projection	Variance 2013 Projection v 2013 Budget Over(Under)	2014 Budget	Variance 2014 Budget v 2013 Budget Over(Under)	2014 Budget Draft 2	Variance to Prior Draft Over(Under)
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Penalty Sanctions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total NERC Funding</b>	<b>\$-</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$-</b>	<b>\$ -</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-
Workshops	-	-	-	-	-	-	-
Interest	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$-</b>	<b>\$ -</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 2,325,293	\$ 2,434,723	\$ 109,430	\$ 2,637,399	\$ 312,106	\$ 2,637,399	-
Payroll Taxes	119,177	125,443	6,266	136,718	17,541	136,718	-
Benefits	185,835	231,040	45,205	265,856	80,021	282,017	(16,161)
Retirement Costs	261,724	222,205	(39,519)	296,887	35,163	296,887	-
<b>Total Personnel Expenses</b>	<b>\$ 2,892,029</b>	<b>\$ 3,013,411</b>	<b>\$ 121,382</b>	<b>\$ 3,336,860</b>	<b>\$ 444,831</b>	<b>\$ 3,353,021</b>	<b>(16,161)</b>
<b>Meeting Expenses</b>							
Meetings	\$ 5,000	\$ 15,000	\$ 10,000	\$ 5,000	\$ -	\$ 5,000	-
Travel	144,500	120,000	(24,500)	120,000	(24,500)	124,500	(4,500)
Conference Calls	3,200	13,953	10,753	12,953	9,753	3,500	9,453
<b>Total Meeting Expenses</b>	<b>\$ 152,700</b>	<b>\$ 148,953</b>	<b>\$ (3,747)</b>	<b>\$ 137,953</b>	<b>\$ (14,747)</b>	<b>\$ 133,000</b>	<b>4,953</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Office Rent	-	-	-	-	-	-	-
Office Costs	50,500	64,342	13,842	63,500	13,000	63,500	-
Professional Services	950,000	810,360	(139,640)	760,000	(190,000)	850,000	(90,000)
Miscellaneous	500	500	-	500	-	500	-
Depreciation	-	3,021	3,021	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 1,001,000</b>	<b>\$ 878,223</b>	<b>\$ (122,777)</b>	<b>\$ 824,000</b>	<b>\$ (177,000)</b>	<b>\$ 914,000</b>	<b>\$ (90,000)</b>
<b>Total Direct Expenses</b>	<b>\$ 4,045,729</b>	<b>\$ 4,040,587</b>	<b>\$ (5,142)</b>	<b>\$ 4,298,813</b>	<b>\$ 253,084</b>	<b>\$ 4,400,021</b>	<b>\$ (101,208)</b>
<b>Indirect Expenses</b>	<b>\$ (4,045,729)</b>	<b>\$ (4,040,587)</b>	<b>\$ 5,142</b>	<b>\$ (4,298,813)</b>	<b>\$ (253,084)</b>	<b>\$ (4,400,021)</b>	<b>\$ 101,208</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (0)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Change in Assets</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Fixed Assets</b>							
Depreciation	-	(3,021)	(3,021)	-	-	-	-
Computer & Software CapEx	-	-	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-	-	-
Allocation of Fixed Assets	\$ -	\$ 3,021	-	-	-	\$ -	-
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (3,021)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (3,021)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>FTEs</b>	<b>14.00</b>	<b>13.78</b>	<b>(0.22)</b>	<b>15.15</b>	<b>1.15</b>	<b>15.15</b>	<b>-</b>

### Summary of Variances by Category – 2014 Budget Compared to the 2013 Budget

- **Personnel** – Salaries, payroll tax and retirement expenses are projected to increase in 2014 due to primarily to the increase in FTEs. Benefits are projected to increase at a higher rate than other personnel expenses due to; (i) the higher cost per employee of employee benefits plans and, (ii) the allocation of benefit expenses that were budgeted in Human Resources in prior years, including education, training and relocation expenses.
- **Travel and Conferencing Expenses** – The increase in travel expense and the decrease in conferencing expenses for 2014 are based upon trending of 2013 actual costs.

- **Professional Services** – The decrease is due to the reduction in the projected use of outside counsel in 2014.

## Information Technology

Information Technology (in whole dollars)				2014 Budget - Prior Draft	Variance to Prior Draft Over(Under)
	2013 Budget	2014 Budget	Increase (Decrease)		
Total FTEs	16.75	18.07	1.32	17.82	0.25
Total Direct Expenses	\$ 7,978,705	\$ 8,320,845	\$ 342,140	8,626,078	(305,233)
Inc(Dec) in Fixed Assets	\$ 649,098	\$ 1,141,357	\$ 492,259	1,141,357	(0)

### Background and Scope

NERC's information technology (IT) department budget includes the resources necessary to support NERC's internal operations. It builds on the initiatives begun in 2013 to replace several internal, outdated legacy applications (such as the standards balloting system) and numerous registration applications, as well as to improve the NERC website, with a focus on security and disaster recovery. In addition, significant emphasis and resources have been placed on working collaboratively with the Regional Entities to build enterprise applications to replace numerous time-consuming and manual efforts, reduce duplicative input by the registered entities, and build a foundation for business intelligence and analytics regarding reliability risks. This effort will establish ERO resource priorities and allocations, as well as provide information to stakeholders for use in their own reliability risk management planning and resource allocation.

NERC's IT staffing strategy over the last several years has been to use a small, core internal IT staff and leverage expertise of external contractors for specific work areas. External contractors are used for numerous maintenance and development tasks for infrastructure and the various NERC applications. In addition, all major application development during 2013 is being performed with the assistance of external firms. For example, the primary ERO Enterprise application under development in 2013 is the BES application. NERC has teamed with an external vendor to develop this application and will retain their services for maintenance support. As the ERO Enterprise systems grow over time, NERC management will assess the balance of internal and external resources to get the required work completed at an efficient cost and acceptable performance and risk profile.

NERC has divided the IT department contractor and consulting budget into two categories: Ongoing Operations and ERO Enterprise Applications. Ongoing operations describe those applications required to support NERC internal business and statutory activities, along with back office applications such as accounting and finance, office productivity (Email, MS Office, etc.), security, and disaster recovery. ERO Enterprise applications are defined as those applications deemed to have similar business processes and functions across NERC and the Regional Entities.

## **Resource Requirements**

### ***Personnel***

A database analyst and webmaster are proposed to be added to this department in 2014. The addition of a dedicated database analyst is necessary to support the significant number of databases that NERC utilizes and manages for ERO operations. The company does not presently have a database analyst on staff. The addition of a webmaster is necessary to support the day-to-day maintenance of NERC's website and associated applications, which are used extensively to support both internal and external knowledge management and communications. The increase of 1.32 FTEs over 2013 includes the hiring of the proposed 2014 additions and the 4% attrition assumption.

### ***Contract and Consulting Resources to Support Ongoing Operations***

The following text provides a description of required contractor and consulting support for ongoing operations, followed by a chart containing a three-year projection of costs. The 2014 budgeted amounts are also set forth in Exhibit C, with a comparison to 2013 budgeted amounts.

**Security and Vulnerability Testing of NERC Website and Network** — Ongoing intrusion detection and vulnerability testing of the NERC public website, NERC network, applications, and systems is an essential requirement of on-going operations. Testing is conducted by an outside vendor using the latest intrusion techniques to test the security of the NERC network. Multiple attempts are made to gain access, and any vulnerability identified is documented and provided to NERC IT for rapid remediation.

**Maintenance and Redesign of NERC Legacy Applications** — Utilizing resources included to support ongoing operations in 2014, NERC initiated a multiyear effort to replace several legacy applications, some initially coded over a decade ago and lacking many common features of modern, efficient software. Currently, there are over eight registration applications that provide Regional Entities, registered entities, governmental agencies, and general public access to NERC applications and data based on registration, vetting, and, if appropriate, approval to access data and applications. In addition, there are numerous other tools associated with the legacy registration applications that provide connectivity, security parameters, and other pieces of information that are then fed to several applications and databases. Each application and database is heavily used by NERC staff, Regional Entity staff and registered entities to perform various ERO-related business functions. These legacy applications are cumbersome, difficult to administer, require multiple registrations by registered entities, and lack many of the self-service features that are common in modern applications. This causes up to one hundred monthly NERC IT support tickets for assistance with resetting passwords, unknown or forgotten usernames, and a myriad of other technical support issues that would be minimized by contemporary technology.

Funding in this category for ongoing operations includes numerous software applications common to NERC business processes, such as the Standards Balloting System (SBS), ERO Membership, NERC My Account, User Management Profile, and Compliance Reporting and Tracking System (CRATS).

**Disaster Recovery Planning – Consultant Services** — Initial steps were taken in 2013 to set up, test, and implement applications deemed important for communicating during a disaster scenario. Calendar year 2015 will be used to further improve disaster recovery planning to include setting up those business applications required to be functional at an offsite location in the event access to the primary NERC offices has been impacted by an unforeseen event; IT will also further enhance and test NERC disaster recovery processes.

**Security Program – Phased 2014–2016** — As outlined under the paragraph titled “Security and vulnerability testing of NERC website and network,” NERC IT performs a number of technology initiatives to ensure the security of the network and infrastructure. However, in order to continually improve security, a more holistic approach is required that implements technology improvements and constructs an overarching security program to ensure all aspects of security have been considered, including information classification, review of retention policies, and enforcement of security guidelines.

**NERC Website Phase II and Document Management – Combined Knowledge Management** — During 2012 and the first quarter of 2013, IT completed a major initiative to redesign and rewrite the NERC public website using SharePoint 2010. The effort was focused on moving to a much more flexible product that would lay the foundation for future website enhancements, such as an improved document library and navigation, and greatly improved analytics and search capability. IT will focus on two interrelated activities in 2014: NERC Website and Document Management, both of which are designed to improve knowledge management capability and streamline information posted on the public-facing website. NERC is planning to retain the services of an external consultant with expertise in document and content management systems to help assess NERC and stakeholder needs and to assist in redesigning the organization of the massive amount of files and information contained on the NERC website.

**Vendor Maintenance/Change Management – ERO Applications** — ERO Enterprise applications that were developed in 2013, such as the BES application, along with applications slated for development and implementation in 2014 will require enhancements to functionality as business processes are modified. In some instances, those enhancements may require considerable changes to user screens, workflow, or databases funded by this line item.

**Audio Visual Architect (consultant)** — NERC has 15 heavily used conference rooms designed to provide audio, visual, and in some instances video conference capability. The rooms were designed in 2011 prior to an in-depth understanding of their use to ensure they were designed for their specific purpose (e.g., NERC, Region, and industry training). In 2016, the audio visual and video conference equipment will be over five years old, and conducting an audiovisual assessment of room usage, along with recommendations for replacement equipment, would be best suited to an outside consulting firm that specializes in audiovisual equipment and installation.

**Network Architect (consultant)** — Consulting services are required to review, recommend, and implement solutions to re-architect the NERC internal network to align with industry best

practices thereby greatly simplifying the process of implementing applications and services while maintaining an emphasis on robust security.

**Standards Issues Database** — This database is designed to capture FERC directives and track actions taken by multiple NERC program areas to adhere to the directive by cataloging specific actions taken and tracking ongoing compliance. In addition, the database would be used for internal NERC risk control to ensure risks have been identified and actions taken to address these risks.

The table below summarizes the budgeted costs of ongoing operations.

Ongoing Operations	2014	2015	2016	3-Year Projection
Security vulnerability testing of NERC website and network	\$ 150,000	\$ 150,000	\$ 150,000	\$ 450,000
Maintenance and Re-Design of NERC Legacy Applications	\$ 554,000	\$ 554,000	\$ 500,000	\$ 1,608,000
Disaster Recovery Planning - Consultant Services	\$ -	\$ 150,000	\$ 150,000	\$ 300,000
Security Program - Phased 2014 – 2016	\$ 200,000	\$ 200,000	\$ 200,000	\$ 600,000
NERC Website Phase II and Document Management - Combined knowledge management	\$ 300,000	\$ 250,000	\$ 350,000	\$ 900,000
Vendor Maintenance / Change Management - ERO Applications	\$ 320,000	\$ 250,000	\$ 250,000	\$ 820,000
Audio Visual Architect (consultant)	\$ -	\$ -	\$ 25,000	\$ 25,000
Network Architect (consultant)	\$ -	\$ -	\$ 80,000	\$ 80,000
Standards Issues Database	\$ -	\$ -	\$ 75,000	\$ 75,000
<b>Total Ongoing Operations</b>	<b>\$ 1,524,000</b>	<b>\$ 1,554,000</b>	<b>\$ 1,780,000</b>	<b>\$ 4,858,000</b>

### ERO Enterprise Applications

ERO Enterprise Applications are defined as those applications deemed to have similar business process and functions across NERC and the Regions. They are multi-year initiatives tailored to improve productivity and visibility to data and reduce complexity of managing multiple applications. In late 2012, NERC and the Regional Entities collectively formed an ERO Project

Management Office (ERO PMO) to oversee and manage the implementation of ERO Enterprise Applications. The ERO PMO follows well established project management methodologies to design, build, and implement ERO Enterprise Applications. These methodologies follow the global standards defined by the Project Management Institute (PMI) and encompass rigorous procedures for project planning, communications, contracts, resources, schedules, budgets, and risks. The ERO PMO, which is staffed by NERC personnel, works closely with and is supported by an IT steering group (ITSG) comprised of the senior IT representatives from each Regional Entity and NERC. It is governed by the terms of a charter approved by the ERO EMG. Internally, the ERO PMO reports directly to NERC's chief operating officer.

Each proposed ERO Enterprise Application goes through a multistep process to define the application's purpose and parameters, obtain executive sponsorship and funding approval, define business and functional requirements, and manage vendor selection. The ERO PMO processes also include well-defined tollgates and status reporting to ensure the project is meeting objectives during the execution. Each tollgate requires review and approval by the executive sponsor (typically an ERO EMG executive or executive designee), NERC program area officer for the lead program area the application is intended to support, and ITSG. At any point in the tollgate process, the project can be stopped for further review and remediation of issues.

The ERO Enterprise Applications outlined below have been determined to be strategic by ERO EMG over the 2014–2016 planning period, and each approved project is required to follow the ERO PMO process. Each project is closely monitored and managed by the assigned project manager, ensuring all processes are followed and required checkpoints and approvals are obtained from all project stakeholders.

During 2013, NERC and the Regional Entities worked collaboratively under the ERO PMO framework described above to design, build, and implement the BES enterprise application. Centrally located in a dedicated data center, the BES enterprise application will be used by NERC, Regional Entities, and registered entities to manage BES exception applications. Three additional ERO Enterprise Applications, the Event Information Data System (EIDS), Reliability Assessment Data Store (RADS), and Compliance and Registration applications, have been selected by the ERO EMG for development and implementation over the 2013–2016 time frame using the ERO PMO framework discussed above. These applications will be used by both NERC and the Regional Entities to perform required business and statutory functions, thereby reducing multiple disparate applications and databases into single, agreed-upon business applications. These applications will also be designed to provide a more cohesive view of data across applications and databases by NERC and the Regional Entity staffs. They will incorporate design features that allow the registered entities, along with the general public, access to reporting and analytics and will be designed to facilitate dashboards and reporting either with anonymous access, or—to enhance feature functionality—upon proper vetting and approval.

A description of EIDS and the associated development work and budget for 2014 is included in the Event Analysis department since this department has lead responsibility for the development of this tool. Similarly, a description of the RADS is included in the RAPA department, and a description of the Compliance and Registration application that is proposed to be developed in 2015 is included in the Compliance Operation department.

**ERO Enterprise Fully Managed Services (dedicated hosting)** — ERO Enterprise applications that have been deemed of similar business process and function will be implemented in a dedicated data center with fully outsourced IT services to encompass all infrastructure requirements (e.g., power, cooling, fire protection, security, backup, and recovery). In addition, all IT personnel activities (such as Microsoft Windows system administration, database services, help desk, and security) will be performed by a vendor chosen by NERC and the Regional Entities following the ERO PMO process discussed above. The dedicated hosting environment will be used to run, manage, and ensure that the ERO Enterprise applications used by NERC and the Regional Entities are housed in a common, well-secured, dedicated data center facility. This approach is designed to ensure the overall security, availability, efficiency, and cost-effectiveness of the operation and maintenance of the ERO Enterprise Applications.

**Contract Project Management Support** — Supplemental project management and business analyst support of the ERO PMO will be required to manage the foregoing ERO Enterprise Applications to ensure that rigorous project methodology is followed before, during, and after implementation. These resources will assist the ERO PMO in gathering the relevant business and functional requirements from NERC and the eight Regions, aggregate this information into a single cohesive requirements document, and then manage the design, build, and implementation process from inception to project closure.

**Project Management Applications** — Project management tools will be required over the planning period to track and monitor project resources throughout development and implementation to ensure scope is managed appropriately and projects are delivered on time and within budget. The tool would also be used by the Standards Program Area and would replace the existing tool, which lacks core capability and functionality to track activities.

The following table summarizes the projected Enterprise IT application development costs between 2014 and 2016.

Enterprise Applications	2014	2015	2016	3-Year Investment
Reliability Assessment Data Store (RADS) Development and Change Management Total <sup>16</sup> (Budgeted in RAPA)		\$700,000	\$120,000	\$820,000
Enterprise Compliance application <sup>17</sup> Development and Change Management (Budgeted in Compliance Operations)		\$1,650,000	\$1,000,000	\$2,650,000
ERO Enterprise Fully Managed Services (dedicated hosting)	\$420,000	\$480,000	\$540,000	\$1,440,000
ERO Enterprise Application Enhancement <sup>18</sup> (Budgeted as fixed asset in IT)	\$300,000	\$100,000	\$100,000	\$500,000
Contract Project Management Support <sup>19</sup> (Budgeted as fixed asset in IT)	\$410,000	\$540,000	\$540,000	\$1,490,000
Project Management Application (Budgeted as fixed asset in IT)	\$60,000	\$60,000	\$60,000	\$180,000
<b>Total</b>	<b>\$1,190,000</b>	<b>\$3,530,000</b>	<b>\$1,860,000</b>	<b>\$6,580,000</b>

### 2014 IT Operating and Capital Expense Budget

As indicated above, IT planning has been based on a multiyear strategy and is designed to reduce complexity, improve productivity, and gain a consolidated view of data across the ERO. Several criteria were considered during the planning phase, including the results of an IT architecture study conducted in late 2011, and the need for visibility to aggregate data across the ERO and improve collaboration among NERC and the Regions.

The NERC IT Architecture study determined that many of the ERO applications designed in prior years were shown to be in silos and were not integrate with other applications to obtain an aggregate view of interrelated information events or trending. The implementation of

<sup>16</sup> Development of the RADS application may commence in 2014 and would be identified as a known operating reserve contingency. 2014 funding will be subject to the availability of operating reserves to cover debt service (principal and interest cost) associated with financing the development of this application.

<sup>17</sup> 2014 funding to define business requirements is included in the Compliance Operations department budget in connection with the Reliability Assurance Initiative.

<sup>18</sup> The cost associated with the development of new software applications is expected to be financed. See Exhibit D for more information.

<sup>19</sup> The cost associated with the contract project management support of the development of new applications is also expected to be financed. See Exhibit D.

enterprise-class tools such as SharePoint, SQL Server 2008, Virtualization, and centralized data warehouse capability is deemed critical for providing greater productivity and efficiency, enhanced visibility to data, and vastly improved collaboration.

### 2014 IT Operating Expenses

A summary of the major categories of IT Operating Expenses are set forth in the following table.

Office Costs	Budget 2013	Budget 2014	Variance
Telephone	\$ 175,000	\$ 225,000	
Internet	335,000	275,000	
Computer Supplies and Maintenance			
Computers	3,000	4,500	
Computer Supplies	116,900	95,400	
Maintenance & Service Agreements	1,226,325	1,539,370	
Software	37,500	140,500	
<b>Total Office Costs</b>	<b>\$ 1,893,725</b>	<b>\$ 2,279,770</b>	<b>\$ 386,045</b>

### Telephone Expenses

Office telephone costs are items associated with cellular phone, mobile laptop cellular air card, bonded T1 Voice over Internet Protocol (VoIP) data circuits, and conference calling expenses.

- NERC-issued cell phones are provided to employees to ensure access and productivity before, during, and after business hours, and cost is minimized by leveraging pooled minutes. Individual NERC employees are provided with a basic pooled cell phone plan of 450 minutes, including a basic level subscription for texting and data. This plan is designed to ensure persons who travel frequently have additional cell phone minutes by taking advantage of limited usage by employees who travel less frequently. In addition, employees are encouraged to connect via wireless whenever possible to reduce cellular charges for data usage. The basic texting plan is provided for those instances when calling or email is not optimal. Cellular calling costs are included in the telephone expense item.
- Mobile laptop cellular air cards are provided to ensure connectivity while traveling or in locations where wireless connectivity is unavailable. Wireless or cellular connectivity to the NERC network is enabled using virtual private network technology to ensure maximum security, logging, and encryption.
- IT support persons are required to be available for support 24x7x365. That in almost all instances requires them to have access to systems and network via secure internet connectivity. Included in the line item "telephone" are those monthly costs associated with internet access for systems, application, network, and security to enable IT resources to provide support and conduct emergency and non-emergency patching of systems, routers, firewalls, etc., as required to ensure the stability of the NERC technology environment.
- Conference calling is conducted via an external service provider in order to minimize internal hardware, IT support, and internal conference lines capable of providing access

to an external audience. Information Technology conference calling, webinars, recorded events, etc., are included in the telephone cost line item.

- Bonded T1 circuits provide access for VoIP service for NERC desk phones in lieu of having a very expensive, support-intensive in-house phone switch (e.g., Private Branch Exchange) that requires senior-level telecommunication resources to support and manage.

### ***Internet Expense***

Internet expense is comprised of data circuits, Plain old Telephone Service (POTS), and redundant capability in the event of primary service provider failure.

### ***Computers***

Computers are items that do not meet the criteria to be considered a capital expense, such as desktop computers or iPads. Desktop computers enable conference webinars, internet access, training room functionality, etc., for those instances when a presenter does not have a computer device available to conduct presentations. In addition, on a case-by-case basis and as justified by extensive travel or consistent out of office meetings, NERC will provide an iPad with cellular data access for persons who require functionality but are unable to use a laptop for computing needs.

### ***Computer Supplies***

Computer supplies are expense items required for infrastructure support to include computer monitors, mice, keyboard, cell phones, cables, encrypted hard drives, encrypted thumb drives, encryption keys, uninterruptible power supplies (UPS), privacy screens, phone headsets, docking stations, computer memory, and any other computer supplies or components required to support the technology infrastructure.

### ***Maintenance and Service Agreements***

Maintenance and Service Agreements comprise those items required to support internal and external access to routers, switches, firewalls, intrusion protection, 100-file servers, audiovisual, storage area network, data backup services, network and security monitoring, co-location data center services, video conferencing, digital certificates, and development and virtualization software. Service agreements related to the co-location data center, offsite backup of over one hundred terabytes of data, conference calling, and network and security monitoring consume a large portion of the maintenance and service agreements budget.

### ***Software***

Tools such as SharePoint Designer, Microsoft Visio, and Crystal Reports Developer are included under this line item. The tools are primarily used for NERC infrastructure purposes to develop SharePoint workflow, to create development process flows, and for reporting.

### **2014 IT Fixed Asset (Capital) Expenses**

The following table presents a summary of NERC's 2014 fixed asset budget.

<b>Fixed Assets</b>	<b>Budget 2013</b>	<b>Budget 2014</b>	<b>Variance</b>
<b>Computer &amp; Software CapEx</b>	<b>\$ 1,556,100</b>	<b>\$ 2,258,800</b>	
<b>Equipment CapEx</b>	<b>\$ 216,000</b>	<b>\$ 213,000</b>	
	<b>\$ 1,772,100</b>	<b>\$ 2,471,800</b>	<b>\$ 699,700</b>

Providing access, visibility, and analysis of data from many different sources across the ERO will require significant investment in hardware, software, and associated tools and technology. The overarching theme is to gain a holistic view of data across the enterprise to support reliability and accountability of the BPS. Adding capability to centralize and mine data, in addition to foundational elements such as disaster recovery and application development, set the stage for vastly improved reporting, business intelligence and capability for collaboration, and sharing of information vital to the ERO’s mission.

In addition to the investments described above to support efficiency and consistency across the enterprise, the 2014 budget also includes the cost of software, servers, laptops, and other hardware to support daily operations.

As further described in Exhibit D, NERC plans to finance a portion of these capital assets in the amount of \$770k, consisting primarily of software development costs and hardware.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital							
2013 Budget & Projection, and 2014 Budget							
INFORMATION TECHNOLOGY							
	2013	2013	Variance	2014	Variance	2014	Variance to
	Budget	Projection	2013 Projection	Budget	2014 Budget	Budget	Prior Draft
			v 2013 Budget		v 2013 Budget	Draft 2	Over(Under)
			Over(Under)		Over(Under)		Over(Under)
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
Penalty Sanctions	-	-	-	-	-		-
<b>Total NERC Funding</b>	<b>\$ -</b>		<b>\$ -</b>				
Membership Dues	-	-	-	-	-		-
Testing Fees	-	-	-	-	-		-
Services & Software	-	-	-	-	-		-
Workshops	-	-	-	-	-		-
Interest	-	-	-	-	-		-
Miscellaneous	-	-	-	-	-		-
<b>Total Funding (A)</b>	<b>\$ -</b>		<b>\$ -</b>				
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 1,651,076	\$ 1,821,378	\$ 170,302	\$ 2,013,859	\$ 362,783	\$ 2,013,859	-
Payroll Taxes	114,954	115,399	445	136,366	21,412	136,366	-
Benefits	224,184	230,278	6,094	317,097	92,913	336,373	(19,276)
Retirement Costs	178,464	177,072	(1,392)	229,767	51,303	229,767	-
<b>Total Personnel Expenses</b>	<b>\$ 2,168,678</b>	<b>\$ 2,344,127</b>	<b>\$ 175,449</b>	<b>\$ 2,697,089</b>	<b>\$ 528,411</b>	<b>\$ 2,716,365</b>	<b>(19,276)</b>
<b>Meeting Expenses</b>							
Meetings	\$ 5,000	\$ 7,231	\$ 2,231	\$ 5,000	\$ -	\$ 5,000	-
Travel	62,000	59,243	(2,757)	59,243	(2,757)	60,000	(757)
Conference Calls	4,800	4,800	-	4,800	-	5,000	(200)
<b>Total Meeting Expenses</b>	<b>\$ 71,800</b>	<b>\$ 71,273</b>	<b>\$ (527)</b>	<b>\$ 69,043</b>	<b>\$ (2,757)</b>	<b>\$ 70,000</b>	<b>(957)</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 2,721,000	\$ 1,715,846	\$ (1,005,154)	\$ 1,944,000	\$ (777,000)	\$ 2,204,000	(260,000)
Office Rent	-	-	-	-	-	-	-
Office Costs	1,893,725	2,249,955	356,230	2,279,770	386,045	2,304,770	(25,000)
Professional Services	-	2,500	2,500	-	-	-	-
Miscellaneous	500	100	(400)	500	-	500	-
Depreciation	1,123,002	1,179,176	56,174	1,330,443	207,441	1,330,443	-
<b>Total Operating Expenses</b>	<b>\$ 5,738,227</b>	<b>\$ 5,147,577</b>	<b>\$ (590,650)</b>	<b>\$ 5,554,713</b>	<b>\$ (183,514)</b>	<b>\$ 5,839,713</b>	<b>\$ (285,000)</b>
<b>Total Direct Expenses</b>	<b>\$ 7,978,705</b>	<b>\$ 7,562,978</b>	<b>\$ (415,727)</b>	<b>\$ 8,320,845</b>	<b>\$ 342,140</b>	<b>\$ 8,626,078</b>	<b>\$ (305,233)</b>
<b>Indirect Expenses</b>	<b>(7,978,705)</b>	<b>(7,618,324)</b>	<b>\$ 360,381</b>	<b>(8,320,845)</b>	<b>(342,140)</b>	<b>(8,626,078)</b>	<b>\$ 305,233</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>-</b>					
<b>Total Expenses (B)</b>	<b>\$ -</b>	<b>\$ (55,346)</b>	<b>\$ (55,346)</b>	<b>\$ -</b>	<b>\$ (0)</b>	<b>\$ -</b>	<b>\$ (0)</b>
<b>Change in Assets</b>	<b>\$ -</b>	<b>\$ 55,346</b>	<b>\$ 55,346</b>	<b>\$ -</b>	<b>\$ 0</b>	<b>\$ -</b>	<b>-</b>
<b>Fixed Assets</b>							
Depreciation	(1,123,002)	(1,179,176)	(56,174)	(1,330,443)	(207,441)	(1,330,443)	-
Computer & Software CapEx	1,556,100	873,864	(682,236)	2,258,800	702,700	2,258,800	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-
Equipment CapEx	216,000	514,531	298,531	213,000	(3,000)	213,000	-
Leasehold Improvements	-	-	-	-	-	-	-
Allocation of Fixed Assets	\$ (649,098)	\$ (209,219)	439,879	\$ (1,141,357)	\$ (492,259)	\$ (1,141,357)	-
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ -</b>						
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ -</b>	<b>\$ (55,346)</b>	<b>\$ (55,346)</b>	<b>\$ -</b>	<b>\$ (0)</b>	<b>\$ -</b>	<b>-</b>
<b>FTEs</b>	<b>16.75</b>	<b>15.88</b>	<b>(0.87)</b>	<b>18.07</b>	<b>1.32</b>	<b>18.07</b>	<b>-</b>

### Summary of Variances by Category – 2014 Budget Compared to the 2013 Budget

- **Personnel** – Salaries, payroll tax and retirement expenses are projected to increase in 2014 due to primarily to the increase in FTEs. Benefits are projected to increase at a higher rate than other personnel expenses due to; (i) the higher cost per employee of employee benefits plans and, (ii) the allocation of benefit expenses that were budgeted in Human Resources in prior years, including education, training and relocation expenses.
- **Consultants and Contracts** – The decrease is primarily due to a reclassification of consulting services that support the development of enterprise applications to fixed assets as a capitalized cost of the project.

- **Office Costs** – The increase is primarily related to software and hardware annual maintenance agreements and data center hosting expense.

## Human Resources

Human Resources (in whole dollars)				2014 Budget - Prior Draft	Variance to Prior Draft Over(Under)
	2013 Budget	2014 Budget	Increase (Decrease)		
Total FTEs	3.00	2.88	(0.12)	2.88	-
Total Direct Expenses	\$ 1,527,797	\$ 1,104,974	\$ (422,823)	1,110,049	(5,075)
Inc(Dec) in Fixed Assets	\$ -	\$ -	\$ -		-

### Background and Scope

Human Resources (HR) manages all of NERC's human resources functions, including new hires, benefits, and employee functions. This area also oversees NERC's employee performance appraisal and incentive structure process. Management has implemented a robust, objective, and auditable performance management system to track corporate, departmental, and individual performance against pre-established goals, objectives, and measures. Each year NERC continues to refine and improve this system. In 2012 NERC implemented a new time accounting system to facilitate tracking of time by functional activities or, where appropriate, specific projects.

### 2014 Goals and Objectives

#### *Executive Training and Development*

As the risk-based methodology to improve reliability is further developed and deployed, NERC will use experienced consultants to provide strategic guidance and training for the executive team to frame problems according to highest potential risk factors and prioritize them to solve big issues. The executive leadership team may also receive additional training and development initiatives geared toward promoting collaboration and consensus building to improve knowledge sharing.

#### *Staff Development*

Management believes that access to knowledge is a key differentiator for NERC and that it ensures retention and high performance. Therefore, NERC will invest in learning opportunities for staff in several areas. First, HR will continue to host and optimize an e-learning platform, SkillSoft, to provide staff resources for improving soft and technical skills. Second, HR will provide staff development training through real-world access via tours of and training on control centers, electric substations, and power plants. Finally, staff will have access to additional education, including but not limited to degree-oriented university education, pursuit of specialized certifications, and other in-house and external training that provides essential knowledge and skills development that will lead to improved staff performance.

#### *Compensation Consulting*

HR will continue to rely on market data to drive its attraction, engagement, and retention model. Periodically, HR will have a compensation consultant examine the current market data to ensure that decisions affecting compensation are made in light of the current market climate and that qualified employees are attracted and retained within a defined total remuneration range. To protect NERC's substantial investment in human capital, HR will also engage

consultants to consider compensation models and practices prevalent within the market that have been successful in attracting, engaging, and retaining talent. Similarly, HR may partner with compensation subject matter experts to perform periodic assessments of the BOT compensation model to ensure alignment with market practices. NERC's compensation policy and analysis of market data will be based on total remuneration, taking into account base and incentive compensation, as well as benefits.

### ***Surveys***

HR will retain a vendor to conduct periodic Board of Trustees and committee effectiveness surveys to identify improvement opportunities. HR will also launch additional surveys as appropriate, based on business needs.

### ***Succession Planning***

Minimizing disruption of knowledge/skill/experience bases of key staff is critical to continued success toward ensuring the reliability of the BPS. HR will work with senior management to identify essential roles and develop strategies to build pipelines and contingency plans for any loss of staff.

### ***HR Products and Services Automation***

Paramount to an effective and efficient HR department is the use of electronic and automated products and services. HR will continue to operate, maintain, and investigate investment in additional electronic platforms for HR support services.

### **Resource Requirements**

#### ***Personnel***

No additional personnel are proposed to be added in 2014. The 0.12 decrease in FTEs over 2013 is due to the assumption of 4% attrition in all departments.

#### ***Contractor Expenses***

Contractor and consultant expenses are \$31k below 2013 budgeted amounts and are set forth in additional detail in Exhibit C.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital							
2013 Budget & Projection, and 2014 Budget							
HUMAN RESOURCES							
	2013	2013	Variance	2014	Variance	2014 Budget	Variance to
Funding	Budget	Projection	2013 Projection	Budget	2014 Budget	Draft 2	Prior Draft
			v 2013 Budget		v 2013 Budget		Over(Under)
			Over(Under)		Over(Under)		Over(Under)
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Penalty Sanctions	-	-	-	-	-	-	-
<b>Total NERC Funding</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-
Workshops	-	-	-	-	-	-	-
Interest	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 498,724	\$ 482,804	\$ (15,920)	\$ 595,009	\$ 96,285	\$ 595,009	-
Payroll Taxes	22,610	23,574	964	23,428	818	23,428	-
Benefits	573,737	189,635	(384,102)	50,539	(523,198)	53,611	(3,072)
Retirement Costs	41,348	43,454	2,106	42,721	1,373	42,721	-
<b>Total Personnel Expenses</b>	<b>\$ 1,136,419</b>	<b>\$ 739,467</b>	<b>\$ (396,952)</b>	<b>\$ 711,697</b>	<b>\$ (424,722)</b>	<b>\$ 714,769</b>	<b>(3,072)</b>
<b>Meeting Expenses</b>							
Meetings	\$ 5,000	\$ 1,500	\$ (3,500)	\$ 2,000	\$ (3,000)	\$ 2,000	-
Travel	21,000	10,897	(10,103)	10,897	(10,103)	12,500	(1,603)
Conference Calls	600	600	-	600	-	1,000	(400)
<b>Total Meeting Expenses</b>	<b>\$ 26,600</b>	<b>\$ 12,997</b>	<b>\$ (13,603)</b>	<b>\$ 13,497</b>	<b>\$ (13,103)</b>	<b>\$ 15,500</b>	<b>(2,003)</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 288,500	\$ 353,175	\$ 64,675	\$ 257,500	\$ (31,000)	\$ 257,500	-
Office Rent	-	-	-	-	-	-	-
Office Costs	42,500	16,838	(25,662)	16,500	(26,000)	16,500	-
Professional Services	23,278	64,449	41,171	80,280	57,002	80,280	-
Miscellaneous	10,500	10,500	-	25,500	15,000	25,500	-
Depreciation	-	3,867	3,867	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 364,778</b>	<b>\$ 448,829</b>	<b>\$ 84,051</b>	<b>\$ 379,780</b>	<b>\$ 15,002</b>	<b>\$ 379,780</b>	<b>\$ -</b>
<b>Total Direct Expenses</b>	<b>\$ 1,527,797</b>	<b>\$ 1,201,293</b>	<b>\$ (326,504)</b>	<b>\$ 1,104,974</b>	<b>\$ (422,823)</b>	<b>\$ 1,110,049</b>	<b>\$ (5,075)</b>
<b>Indirect Expenses</b>	<b>\$ (1,527,797)</b>	<b>\$ (1,201,293)</b>	<b>\$ 326,504</b>	<b>\$ (1,104,974)</b>	<b>\$ 422,823</b>	<b>\$ (1,110,049)</b>	<b>\$ 5,075</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 0</b>	<b>\$ -</b>	<b>\$ (0)</b>	<b>\$ -</b>	<b>\$ (0)</b>
<b>Change in Assets</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (0)</b>	<b>\$ -</b>	<b>\$ 0</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Fixed Assets</b>							
Depreciation	-	(3,867)	(3,867)	-	-	-	-
Computer & Software CapEx	-	-	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-	-	-
Allocation of Fixed Assets	\$ -	\$ 3,867	\$ 3,867	-	-	\$ -	-
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 0</b>	<b>\$ -</b>	<b>\$ (0)</b>	<b>\$ -</b>	<b>\$ -</b>
<b>FTEs</b>	<b>3.00</b>	<b>3.00</b>	<b>-</b>	<b>2.88</b>	<b>(0.12)</b>	<b>2.88</b>	<b>-</b>

### Summary of Variances by Category – 2014 Budget Compared to the 2013 Budget

- Personnel** – Salaries expense includes a total corporate budget for employment agency fees and temporary office services. The budget for these expenses was increased \$43.5k in 2014 based upon 2013 actual trends. Salaries expense also increased due to an increase in the average salary expense per FTE offset by the 4% attrition rate applied to all departments. Benefits are projected to decrease due to the allocation of benefit expenses, including education, training and relocation expenses, across all departments rather than being budgeted solely in Human Resources as in prior years.
- Travel** – The decrease is based upon 2013 actual trending.

- **Consultants and Contracts** – The decrease is primarily due to a reduction in consultant and contract support for staff training and development.
- **Office Costs** – The decrease is primarily related to the reclassification of monthly fees for performance management software to professional services.
- **Professional Services** – The increase is due to the reclassification of performance management software from office costs, as described above, and additional services related to automated benefits enrollment and management of benefits under the Family Medical Leave Act.
- **Miscellaneous** – The increase is for year-end holiday catering expenses and an increase in costs to support employee community responsibility and engagement activities.

## Finance and Accounting

Accounting and Finance (in whole dollars)			Increase (Decrease)	2014 Budget - Prior Draft	Variance to Prior Draft Over(Under)
2013 Budget	2014 Budget				
Total FTEs	11.00	12.48	1.48	11.52	0.96
Total Direct Expenses	\$ 2,201,294	\$ 2,617,147	\$ 415,853	2,856,413	(239,266)
Inc(Dec) in Fixed Assets	\$ (798)	\$ -	\$ 798		-

### Background and Scope

NERC's Finance and Accounting department manages all finance and accounting functions, including employee payroll, 401(k) and 457(b) plans, travel and expense reporting, monthly financial reporting, sales and use tax, meeting and events planning and services, insurance, internal auditing, and facilities management. This area also holds primary responsibility for the development of the annual business plan and budget, as well as NERC's proposed ERO risk management framework. Over the past several years, NERC's Finance and Accounting department implemented additional policies, procedures, and controls governing day-to-day practices including contract and personnel procurements, meeting, conference planning and travel, expense reimbursement, and back office systems and procedures. The department will continue to refine, improve, and where necessary implement additional procedures and controls.

### Resource Requirements

#### *Personnel*

With the exception of converting a contractor who is currently providing office support services into a full-time employee, no new FTE additions are planned for 2014. The increase of 1.48 FTEs reflects 2013 additions and the assumption of 4% attrition.

#### *Contractor Expenses*

A total of \$400k is budgeted for outside contractor and consulting support, representing an increase of \$75k over the 2013 budget. These costs are primarily for outside professional support for auditors to support various risk management and internal control initiatives, as well as to provide finance and accounting support.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>							
<b>2013 Budget &amp; Projection, and 2014 Budget</b>							
<b>FINANCE and ACCOUNTING</b>							
	2013 Budget	2013 Projection	Variance 2013 Projection v 2013 Budget Over(Under)	2014 Budget	Variance 2014 Budget v 2013 Budget Over(Under)	2014 Budget Draft 2	Variance to Prior Draft Over(Under)
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
Penalty Sanctions							
<b>Total NERC Funding</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>		<u>\$ -</u>
Membership Dues	-	-	-	-	-		-
Testing Fees	-	-	-	-	-		-
Services & Software	-	-	-	-	-		-
Workshops	-	-	-	-	-		-
Interest	-	-	-	-	-		-
Miscellaneous	-	-	-	-	-		-
<b>Total Funding (A)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>		<u>\$ -</u>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 1,230,355	\$ 1,347,398	\$ 117,043	\$ 1,379,476	\$ 149,121	\$ 1,490,011	(110,535)
Payroll Taxes	70,460	72,958	2,498	81,128	10,668	87,629	(6,501)
Benefits	149,964	148,755	(1,209)	219,002	69,038	250,930	(31,928)
Retirement Costs	140,368	132,326	(8,042)	155,391	15,023	167,843	(12,452)
<b>Total Personnel Expenses</b>	<u>\$ 1,591,146</u>	<u>\$ 1,701,437</u>	<u>\$ 110,290</u>	<u>\$ 1,834,997</u>	<u>\$ 243,850</u>	<u>\$ 1,996,413</u>	<u>(161,416)</u>
<b>Meeting Expenses</b>							
Meetings	\$ 5,000	\$ 5,000	\$ -	\$ 5,650	\$ 650	\$ 10,000	(4,350)
Travel	62,500	62,500	-	62,500	-	60,000	2,500
Conference Calls	1,850	5,000	3,150	4,000	2,150	5,000	(1,000)
<b>Total Meeting Expenses</b>	<u>\$ 69,350</u>	<u>\$ 72,500</u>	<u>\$ 3,150</u>	<u>\$ 72,150</u>	<u>\$ 2,800</u>	<u>\$ 75,000</u>	<u>(2,850)</u>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 325,000	\$ 642,822	\$ 317,822	\$ 400,000	\$ 75,000	\$ 475,000	(75,000)
Office Rent	-	-	-	-	-	-	-
Office Costs	28,500	30,330	1,830	29,500	1,000	29,500	-
Professional Services	186,000	327,662	141,662	280,000	94,000	280,000	-
Miscellaneous	500	500	-	500	-	500	-
Depreciation	798	2,196	1,398	-	(798)	-	-
<b>Total Operating Expenses</b>	<u>\$ 540,798</u>	<u>\$ 1,003,510</u>	<u>\$ 462,712</u>	<u>\$ 710,000</u>	<u>\$ 169,202</u>	<u>\$ 785,000</u>	<u>(75,000)</u>
<b>Total Direct Expenses</b>	<u>\$ 2,201,294</u>	<u>\$ 2,777,447</u>	<u>\$ 576,152</u>	<u>\$ 2,617,147</u>	<u>\$ 415,852</u>	<u>\$ 2,856,413</u>	<u>(239,266)</u>
<b>Indirect Expenses</b>	<u>\$ (2,201,294)</u>	<u>\$ (2,777,447)</u>	<u>\$ (576,153)</u>	<u>\$ (2,617,147)</u>	<u>\$ (415,853)</u>	<u>\$ (2,856,413)</u>	<u>\$ 239,266</u>
<b>Other Non-Operating Expenses</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Total Expenses (B)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (2)</u>	<u>\$ -</u>	<u>\$ (2)</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Change in Assets</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 2</u>	<u>\$ -</u>	<u>\$ 2</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Fixed Assets</b>							
Depreciation	(798)	(2,196)	(1,398)	-	798	-	-
Computer & Software CapEx	-	2,495	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-	-	-
Allocation of Fixed Assets	\$ 798	\$ (299)	\$ (1,097)	-	(798)	-	-
<b>Inc(Dec) in Fixed Assets (C)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (2,495)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>TOTAL BUDGET (=B + C)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (2,497)</u>	<u>\$ -</u>	<u>\$ (2)</u>	<u>\$ -</u>	<u>\$ -</u>
<b>FTEs</b>	11.00	11.02	0.02	12.48	1.48	12.48	-

### Summary of Variances by Category – 2014 Budget Compared to the 2013 Budget

- Personnel** – Salaries, payroll tax and retirement expenses are projected to increase in 2014 due to primarily to the increase in FTEs. Benefits are projected to increase at a higher rate than other personnel expenses due to; (i) the higher cost per employee of employee benefits plans and, (ii) the allocation of benefit expenses that were budgeted in Human Resources in prior years, including education, training and relocation expenses.

- **Consultants and Contracts** - Primarily for outside professional support for auditors to support various risk management and internal control initiatives, as well as to provide finance and accounting support.
- **Professional Services** – The increase is due to implementation of new systems to improve efficiency and controls in processing expenses.

## Section B — Supplemental Financial Information

### Reserve Balance

**Table B-1**

<b>Working Capital and Operating Reserve Analysis</b>					
<b>Statutory</b>					
	<b>Total Reserves</b>	<b>Working Capital<sup>1</sup></b>	<b>Known Contingencies</b>	<b>Unknown Contingencies</b>	<b>Operator Certification</b>
<b>Beginning Balance</b>					
Balance as of 12/31/12 - per audit	8,167,396	3,667,844	1,000,000	1,933,590	1,565,962
Release of penalty funding from restriction	2,512,500			2,512,500	
Less: Adjustment for future liabilities	(3,667,844)	(3,667,844)			
<b>Available Working Capital and Operating Reserves</b>	<b>7,012,052</b>	<b>-</b>	<b>1,000,000</b>	<b>4,446,090</b>	<b>1,565,962</b>
<b>Generation or (Use) from 2013 Operations</b>					
From budgeted operations	(353,004)			6,212	(359,216)
From Known and Unknown Contingency Reserves <sup>2</sup>	(2,952,030)		(836,706)	(2,115,324)	
Proceeds from financing activities (non-current portion only)	843,000			843,000	
Amortize adjustment for future liabilities	(120,801)			(120,801)	
<b>Projected Working Capital and Operating Reserves - 12/31/13</b>	<b>4,429,217</b>	<b>-</b>	<b>163,294</b>	<b>3,059,177</b>	<b>1,206,746</b>
<b>Required Working Capital and Operating Reserves - 12/31/13<sup>3</sup></b>					
Adjustment to achieve required reserve balance	(1,660,724)		836,706	(2,059,177)	(438,253)
	-		-		
<b>Increase(decrease) in funding requirement to adjust reserve balance</b>	<b>(1,660,724)</b>	<b>-</b>	<b>836,706</b>	<b>(2,059,177)</b>	<b>(438,253)</b>
<b>2014 NERC Assessment</b>					
2014 Expenses and Capital Expenditures	56,390,096			54,931,402	1,458,695
Less: Penalty Sanctions received 7/1/12 - 6/30/13	(290,000)			(290,000)	
Less: Other Funding Sources	(2,044,000)			(1,023,558)	(1,020,442)
Adjustment to achieve desired reserve balance	(1,660,724)	-	836,706	(2,059,177)	(438,253)
Less: Proceeds from financing activities	(1,415,990)				
Plus: debt service	422,000				
<b>2014 NERC Assessment</b>	<b>51,401,382</b>				

<sup>1</sup>Funds classified as Working Capital offset future, non-current liabilities and are restricted from use for current operations. The increase in the required balance as of 12/31/13, represents additional funds received in connection with the expansion of the Atlanta offices.

<sup>2</sup> The use of Unknown Contingency reserves includes the \$1,686,309 budgeted reduction in reserves in 2013. The 2013 budget also included a \$359k reduction in the Operator Certification reserves

<sup>3</sup> On August 16, 2012, the NERC Board of Trustees approved the Working Capital and Operating Reserve Policy set forth herein.

### Breakdown by Statement of Activity Sections

The following detailed schedules support the consolidated Statement of Activities. All significant variances were disclosed by program area in the preceding pages.

#### Penalty Sanctions

Penalty monies received prior to June 30, 2013 are to be used to offset assessments in the 2014 Budget, as documented in *NERC Policy – Accounting, Financial Statement and Budgetary Treatment of Penalties Imposed and Received for Violations of Reliability Standard*, as well as Section 1107 of the Rules of Procedure. Penalty monies received from July 1, 2013 through June 30, 2014 will be used to offset assessments in the 2015 budget.

All penalties received prior to June 30, 2013 are detailed below, including the amount and date received.

#### Allocation Method

Penalty sanctions received have been allocated to the following statutory programs to reduce assessments: Reliability Standards, Compliance Operations and Organization Registration and Certification, Compliance Enforcement, Reliability Assessments and Performance Analysis, Training and Education, Situational Awareness, Events Analysis and Investigations, and the Critical Infrastructure Department. Penalty sanctions are allocated based upon the number of FTEs in the Program divided by the aggregate total FTEs in the Programs receiving the allocation.

**Table B-2**

Penalty Sanctions Received On or Prior to June 30, 2013		
	Date Received	Amount Received
	2/7/2013	\$ 250,000
	5/28/2013	40,000
<b>Total Penalties Received</b>		<u>\$ 290,000</u>

## Supplemental Funding

Table B-3

Outside Funding Breakdown By Program (Excluding Penalty Sanction)	Budget 2013	Projection 2013	Budget 2014	Variance 2014 Budget v 2013 Budget
<b>Reliability Standards</b>				
Workshops	\$ 104,000	\$ 104,000	\$ 104,000	\$ -
Interest Allocation	3,970	4,224	3,976	6
<b>Total</b>	<b>\$ 107,970</b>	<b>\$ 108,224</b>	<b>\$ 107,976</b>	<b>\$ 6</b>
<b>Compliance Operations, Investigations and Enforcement</b>				
Workshops	\$ 40,000	\$ 20,000	\$ 40,000	\$ -
Interest Allocation	6,742	6,471	6,332	(410)
<b>Total</b>	<b>\$ 46,742</b>	<b>\$ 26,471</b>	<b>\$ 46,332</b>	<b>\$ (410)</b>
<b>Reliability Assessments and Performance Analysis</b>				
pc_GAR Software	\$ -	\$ 50,000	\$ 50,000	\$ 50,000
GADS Services	-	-	-	-
Workshops	40,000	40,000	40,000	-
Interest Allocation	2,809	2,780	2,913	104
<b>Total</b>	<b>\$ 42,809</b>	<b>\$ 92,780</b>	<b>\$ 92,913</b>	<b>\$ 50,104</b>
<b>Training and Education</b>				
Testing Fees and Certificate Renewals	\$ 1,080,000	\$ 1,080,000	\$ 1,020,000	\$ (60,000)
CEH Fees	600,000	600,000	600,000	-
Workshops	-	-	-	-
Interest Allocation	1,199	1,250	1,252	53
<b>Total</b>	<b>\$ 1,681,199</b>	<b>\$ 1,681,250</b>	<b>\$ 1,621,252</b>	<b>\$ (59,947)</b>
<b>Event Analysis</b>				
Workshops	\$ 52,000	\$ 38,100	\$ 50,000	\$ (2,000)
Interest Allocation	1,423	1,522	1,473	49
<b>Total</b>	<b>\$ 53,423</b>	<b>\$ 39,622</b>	<b>\$ 51,473</b>	<b>\$ (1,951)</b>
<b>Situation Awareness</b>				
Workshops	\$ 105,000	\$ 75,850	\$ 75,000	\$ (30,000)
FIST Royalties	-	7,000	-	-
Interest Allocation	974	835	957	(17)
<b>Total</b>	<b>\$ 105,974</b>	<b>\$ 83,685</b>	<b>\$ 75,957</b>	<b>\$ (30,017)</b>
<b>Critical Infrastructure Protection</b>				
Workshops	\$ 95,000	\$ 95,000	\$ 45,000	\$ (50,000)
Interest Allocation	2,884	2,917	3,098	215
<b>Total</b>	<b>\$ 97,884</b>	<b>\$ 97,917</b>	<b>\$ 48,098</b>	<b>\$ (49,785)</b>
<b>General and Administrative</b>				
Miscellaneous Income	\$ -	\$ 224	\$ -	\$ -
<b>Total</b>	<b>\$ -</b>	<b>\$ 224</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Outside Funding</b>	<b>\$ 2,136,000</b>	<b>\$ 2,130,174</b>	<b>\$ 2,044,000</b>	<b>\$ (92,000)</b>

**Personnel Expenses****Table B-4**

Personnel Expenses	Budget 2013	Projection 2013	Budget 2014	Variance 2014 Budget v 2013 Budget	Variance %
Total Salaries	\$ 24,056,165	\$ 24,965,038	\$ 26,218,572	\$ 2,162,407	9.0%
Total Payroll Taxes	1,459,710	1,473,809	1,570,954	111,244	7.6%
Total Benefits	3,079,941	2,917,558	3,385,917	305,976	9.9%
Total Retirement	2,702,588	2,264,996	2,884,211	181,623	6.7%
<b>Total Personnel Costs</b>	<b>\$ 31,298,404</b>	<b>\$ 31,621,401</b>	<b>\$ 34,059,654</b>	<b>\$ 2,761,250</b>	<b>8.8%</b>
FTEs	186.25	176.12	189.53	3.28	1.8%
Cost per FTE					
Salaries	\$ 129,161	\$ 141,750	\$ 138,335	9,174	7.1%
Payroll Taxes	7,837	8,368	8,289	451	5.8%
Benefits	16,537	16,566	17,865	1,328	8.0%
Retirement	14,511	12,861	15,218	707	4.9%
<b>Total Cost per FTE</b>	<b>\$ 168,045</b>	<b>\$ 179,545</b>	<b>\$ 179,706</b>	<b>\$ 11,661</b>	<b>6.9%</b>

**Consultants and Contracts****Table B-5**

**NOTE: This table has been replaced by Exhibit C**

**Office Rent****Table B-6**

Rent	Budget 2013	Projection 2013	Budget 2014	Variance 2014 Budget v 2013 Budget	Variance %
Office Rent	\$ 2,756,840	\$ 2,695,217	\$ 2,617,300	\$ (139,540)	-5.06%
<b>Total Office Rent</b>	<b>\$ 2,756,840</b>	<b>\$ 2,695,217</b>	<b>\$ 2,617,300</b>	<b>\$ (139,540)</b>	<b>-5.06%</b>

## Office Costs

**Table B-7**

Office Costs	Budget 2013	Projection 2013	Budget 2014	Variance 2014 Budget v 2013 Budget	Variance %
Telephone	\$ 527,000	\$ 605,852	\$ 628,000	\$ 101,000	19.17%
Telephone Answering Srv	-	2,609	-	-	
Internet	354,000	562,549	310,000	(44,000)	-12.43%
Office Supplies	172,500	208,240	199,300	26,800	15.54%
Computer Supplies and Maintenance	-	-	-	-	
Computers	3,000	8,423	4,500	1,500	50.00%
Computer Supplies	116,900	127,031	95,400	(21,500)	-18.39%
Maintenance & Service Agreements	1,404,265	1,457,919	1,701,029	296,764	21.13%
Software	38,500	9,036	141,500	103,000	267.53%
Network Supplies	-	10,471	-	-	
Publications & Subscriptions	73,000	75,002	32,995	(40,005)	-54.80%
Dues	42,750	40,006	41,750	(1,000)	-2.34%
Postage	20,100	16,841	19,600	(500)	-2.49%
Express Shipping	64,500	35,553	34,000	(30,500)	-47.29%
Copying	135,000	104,415	115,000	(20,000)	-14.81%
Reports	8,000	8,000	8,000	-	0.00%
Stationary/Forms	15,000	100	10,000	(5,000)	-33.33%
Equipment Repair/Service Contracts	30,000	72,405	70,000	40,000	133.33%
Bank Charges	25,000	60,000	20,000	(5,000)	-20.00%
Taxes	50,000	7,565	15,000	(35,000)	-70.00%
Merchant Card Fees	102,000	76,161	85,000	(17,000)	-16.67%
<b>Total Office Costs</b>	<b>\$ 3,181,515</b>	<b>\$ 3,488,178</b>	<b>\$ 3,531,074</b>	<b>\$ 349,559</b>	<b>10.99%</b>

The increase in Office Costs is primarily due to increased cellular and air card expenses and due to higher costs for annual maintenance and service costs, which are primarily related to software and hardware annual maintenance agreements and data center hosting expense.

## Professional Services

The Professional Services budget includes a projected increase in trustee fees.<sup>20</sup> \$70k has also been budgeted for a search fee for a new Trustee to fill the vacancy of an existing Trustee whose term limit expires in February 2015. The projected increase in outside services costs is primarily related to consulting costs to implement accounting system improvements and support. These increases are offset by a reduction in projected outside counsel expenses.

<sup>20</sup> For further information regarding the increase in Trustee fees may be found in the background materials to Agenda Item 2 on the August 14, 2013 Corporate Governance and Human Resources Committee agenda.

**Table B-8**

Professional Services	Budget 2013	Projection 2013	Budget 2014	Variance 2014 Budget v 2013 Budget	Variance %
Independent Trustee Fees	\$ 980,000	\$ 980,000	\$ 1,000,000	\$ 20,000	2.04%
Trustee Search Fee	-	-	70,000	70,000	
Outside Legal	900,000	900,000	740,000	(160,000)	-17.78%
Lobbying Fees	50,000	50,000	50,000	-	0.00%
Accounting & Auditing Fees	242,278	242,278	150,000	(92,278)	-38.09%
Insurance Commercial	110,000	110,000	100,000	(10,000)	-9.09%
Outside Services		56,815	180,280	180,280	
<b>Total Services</b>	<b>\$ 2,282,278</b>	<b>\$ 2,339,093</b>	<b>\$ 2,290,280</b>	<b>\$ 8,002</b>	<b>0.35%</b>

**Miscellaneous****Table B-9**

Miscellaneous Expenses	Budget 2013	Projection 2013	Budget 2014	Variance 2014 Budget v 2013 Budget	Variance %
Miscellaneous Expense	\$ 6,500	\$ 5,405	\$ 6,500	\$ -	
Employee Rewards and Recognition	\$ 10,000	10,000	10,000	-	0.00%
Community Resp & Employee Engagement	5,000	5,000	10,000	5,000	100.00%
Year-end Holiday Catering			10,000	10,000	
<b>Total Miscellaneous Expenses</b>	<b>\$ 21,500</b>	<b>\$ 20,405</b>	<b>\$ 36,500</b>	<b>\$ 15,000</b>	<b>69.77%</b>

A further discussion of these expenses may be found under the General and Administrative department.

**Other Non-Operating Expenses****Table B-10**

Other Non-Operating Expenses	2013	Projection 2013	Budget 2014	Variance 2014 Budget v 2013 Budget	Variance %
Gain/Loss from Sale of Assets	\$ -	\$ -	\$ -	\$ -	
Property Tax Expense	\$ 50,000	50,000	\$ 50,000	-	
Office Relocation	-		-	-	
Interest			94,000	94,000	
<b>Total Other Non-Operating Expenses</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 144,000</b>	<b>\$ 94,000</b>	<b>188.00%</b>

The budgeted interest expense is detailed in the Capital Financing program, Exhibit D.

## **Section C — Non-Statutory Activity**

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**NERC has no non-statutory activities.**

## Section D — Supplemental Financial Statements

### NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION STATEMENT OF FINANCIAL POSITION

	12/31/2012 - per Audit	12/31/2013 - Projection	12/31/2014 - Projection	12/31/2015 - Projection	12/31/2016 - Projection
<b>ASSETS</b>					
Cash	27,936,696	17,881,732	16,108,351	15,477,700	14,848,610
Trade Accounts receivable, net of allowance for uncollectible accounts of 62,573 and 179,565 in 2012 and 2011	4,281,602	4,281,602	4,281,602	4,281,602	4,281,602
Other Receivables	-	-	-	-	-
Prepaid expenses and other current assets	888,087	888,087	888,087	888,087	888,087
Security deposit	114,903	99,136	99,136	99,136	99,136
Cash value of insurance policies	337,414	337,414	337,414	337,414	337,414
Employee Fiduciary - 457b	118,243	118,243	118,243	118,243	118,243
Property and equipment	5,220,210	6,548,907	7,333,691	10,771,485	11,723,280
<b>Total Assets</b>	<b>38,897,155</b>	<b>30,155,121</b>	<b>29,166,524</b>	<b>31,973,668</b>	<b>32,296,372</b>
<b>LIABILITIES AND NET ASSETS</b>					
<b>Liabilities</b>					
Accounts payable and accrued expenses (incl, vacation accrual)	2,959,896	2,959,896	2,959,896	2,959,896	2,959,896
Accrued Incentive Comp	2,911,359	3,780,127	3,792,317	3,792,317	3,792,317
Deferred income	5,177,751	5,177,751	5,177,751	5,177,751	5,177,751
Regional assessments	9,614,829	-	-	-	-
Deferred rent-current	120,801	182,421	259,950	329,605	395,953
Deferred compensation (Def. comp; 457b; retiree medical)	736,019	736,019	736,019	736,019	736,019
Accrued retirement liabilities	1,410,466	1,575,000	1,640,591	1,640,591	1,640,591
Capital lease obligations - current	65,928	65,928	65,928	65,928	65,928
Capital Project Financing - Current Portion	-	422,000	894,000	1,910,000	1,889,000
Deferred rent - non-current	3,620,736	3,819,947	3,553,110	3,233,179	2,846,900
Capital lease obligations - non-current	47,108	47,108	47,108	47,108	47,108
Capital Project Financing - non-current	-	843,000	1,364,990	2,504,990	1,815,990
<b>Total Liabilities</b>	<b>26,664,893</b>	<b>19,609,197</b>	<b>20,491,660</b>	<b>22,397,384</b>	<b>21,367,453</b>
Net Assets - unrestricted	9,719,762	10,255,924	8,674,864	9,576,284	10,928,920
Net Assets - restricted	2,512,500	290,000	-	-	-
<b>Total Liabilities and Net Assets</b>	<b>38,897,155</b>	<b>30,155,121</b>	<b>29,166,524</b>	<b>31,973,668</b>	<b>32,296,373</b>

**Statement of Activities**

**Next page.**

NORTH AMERICAN ELECTRIC RELIABILITY COPORATION

Statement of Activities, Fixed Asset Expenditures and Change in Working Capital by Program 2014 Budget	Statutory Activities														
	Statutory Total	Reliability Standards (Section 300)	Compliance Operations, Investigations and Organization Registration and Certification	Compliance Enforcement	Reliability Assessment and Performance Analysis	Operator Certification	Training and Continuing Education	Event Analysis	Situation Awareness and Infrastructure Security	Critical Infrastructure Protection	General and Administrative (Includes Executive and Gov't Relations)	Legal and Regulatory	Information Technology	Human Resources	Accounting and Finance
<b>Funding</b>															
<b>ERO Funding</b>															
NERC Assessments	51,401,382	10,000,443	9,400,511	6,350,810	8,214,496		1,665,959	3,975,065	4,493,115	9,517,444	(2,216,461)	-	-	-	-
Penalty Sanctions	290,000	58,951	52,401	41,484	43,190		12,008	21,834	14,192	45,941		-	-	-	-
<b>Total NERC Funding</b>	<b>51,691,382</b>	<b>10,059,394</b>	<b>9,452,912</b>	<b>6,392,293</b>	<b>8,257,686</b>		<b>1,677,968</b>	<b>3,996,898</b>	<b>4,507,307</b>	<b>9,563,386</b>	<b>(2,216,461)</b>	-	-	-	-
Membership Dues	-														
Testing Fees	1,620,000					1,020,000	600,000								
Services & Software	50,000				50,000										
Workshops	354,000	104,000	40,000		40,000			50,000	75,000	45,000					
Interest	20,000	3,976	3,534	2,798	2,913	442	810	1,473	957	3,098					
Miscellaneous	-														
<b>Total Funding (A)</b>	<b>53,735,382</b>	<b>10,167,369</b>	<b>9,496,446</b>	<b>6,395,091</b>	<b>8,350,598</b>	<b>1,020,442</b>	<b>2,278,778</b>	<b>4,048,371</b>	<b>4,583,264</b>	<b>9,611,484</b>	<b>(2,216,461)</b>	-	-	-	-
<b>Expenses</b>															
<b>Personnel Expenses</b>															
Salaries	26,218,572	3,308,688	3,192,809	2,043,427	2,604,058	243,369	562,747	1,470,290	915,216	3,220,485	2,031,740	2,637,399	2,013,859	595,009	1,379,476
Payroll Taxes	1,570,954	210,130	202,068	132,855	159,156	17,411	39,508	91,480	60,207	191,249	89,250	136,718	136,366	23,428	81,128
Benefits	3,385,917	454,850	404,311	320,080	333,241	50,539	92,655	168,463	109,501	354,474	245,309	265,856	317,097	50,539	219,002
Retirement Costs	2,884,211	377,588	364,901	234,210	294,179	28,185	63,655	167,286	104,293	366,598	158,550	296,887	229,767	42,721	155,391
<b>Total Personnel Expenses</b>	<b>34,059,654</b>	<b>4,351,256</b>	<b>4,164,089</b>	<b>2,730,572</b>	<b>3,390,634</b>	<b>339,504</b>	<b>758,565</b>	<b>1,897,519</b>	<b>1,189,217</b>	<b>4,132,806</b>	<b>2,524,849</b>	<b>3,336,860</b>	<b>2,697,089</b>	<b>711,697</b>	<b>1,834,997</b>
<b>Meeting Expenses</b>															
Meetings	1,052,150	185,000	70,000	2,500	90,000	21,000	15,000	67,000	171,000	145,000	268,000	5,000	5,000	2,000	5,650
Travel	2,419,525	400,000	312,657	85,298	385,000	20,000	31,000	155,000	28,020	328,428	421,482	120,000	59,243	10,897	62,500
Conference Calls	317,851	123,748	16,574	5,081	31,950	500	25,000	31,864	4,000	32,574	24,206	12,953	4,800	600	4,000
<b>Total Meeting Expenses</b>	<b>3,789,525</b>	<b>708,748</b>	<b>399,232</b>	<b>92,879</b>	<b>506,950</b>	<b>41,500</b>	<b>71,000</b>	<b>253,864</b>	<b>203,020</b>	<b>506,003</b>	<b>713,688</b>	<b>137,953</b>	<b>69,043</b>	<b>13,497</b>	<b>72,150</b>
<b>Operating Expenses</b>															
Consultants & Contracts	6,828,973		400,000		638,085	473,000	375,830	-	1,289,108	976,450	75,000		1,944,000	257,500	400,000
Office Rent	2,617,300										2,617,300				
Office Costs	3,506,074	90,350	73,500	41,000	139,135	47,300	51,000	38,519	47,750	86,250	502,000	63,500	2,279,770	16,500	29,500
Professional Services	2,290,280										1,170,000	760,000		80,280	280,000
Miscellaneous	36,500	500	500	500	500		500	500	500	500	5,500	500	500	25,500	500
Depreciation	2,333,006				228,000			193,667	161,498		419,399		1,330,443		
<b>Total Operating Expenses</b>	<b>17,612,133</b>	<b>90,850</b>	<b>474,000</b>	<b>41,500</b>	<b>1,005,720</b>	<b>520,300</b>	<b>427,330</b>	<b>232,686</b>	<b>1,498,856</b>	<b>1,063,200</b>	<b>4,789,199</b>	<b>824,000</b>	<b>5,554,713</b>	<b>379,780</b>	<b>710,000</b>
<b>Total Direct Expenses</b>	<b>55,461,313</b>	<b>5,150,854</b>	<b>5,037,321</b>	<b>2,864,951</b>	<b>4,903,304</b>	<b>901,304</b>	<b>1,256,895</b>	<b>2,384,069</b>	<b>2,891,092</b>	<b>5,702,009</b>	<b>8,027,736</b>	<b>4,298,813</b>	<b>8,320,845</b>	<b>1,104,974</b>	<b>2,617,147</b>
<b>Indirect Expenses</b>	0	4,872,999	4,331,554	3,429,147	3,570,148	541,444	992,648	1,804,814	1,173,129	3,797,630	(8,171,736)	(4,298,813)	(8,320,845)	(1,104,974)	(2,617,147)
<b>Other Non-Operating Expenses</b>	<b>144,000</b>	-	-	-	-	-	-	-	-	-	144,000				
<b>Total Expenses (B)</b>	<b>55,605,313</b>	<b>10,023,853</b>	<b>9,368,875</b>	<b>6,294,098</b>	<b>8,473,452</b>	<b>1,442,748</b>	<b>2,249,543</b>	<b>4,188,883</b>	<b>4,064,222</b>	<b>9,499,639</b>	-	-	-	-	-
<b>Change in Assets</b>	<b>(1,869,930)</b>	<b>143,517</b>	<b>127,570</b>	<b>100,993</b>	<b>(122,854)</b>	<b>(422,307)</b>	<b>29,235</b>	<b>(140,512)</b>	<b>519,043</b>	<b>111,846</b>	<b>(2,216,461)</b>	-	-	-	-
<b>Fixed Assets</b>															
Depreciation	(2,333,006)	-	-	-	(228,000)	-	-	(193,667)	(161,498)	-	(419,399)	-	(1,330,443)	-	-
Computer & Software CapEx	2,904,790							645,990					2,258,800		
Furniture & Fixtures CapEx	-														
Equipment CapEx	213,000												213,000		
Leasehold Improvements	-														
Allocation of Fixed Assets	-	143,517	127,570	100,993	105,146	15,946	29,235	53,154	34,550	111,846	419,399	-	(1,141,357)	-	-
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>784,784</b>	<b>143,517</b>	<b>127,570</b>	<b>100,993</b>	<b>(122,854)</b>	<b>15,946</b>	<b>29,235</b>	<b>(140,512)</b>	<b>519,043</b>	<b>111,846</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>56,390,096</b>	<b>10,167,369</b>	<b>9,496,446</b>	<b>6,395,091</b>	<b>8,350,598</b>	<b>1,458,695</b>	<b>2,278,778</b>	<b>4,048,371</b>	<b>4,583,264</b>	<b>9,611,484</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>FTEs</b>	<b>189.53</b>	<b>25.92</b>	<b>23.04</b>	<b>18.24</b>	<b>18.99</b>	<b>2.88</b>	<b>5.28</b>	<b>9.60</b>	<b>6.24</b>	<b>20.20</b>	<b>10.56</b>	<b>15.15</b>	<b>18.07</b>	<b>2.88</b>	<b>12.48</b>

## **Exhibit A – Common Assumptions**

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### **Draft**

### **Shared Business Plan and Budget Assumptions**

#### **NERC and the Regional Entities**

#### **2014-2016 Planning Period**

As part of the implementation of the Strategic Plan ([ERO 2013-2016 Strategic Plan](#)), NERC and the Regional Entities developed a set of common assumptions to help guide resource projections over the planning period for each entity and the ERO overall, recognizing there are often unique factors that drive differences in each organization's final determination of its resource needs and budget. The specific resource needs and budget of NERC and each Regional Entity will continue to be publicly posted for review and approved in open session by NERC's Finance and Audit Committee as part of the annual business plan and budget process.

It continues to be the objective of NERC and the Regional Entities to identify and implement process and other improvements to increase the overall efficiency and effectiveness of the ERO, with due recognition and sensitivity to the cost of compliance by industry and the critical nature of industry support and participation to the success of the ERO regulatory model as contemplated by the Energy Policy Act of 2005. In addition, NERC and the Regional Entities have reviewed the existing scope of the program areas and reprioritized current resources as appropriate. Efforts have been made to focus on assumptions that affect resource requirements instead of specific program area goals, objectives, and actions, which are incorporated in the Strategic Plan and each Regional Entity's business plan and budget.

#### **Legal and Operating Framework**

NERC and the Regional Entities are expected to continue to work under the existing regulatory framework governing the establishment and enforcement of reliability standards for the BPS by applicable governmental authorities in the United States and Canada, as well as the authorizations contained in FERC's order approving NERC as the ERO. No significant changes to this framework are assumed to occur over the planning period.

The terms of the existing delegation agreements between NERC and the Regional Entities are also assumed to continue to apply over the planning period. With respect to the performance of delegated functions, the Regional Entities are expected to have primary responsibility for interactions with registered entities. NERC will provide oversight of the Regional Entities and otherwise ensure that its responsibilities as the ERO are fulfilled. Over the planning period, NERC and the Regional Entities are also expected to refine and revise procedures to eliminate duplication, increase operational efficiencies, enhance ERO-wide consistency, and achieve measurable reliability outcomes consistent with their respective roles and responsibilities.

NERC will evaluate the scope of its activities in relation to the FERC-approved Section 215 guidelines in connection with the development of its annual business plan and budget. NERC will also evaluate the extent to which it will undertake activities within these guidelines and may voluntarily defer or elect to not undertake certain activities in light of resource limitations and priorities. NERC may also voluntarily consider funding alternatives for certain Section 215 activities.

### **Business Environment**

NERC and the Regional Entities will work collaboratively to identify additional ways to improve efficiency and leverage overall ERO resources, as well as to gather and evaluate information regarding the impact of ERO activities on registered entities. Industry concerns relative to the overall cost of compliance with ERO requirements will remain an area of focus.

Cost pressures may affect the number of stakeholder resources available to participate in NERC and Regional Entity activities. NERC and Regional Entity business plans, budgets, and resource requirements will continue to be established based upon the assumption of continued industry participation in support of key program areas, including but not limited to event analysis, reliability assessments, and standards development. Any significant change in the quality or availability of industry resources will likely affect ERO resource requirements.

### **General**

External factors will continue to affect both resource needs and allocation. These factors will likely include, but not be limited to:

- FERC orders, directives, notices of proposed rulemaking, audits, and performance assessment
- Availability of experienced workforce
- The timing and scope of BES exception implementation
- Number and severity of violations and system events
- Assessment of the impact of new technologies
- Proposed and actual changes in applicable laws and regulations, including environmental and others
- Transformation of NERC's standards to a high-quality, results-based steady state
- Resources required to complete and implement any recommendations included in or FERC directives issued in connection with the Five-Year ERO Performance Assessment

Leveraging the activities of the transmission, generator, and other forums is expected to increasingly complement ERO activities and place downward pressure on the need to add incremental resources that might otherwise be required in the absence of these forums.

NERC and the Regional Entities expect annual gains in efficiency as programs and initiatives mature, experience is gained, standard development and execution is improved and internal process and performance improvements are achieved.

## **Key Assumptions by Program Area**

### **Reliability Standards Program**

1. With the filing of the Critical Infrastructure Protection (CIP) Version 5 standards and the need for a smooth transition from Version 3 to Version 5, additional resources may be required to provide industry and Regional guidance. These commitments are expected to be largely offset by increased efficiencies and effectiveness of the standards development process.
2. For planning purposes, given the current industry-approved implementation plan, NERC and the Regional Entities are assuming an implementation start date of January 2016 for CIP Version 5. If directed to accelerate the implementation date, NERC and the Regions will direct appropriate resources from existing staff.
3. Staffing resources required for standards activities at NERC are expected to be flat during the planning period; if minor resource additions are required, they will be offset by operating efficiencies in other areas.
4. Experience has shown that project management discipline is necessary to satisfy standards development project goals and priorities, including the assurance of a requisite level of quality. This includes recruiting standard developers with the appropriate skill set needed to bring that discipline. Examples of efforts to increase project management discipline during the planning period include but are not limited to:
  - a. Specific time frames for standards development and process milestones;
  - b. Increased industry resource dedication over shorter periods; and
  - c. Clear criteria for cancellation of projects not yielding timely and high-quality results.
5. NERC will need to allocate additional resources to support (1) the transformation of standards to a steady state, (2) improvements in the quality of standards development, and (3) industry guidance, including related technical conference and training activities.
6. Expected significant increases in standards development and processing may create additional resources to review and comment on proposed standards, support regulatory filings, and oversee new standards as they become effective. However, incremental resources are expected to be offset by improvements in the efficiency of the standards development process.
7. Implementing a cost-effectiveness analysis or assessment of proposed standards is likely to impact resource requirements, but the extent of the impact both at the ERO and Regions cannot be fully assessed at this time.

8. The number of interpretation and guidance requests is expected to decrease over time, reflecting the initiative to transform the current standards to a body of high-quality, results-based standards and improve the execution of the standards development process.
9. The number of projects contained in the Reliability Standards Development Plan is expected to increase over the planning period, reflecting the transformation of standards to a steady state. However, the scope of these projects is expected to be somewhat narrower than would otherwise exist in the absence of the results-based standards initiative.
10. With NERC's improved execution and focus on results-based standards, the need for activity associated with regional standards development is expected to decrease, together with staffing resources supporting this area. The Regions and ERO plan to work closely to support the development of continent-wide standards.
11. Improvements in the quality of standards drafting and implementation will result in improvements in the efficiency and effectiveness of auditing and enforcement activities toward the end of the planning period.
12. NERC will increase the quality and effectiveness of regulatory filings. Efforts will include, but not be limited to:
  - a. Greater use of pre-filing meetings, which will include opportunities for regional and stakeholder participation;
  - b. Increased dialogue with regulatory authorities regarding the form and requirements for regulatory filings, including reducing the requirement for exhibits by instead relying on publicly available documentation on NERC's website;
  - c. Seeking engagement with regulatory authorities to obtain formal regulatory authority input during standards development; and
  - d. With the support from the Regions, more developed technical justifications to support filings.

## **Compliance Monitoring and Enforcement and Organization Registration and Certification Program**

### ***Compliance and Enforcement***

1. NERC and Regional Entities will have sufficient staff, supervision, and technical specialists with adequate collective professional competence and other resources, as needed, to perform the compliance work and to meet expected timeframes for completing the work.
2. Resources required for compliance and enforcement activities at NERC are expected to increase slightly in support of the Reliability Assurance Initiative. When the initiative has matured, these resources will either be reduced or redirected to facilitate a more rigorous oversight and quality assurance model.

3. Staffing resources required for compliance and enforcement activities at the Regional Entities over the planning period will vary based on regional needs and circumstances, with any increases generally expected to be mitigated through operating efficiencies in other areas. The Reliability Assurance Initiative may create short-term incremental resource needs at both NERC and some Regional Entities as new procedures and tools are developed to implement revised compliance enforcement processes.
4. Results of implementing the Find, Fix, Track and Report (“FFT”) process over the planning period will lead to continued refinement, improvement, and prioritization of risk-based compliance monitoring efforts and a reduction in registered entity resources focusing on lower level potential violations.
5. Changes in TFE processing, including equipment class-based exceptions, audit sampling, and elimination of much of the reporting and review burden, have been implemented to improve efficiency.
6. Improvements in consistency among the Regional Entities may facilitate more efficient resource allocation within the compliance and enforcement areas at NERC, as well as potentially reduce compliance costs for some registered entities.
7. Improvements in audit guidance may increase ERO efficiency, support improvements to resource allocation, and help mitigate overall compliance costs.
8. Improvements in consistency among Regional Entities and registered entities are expected from an improved centralized compliance, registration, analysis, and tracking system. A significant multiyear investment will be required to develop and implement the system.
9. As risk-based monitoring activities increase, consideration will be given to modifying the current three- and six-year audit cycles for registered entities. As an outgrowth of RAI, the rigor, scope, depth, and recurrence of audits and spot checks are expected to be driven by reliability risk, rather than a predetermined schedule. As standards are improved, the need for clarifying documents such as interpretations is expected to decrease. As a result of the foregoing, audit resource needs may vary year to year.
10. Consideration of existing registered entity management practices (i.e., internal controls) around Reliability Standards in the scope of the compliance monitoring program will allow NERC and the Regional Entities to further prioritize activities.
11. Further auditing efficiencies can be achieved by continued refinement of auditing procedures focused on the purpose and intent of the requirements related to reliability risk. This will require a change in approach by the Regional Entities and NERC staff.

### ***Organization Registration and Certification***

1. Implementation of the BES definition may place additional resource demands in the Registration area but the significance cannot be fully assessed at this time. If a high number of BES exceptions are requested, the potential for a backlog situation in the first years of implementation is possible.

2. Identification of “gaps” in registration and corrections in registration.
3. The certification process will be revised to emphasize the technical capabilities of those conducting a certification evaluation.

### **Reliability Assessment and Performance Analysis Program**

1. Implementation of a BES exception process will impact resource requirements in this program area, but the significance of the impact cannot be fully assessed at this time, as resource requirements will be driven by the number and type of exception requests received. It’s also expected that there will be resource impacts at the Regional Entity level.
2. ERO investments in new software applications and IT infrastructure will be needed to develop and implement improved data collection and analysis systems and capabilities and should improve overall ERO resource allocation and efficiency in the long term. (See Information Technology for assumptions regarding the role of NERC and the Regional Entities with respect to funding.)
3. Resource impacts associated with the ERO’s reliability assessments of new technologies within the industry and environmental regulations are uncertain at this point.
4. Implementation of an outcome-based approach to achieving measurable improvements in reliability will likely require allocating resources to this program area, the significance of which from an overall budget perspective cannot be determined at this time.

### **Training, Education, and System Operator Certification Program**

1. Both NERC and the Regional Entities agree that there are opportunities for improvements in the coordination, content, and manner of internal training programs.
2. While additional or different resources will be required for certain training initiatives, it is not clear at this time whether these needs will translate into a significant increase in NERC’s or any of the Regional Entities’ budgets. The general sense at this point is that improvements with minimal budgetary impact can be achieved through better coordination, planning, and management of training programs. The possible exception is in the area of additional resources needed to support CEA staff auditor training, as further discussed below.
3. Implementation of auditor training associated with the Reliability Assurance Initiative process improvements may result in resource impacts; the timeframe required to train auditors will depend on regional audit work plans and schedules.

### **Situation Awareness and Event Analysis**

1. NERC will continue to review the appropriateness of continued funding of existing reliability tools, with any proposed changes thereto subject to review and input from the

Regional Entities, appropriate NERC committees and working groups, and other affected parties.

2. SAFNR will provide additional situational awareness capabilities at both NERC and Regional Entity levels. Significant additional resource investments are not anticipated to be necessary for the Regional Entities to utilize SAFNR. NERC will continue to budget and incur costs to operate and maintain SAFNR.
3. The number of “qualified system events,”<sup>21</sup> as defined in the NERC Events Analysis Process, is expected to remain steady with an average of 10 per month. Greater collaboration with the Region and the registered entity is leading to more detailed analysis and support of the identification of reliability issues and lessons learned. The number of “system occurrences” relates to events and disturbances that fall below the threshold of the categorized definitions in the NERC Events Analysis Process document and is expected to remain steady at approximately 25 per month.

### **Critical Infrastructure Protection**

1. NERC will continue to fund the ES-ISAC.
2. On an annual basis, NERC will conduct the annual Grid Security Conference and rotate conference locations throughout the eight Regions.
3. The Sufficiency Review Program (SRP) will expand to include transition issues associated with CIP-002-4 and CIP Version 5. In addition, each year, NERC will increase the number of SRPs conducted.
4. NERC will continue to conduct and budget grid security exercises.
5. To address the changing policy environment, NERC will continue to manage policy development and partnership activities with industry and the government.
6. NERC will need to allocate additional resources to support improvements in the quality of cybersecurity audit and guidance, including related training activities.
7. NERC will revise CIP RSAWS to provide greater flexibility and clarity on how to evaluate compliance with cybersecurity controls.
8. To improve the auditor’s ability to assess for compliance to CIP standards, NERC will evaluate and/or procure cybersecurity auditing tools.

### **Information Technology and Enterprise Applications**

1. Significant investments will be required over the planning period to develop and implement program area and enterprise-wide processes, procedures, and applications to support business needs. These business needs include auditing, compliance,

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<sup>21</sup> The phrase “qualified system events” refers to the ERO event analysis process categorization criteria (Category 1-5), Occurrence also include copper theft, substation intrusions and other occurrences on the bulk electric system which may be reported. The phrase “qualified system events” means events affecting the Bulk Electric System, which meet the ERO event analysis process categorization criteria (Category 1-5).

registration, and tracking systems and other project, data management, and analysis tools to provide greater cost efficiency and uniformity across the ERO.

2. NERC and the Regional Entities will establish procedures to ensure that the ERO EMG considers the potential enterprise-wide applicability of new applications to support delegated functions prior to making decisions on investments in applications designed to support one entity's operations.
3. Ongoing investments will be required to develop, implement, and maintain enhancements to the NERC and Regional Entity websites.
4. In accordance with its approved annual budgets, NERC will provide the funding for the development and maintenance of ERO Enterprise applications.

### **Finance and Administrative**

1. Potential additional resource requirements may be required in connection with implementation of the ERO Risk Management framework. NERC will include funding for consultants in its 2014 budget to support this initiative.
2. NERC and the Regional Entities will work cooperatively to continue focusing on opportunities to improve the efficiency of travel, meeting, conference call, and other operating expenses.
3. NERC and the Regional Entities will work to improve budgeting and forecasting capabilities.
4. NERC and the Regional Entities will work cooperatively to establish a common set of principles regarding the determination of working capital and contingency reserve requirements.

## Exhibit B – Application of NERC Section 215 Criteria

### DISCUSSION OF HOW THE NERC MAJOR ACTIVITIES IN THE 2014 BUSINESS PLAN AND BUDGET MEET THE NERC WRITTEN CRITERIA FOR DETERMINING WHETHER A RELIABILITY ACTIVITY IS ELIGIBLE TO BE FUNDED UNDER FEDERAL POWER ACT SECTION 215

#### I. Introduction

This Exhibit discusses how the major activities in NERC’s 2014 Business Plan and Budget meet the NERC written criteria for determining whether a reliability activity is eligible to be funded under §215 of the Federal Power Act (“FPA §215”). This Exhibit is intended to satisfy Recommendation No. 38 resulting from the financial performance of NERC conducted by the Commission’s Division of Audits (“DA”) in 2012-2013 and adopted by the Commission in its November 2, 2012 order on NERC’s 2013 Business Plan and Budget.<sup>22</sup> NERC submitted the written criteria to the Commission in a compliance filing dated February 21, 2013 in Docket No. FA11-21-000.<sup>23</sup> The Commission approved the NERC written criteria, with modifications, in an order issued in that docket on April 18, 2013.<sup>24</sup> The NERC written criteria as used in this Exhibit incorporate the modifications specified in the Compliance Order.<sup>25</sup>

#### II. Reliability Standards Program 2014 Major Activities

The major activities of the Reliability Standards Program are described at pages 10 and 28-30 of the 2014 Business Plan and Budget. The principal activity areas for the Reliability Standards Program are (1) providing project management, leadership and technical assistance to standard development processes participants to deliver high quality, continent-wide standards; (2) facilitating continent-wide industry engagement in the standard development processes; and (3) conducting industry balloting on standards, disseminating information on standards and the standard development processes, and supporting regulatory filings and proceedings relating to standards. Additionally, the Reliability Standards Program provides technical advice and quality review for Regional Entity Standards development processes, presents proposed Regional

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<sup>22</sup> *North American Electric Reliability Corporation, Order Accepting 2013 Business Plan and Budget of the North American Electric Reliability Corporation and Ordering Compliance Filing*, 141 FERC ¶ 61,086 (2012) (“2013 Budget Order”). Recommendation 38, as adopted in the 2013 Budget Order, is: “In its annual business plan and budget filings, [NERC should] provide an explanation as to why the proposed activities to be undertaken by each program area for the budget year are statutory, including, at a minimum: a description and the purpose of the major activities to be taken by each program area and an explanation for why the activity is a statutory activity.” *Id.* at P 16.

<sup>23</sup> *Compliance Filing of the North American Electric Reliability Corporation in response to paragraph 30 of November 2, 2012 Commission Order – NERC Written Criteria for Determining Whether a Reliability Activity is Eligible to be Funded Under Federal Power Act Section 215*, filed February 1, 2013 in Docket No. FA 11-21-000 (“February 1, 2013 Compliance Filing”).

<sup>24</sup> *North American Electric Reliability Corporation, Order on Compliance*, 143 FERC ¶ 61,052 (2013) (“Compliance Order”).

<sup>25</sup> For ease of reference, the complete NERC written criteria, as modified in accordance with the Compliance Order, are provided at the end of this Exhibit.

standards to the NERC Board, and develops and supports regulatory filings for approval of regional standards.

For 2014, the Reliability Standards Program will be focused on three areas: (1) transforming the NERC standards to high quality, world-class results-based standards (ensuring that standards are focused on required actions or results and not necessarily on the methods by which to accomplish those actions or results); developing a bulk power system (“BPS”) reliability risk profile; and (3) developing methods to assess and manage cost-effectiveness (benefit) of new standards. Specific ongoing and new major activities for the Reliability Standards Program for 2014 include: continuing to address regulatory obligations for standards development and revisions as specified in regulatory directives; completing standards revisions related to the Phase 2, Paragraph 81 requirements; supporting the NERC three-year Reliability Standards Development Plan; integrating the plan from the 2013 Standards Independent Expert Review Panel into the Reliability Standards Development Plan; increasing coordination with the NERC Compliance Monitoring and Enforcement Program in integrating compliance considerations into standards development; accelerating delivery of the number of standards that meet the quality criteria and the results-based construct; developing a BPS reliability risk profile to evaluate existing standards and continuing the prioritized development of risk-based standards focused on key reliability outcomes; facilitating the industry’s transition to Version 5 of the Critical Infrastructure Protection (“CIP”) standards, including minimizing an unintended surge in violations when the Version 5 CIP standards go into effect; developing methods to assess and manage the cost effectiveness (benefit) of new standards; and continuing to support alignment between standards development and the Reliability Issues Steering Committee (“RISC”) priorities.

The major activities of the Reliability Standards Program satisfy the following criteria:

I.A: Is the activity necessary or appropriate for Reliability Standards development projects pursuant to the NERC Rules of Procedure (ROP)?

I.C: Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information for Reliability Standards development, including for purposes of identifying areas in which new Reliability Standards could be developed, existing Reliability Standards could be revised, or existing Reliability Standards could be eliminated?

II.F.1: Is the activity necessary or appropriate for the provision of training, education and dissemination of information for/to (i) NERC personnel, (ii) Regional Entity personnel, and (ii) industry personnel with respect to compliance monitoring and enforcement topics and topics concerning reliability risks identified through compliance monitoring and enforcement activities, such as (1) Requirements of Reliability Standards, including how to comply and how to demonstrate compliance? This includes development of guidance and interpretation documents.

IV: Is the activity one that is required or specified by, or carries out, the provisions of NERC’s Rules of Procedure that have been approved by the Commission as “Electric Reliability Organization Rules” (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)?

(The applicable Rules of Procedure provisions for these major activities are §300 and Appendix 3A.)

### **III. Compliance Monitoring and Enforcement and Organization Registration and Certification Program 2014 Major Activities**

The major activities of the Compliance Monitoring and Enforcement and Organization Registration and Certification Program are described at pages 11, 20-21, 33-38 and 41-43 of the 2014 Business Plan and Budget. The Compliance Operations department of this program works with the Regional Entities to ensure consistent and effective implementation of the Compliance Monitoring and Enforcement Program (“CMEP”). This department is responsible for the major activities of consistent implementation of the risk-based compliance monitoring program, including organization registration and certification, for reliability improvements; developing and presenting education programs that support industry compliance and the integration of risk assessment and internal controls; development of minimum baseline monitoring requirements; oversight of the Regional Entities’ delegated compliance functions including CMEP planning, implementation and reporting, compliance operations and coordination, and auditor training; development and maintenance of the Reliability Standards Audit Worksheets; and support for the NERC Compliance and Certification Committee. The Compliance Enforcement department of this program is responsible for overseeing enforcement processes, application of penalties or sanctions, and activities to mitigate and prevent recurrence of remediated issues or confirmed violations of reliability standards; the department executes these responsibilities through the following major activities: monitoring Regional Entities’ enforcement processes to ensure due process, identify best practices and process efficiency opportunities, and promote consistency among Regional Entities’ business practices; collecting and analyzing compliance enforcement and violation data and trends to assist with identification of emerging risks and help inform the development of enforcement policy and processes; filing notices of penalty (“NOPs”) and other submittals associated with violations discovered through Regional Entity compliance, monitoring and enforcement activities; processing and filing NOPs and other submittals associated with violations discovered through NERC-led investigations and audits; and docketing possible violations coming into the NERC enforcement program.

The ongoing and new major activities of the Compliance Monitoring and Enforcement and Organization Registration and Certification Program for 2014 include: continuing to improve enforcement processing efficiency, including steps to ensure the sustainability and expandability of the Find, Fix, Track and Report (“FFT”) process; finalizing and implementing the Reliability Assurance Initiative (“RAI”) enforcement strategy and delivering on its 2014 milestones; focusing on achieving better consistency in regional enforcement outcomes; continuing Registered Entity mapping activities to ensure that registry gaps and duplicative registration and compliance monitoring are avoided; continuing to work to ensure Registered Entities understand their compliance obligations and how compliance will be assessed; completing the functional model review and registration needs assessment, including developing a common and consistent registration approach among Regional Entities and developing recommendations to modify registration and certification processes based on risks to the BPS; completing implementation of the Bulk Electric System (“BES”) definition Phase II exception process; reducing unnecessary compliance documentation while working to ensure Registered

Entities are monitored in a cost effective manner; continuously assessing the Actively Monitored [standards] List based on reliability trends, risks and historical information to ensure that the compliance focus remains on the most critical reliability standards; developing highly qualified and trained auditor, investigator and enforcement staffs; developing training resources for the Electric Reliability Organization (“ERO”) and industry, including materials relating to the RAI; providing early and ongoing input into the standard development process; providing ongoing oversight of Regional Entity compliance and enforcement activities; developing metrics and incentives to improve trends in the mitigation aging curve; continuing to identify the causes and trends of violations in enforcement cases; and continuing to work to reduce the outstanding violations caseload and increasing processing efficiency for violations.

Major activities for 2014 specifically relating to the RAI will include: identifying and implementing process improvements to the self-reporting process; implementing FFT process enhancements; developing an auditor handbook and checklist for use by compliance auditors; and initiating small prototype and pilot programs focused on developing Registered Entity risk assessments and developing processes for evaluating and testing Registered Entity internal controls. Additionally, the following major activities will be conducted in 2014 to build upon the framework developed through RAI activities in 2013: developing a training program to support implementation of the common audit procedures developed in 2013; assessment of the existing NERC compliance, reporting, analysis tracking system and other compliance tools to support RAI activities; and developing prototypes and pilot programs to support the development of Registered Entity reliability risk assessments and compliance monitoring scoping projects.

The major activities of the Compliance Monitoring and Enforcement and Organization Registration and Certification Program satisfy the following criteria:

I.A: Is the activity necessary or appropriate for Reliability Standards development projects pursuant to the NERC Rules of Procedure?

II.A: Is the activity necessary or appropriate for the identification and registration of users, owners, and operators of the Bulk Power System that are required to comply with Requirements of Reliability Standards applicable to the reliability functions for which they are registered?

II.B: Is the activity necessary or appropriate for the Certification of Reliability Coordinators, Transmission Operators and Balancing Authorities as having the requisite personnel, qualifications and facilities and equipment needed to perform these reliability functions in accordance with the applicable Requirements of Reliability Standards?

II.D: Is the activity necessary or appropriate for conducting, participating in or overseeing compliance monitoring and enforcement activities pursuant to the NERC ROP and (through the Regional Entities) the Commission-approved delegation agreements?

II.E: Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information to monitor and enforce compliance with Reliability Standards, including evaluating the effectiveness of current compliance

monitoring and enforcement processes, the need for new or revised compliance monitoring and enforcement processes, and the need for new or different means of training and education on compliance with Reliability Standards

II.F: Is the activity necessary or appropriate for the provision of training, education and dissemination of information for/to (i) NERC personnel, (ii) Regional Entity personnel, and (iii) industry personnel with respect to compliance monitoring and enforcement topics and topics concerning reliability risks identified through compliance monitoring and enforcement activities, such as: (1) Requirements of Reliability Standards, including how to comply and how to demonstrate compliance? This includes development of guidance and interpretation documents. (2) Compliance monitoring and enforcement processes, including how to conduct them, how to participate in them, and the expectations for the process? This includes development of guidance documents. (3) Disseminating, through workshops, webinars, Advisories/Recommendations/Essential Actions, and other publications, “lessons learned” information on compliance concerns and reliability risks obtained through compliance monitoring and enforcement activities, monitoring and investigation of Bulk Power System major events, off-normal occurrences and near miss events, and other Bulk Power System monitoring activities? (4) Registered Entity internal processes for compliance with Reliability Standards, such as development, implementation and maintenance of internal reliability compliance programs?

IV: Is the activity one that was required or directed by a Commission order issued pursuant to FPA §215? (FERC orders directed NERC to develop and submit a revised definition of “Bulk Electric System” and a procedure for requesting and receiving exceptions from the BES definition, and subsequently approved (with some changes) NERC’s proposed revised definition and its proposed BES exception procedure.)

V: Is the activity one that is required or specified by, or carries out, the provisions of NERC’s Rules of Procedure that have been approved by the Commission as “Electric Reliability Organization Rules” (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)? (The applicable Rules of Procedure provisions for these major activities are §400 and 500 and Appendices 4B, 4C, 5A, 5B and 5C.)

VI: Is the activity necessary or appropriate for the supervision and oversight of Regional Entities in the performance of their delegated responsibilities in accordance with FPA §215, 18 C.F.R. Part 39, the Commission-approved delegation agreement between NERC and the Regional Entity, the NERC ROP, and applicable provisions of Commission orders?

X: Is the activity necessary or appropriate for the analysis and evaluation of activities encompassed by one or more of the other criteria for the purpose of identifying means of performing the activities more effectively and efficiently?

#### **IV. Reliability Assessment and Performance Analysis Program 2014 Major Activities**

The major activities of the Reliability Assessment and Performance Analysis (“RAPA”) Program are described at pages 11-12, 18-20 and 46-50 of the 2014 Business Plan and Budget. The principal activity areas of the RAPA program include: (1) conducting and publishing reliability assessments, including the annual long-term, summer, and winter reliability assessments and special and scenario reliability assessments; (2) conducting performance analysis to identify and track key reliability risk indicators as a means of benchmarking reliability performance and measuring reliability improvements in order to provide a framework for insights and guidance about emerging trends and associated actions that may be warranted; (3) reliability risk analysis and control activities; and (4) reliability initiatives and system analysis activities, involving comprehensive evaluation and testing system behavior through forensic analysis during system disturbances and through analytic simulations of that performance.

The ongoing and new major activities of the RAPA Program for 2014 include: issuing reliability reports, guidelines, recommendations and alerts as needed; preparing the long-term and seasonal reliability assessments; conducting special assessments addressing key reliability issues; preparing an annual State of Reliability Report that analyzes BPS performance trends and provides insight and guidance to address key reliability aspects; continuing to work to address high impact, low frequency type issues, including geo-magnetic disturbance (“GMD”) BES effects and vulnerability assessment; providing oversight, analysis and review of the Generating Availability System, Transmission Data Availability System and Demand Response Availability System, along with the Spare Equipment Database; strengthening data collection and validation processes by designing, creating, testing and implementing data systems and management for reliability assessment and risk analysis; providing quarterly updates on trends and measures of BES reliability; developing risk registry and a systematic prioritization process with the RISC; developing control strategies and plans to address the highest priority existing or emerging risks to BES reliability; developing a risk register to support BPS risk profile measurement and assessment of standards; supporting the development of ERO enterprise applications critical to advancing the quality and usefulness of reliability assessments; and developing a structured approach to evaluate and improve system models, analysis and assessments. The RAPA Program will also provide support and leadership to the NERC Planning Committee, the subcommittees of NERC standing committees, and task forces serving the standing committees. During 2014, the RAPA Program will be responsible for conducting/supporting research in the following areas: research to validate the technical foundation supporting the inclusion within the Gallet Equation in Reliability Standard FAC-003 of factors for the Minimum Vegetation Clearance Distance; research relating to vegetation management on public lands (FAC-003); and research to expand the technical foundation for understanding the potential impact of GMD, through continuation of the GMD Task Force and GMD research through the Electric Power Research Institute. Additionally, during 2014 the RAPA Program will continue to work with the Regional Entities to implement the revised BES definition and the BES exception process.

The major activities of the RAPA Program satisfy the following criteria:

I.A: is the activity necessary or appropriate for Reliability Standards development

projects pursuant to the NERC Rules of Procedure?

I.C.1: Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information for Reliability Standards development, including for purposes of identifying areas in which new Reliability Standards could be developed, existing Reliability Standards could be revised, or existing Reliability Standards could be eliminated, such as: (1) Measuring reliability performance – past, present and future; publishing or disseminating the results of such measurements; analyzing the results of such measurements; identifying and analyzing risks to reliability of the Bulk Power System based on such measurements; and/or identifying approaches to mitigating or eliminating such risks?

III.A: Is the activity necessary or appropriate for the preparation or dissemination of long-term, seasonal, and special assessments of the reliability and adequacy of the Bulk Power System?

III.B: Is the activity necessary or appropriate for measuring reliability performance – past, present and future; publishing or disseminating the results of such measurements; analyzing the results of such measurements; identifying and analyzing risks to reliability of the Bulk Power System based on such measurements; and/or identifying approaches to mitigating or eliminating such risks?

III.F: Is the activity necessary or appropriate for the development and dissemination of Advisories/Recommendations/Essential Actions regarding lessons learned and potential reliability risks to users, owners, and operators of the Bulk Power System?

IV: Is the activity one that was required or directed by a Commission order issued pursuant to §215? (FERC Order No. 777, 142 FERC ¶ 61,208 (2013), directing NERC to conduct research regarding the vegetation management topics described above.)

V. Is the activity one that is required or specified by, or carries out, the provisions of NERC's Rules of Procedure that have been approved by the Commission as "Electric Reliability Organization Rules" (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)? (The applicable Rules of Procedure provisions for this major activity are §801-806 and 809-811.)

IX: Is the activity necessary or appropriate for NERC and Regional Entity committees, subcommittees and working groups engaged in activities encompassed by one or more of the other criteria?

X: Is the activity necessary or appropriate for the analysis and evaluation of activities encompassed by one or more of the other criteria for the purpose of identifying means of performing the activities more effectively and efficiently?

## **V. Reliability Risk Management (Situation Awareness and Event Analysis) 2014 Major Activities**

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The major activities of the Reliability Risk Management Program, which is comprised of the Situation Awareness Department and the Event Analysis Department, are described at pages 12, 58-60 and 63-65 of the 2014 Business Plan and Budget. The major activities of this program are real-time or near-real-time BPS awareness; event analysis and determination of root or contributing causes; assessment of human performance challenges affecting BPS reliability and identification of improvement opportunities; and support of the NERC Operating Committee. These activities are carried out to analyze events and address significant risks to the reliability of the BPS and to insure the industry is well informed of system events, emerging trends, risk analysis, lessons learned and actions. These activities may also identify areas in which new or enhanced compliance monitoring and enforcement initiatives are warranted.

The ongoing and new major activities of the Reliability Risk Management Program for 2014 include: conducting major event investigations, analysis and reporting of major findings and recommendations that will improve reliability; supporting the development and implementation of ERO enterprise applications critical to advancing the quality and usefulness of event analysis data; and continuing to work with Regional Entities to obtain and review information from Registered Entities regarding qualifying events and disturbances in order to advance awareness of events above a threshold level, facilitate analysis of root causes, risks to reliability, Wide-Area assessments, mitigation, and timely dissemination of information regarding events. The major activities of the Situation Awareness Department include the ongoing maintenance and support of a number of tools used to support the ERO's operations, including automated reliability reports, the resource adequacy (ACE frequency) tool, the inadvertent interchange tool, the AIE monitoring tool, the frequency monitoring and analysis tool, the intelligent alarms tool, and the Secure Alerts system. The Events Analysis Department will continue to work with the Regional Entities to develop the Events Information Data System, a new software application whose purpose is to provide an ERO-wide robust tool to collect, analyze and report detailed information regarding events which impact the reliability of the BPS.

The major activities of the Situation Awareness Department and Event Analysis Department satisfy the following criteria:

I.C.2: Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information for Reliability Standards development, including for purposes of identifying areas in which new Reliability Standards could be developed, existing Reliability Standards could be revised, or existing Reliability Standards could be eliminated, such as: (2) Monitoring, event analysis and investigations of Bulk Power System major events, off-normal occurrences and near-miss events?

II.E.2: Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information to monitor and enforce compliance with Reliability Standards, including evaluating the effectiveness of current compliance monitoring and enforcement processes, the need for new or revised compliance monitoring and enforcement processes, and the need for new or different means of

training and education on compliance with Reliability Standards, such as: (2) Monitoring, event analysis and investigation of Bulk Power System major events, off-normal occurrences, and near miss events?

II.F.3: Is the activity necessary or appropriate for the provision of training, education and dissemination of information for/to (i) NERC personnel, (ii) Regional Entity personnel, and (iii) industry personnel with respect to compliance monitoring and enforcement topics and topics concerning reliability risks identified through compliance monitoring and enforcement activities, such as: (3) Disseminating, through workshops, webinars, Advisories/Recommendations/Essential Actions, and other publications, “lessons learned” information on compliance concerns and reliability risks obtained through compliance monitoring and enforcement activities, monitoring and investigation of Bulk Power System major events, off-normal occurrences and near miss events, and other Bulk Power System monitoring activities?

III.C: Is the activity necessary or appropriate for investigating, analyzing, evaluating, and disseminating information concerning, the causes of major events and off-normal occurrences, and/or providing coordination assistance, technical expertise and other assistance to users, owners, and operators of the Bulk Power System in connection with Bulk Power System major events and off-normal occurrences, but not real-time operational control of the Bulk Power System?

III.D: Is the activity necessary or appropriate for awareness of circumstances on the Bulk Power System and to contribute to understanding risks to reliability?

III.F: Is the activity necessary or appropriate for the development and dissemination of Advisories/Recommendations/Essential Actions regarding lessons learned and potential reliability risks to users, owners, and operators of the Bulk Power System?

II.G: Is the activity necessary or appropriate for the development and provision of tools and services that are useful for the provision of adequate reliability, because they relate specifically to compliance with existing Reliability Standards and they proactively help avert Reliability Standard violations and Bulk Power System disturbances?

V: Is the activity one that is required or specified by, or carries out, the provisions of NERC’s Rules of Procedure that have been approved by the Commission as “Electric Reliability Organization Rules” (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)? (The applicable Rules of Procedure provisions for these major activities are §807, 808, 810 and 1001 and Appendix 8.)

IX. Is the activity necessary or appropriate for NERC and Regional Entity committees, subcommittees and working groups engaged in activities encompassed by one or more of the other criteria?

## **VI. Critical Infrastructure Protection Program 2014 Major Activities**

The major activities of the Critical Infrastructure Protection Program are described at pages 12, 23 and 67-74 of the 2014 Business Plan and Budget. The major activities of the CIP Program include supporting the development and administration of the CIP standards; oversight of CMEP activities related to CIP standards; critical infrastructure and cyber security information sharing; cyber security incident analysis; risk assessment; coordination between industry and governmental entities on cyber-security issues; and support for the NERC Critical Infrastructure Protection Committee and the Electricity Sub-sector Coordinating Council (“ESSC”). The CIP Program is responsible for the operation of the Electricity Sector Information Sharing and Analysis Center (“ES-ISAC”), the primary activity of which is the rapid and secure sharing of information with the electric industry and government entities regarding real and potential cyber related threats to the electricity sector as well as methods and tools to avoid or mitigate potential impacts from these threats.

The ongoing and new major activities of the CIP Program, including the ES-ISAC, for 2014 include: delivering important information to Registered Entities on CIP security threats, vulnerabilities, and lessons learned from subject matter experts, senior industry and governmental representatives; through security best-practice discussion forums, educating industry about reliability concerns and risk mitigation associated with emerging physical and cyber security threats; continuing to collaborate with government agencies in the U.S. and Canada to develop more timely dissemination of classified information regarding threats to the BPS, including dissemination of information from classified sources in a form that can be provided to and used by the industry; conducting security incident analysis and working with industry experts to evaluate, track, and identify lessons learned and security metrics that enhance the electricity sector’s security posture; and conducting cyber risk preparedness assessments, which assess the cyber security capabilities of Registered Entities through facilitated table top exercises.

The major activities of the CIP Program satisfy the following criteria:

I.C.1: Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information for Reliability Standards development, including for purposes of identifying areas in which new Reliability Standards could be developed, existing Reliability Standards could be revised, or existing Reliability Standards could be eliminated, such as: (1) Measuring reliability performance – past, present and future; publishing or disseminating the results of such measurements; analyzing the results of such measurements; identifying and analyzing risks to reliability of the Bulk Power System based on such measurements; and/or identifying approaches to mitigating or eliminating such risks?

II.D: Is the activity necessary or appropriate for conducting, participating in or overseeing compliance monitoring and enforcement activities pursuant to the NERC ROP and (through the Regional Entities) the Commission-approved delegation agreements?

III.B: Is the activity necessary or appropriate for measuring reliability performance –

past, present and future; publishing or disseminating the results of such measurements; analyzing the results of such measurements; identifying and analyzing risks to reliability of the Bulk Power System based on such measurements; and/or identifying approaches to mitigating or eliminating such risks?

III.D: Is the activity necessary or appropriate for awareness of circumstances on the Bulk Power System and to contribute to understanding risks to reliability?

III.E: Is the activity necessary or appropriate for gathering, analyzing and sharing with and among industry and government participants, information regarding the physical or cyber security of the Bulk Power System?

III.F: Is the activity necessary or appropriate for the development and dissemination of Advisories/Recommendations/Essential Actions regarding lessons learned and potential reliability risks to users, owners, and operators of the Bulk Power System?

V: Is the activity one that is required or specified by, or carries out, the provisions of NERC's Rules of Procedure that have been approved by the Commission as "Electric Reliability Organization Rules" (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)? (The applicable Rules of Procedure provisions for these major activities are §810 and 1003.)

VI: Is the activity necessary or appropriate for the supervision and oversight of Regional Entities in the performance of their delegated responsibilities in accordance with FPA §215, 18 C.F.R. Part 39, the Commission-approved delegation agreement between NERC and the Regional Entity, the NERC ROP, and the applicable provisions of Commission orders.

IX. Is the activity necessary or appropriate for NERC and Regional Entity committees, subcommittees and working groups engaged in activities encompassed by one or more of the other criteria?

## **VII. Training, Education, and Operator Certification Program 2014 Major Activities**

The major activities of the Training, Education, and Operator Certification Program are described at pages 13 and 76-77 of the 2014 Business Plan and Budget. The major activities of this program include oversight and coordination of the delivery of training programs to NERC and Regional Entity staff and industry participants that support the ERO's responsibilities; and supporting NERC's System Operator Certification and Continuing Education ("SOCCED") Programs, which ensure that personnel operating the BPS have the skills, training and qualifications needed to operate the BPS reliably.

The major activities of the Training, Education, and Operator Certification Program for 2014 include: continuing to support the SOCCED programs; and providing or facilitating the provision of training to support knowledge and skills development in the standards, compliance, registration, event analysis and other key areas.

The major activities of the Training, Education, and Operator Certification Program satisfy the following criteria:

I.D: Is the activity necessary or appropriate for the provision of training and education concerning Reliability Standards development processes, procedures and topics for/to (i) NERC personnel, (ii) Regional Entity personnel, and (iii) industry personnel?

II.C: Is the activity necessary or appropriate for the Certification of system operating personnel as qualified to carry out the duties and responsibilities of their positions in accordance with the Requirements of applicable Reliability Standards?

II.F: Is the activity necessary or appropriate for the provision of training, education and dissemination of information for/to (i) NERC personnel, (ii) Regional Entity personnel, and (iii) industry personnel with respect to compliance monitoring and enforcement topics and topics concerning reliability risks identified through compliance monitoring and enforcement activities, such as: (1) Requirements of Reliability Standards, including how to comply and how to demonstrate compliance? This includes development of guidance and interpretation documents. (2) Compliance monitoring and enforcement processes, including how to conduct them, how to participate in them, and the expectations for the processes? This includes development of guidance documents. (3) Disseminating, through workshops, webinars, Advisories/Recommendations/Essential Actions, and other publications, “lessons learned” information on compliance concerns and reliability risks obtained through compliance monitoring and enforcement activities, monitoring and investigation of Bulk Power System major events, off-normal occurrences and near miss events, and other Bulk Power System monitoring activities? (4) Registered Entity internal processes for compliance with Reliability Standards, such as development, implementation and maintenance of internal reliability compliance programs?

V: Is the activity one that is required or specified by, or carries out, the provisions of NERC’s Rules of Procedure that have been approved by the Commission as “Electric Reliability Organization Rules” (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)? (The applicable Rules of Procedure provision for these major activities are §600 and 900.)

### **VIII. Administrative Services 2014 Major Activities**

NERC’s Administrative Services Departments are Technical Committees and Member Forums (for which no activities are budgeted for 2014), General and Administrative, Legal and Regulatory, Information Technology (“IT”), Human Resources, and Accounting and Finance. The major activities of these departments are described at pages 13, 81, 83, 85-90, 96-97 and 99 of the 2014 Business Plan and Budget. General and Administrative includes the administration and general management of the organization, Board of Trustees fees and expenses, communications and governmental affairs, and office rent. Legal and Regulatory provides legal support to the organization, including to the Board, executive management, and the Reliability Standards and Compliance Programs, as well as general corporate legal support. IT supports

NERC's computing, Internet, database and electronic data storage and maintenance, and telecommunications needs, programs, applications and infrastructure, including management of the development and implementation of new applications and infrastructure. Human Resources manages all of NERC's human resources functions, including new hires, benefits, employee functions, and the performance appraisal and incentive structure processes. Accounting and Finance manages all finance and accounting functions of NERC, including payroll, 401(k) and 457(b) plans, travel and expense reporting, monthly financial reporting, sales and use tax, meeting and event planning and service, insurance, internal audit, facilities management, development of the annual business plan and budget, and the ERO risk management framework.

Major activities for the NERC Administrative Services departments in 2014 include: continuing to provide resources to support the Board and Board committees, Member Representatives Committee, Standards Committee, Compliance and Certification Committee, Planning Committee, Operating Committee, CIP Committee, ESSC, RISC, and numerous ERO subcommittees and working groups; continuing to implement procedures, controls, processes, documentation and systems to improve the efficiency of operations and control costs; continuing to work with the Regional Entities to improve oversight and collaboration; continuing to enhance ERO risk management tools and procedures; developing a comprehensive technology roadmap for applications and infrastructure supporting ERO operations, including Regional Entity components; reviewing and where applicable making recommendations for improvements in NERC and Regional Entity operating and working capital reserve policies and forecasting, including policies applicable to tracking and use of excess operating reserves; financial reporting and practices; and evaluating and implementing mechanisms to improve talent acquisition and employee retention.

Major activities for 2014 relating to development and enhancement of NERC and ERO enterprise software applications and infrastructure include: continuing to develop ERO enterprise-wide applications for common business processes and functions of NERC and the Regional Entities; continuing to work collaboratively with the Regional Entities to advance the design and implementation of strategic ERO Enterprise IT applications and supporting infrastructure, leading to development of a centrally-managed, dedicated hosting and data center facility for NERC and the Regional Entities; maintenance and re-design of NERC legacy applications; ensuring recoverability of the NERC technology footprint (disaster recovery); enhancing knowledge management through implementation of document and information management systems; continuing emphasis on security and vulnerability testing; and developing and commencing implementation of ERO enterprise applications to support reliability assessments and event analysis data management needs.

The major activities of NERC's Administrative Services Departments satisfy the following criteria:

I.A: Is the activity necessary or appropriate for Reliability Standards development projects pursuant to the NERC Rules of Procedure (ROP)?

II.A: Is the activity necessary or appropriate for the identification and registration of users, owners, and operators of the Bulk Power System that are required to comply with

Requirements of Reliability Standards applicable to the reliability functions for which they are registered?

II.D: Is the activity necessary or appropriate for conducting, participating in or overseeing compliance monitoring and enforcement activities pursuant to the NERC ROP and (through the Regional Entities) the Commission-approved delegation agreements?

III.C: Is the activity necessary or appropriate for investigating, analyzing, evaluating, and disseminating information concerning, the causes of major events and off-normal occurrences, and/or providing coordination assistance, technical expertise and other assistance to users, owners, and operators of the Bulk Power System in connection with Bulk Power System major events and off-normal occurrences, but not real-time operational control of the Bulk Power System?

V: Is the activity one that is required or specified by, or carries out, the provisions of NERC's Rules of Procedure that have been approved by the Commission as "Electric Reliability Organization Rules" (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)? (The applicable Rules of Procedure provision for this major activity is §1100.)

VI: Is the activity necessary or appropriate for the supervision and oversight of Regional Entities in the performance of their delegated responsibilities in accordance with FPA §215, 18 C.F.R. Part 39, the Commission-approved delegation agreement between NERC and the Regional Entity, the NERC ROP, and the applicable provisions of Commission orders.

IX. Is the activity necessary or appropriate for NERC and Regional Entity committees, subcommittees and working groups engaged in activities encompassed by one or more of the other criteria?

X. Is the activity necessary or appropriate for the analysis and evaluation of activities encompassed by one or more of the other criteria for the purpose of identifying means of performing the activities more effectively and efficiently?

XI: Is the activity a governance or administrative/overhead function, activity or service necessary or appropriate for the activities encompassed by the other criteria and, in general, necessary and appropriate to operate a functioning organization?

**NERC WRITTEN CRITERIA FOR DETERMINING  
WHETHER AN ACTIVITY IS ELIGIBLE TO BE FUNDED  
UNDER SECTION 215 OF THE FEDERAL POWER ACT**

For purposes of internal management approval of a proposed new activity or group of related activities (“major activity”), the proposed activity or major activity must be shown to fall within at least one of the criteria listed below. When sub-criteria are listed below a roman numeral numbered major criterion, the proposed activity should be a positive answer to at least one of the sub-criteria. Conversely, an activity that falls under a sub-criterion should pertain to the subject matter of the major criterion.

NERC’s annual business plan and budget will describe how each major activity falls within one or more of the criteria listed below. If the major activity is substantially the same as a major activity that was shown to fall within the criteria in a previous year’s business plan and budget, the current year’s business plan and budget can refer to the prior year business plan and budget.

A determination that an activity falls within FPA §215 does not necessarily mean that NERC will propose or undertake such activity. The determination of whether an activity falling under FPA §215 should or will be undertaken in a given budget year will be addressed in the context of the applicable business plan and budget and will include opportunities for stakeholder input.

The criteria listed below are not necessarily each distinct from the others. An activity or major activity may fall within more than one of the criteria listed below.

- I. Is the activity necessary or appropriate for the development of Reliability Standards?
  - A. Is the activity necessary or appropriate for Reliability Standards development projects pursuant to the NERC Rules of Procedure (ROP)?
  - B. Is the activity necessary or appropriate for providing guidance and assistance to Regional Entities in carrying out Regional Reliability Standards development activities?
  - C. Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information for Reliability Standards development, including for purposes of identifying areas in which new Reliability Standards could be developed, existing Reliability Standards could be revised, or existing Reliability Standards could be eliminated, such as:
    1. Measuring reliability performance – past, present and future; publishing or disseminating the results of such measurements; analyzing the results of such measurements; identifying and analyzing risks to reliability of the Bulk Power System<sup>26</sup> based on such measurements; and/or identifying approaches to mitigating or eliminating such risks?

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<sup>26</sup> This document uses the term “Bulk Power System” because that is the term defined and used in FPA §215. NERC recognizes that a different term, “Bulk Electric System,” is used to define the current reach of Reliability Standards.

2. Monitoring, event analysis and investigation of Bulk Power System major events, off-normal occurrences and near miss events?
- D. Is the activity necessary or appropriate for the provision of training and education concerning Reliability Standards development processes, procedures and topics for/to (i) NERC personnel, (ii) Regional Entity personnel, and (iii) industry personnel?
- II. Is the activity necessary or appropriate for the monitoring and enforcement of compliance with Reliability Standards?
- A. Is the activity necessary or appropriate for the identification and registration of users, owners, and operators of the Bulk Power System that are required to comply with Requirements of Reliability Standards applicable to the reliability functions for which they are registered?
- B. Is the activity necessary or appropriate for the Certification of Reliability Coordinators, Transmission Operators and Balancing Authorities as having the requisite personnel, qualifications and facilities and equipment needed to perform these reliability functions in accordance with the applicable Requirements of Reliability Standards?
- C. Is the activity necessary or appropriate for the Certification of system operating personnel as qualified to carry out the duties and responsibilities of their positions in accordance with the Requirements of applicable Reliability Standards?<sup>27</sup>
- D. Is the activity necessary or appropriate for conducting, participating in or overseeing compliance monitoring and enforcement activities pursuant to the NERC ROP and (through the Regional Entities) the Commission-approved delegation agreements?
- E. Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information to monitor and enforce compliance with Reliability Standards, including evaluating the effectiveness of current compliance monitoring and enforcement processes, the need for new or revised compliance monitoring and enforcement processes, and the need for new or different means of training and education on compliance with Reliability Standards, such as:
1. Measuring reliability performance – past, present and future; publishing or disseminating the results of such measurements; analyzing the results of such measurements; identifying and analyzing risks to reliability of the Bulk Power System based on such measurements; and/or identifying approaches to mitigating or eliminating such risks?

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<sup>27</sup> Although certification of system operating personnel is an activity falling within the scope of, and eligible to be funded pursuant to, FPA §215, NERC strives to fully fund the costs of this activity through fees charged to participants.

2. Monitoring, event analysis and investigation of Bulk Power System major events, off-normal occurrences, and near miss events?
- F. Is the activity necessary or appropriate for the provision of training, education and dissemination of information for/to (i) NERC personnel, (ii) Regional Entity personnel, and (iii) industry personnel with respect to compliance monitoring and enforcement topics and topics concerning reliability risks identified through compliance monitoring and enforcement activities, such as:
1. Requirements of Reliability Standards, including how to comply and how to demonstrate compliance? This includes development of guidance and interpretation documents.
  2. Compliance monitoring and enforcement processes, including how to conduct them, how to participate in them, and the expectations for the processes? This includes development of guidance documents.
  3. Disseminating, through workshops, webinars, Advisories/Recommendations/Essential Actions, and other publications, “lessons learned” information on compliance concerns and reliability risks obtained through compliance monitoring and enforcement activities, monitoring and investigation of Bulk Power System major events, off-normal occurrences and near miss events, and other Bulk Power System monitoring activities?
  4. Registered Entity internal processes for compliance with Reliability Standards, such as development, implementation and maintenance of internal reliability compliance programs?
- G. Is the activity necessary or appropriate for the development and provision of tools and services that are useful for the provision of adequate reliability, because they relate specifically to compliance with existing Reliability Standards and they proactively help avert Reliability Standard violations and Bulk Power System disturbances?
- III. Is the activity necessary or appropriate for conducting and disseminating periodic assessments of the reliability of the Bulk Power System or monitoring the reliability of the Bulk Power System?
- A. Is the activity necessary or appropriate for the preparation or dissemination of long-term, seasonal, and special assessments of the reliability and adequacy of the Bulk Power System?
  - B. Is the activity necessary or appropriate for measuring reliability performance – past, present and future; publishing or disseminating the results of such measurements; analyzing the results of such measurements; identifying and analyzing risks to reliability of the Bulk Power System based on such

- measurements; and/or identifying approaches to mitigating or eliminating such risks?
- C. Is the activity necessary or appropriate for investigating, analyzing, evaluating, and disseminating information concerning, the causes of major events and off-normal occurrences, and/or providing coordination assistance, technical expertise and other assistance to users, owners, and operators of the Bulk Power System in connection with Bulk Power System major events and off-normal occurrences, but not real-time operational control of the Bulk Power System?
  - D. Is the activity necessary or appropriate for awareness of circumstances on the Bulk Power System and to contribute to understanding risks to reliability?
  - E. Is the activity necessary or appropriate for gathering, analyzing and sharing with and among industry and government participants, information regarding the physical or cyber security of the Bulk Power System?
  - F. Is the activity necessary or appropriate for the development and dissemination of Advisories/Recommendations/Essential Actions regarding lessons learned and potential reliability risks to users, owners, and operators of the Bulk Power System?
  - G. Is the activity necessary or appropriate for data collection and analysis of information regarding Bulk Power System reliability matters mandated by the Commission?
- IV. Is the activity one that was required or directed by a Commission order issued pursuant to FPA §215? Justification of an activity as a FPA §215 activity based on this category must reference the particular Commission order and directive.
- V. Is the activity one that is required or specified by, or carries out, the provisions of NERC's Rules of Procedure that have been approved by the Commission as "Electric Reliability Organization Rules" (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)?
- VI. Is the activity necessary or appropriate for the supervision and oversight of Regional Entities in the performance of their delegated responsibilities in accordance with FPA §215, 18 C.F.R. Part 39, the Commission-approved delegation agreement between NERC and the Regional Entity, the NERC ROP, and applicable provisions of Commission orders?
- VII. Is the activity necessary or appropriate to maintain NERC's certification as the Electric Reliability Organization? This Criterion includes conducting periodic assessments of NERC's and the Regional Entities' performance as the Electric Reliability Organization as required by 18 C.F.R. §39.3(c).
- VIII. Does the activity respond to or is it necessary or appropriate for audits of NERC and the Regional Entities conducted by the Commission?

- IX. Is the activity necessary or appropriate for NERC and Regional Entity committees, subcommittees and working groups engaged in activities encompassed by one or more of the other criteria?
- X. Is the activity necessary or appropriate for the analysis and evaluation of activities encompassed by one or more of the other criteria for the purpose of identifying means of performing the activities more effectively and efficiently?
- XI. Is the activity a governance or administrative/overhead function, activity or service necessary or appropriate for the activities encompassed by the other criteria and, in general, necessary and appropriate to operate a functioning organization? (Should NERC perform any non-FPA §215 activities, the costs of governance and administrative/overhead functions must be appropriately allocated.)

NERC's current governance and administrative/overhead functions are carried out in the following program areas:

- A. Technical Committees and Members' Forum Programs
- B. General and administrative (includes, but is not limited to, executive, board of trustees, communications, government affairs, and facilities and related services).
- C. Legal and Regulatory.
- D. Information Technology
- E. Human Resources
- F. Accounting and Finance.

The following matters are excluded from the scope of FPA §215 activities. While a list of non-FPA §215 activities would be infinite, the following excluded matters are listed here because they are expressly referred to in FPA §215, the Commission's ERO regulations and/or a Commission order issued pursuant to FPA §215:

- A. Developing or enforcing requirements to enlarge Bulk Power System facilities, or to construct new transmission capacity or generation capacity, or requirements for adequacy or safety of electric facilities or services.
- B. Activities entailing Real-time operational control of the Bulk Power System.
- C. Activities pertaining to facilities used in the local distribution of electric energy.

## Exhibit C – Contractor and Consulting Costs

Program	Consultants & Contracts	2013 BUDGET	2014 BUDGET	INC (DEC) OVER 2013	2015	2016
Reliability Standards	Standards Restructuring Project	150,000		(150,000)	-	-
	<b>Total Reliability Standards</b>	<b>150,000</b>	<b>-</b>	<b>(150,000)</b>	<b>-</b>	<b>-</b>
Compliance Operations				-		
	Reliability Assurance Initiative		400,000	400,000	400,000	
	Compliance Database - (Maintenance beginning 2016)					500,000
	<b>Total Compliance Operations</b>	<b>-</b>	<b>400,000</b>	<b>400,000</b>	<b>400,000</b>	<b>500,000</b>
Reliability Risk Mgmt	Subject Matter Experts - Events Analysis	120,000	-	(120,000)	-	-
	<b>Reliability Risk Management</b>	<b>120,000</b>	<b>-</b>	<b>(120,000)</b>	<b>-</b>	<b>-</b>
<b>Reliability Assessments, GADS, TADS, DADS &amp; Spare Equipment Database</b>						
RAPA	Reliability affects of GMD	250,000	250,000	-	100,000	100,000
	Vegetation Research (FAC 3)			-	250,000	250,000
	Federal Right-of-Way Monitoring			-		
	Metrics - Centralized data collection-Change Orders	50,000	50,000	-	-	-
	RADS Assessment Database -( Maintenance beginning 2016)	100,000		(100,000)		120,000
	Scenario Consultant	70,000	70,000	-	70,000	70,000
GADS/TADS/DADS/SED	Database Consulting Support	80,000	50,000	(30,000)	50,000	50,000
	Monthly Maintenance	135,000	218,085	83,085	224,627	231,366
	Replacement for pc_GAR			-	-	-
	<b>Total Reliability Assessments and Performance Analysis</b>	<b>685,000</b>	<b>638,085</b>	<b>(46,915)</b>	<b>694,627</b>	<b>821,366</b>
Situation Awareness	Synchro Phasor (NASPI)	810,000		(810,000)		
	Automated Reliability Reports		100,000	100,000	100,000	100,000
	Resource Adequacy (ACE Frequency) Tool	80,000	80,000	-	80,000	80,000
	Inadvertent Interchange (Srv. Agreement)	35,000	35,000	-	35,000	35,000
	AIE Monitoring (Srv. Agreement)	35,000	35,000	-	35,000	35,000
	Frequency Monitoring and Analysis Tool (FMA)	45,000	45,000	-	45,000	45,000
	Intelligent Alarms/DARA (Srv. Agreement)	55,000	55,000	-	55,000	55,000
	NERC Access to IDC		27,816	27,816	27,816	27,816
	Secure Alerting System	200,000	79,373	(120,627)	107,200	107,200
	SAFNR - Phase II	725,500	531,825	(193,675)	502,824	522,937
	IDC Contract	<b>457,586</b>	<b>-</b>	<b>(457,586)</b>	<b>-</b>	<b>-</b>
	Frame Relay-RC's	300,094	300,094		400,000	400,000
	NERCnet (Frame Relay) Contract	<b>300,094</b>	<b>300,094</b>	<b>-</b>	<b>400,000</b>	<b>400,000</b>
	<b>Total Situation Awareness</b>	<b>2,743,180</b>	<b>1,289,108</b>	<b>(1,454,072)</b>	<b>1,387,840</b>	<b>1,407,953</b>

Exhibit C — Contractor and Consulting Costs

Program	Consultants & Contracts	2013 BUDGET	2014 BUDGET	INC (DEC) OVER 2013	2015	2016
<b>Critical Infrastructure</b>	ESCC Support	130,000	190,000	60,000	200,000	200,000
	GridEx Support	200,000		(200,000)	250,000	
	Subtotal - ESCC and GridEx	<b>330,000</b>	<b>190,000</b>	<b>(140,000)</b>	<b>450,000</b>	<b>200,000</b>
	<b>ES-ISAC</b>					
	Portal Enhancement	90,000	250,000	160,000	250,000	250,000
	Intelligence Reporting Services		42,000	42,000	44,100	46,305
	Cyber Risk Preparedness Assessment	150,000	200,000	50,000	150,000	150,000
	Aurora Webinars and Technical Support	15,000	30,000	15,000	15,000	15,000
	ES-ISAC Members Conference	30,000	-	(30,000)		
	Secure bi-directional communications	25,000	20,000	(5,000)	20,000	20,000
	Cyber Awareness Monitoring	60,000	152,700	92,700	152,700	152,700
	Software Integration Support Services	55,000	61,750	6,750	61,750	61,750
	Analyst Workbench	30,000	30,000	-	30,000	30,000
	Subtotal - ES-ISAC	<b>455,000</b>	<b>786,450</b>	<b>331,450</b>	<b>723,550</b>	<b>725,755</b>
	<b>Total Critical Infrastructure Department</b>	<b>785,000</b>	<b>976,450</b>	<b>191,450</b>	<b>1,173,550</b>	<b>925,755</b>
				-		
<b>Operator Certification</b>	System Operator Testing Expenses 2011 1,025 @ \$70)	63,124	100,000	36,876	61,193	59,089
	System Operator Examination Development	113,690	100,000	(13,690)	117,101	120,614
	Examination Analysis (750 exams@\$17 per exam)	13,600	14,000	400	12,800	12,000
	<b>System Operator Certification and Continuing Education Database</b>					
	Database Development	20,000	35,000	15,000	25,000	30,000
	Database Maintenance	12,330	24,000	11,670	24,099	26,065
	SOCCEC Database Improvement Project (funded from Working Capital generated from fees in excess of expenses)	250,000	200,000	(50,000)	100,000	
	<b>Total System Operator Certification</b>	<b>472,744</b>	<b>473,000</b>	<b>256</b>	<b>340,193</b>	<b>247,768</b>
<b>Training &amp; Education</b>	<b>Continuing Education Program</b>					
	Individual Learning Activity Reviewers	120,000	120,000	-	120,000	120,000
	Database Development	20,000	20,000	-	20,000	20,000
	Database Maintenance	12,330	12,330	-	12,330	12,330
	<u>Web-based course hosting (Learning Management System)</u>	26,500	26,500	-	26,500	26,500
	<u>Web-based course development</u>			-	75,000	75,000
	standards applications for industry, CEA staff	43,750	43,750	-		
	risk assessment training for CEA staff, industry	20,000	20,000	-		
	human performance fundamentals for staff, industry	43,750	43,750	-		
	BPS events lessons learned for industry	12,500	12,500	-		
	<b>Training Services-NERC and Regional Entities</b>					
	Regional Entity and NERC Auditor training	47,000	47,000	-	47,000	47,000
	<u>NERC Staff Technical Training</u>	30,000	30,000	-	30,000	30,000
	<b>Total CE, Training &amp; Education</b>	<b>375,830</b>	<b>375,830</b>	<b>-</b>	<b>330,830</b>	<b>330,830</b>
	<b>Total Training, Education and Operator Certification</b>	<b>848,574</b>	<b>848,830</b>	<b>256</b>	<b>671,023</b>	<b>578,598</b>
<b>Government Relations</b>	External Affairs	150,000	75,000	(75,000)	75,000	75,000
	<b>Total Government Relations</b>	<b>150,000</b>	<b>75,000</b>	<b>(75,000)</b>	<b>75,000</b>	<b>75,000</b>

Exhibit C — Contractor and Consulting Costs

Program	Consultants & Contracts	2013 BUDGET	2014 BUDGET	INC (DEC) OVER 2013	2015	2016
<b>Information Technology</b>						
	Ongoing Operations	1,371,000	1,524,000	153,000	1,554,000	1,780,000
	Enterprise Applications Consulting Services	1,350,000	420,000	(930,000)	480,000	540,000
	<b>Information Technology</b>	<b>2,721,000</b>	<b>1,944,000</b>	<b>(777,000)</b>	<b>2,034,000</b>	<b>2,320,000</b>
<b>Human Resources</b>	Executive Training and Development	90,000	90,000	-	90,000	90,000
	Staff Training and Development	106,000	65,000	(41,000)	65,000	65,000
	Compensation Consulting	30,000	30,000	-	30,000	30,000
	Employee, industry and Board Surveys, succession planning	35,000	45,000	10,000	45,000	45,000
	HR Process Improvements	27,500	27,500	-	27,500	27,500
	HR Consulting Services				50,000	50,000
	<b>Human Resources</b>	<b>288,500</b>	<b>257,500</b>	<b>(31,000)</b>	<b>307,500</b>	<b>307,500</b>
<b>Finance and Accounting</b>	Internal Controls and Outside Auditor Consulting Support	205,000	300,000	95,000	300,000	300,000
	Assessment of CIP Auditing Practices and reports	60,000	-	(60,000)	-	-
	Audit procedures, practices, tools and reports consulting support	60,000	50,000	(10,000)	50,000	50,000
	Finance and Accounting Support		50,000	50,000	50,000	50,000
	<b>Finance and Accounting</b>	<b>325,000</b>	<b>400,000</b>	<b>75,000</b>	<b>400,000</b>	<b>400,000</b>
	<b>TOTAL CONSULTANTS AND CONTRACTS</b>	<b>8,816,254</b>	<b>6,828,973</b>	<b>(1,987,281)</b>	<b>7,143,540</b>	<b>7,336,172</b>

## **Exhibit D – Capital Project Financing - Overview**

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Management has been exploring ways to mitigate the impact on assessments and operating reserves associated with funding the development and cost of large software development projects whose costs are capitalized and spread over a number years. As further described in the text of NERC's proposed 2014 business plan and budget, management has been developing and proposes to continue to develop software applications that support critical ERO operations and initiatives. Management has been working with its lender to structure a financing program for the development of these applications. Based on these discussions, it appears that the company will be capable of structuring a multiyear credit facility at favorable interest rates that will allow the cost of the development of these applications and supporting infrastructure to be spread over three or more years. The terms of the credit facility are also expected to provide the company with the flexibility to prepay outstanding loans without penalty. Working with information provided by its lender, management has developed a preliminary projection of the annual principal and interest repayment costs associated with financing the applications that are currently under development or planned for development in 2013. Those applications include the BES and EIDS applications, the development of a new alerts application in 2014, and the development of the RADS application and a replacement compliance information systems application in 2015, together with the cost of financing portions of the company's IT hardware budget. This projection is detailed on the chart on the following page. While in-house resources will also be involved in the development of these applications, it is not expected that these costs will be capitalized and financed. An activity code will be created in the workforce management system to track in-house time on these projects.

The capital financing program and associated loan documentation will be subject to (1) management's receipt of all necessary corporate authorizations, including approval by the Board of Trustees and (2) FERC approval of the company's final 2014 business plan and budget reflecting the company's projected repayment obligations under the credit facility.

## **Capital Project Financing Program Projected Principal and Interest Repayment Schedule**

The table below sets forth the total amount of capital assets that the company projects to finance over the next three years. As further described under the Reliability Assessment and Performance Analysis department and Event Analysis department sections of this 2014 business plan and budget, in Q4 2013 the company proposes to finance approximately \$1.27M in development costs for the BES and EIDS applications. This is reflected as Tranche A in the table, with interest only payments in 2013 and a three-year principal repayment schedule commencing in 2014. In 2014, the company is proposing to finance approximately \$1.42M in software development costs and hardware. This is reflected as Tranche B in the table and reflects interest only payments in 2014 and a three-year principal repayment schedule commencing in 2015. A 3.5% interest rate was assumed. The actual interest rate and interest rate expense will be reflected in the quarterly budget to actual variance reports the company posts on its website, reviews in open session with the NERC Finance and Audit Committee and files with FERC. Any savings in interest expense will be captured and reported as a contribution to the company operating reserves, the expenditures of which are subject to the terms of the company's Working Capital and Operating Reserve Policy.



## Exhibit E - Working Capital and Operating Reserve Amounts

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### **Working Capital – \$3.6M**

Based on its 2013 cash flow projection and taking into account the historic manner in which NERC's assessments have been billed and paid (including the fact that WECC collects and pays its entire annual allocated share of the NERC assessments during the first quarter of the year), NERC does not anticipate needing access to working capital in 2013 to meet monthly cash flow needs. In the unlikely event NERC experiences a temporary cash flow shortage, it has the ability to either request authorization from the Finance and Audit Committee and Board of Trustees to temporarily access operating reserve funds, or draw on its \$4M line of credit, as long as NERC is in compliance with the covenants under its bank credit agreement.

Per its credit agreement, NERC must maintain a minimum of \$1.250M in net assets (total assets minus intangible assets minus total liabilities). As of December 31, 2012, NERC's unrestricted net assets were \$9.7M. (Refer to Section D, Supplemental Financial Statements.)

NERC has also posted letters of credit totaling approximately \$101,236 in lieu of cash security deposits in connection with its offices leases. In the event these lines of credit are drawn upon, NERC is required to reimburse the draws in full. Management does not recommend at this time that working capital be maintained as security for this reimbursement obligation, as cash flows are projected to be sufficient in 2013–2014 to support timely payment of office rent without the letters of credit being drawn on.

NERC has collected funding to offset future liabilities under lease agreements for the Atlanta and Washington, DC offices. The projected \$3.6M yearend balance of these funds is being held as a restricted working capital reserve to offset these future liabilities.

**Operating Reserves – \$2.8M Total** (Known Contingency Category (\$1M) + Unforeseen Contingency Category (\$1M) + Personnel Certification and Operating Training Excess Revenues (\$767k))

Operating reserve amounts are divided into three categories: (1) known contingencies, (2) unknown contingencies, and (3) excess revenues from the Personnel Certification and Operator Training Programs. Management's proposal with respect to the amount of 2013 reserves for each of these categories is set forth below.

(1) Known Contingencies where timing and amount uncertain — \$1M

- a. 2014 known contingencies include (i) potential funding of FAC 3 vegetation research, (ii) higher than projected data base support and maintenance expenses, (iii) additional costs to develop a replacement PC-GAR applications and (iv) financing expense associated with the higher than projected software development and hardware costs and acceleration of the development of the RADS application to 2014 from 2015. .

(2) Unforeseen Contingencies — \$1M

- a. Represents a contingency for unknowns, including significant litigation, compliance with new governmental or regulatory mandates, consulting expense for experts in connection with review of significant system events and investigations, etc.

(3) System Operator Certification Program — \$767k

**Total Working Capital + Operating Reserves – \$6.4M**